

A-SERIES



CONTENTS

or warranty information, visit undersent indows.com/ warranty



Andersen Corporation, including its subsidiaries, has been named a 2022 ENERGY STAR® Partner of the Year – Sustained Excellence Award winner, the highest honor given by ENERGY STAR, for continued leadership in protecting the environment through superior energy efficiency achievements.



AMERICA'S MOST VED BRAND F WINDOWS & DOORS. You want to give your customers a home they love, and we're here to make that easy for you. That's why we're proud to offer you products that rate #1 in quality and performance," and to be the #1 trusted and recommended window and door brand. **A-SERIES PRODUCTS** Designed in collaboration with architects, A-Series products are our most fine-tuned windows and doors. Their matching sight lines, matching glass setbacks and size options will help you bring any architectural style to life down to the smallest detail. And with numerous glass options and composite exteriors, they're our best performing and most energy-efficient products capable of withstanding the toughest conditions. *2022 Andersen brand surveys of U.S. realtors, contractors, builders and homeowners. **2022 Andersen brand surveys of U.S. contractors, builders and architects.

UNPARALLELED INNOVATION & PERFORMANCE

The beauty of A-Series products goes beyond their architecturally detailed designs. They're also the best-performing, most energy-efficient windows and patio doors we've ever engineered. With environmental and impact certifications, they can help you achieve almost anything.

BUILT STRONG

We use solid wood in interior door panels and window sash and frames plus fiberglass on outer door frames and window sash exteriors to provide an unmatched combination of strength, insulation, versatility and beauty. Additionally, our Fibrex® composite material used in window frames and trim components delivers twice the strength and rigidity of vinyl.

WATER MANAGEMENT **THAT WORKS**

These features work together to direct water away from buildings:

- Hermetically sealed corner keys keep frames tight
- Sloped sill on double-hung windows
- Sill on patio doors channels water away from the home
- Innovative trim attachment flange secures trim independent of the window or door's water management system

VIRTUALLY MAINTENANCE-FREE EXTERIORS

Exteriors of A-Series products never need painting. They won't flake, rot, blister, peel, pit or corrode.** Plus they're warranted against corrosion for the life of the products, with no washing or waxing required.**



QUALITY SO SOLID, THE WARRANTY IS TRANSFERABLE**†

Our renowned Owner-2-Owner® limited warranty is fully transferable and not prorated, making it one of the best coverage plans available - which means it can add resale value for your customers. It's also supported by the industry's largest service network.



ARCHITECTURAL AUTHENTICITY

A-Series products and their detailed design options make architectural authenticity not only possible but also easy to achieve. To find A-Series windows, doors, hardware, exterior trim and color palettes that are authentic to a particular home's architectural style, see our style library at andersenwindows.com/stylelibrary.

ENERGY-SAVING GLASS AND DESIGN

Andersen makes windows and doors with options that make them ENERGY STAR® v. 6.0 certified throughout the United States.

Visit andersenwindows.com/energystar for more information and contact your

delaer to verify that the product with your glass option is ENERGY STAR certified in your area.



PHIUS CERTIFICATION NEW!



A-Series casement, awning and fixed transom windows are Phius (Passive House Institute US) certified, helping you work your designs toward a zero-carbon footprint.



*Available on select A-Series products. **Visit andersenwindows.com/warranty for details. †Hardware excluded. All logos and marks are trademarks of their respective owners.

RIGOROUSLY TESTED

A-Series products have withstood testing that has taken them from temperatures as cold as Alaskan winters to the heat of Death Valley summers. They've stood up to hurricane-force winds and prolonged exposure to sea air.* A-Series standard products feature the following ratings:

Windows PG50 (DP50)

Gliding Patio Doors PG50 (DP50)**

Hinged Patio Doors PG45 (DP45)

PG50 †
ADH4080 +50/-50
[AAMA/WDMA/CSA 101/I.S.2/A440-1]

Ratings vary by product performance and unit size. See the performance section in this guide for specific unit performance. Visit andersenwindows.com for up-to-date performance values.

SEALS OUT THE WEATHER

Weather-resistant seals stand up to eight inches of rain per hour and hurricane-force winds.* Double-hung windows feature a dual-bulb seal, and casement windows use refrigerator-type gaskets to help keep air and water out.

PERFORMANCE GRADE NEW! (PG) UPGRADES



PG70^{††}
ADH4080 PGUP +70/-70

OPTIONS FOR THE HARSHEST WEATHER

A-Series products are available with Stormwatch® Protection to achieve higher air, water and structural ratings. They also include impact-resistant glass for windborne debris protection to maintain the structural integrity of the unit after impact. Visit andersenwindows.com/coastal or refer to the Andersen® A-Series Coastal Product Guide for more information. See your local building code official for specific requirements.

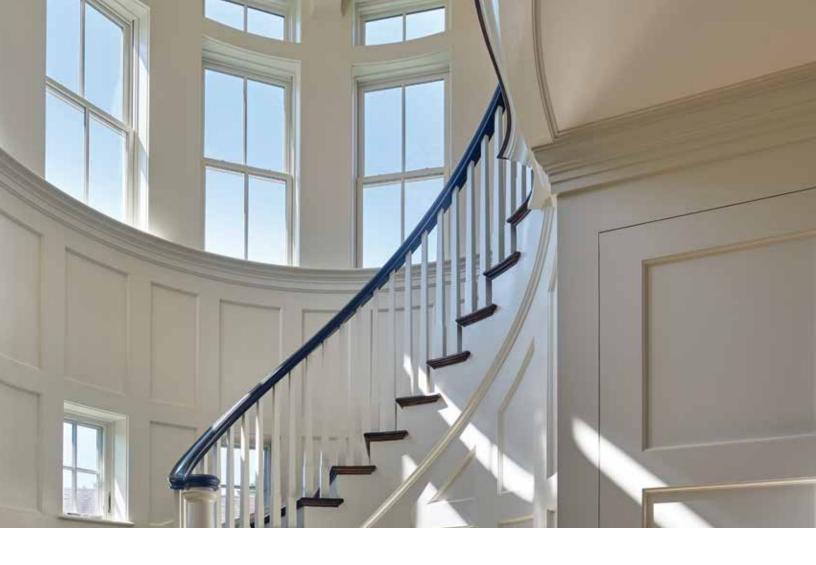




^{**}Rating applies to all gliding patio doors except two-panel 10' tall doors (PG45) and three- and four-panel 8' and 10' tall doors (PG40). †ADH4080 +50/-50 (AAMA/WDMA/CSA 101/1.S.2/A440-11). For more information, visit andersenwindows.com/a-series. ††ADH4080 PGUP +70/-70 (AAMA/WDMA/CSA 101/1.S.2/A440-11). For more information, visit andersenwindows.com/a-series. ‡ADH4080 SW Impact +70/-70 (AAMA/WDMA/CSA 101/1.S.2/A440-11). For more information, visit andersenwindows.com/coastal.



^{*}Tested to AAMA/WDMA/CSA 101/I.S.2/A440-08 & -11 PG50.



ARCHITECTURALLY DETAILED DESIGN

COMMON SIZE GRID

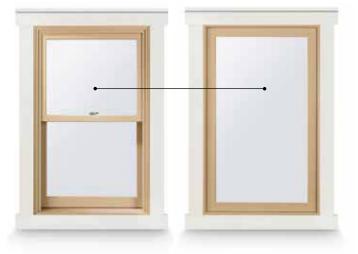
Common sizes in 4" (102) increments are based on the rough opening to simplify framing and specifying. Even-inch sizes eliminate fractions and reduce job site errors. A 3/4" (19) gap horizontally and vertically leaves room for shims, insulation and sill flashing.

CUSTOM SIZING

All A-Series windows and patio doors can be ordered in ½8" (3) increments, providing flexibility for replacement, remodeling, new construction and light commercial projects.

COMMON GLASS SETBACK

A common glass setback on A-Series windows and patio doors delivers noticeably clean shadow lines both inside and out.

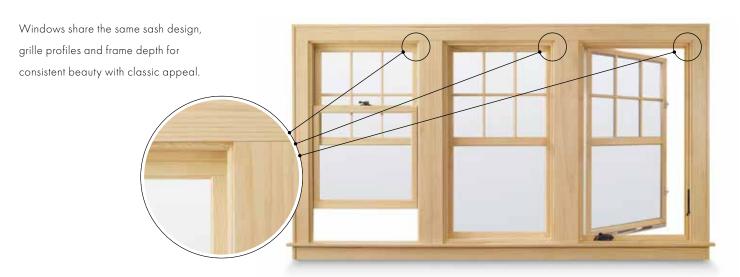


The upper sash of double-hung windows aligns perfectly with casement windows, awning windows, picture windows, patio doors and transoms.

COMPLETE ALIGNMENT

Common sight lines allow you to specify any combination of window styles and still have them match and align perfectly.

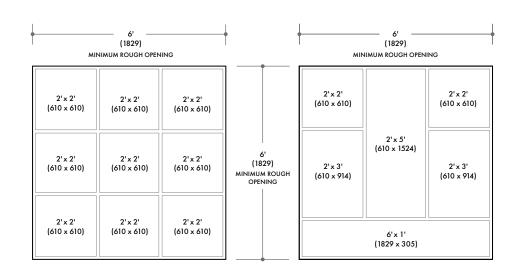




EASY MATH

The A-Series window system simplifies selection and installation of multiple windows within a single rough opening.

3/4" (19) horizontal and vertical joins keep sizing consistent no matter how many or what size windows you combine.



The spacing in these illustrations is exaggerated for demonstration purposes.



WINDOW & DOOR TYPES

A-SERIES WINDOWS

The A-Series window lineup consists of casement, awning, double-hung, picture, transom (fixed or venting) and specialty shape windows. Every type is meticulously designed to fit a variety of different architectural styles. And with common sight lines they're designed to align perfectly no matter how you combine them.





A-SERIES PATIO DOORS

The A-Series door lineup consists of gliding and hinged patio doors (inswing and outswing) with options to add sidelights and transoms for an even stronger connection to the outdoors.

Contemporary Panels



The new A-Series contemporary panels have a 6 1/4" (159) bottom rail as opposed to traditional panels with a 10 1/2" (267) bottom rail. Matching patio door sidelights and transoms are available.











COMPLEMENTARY CASEMENT WINDOWS

Our complementary casement windows offer easy operation along with old-world style. They include French casements — twin sash inside one frame with no mullion post between them like ordinary casements — that give you a totally unobstructed view. Complementary casement windows are available in rectangles, trapezoids and a variety of arched shapes.



COMPLEMENTARY CURVED TOP PATIO DOORS

With features like Romanesque arches and sweeping curves, nothing else quite matches the grandeur our complementary curved top inswing and outswing patio doors can bring to a home.



EXTERIORS

A-Series products are available in a wide range of exterior colors and exterior trim choices. Even in harsh conditions they're virtually maintenance free, hold their original vibrant colors, never need painting and won't flake, rot, blister, peel, pit or corrode.* Select any combination of colors shown here for your exterior frame, sash and trim.

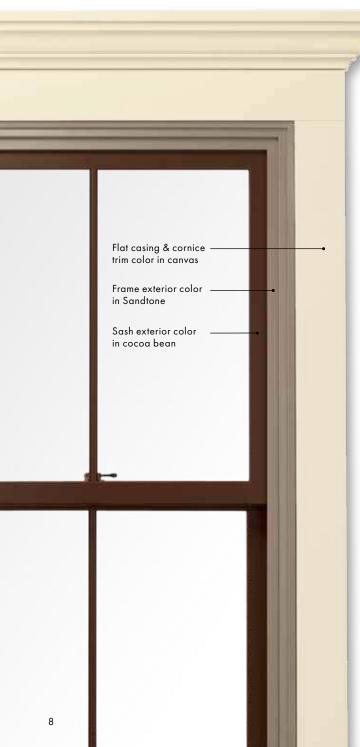
EXTERIOR COLORS



EXTERIOR TRIM SYSTEM

- · Complements a wide range of architectural styles
- · Low maintenance and never needs painting
- Order as pre-assembled surrounds, in precut kits or as individual components
- Innovative trim attachment flange on A-Series windows allows pre-assembled exterior trim surrounds to be installed in seconds
- Installed independent of the window's or door's water management system
- For more information, see the exterior trim section starting on page 191.





INTERIORS

With six natural wood species, six rich factory-finished stain options and a variety of painted interiors, A-Series products provide the flexibility to create interiors that please both you and your customers.

INTERIOR WOOD SPECIES



FACTORY-FINISHED INTERIORS



All wood interiors are unfinished unless a finish is specified. For windows, clear coat is now available on all wood species; all other factory finishes are available on pine, maple and oak. For doors, factory finishes are available on pine, maple and oak. Finishes shown above on pine.

INTERIOR PAINT COLORS



For windows, painted interiors are now available on maple in addition to pine. For doors, painted interiors are available on pine. Additional colors to match all 11 exterior colors are also available; see your Andersen supplier for details.



Mix and match up to four interior wood species, stains and/or colors for your window's frame, sash, grilles and extension jambs to achieve a look unique to your project.

Printing limitations prevent exact duplication of colors. See your Andersen supplier for actual color samples.



^{*}Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies. Naturally occurring variations in grain, color and texture of wood make each window one of a kind. We cannot guarantee consistency in wood grain and/or color within a particular species, product or project.



WINDOW HARDWARE

The hardware for our A-Series windows is created exclusively for Andersen and is made of forged metal for added strength. A range of available finishes makes it easy for customers to coordinate their window hardware with their cabinet hardware, faucets and other room décor.

Casement, Awning & Venting Transom



CONTEMPORARY FOLDING

Black | Bright Brass | Oil Rubbed Bronze Satin Nickel | Stone | White



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze | Satin Nickel Stone | White

Folding handles avoid interference with window treatments. Bold name denotes finish shown.

Double-Hung



Antique Brass | Black | Bright Brass | Distressed Bronze | Distressed Nickel Oil Rubbed Bronze | Satin Nickel | Stone | White







Optional Bar Lift

Optional Hand Lift

Optional Finger Lift

Antique Brass | Black | Bright Brass | Distressed Bronze | Distressed Nickel Oil Rubbed Bronze | Satin Nickel | Stone | White

Bold name denotes finish shown.

HARDWARE FINISHES



















Stone

White



Black

Bright Brass

Distressed Bronze



Distressed Nickel



Oil Rubbed Bronze

Satin Nickel



EASY TILT-TO-CLEAN

A-Series double-hung windows include a tilt-to-clean feature, with one hand operation, for easy exterior glass cleaning of both sash.

Printing limitations prevent exact replication of finishes. See your Andersen supplier for actual finish samples.

^{*}Hardware sold separately except double-hung lock and keeper. Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

PATIO DOOR HARDWARE

Patio door hardware is available in a variety of designs to match virtually any style. Yuma, Encino, Newbury and Anvers hardware options each feature solid drop-forged brass for added strength, while Albany and Tribeca hardware options are made of zinc die-cast with durable powder-coated finishes. Additional hardware options such as exterior keyed locks, matching hinge finishes and more are also available.



HARDWARE FINISHES



^{*}Hardware sold separately.

Bright brass and satin nickel finishes on patio door hardware feature a 10-year limited warranty.

FSB® HARDWARE FOR HINGED PATIO DOORS

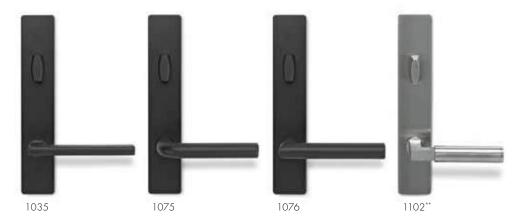
Durable FSB hinged door hardware* features clean lines and a sleek satin finish for a thoroughly modern look. Choose from four styles.





Steel

Black Satin Anodized Stainless Aluminum



YALE® ASSURE LOCK® FOR HINGED PATIO DOORS†

The sleek key-free lock* includes Bluetooth® technology for keyless unlocking. Available with Anvers® hardware* in black, satin nickel and white. Compatible with touchscreen, touchscreen + Z-Wave® and touchscreen + Bluetooth + WiFi® kit.

One-Touch Locking – Lock up without the hassle of keys by simply tapping the keypad.

Key Free - No cylinder means no lost keys, and no pick and bump break-ins.

Battery Backup – Never lose power; the lock can be energized with a 9V battery.

Remote Access – Monitor, lock and unlock from anywhere. ††







Black Satin Nickel

White



FLUSH HARDWARE FOR NEW! **GLIDING PATIO DOORS**





Sleek, low profile hardware* for gliding patio doors is available in keyed and non-keyed options for both traditional and contemporary door panels. Shown in satin nickel.





Black

Oil Rubbed Bronze





Satin Nickel

White

^{*}Hardware sold separately.

^{**}FSB style 1102 is not available in black anodized aluminum. †Available on select Andersen® hinged patio doors; see your Andersen supplier for details.

GLASS

Choose from a variety of high-performance glass options, including triple-pane glass and HeatLock® technology for even greater energy efficiency.



Low-E4® SmartSun™ Glass

Helps shield your home from the sun's heat, filtering out 95% of harmful UV rays while letting sunlight shine through, plus it provides all the benefits of Low-E4 glass.



Low-E4 Glass

Outstanding thermal performance for climates where both heating and cooling costs are a concern. It comes standard on all A-Series products and is up to 57% more energy efficient than ordinary dual-pane glass.*



Low-E4 Sun Glass

Outstanding thermal performance in southern climates where less solar heat gain is desired. It's tinted for maximum protection from the effects of intense sunlight while providing all the benefits of Low-E4 glass.

Triple-Pane Glass

Three panes of glass are combined with either argon gas blend or air and Low-E coatings to provide enhanced energy performance. Adding triple-pane glass to one of our windows or doors results in a lower U-Factor value than using regular dual-pane glass.

HeatLock Technology

Our HeatLock coating can increase the energy efficiency of any A-Series window or door with Low-E4 or SmartSun glass.

Applied to the room-side glass surface, it reflects heat back into the home for improved performance.

	ENERGY									LIGHT							
GLASS	How we		or ct prevents aping.	Solar Heat Gain Coefficient How well a product blocks heat caused by sunlight.				Visible Light Transmittance How much visible light comes through a product.				UV Protection How well a product blocks ultraviolet rays.				t	
SmartSun	•	•	•	0	•	•	•	•	•	•	•	0	•	•	•	•	
SmartSun with HeatLock Coating	•	•	•	0	•		•	•	•	•	0	0	•	•	•	•	
Low-E4	•	•	•	0	•	•	•	0		•	•	0	•	•	•	0	
Low-E4 with HeatLock Coating	•	•	•	0	•	•	•	0	•	•	•	0	•	•	•	0	
Sun	•	•	•	0	•	•	•	•	•	0	0	0	•	•	•	0	
PassiveSun®	•	•	0	0	•	0	0	0	•		•	0	•	•	•	0	
PassiveSun with HeatLock Coating	•	•	•	0	•	0	0	0	•		•	0	•	•	•	0	
Triple-Pane with Low-E Coating on two surfaces	•	•	•	•	•	•	•	0	•	•	0	0	•	•	•	•	
Clear Dual-Pane	•	0	0	0	0	0	0	0	•	•		•	0	0	0	0	

Center of glass performance only. Ratings based on glass options as of August 2022. Visit andersenwindows.com/energystar for ENERGY STAR® map and NFRC total unit performance data or contact your Andersen supplier for product specific performance data.

^{*}Summer values are based on comparison of Andersen® A-Series double-hung window SHGC to the SHGC for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018 International Energy Conservation Code "Glazed Fenestration" Default Tables.

See your Andersen supplier for actual glass samples.

STORMWATCH® PROTECTION

A-Series products are available with impactresistant glass in addition to structural upgrades to meet the tough building codes of hurricane-prone coastal areas. See your local code official for specific requirements.

Stormwatch

ADDITIONAL GLASS OPTIONS

Tempered safety glass is standard on patio doors and required by code for larger window sizes.*

Laminated glass is available for added strength, enhanced security and sound control.

Patterned glass lets in light while obscuring vision and adds a unique, decorative touch.

Cascade and Reed patterns can be ordered with either a vertical or horizontal orientation.



TIME-SAVING FILM

We protect our products during delivery and construction with translucent film on the glass that peels away for a virtually spotless window.

Visit andersenwindows.com/glass for more details on our glass options.



*See your local code official for code requirements in your area.

Printing limitations prevent exact color duplication. See your Andersen supplier for details.

GLASS SPACER OPTIONS



Black or white glass spacers are available as a standard offering on A-Series products, in addition to stainless steel glass spacers, to provide more ways to customize project designs and achieve a contemporary style. Colored glass spacers blend in with the color of the window or door for a sleek design, or serve as a shadow line.

Add full divided light grilles, and the grille spacer bar between the glass will match the selected glass spacer color.



BETWEEN-THE-GLASS ART GLASS

With our between-the-glass art glass you can add interest, create focal points and make your work stand out. See page 16 or visit andersenwindows.com/artglass for more information.

BLINDS-BETWEEN-THE-GLASS FOR PATIO DOORS



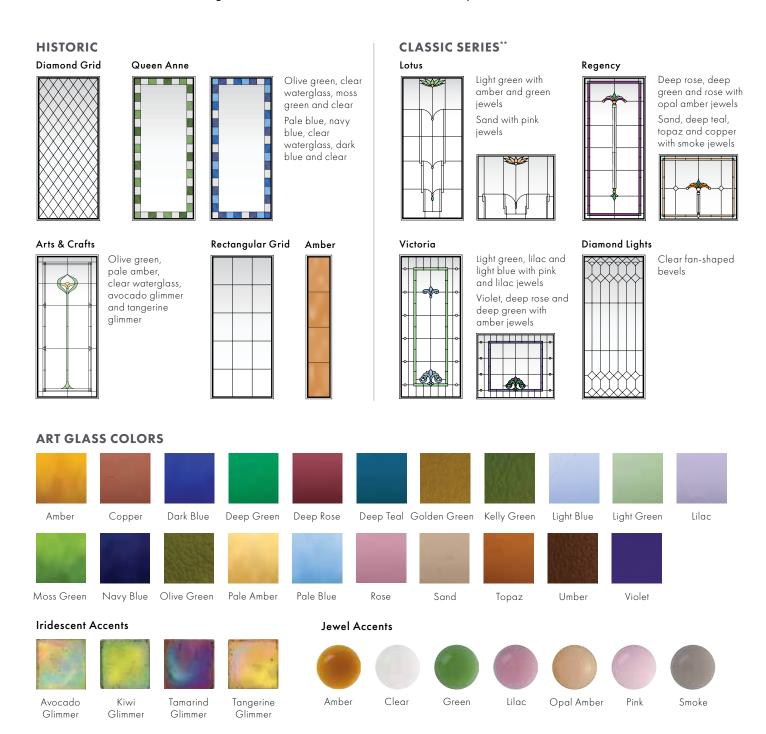
Conveniently located between the panes of insulated glass, and protected from dust and damage for long-lasting protection, blinds-between-the-glass are available on select sizes of A-Series patio doors. The cordless design easily raises, lowers or tilts the blinds for control of light and privacy. Available in slate gray or white, and can be ordered with any interior or exterior door finish. Blinds are covered by a 10-year limited warranty.**

 $[\]hbox{**Visit andersenwindows.com for warranty details.}$

[&]quot;ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

BETWEEN-THE-GLASS ART GLASS

A-Series between-the-glass art glass places the decorative panel between the glass panes, providing superior protection for the art glass and making it easy to keep clean. Historic patterns and Classic Series designs, representing major architectural themes from the late 1800s through the 1930s, are available in standard color palettes or custom color combinations.



Clear, clear antique, clear waterglass, along with textured semi-privacy (double glue chip) and light restoration glass are also available. For custom capabilities, contact your Andersen supplier.

*Color palettes and jewel accents for custom combinations are predetermined by style of art glass. For custom capabilities, see your Andersen supplier.

**Classic Series patterns are also available with semi-privacy glass or clear antique glass in place of colored glass. Additional color palettes are available.

Patterns vary based on window or panel size and shape. Illustrations (except Amber) depict patterns for 6068 patio door panel. See your Andersen supplier for pattern availability.

Art glass changes appearance greatly based on lighting in its environment, making it beautiful to look at yet difficult to represent accurately in print. Printing limitations prevent exact color duplication. Colors in the Historic patterns and Classic Series designs may also vary. See your Andersen supplier for actual color samples.

INSECT SCREENS

Our TruScene® insect screens provide more than 50% greater clarity than our conventional insect screens for a beautifully unobstructed view. They let in 25% more fresh air; all while keeping out unwanted small insects.



TRUSCENE INSECT SCREENS

TruScene insect screens are available for all venting windows. Insect screen frames for casement, awning and venting transom windows are available in white, gold dust and stone as well as prefinished in six wood veneers, six stains and all interior paint colors. Frames for double-hung windows match the product's exterior color.



Interior TruScene insect screen with a pine frame and clear coat finish.

CONVENTIONAL INSECT SCREENS

Conventional insect screens are available for venting windows and doors. Insect screen frames for casement, awning and venting transom window are available in interior paint options, as well as gold dust and stone. Frames for outswing patio doors are available in white, gold dust, pine, maple and oak finishes and in six stain options to match the door's interior. Frames for gliding and inswing patio doors and double-hung windows match the product's exterior color.







Interior conventional insect screen frames for casement, awning and venting transom windows shown in three of the color options.

Gold Dust

INSECT SCREEN CONFIGURATIONS

Windows



Full insect screen for venting windows. Half insect screen for the lower sash

of double-hung windows.

Gliding Patio Doors

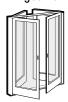


Premium top-hung or conventional gliding insect screen for twoand four-panel gliding doors.



Retractable insect screen for twopanel gliding doors. Installed on the exterior, it neatly retracts into a small canister.

Hinged Patio Doors



Single- or double-hinged insect screen for inswing singleand two-panel doors.



Premium top-hung or conventional gliding insect screen for twoand three-panel inswing doors.



Retractable insect screen for twopanel outswing doors, Installed on the interior, it neatly retracts into a small canister.

^{*}TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens.



GRILLES

A-Series windows and patio doors offer a variety of architecturally authentic grille types and standard patterns.

We'll also work with you to provide your customers with custom grille designs for a signature look.







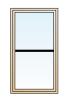


Prairie A

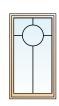












Queen Anne

Diamond

Colonial

Tall Fractional

Short Fractional

Simulated Meeting Rail

1x4 Specified Equal Light**

Custo

FULL DIVIDED LIGHT

Permanently applied to the interior and exterior of the window, with a spacer between the glass.

Full Divided Light with Energy Spacer

Full divided light with a narrow spacer bar that provides a 3 mm gap around the spacer to minimize transfer of heat and cold to the interior glass surface, improving overall thermal performance.



Permanent exterior and permanent interior with spacer



Permanent exterior and permanent interior with energy spacer

SIMULATED DIVIDED LIGHT

Permanent grilles on the exterior and interior, with no spacer between the glass. We also offer permanent exterior grilles with removable interior grilles available in natural wood or prefinished white.



Permanent exterior and permanent interior



Permanent exterior and removable interior

CONVENIENT CLEANING

Removable interior grilles come off for easy cleaning. Finelight™ grilles-between-the-glass are installed between the glass panes, and feature a contoured 1" (25) or ¾" (19) profile.



Removable interior



Finelight grillesbetween-the-glass[†]

GRILLE BAR WIDTHS

Traditional







7/8" (22)



11/8" (29)



Contemporary for Patio Doors NEW!





3/4" (19)









Wide traditional grilles can be positioned horizontally across the center of a casement window to simulate the look of a double-hung window.* New contemporary grilles can be used for door products with contemporary options. Actual size shown.

^{*}Simulated meeting rails are available in $\frac{7}{8}$ " (22), $1\frac{1}{8}$ " (29) and $2\frac{1}{4}$ " (57) widths.

^{**}Specify number of same-size rectangles wide or high. Some restrictions may apply.

^{† 1/8&}quot; (22), 1 1/8" (29), 2 1/4" (57) and 3 1/2" (89) widths are not available in Finelight grilles-between-the-glass.

EASY CONNECT JOINING SYSTEM

Our Easy Connect Joining System* provides enhanced performance, design flexibility, and job site conveniences. Choose from three options — partially assembled factory-prepped combinations, fully assembled factory-joined combinations or on-site joining kits — to achieve monumental window combinations. These joining options utilize the strength and durability of fiberglass construction, and offer the design flexibility of achieving both one-way and two-way combinations.

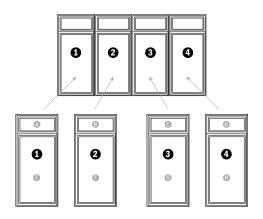
Visit andersenwindows.com/joining for more information.

Innovative patented joining system utilizes 5 3/4" (146) interlocking fiberglass joining plates for 4 9/16" (116) base jamb depths. 7 3/4" (197) interlocking fiberglass joining plates are available for higher performance and are required for hinged inswing patio doors with 6 9/16" (167) base jamb depths. They are available in 14' (4267) lengths, and are field cut and applied.



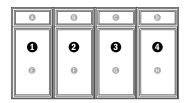
Factory-Prepped Combinations

Receive lighter, easier-to-handle, pre-assembled smaller combinations that join as you install them into the rough opening, making it easier to install large combinations. In fact, most contractors surveyed said they could reduce the number of installers by 50% using the Andersen® Easy Connect Joining System.**



Factory-Joined Combinations

Eliminate the need for job site assembly and receive fully joined, factory-assembled window combinations to fit rough openings up to 12' (3658) \times 8' (2438) or 8' (2438) \times 12' (3658).



	ASSEMBLY	READY TO INSTALL	NUMBER OF	HALLMARK CERTIFIED [†]	TESTED TO AAMA 450	PERFORMANCE	COMBINATION SIZE LIMITATIONS
FACTORY-PREPPED COMBINATIONS	in the Opening	•	FEVVER	•	•	Extensive unit combination size options available certified to PG70 [†] High Velocity Hurricane Zone (HVHZ) approved	ROUGH OPENING MAX: 12' (3658)in one direction with no maximum in the other direction
FACTORY-JOINED COMBINATIONS	FACTORY	•	MORE	•	•	Extensive unit combination size options available certified to PG70 [†] High Velocity Hurricane Zone (HVHZ) approved	ROUGH OPENING MAX: 12' x 8' or 8' x 12' (3658 x 2438 or 2438 x 3658)
JOINING KITS	JOB SITE		MORE	•	•	Extensive unit combination size options available certified to PG70 [†] High Velocity Hurricane Zone (HVHZ) approved	ROUGH OPENING MAX: 12' (3658) in one direction with no maximum in the other direction

^{*}Available on select windows, see your Andersen supplier for details.

^{**69%} of 156 builders/general contractors in a 2018 survey said they could reduce the number of installers by half using the Easy Connect Joining System when comparing the installation of a 12' (3658) wide x 8' (2438) high pre-assembled window combination unit with four 3' (914) wide x 8' (2438) high window combination units.



WINDOWS

Casement

Specifications	28-31
Grille Patterns	37
Window Details	31
Awning	
Table of Sizes	32-33
Specifications	34-36
Grille Patterns	37
Window Details	37
Double-Hung	
Table of Sizes	38-39
Specifications	40-42
Grille Patterns	43
Window Details	43
Picture	
Table of Sizes	44-48
Specifications	49-51
Grille Patterns	46
Window Details	51
Fixed & Venting Transom	
Table of Sizes	52-56
Specifications	54-58
Grille Patterns	58
Window Details	59
Joining Details	60-62
Custom Sizes	63-65
Combination Designs	196
Product Performance	206



Dimensions in parentheses are in millimeters.



FEATURES

CASEMENT & AWNING

FRAME

- ♠ The frame is constructed with wood and Fibrex® composite material exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.
- (3) Wood members are treated with a water-repellent preservative for longlasting* protection and performance.
- The weatherstrip system combines an exterior watershed design and a foam weatherstrip seal between the sash and frame, providing a longlasting, energy-efficient barrier against wind, water and dust.
- A factory-applied rigid vinyl installation flange helps seal the unit to the structure. Available in a standard design or with an exterior trim installation flange (shown). The exterior trim installation flange allows for Andersen® exterior trim surrounds to be applied in seconds after window installation.

SASH

G Fiberglass construction provides durable, strong and long-lasting performance. The Fiberglass is finished with a Flexacron® paint system. This stabilized polyester paint is electrostatically applied for maximum protection and a lustrous, low-maintenance finish.

Traditional architectural style:

- · Classic chamfer detailing
- The look of mortise-and-tenon joinery
- A tall bottom rail on casement and awning windows aligns with double-hung and picture windows for common sight lines
- Natural wood interiors are treated with a water-repellent preservative for long-lasting* protection and performance. Interior stops are fastened using a compression fit system so there are no nail holes to fill.



@ GLASS

See Common Features on page 23 for details.

HARDWARE

Smooth Control Hardware System

Smooth operation is provided by a worm gear drive design that makes opening and closing almost effortless, regardless of the unit size. Hinges allow for a wash mode or widest clear opening depending on the window size. Hardware is sold separately. Hardware option and finish must be specified.

Single-Action Casement Lock



A single-action lock easily releases all locking points on the casement sash, while the reach-out action eliminates binding when closing. The lock is offered in finishes that coordinate with your specified hardware option.

Awning Sash Locks

Awning windows feature dual sash locks. Hardware style and finish options are compatible with casement windows to ensure consistency in appearance when used in combination designs.

PERFORMANCE OPTIONS

See Common Features on page 23 for details.

DOUBLE-HUNG

FRAME

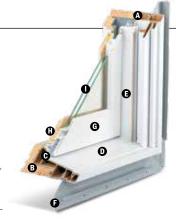
- The frame is constructed with wood and Fibrex composite material exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.
- (B) Wood members are treated with a water-repellent preservative for longlasting* protection and performance.
- The dual weatherstrip system utilizes a double foam-filled design that creates a pressure equalization chamber, knocking down driving rain and delivering a long-lasting, energy-efficient barrier against wind, water and dust.
- Traditional sloped sill design.
- **3** For units with a white exterior, the exterior jamb liner is white. For all other exterior colors, the exterior jamb liner is Sandtone. All double-hung windows include lower jamb liner cover/inserts that match the product's exterior color.
- A factory-applied rigid vinyl installation flange helps seal the unit to the structure. Available in a standard design or with an exterior trim installation flange (shown). The exterior trim installation flange allows for Andersen exterior trim surrounds to be applied in seconds after window installation.

SASH

G Fiberglass construction provides durable, strong and long-lasting* performance. The Fiberglass is finished with a Flexacron paint system. This stabilized polyester paint is electrostatically applied for maximum protection and a lustrous, low-maintenance finish.

Traditional architectural style:

- Classic chamfer detailing
- The look of mortise-and-tenon joinery
- A tall bottom rail on double-hung windows aligns with casement, awning and picture windows for common sight lines



• Natural wood interiors are treated with a water-repellent preservative for long-lasting protection and performance. Interior stops are fastened from behind so there are no nail holes to fill.

O GLASS

See Common Features on page 23 for details.

HARDWARE

Sash Lock



Traditional spoon lock design has an integrated tilt-to-clean feature, so both sash can be cleaned from the inside.

PERFORMANCE OPTIONS

See Common Features on page 23 for details.

SASH OPTIONS"







Reverse Cottage Style



PICTURE WINDOW & FIXED TRANSOM

FRAME

The frame is constructed with wood and fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

Wood members are treated with a water-repellent preservative for longlasting* protection and performance.

A factory-applied rigid vinyl installation flange helps seal the unit to the structure. Available in a standard design or with an exterior trim installation flange. The exterior trim installation flange allows for Andersen® exterior trim surrounds to be applied in seconds after window installation.

Fiberglass construction provides durable, strong and long-lasting performance. The fiberglass is finished with a Flexacron® paint system. This stabilized polyester paint is electrostatically applied for maximum protection and a lustrous, low-maintenance finish.

Traditional architectural style:

- · Classic chamfer detailing
- The look of mortise-and-tenon joinery
- A tall bottom rail on picture windows aligns with casement, awning and double-hung windows for common sight lines
- A shorter bottom rail on fixed transom windows provides an attractive sight line when joined above other A-Series windows or patio doors

Natural wood interiors are treated with a water-repellent preservative for long-lasting* protection and performance. Interior stops are fastened using a compression fit system so there are no nail holes to fill.

GLASS

See Common Features below.

PERFORMANCE OPTIONS

See Common Features below.

VENTING TRANSOM

RAME

The frame is constructed with wood and Fibrex® composite material exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

Wood members are treated with a water-repellent preservative for longlasting* protection and performance.

The weatherstrip system combines an exterior watershed design and a foam weatherstrip seal between the sash and frame, providing a longlasting,* energy-efficient barrier against wind, water and dust.

A factory-applied rigid vinyl installation flange helps seal the unit to the structure. Available in a standard design or with an exterior trim installation flange. The exterior trim installation flange allows for Andersen exterior trim surrounds to be applied in seconds after window installation.

SASH

Fiberglass construction provides durable, strong and long-lasting performance. The fiberglass is finished with a Flexacron paint system. This stabilized polyester paint is electrostatically applied for maximum protection and a lustrous, low-maintenance finish.

Traditional architectural style:

- · Classic chamfer detailing
- The look of mortise-and-tenon joinery
- A shorter bottom rail provides an attractive sight line when joined above other A-Series windows or patio doors

Natural wood interiors are treated with a water-repellent preservative for long-lasting* protection and performance. Interior stops are fastened using a compression fit system so there are no nail holes to fill.

GLASS

See Common Features below.

HARDWARE

Smooth operation is provided by a worm gear drive design that makes opening and closing almost effortless, regardless of the unit size.

Sash Locks

Venting transoms feature dual sash locks. Hardware style and finish options are compatible with casement windows to ensure consistency in appearance when used in combination designs.

PERFORMANCE OPTIONS

See Common Features below.

COMMON FEATURES

GLASS

In addition to stainless steel glass spacers, black or white glass spacers are available to allow the spacer to blend in with the unit color.

3/4" (19) dual-pane glass construction provides exceptional energy performance. High-Performance dual-pane glass options include:

- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- Low-E4 Sun glass

For even greater energy performance, 1" (25) triple-pane glass is available in these options:

- Low-E4 glass
- Low-E4 Enhanced glass
- · Low-E4 Enhanced HeatLock glass
- Low-E4 SmartSun glass
- Low-E4 SmartSun Enhanced glass
- Low-E4 SmartSun Enhanced HeatLock glass

Tempered and other glass options are available; contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 15 for more details.

Between-the-Glass Art Glass

Available in a variety of original patterns. For details, see page 16 or visit andersenwindows.com/artglass.

PERFORMANCE OPTIONS

Performance Grade (PG) Upgrades

Performance Grade (PG) upgrades are now available for A-Series windows in most sizes of standard non-impact windows allowing these units to achieve higher performance ratings. PG upgrade ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. For up-to-date performance information of individual products, visit andersenwindows.com.

Stormwatch

A-Series windows available with Stormwatch® Protection include impact-resistant glass in addition to structural upgrades for coastal areas. For a copy of the A-Series Coastal Product Guide, visit andersenwindows.com/coastal.

^{*}Visit andersenwindows.com/warranty for details.

[&]quot;Flexacron" is a registered trademark of PPG Industries, Inc. Dimensions in parentheses are in millimeters.

EXTERIORS & INTERIORS

EXTERIOR COLORS



INTERIOR WOOD SPECIES



FACTORY-FINISHED INTERIORS



All wood interiors are unfinished unless a finish is specified. Clear coat available on all wood species; all other factory finishes on pine, maple and oak. Shown above on pine. Naturally occurring variations in grain, color and texture of wood make each window one of a kind.

INTERIOR PAINT COLORS



Also available in 11 exterior colors shown above; contact your Andersen supplier. Painted colors on pine or maple.

4-TONE INTERIORS

Mix and match up to four interior wood species, stains and/or colors for your window's frame, sash, grilles and extension jambs to achieve a look unique to your project.

HARDWARE**

Casement, Awning & Venting Transom



CONTEMPORARY FOLDING

Black | Bright Brass | Oil Rubbed Bronze Satin Nickel | Stone | White



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze | Satin Nickel Stone | White

Folding handles avoid interference with window treatments.

Bold name denotes finish shown.

Double-Hung



Lock & Keeper

Antique Brass | Black | Bright Brass | Distressed Bronze | Distressed Nickel
Oil Rubbed Bronze | **Satin Nickel** | Stone | White



Antique Brass | Black | Bright Brass | Distressed Bronze | Distressed Nickel Oil Rubbed Bronze | **Satin Nickel** | Stone | White

Bold name denotes finish shown.

HARDWARE FINISHES



*Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.

**Hardware sold separately except double-hung lock and keeper.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use. Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.



ACCESSORIES Sold Separately

FRAME

Extension Jambs





Extension jambs are available in pine, maple, vertical grain Douglas fir, oak, mahogany* and cherry, precut to fit the unit. Available in 1/16" (1.5) increments up to $7 \frac{1}{8}$ " (181) and can be prefinished in six stain colors as well as all interior paint options to match the interior of the unit. This option is also available factory applied.

Stools for Double-Hung Windows

Available in all six wood species and all prefinished options. Stools are available for 49/16" (116), 5 1/4" (133), 6 9/16" (167) and 7 1/8" (181) wall depths.

HARDWARE

Corrosion-Resistant Components



Corrosion-resistant hinge and operator arm hardware on casement, awning and venting transom windows is designed for applications in harsh and corrosive environments such as heavy industrial or coastal areas.** Shown on a 400 Series casement window.

Window Opening Control Device



A window opening control device is available for casement and doublehung windows, which limits sash travel to less than 4" (102) when the window is first opened. Available in factory applied, or as a field-applied kit in stone, white and black. Shown on a casement window.

Vent Limiter for Awning & **Venting Transom Windows**

Available for awning and venting transom windows, which prevents opening the sash more than 4" (102). Available factory applied or as a field-applied kit (part #9184908).

Power Operator for Awning & Venting Transom Windows



Awning windows can be ordered with an operator enhanced by PowerAssist™ technology that opens and closes the window with the touch of a button. Easy to install, the 24-volt system features a concealed window power driver, battery backup in case of a power outage, and a moisture sensor that automatically closes the window when it rains. A wireless remote control is available (sold separately).

The PowerAssist system is controlled by a wall-mounted console, which includes a power box, battery, touch pad and mounting bracket. Windows can be ordered factory prepped to save time, or they can be ordered as a field kit. The power driver requires field installation. PowerAssist technology eliminates the need for sash locks. Available for windows up to 5' (1524) wide. Not available for units with Stormwatch® Protection or PG upgrades.

INSECT SCREENS

Full or Half Window Insect Screens

Full insect screens are available for all venting windows. Andersen also offers half insect screens for the lower sash of double-hung windows.





Our TruScene insect screens let in over 25% more fresh air† and provide 50% greater clarity than Andersen conventional insect screens, all while keeping out unwanted small insects. For casement, awning and venting transom windows, frames are available in white, gold dust and stone, as well as prefinished in six wood veneers, six stains and all interior paint options. Insect screens for doublehung windows are installed on the exterior of the window, and frames match the product's exterior color.

Conventional Insect Screens

Aluminum insect screens are available with frames finished in white, gold dust or stone, and in all interior paint options for casement, awning and venting transom windows. Insect screens for double-hung windows match the product's exterior color.

GRILLES

Grilles are available in a variety of configurations and widths. See page 19 for details.

EXTERIOR TRIM

Available with Andersen exterior trim. See the exterior trim section starting on page 189.

^{*}Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.

^{**}Visit andersenwindows.com/warranty for details.

[†]TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens. Dimensions in parentheses are in millimeters.

CASEMENT WINDOWS

Table of Casement Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	1-7 1/4" 1-11 1/4" 2-3 1/4" 2-5 1/4" 2-7 1/4" 2-9 1/4" 2-11 1/4" 3-1 1/4" 3-3 1/4" 3-5 1/4" 3-7 1/4" 3-9 1/4" 3-9 1/4" 3-11 1/4"
Minimum	(489) (591) (692) (743) (794) (845) (895) (996) (997) (1048) (1099) (1149) (1200) 1'-8" 2'-0" 2'-4" 2'-6" 2'-8" 2'-10" 3'-0" 3'-2" 3'-4" 3'-6" 3'-8" 3'-10" 4'-0" (508) (610) (711) (762) (813) (864) (914) (965) (1016) (1067) (1118) (1168) (1219)
Rough Opening Unobstructed Glass	12 5/8"
	[(320)] [(422)] [(523)] [(574)] [(625)] [(676)] [(776)] [(777)] [(828)] [(930)] [(1031)] [(1133)] [(1134)] [(12
4" 2'.3 1/4" 1'.11 1/4" (691) (692) (691) (711) (610) (711) (610) (603)	ACW1820 ACW2020 ACW2420 Custom-size windows
2'-3 1/4" (692) 2'-4" (711) 19 ¹³ / ₁₆ " (503)	are available in 1/8" (3)
2'.2' () () () () () () () () () () () () ()	increments. See page 63 ACW1824 ACW2024 ACW2424 ACW2624 ACW2824 for custom sizes and
2'-7 1/4" (794) 2'-8" (813) 23 ¹³ / ₁₆ " (605)	specifications. Choose left, right or stationary as viewed from
	ACW1828 ACW2028 ACW2428 ACW2628 ACW2628 ACW21028 ACW3028 the exterior. Most sizes shown are available
2-111/4" (895) 3-0" (914) 2713/16" (706)	with PG upgrade [‡] Grille patterns shown on page 37. Details shown on page 31. ACW1830 ACW2030 ACW2430 ACW2630 ACW2630 ACW2630 ACW2630 ACW2630 ACW3630 ACW360 ACW3
3'-3 1/4" (997) 3'-4" (1016) 31 13/16" (808)	
3'-7 1/4" (1099) 3'-8" (1118) 35 13/16" (909)	
3'-11 1/4" (1200) 4'-0" (1219) 39 13/16" (1011)	ACW1338 ACW2038 ACW2440 ACW2638 ACW2640 ACW264
4'-3'/4" (1302) 4-4" (1321) 43'15" (1113)	ACW1844 ACW2044 ACW24440* ACW26440* ACW210440
4-71/4" (1403) 4-8" (1422) 47 ¹³ / ₁₆ " (1214)	ACW1848 ACW2048 ACW2448 ⁰ * ACW2648 ⁰ * ACW2648 ⁰ * ACW21048 ⁰ ACW3048 ⁰ ACW3048 ⁰ * ACW
4'-11'/4" (1505) 5'-0" (1524) 51'13'/16" (1316)	ACW1850 ACW2050 ACW2450° ACW2650° ACW21050° ACW3050° ACW3050° ACW3250° ACW3050° ACW3
5'-3 1/4" (1607) 5'-4" (1626) 55 13/16" (1417)	ACW1854 ACW2054 ACW2454* ACW2654* ACW2854* ACW21054* ACW3054* ACW3

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

[‡]PG upgrade is not available for venting sizes shown with an underscore (i.e. <u>ACW2020</u>). \$\footnote{O}\$ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 28-31. \$\footnote{O}\$ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with a limited sash opening.

^{*}Hinged for widest clear opening (straight-arm operator). All other sizes have hinge with wash mode (split-arm operator).

[†]Not available with triple-pane annealed glass. †Not available with triple-pane annealed or tempered glass.



Table of Casement Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the previous page also apply to this page.

Scale $\frac{1}{8}$ " (3) = 1'-0" (3)			01.0.1/.#	0.51/ "	0171/ "	01.0.1/.11	01441/ 11	21.4.1/.11	0.01/ "	01 5 1 / 11	01.7.1/ #	0101/1	01.44.1/ #
Window Dimension	1'-7 1/4" (489)	1'-11 ¹ / ₄ " (591)	2'-3 1/4" (692)	2'-5 ¹ / ₄ " (743)	(794)	2'-9 1/4" (845)	2'-11 1/4" (895)	3'-1 1/4" (946)	3'-3 1/4" (997)	3'-5 1/4" (1048)	3'-7 1/4" (1099)	3'-9 ¹ / ₄ " (1149)	3'-11 ¹ / ₄ " (1200)
Minimum Rough Opening	1'-8"	2'-0"	2'-4"	2'-6"	2'-8" (813)	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0" (1219)
	12 5/8"	(610) 16 ⁵ /8"	20 5/8"	(762) 22 ⁵ /8"	24 5/8"	(864) 26 ⁵ /8"	(914) 28 ⁵ /8"	(965) 30 ⁵ /8"	(1016) 32 ⁵ /8"	(1067) 34 ⁵ /8"	(1118) 36 ⁵ /8"	(1168) 38 ⁵ /8"	40 5/8"
Unobstructed Glass	(320)	(422)	(523)	(574)	(625)	(676)	(726)	(777)	(828)	(930)	(1031)	(1133)	(1234)
571/4" (1708) 5-8" (1727) 59 13/16" (1519) CUSTOM SIZES AVAILABLE	ACW1858	SIZES AVAII	ACW24580*	ACW2658 ⁰ *	ACW2858 ⁰	ACW21058\$	ACW3058 ⁰	ACW3258***	ACW3458 ^{4*1}	ACW3658**1	ACW3858 + H	ACW31058***II	ACW4058**#
5'-11 1/4" (1810) 6'-0" (1829) 63 13/16" (1621)	ACW1860	ACW2060	ACW 2460 ◊ *	ACW 2660 [♦] *	ACW2860 ⁰ ↑	ACW21060 ^{0†}	ACW3060 ⁰	ACW3260 ⁰ *1		ACW3660 ^{4*1}	Acw3860 ⁰⁺¹	ACW31060 ⁴ *1	ACW4060 ***
6'-3 1/4" (1911) 6'-4" (1930) 67 13/16" (1722)	ACW1864 [†]	ACW2064†	ACW2464**	ACW2664**1		ACW21064**			ACW3464**1	ACW3664 **†	ACW3864*1	ACW31064**†	ACW4064 €*†
6'-7 1/4" (2013) 6'-8" (2032) 71 13/16" (1824)	ACW1868 [†]	ACW2068†		ACW2668*1				ACW3268**1	ACW3468***	ACW3668 ⁴ *1	ACW3868 ⁰⁺¹	ACW31068 **†	ACW4068 ⁰⁺¹
6'-11 1/4" (2115) 7'-0" (2134) 75 13/16" (1925)													
73 1/4" (2216) 7-4" (2235) 79 13/16" (2027)	ACW1870 [†] ACW1874 ^{††}			ACW2670***1		ACW21070 ⁶⁺¹			ACW3470**T	ACW3674***	ACW3870 ♣+1	ACW31070 ^{4+†} ACW31074 ^{4+††}	ACW4070 ^{0+†}
7-7 1/4" (2318) 7-8" (2337) 83 13/16" (2129)	ACW1878#1								ACW3478 № 11			ACW31078***	ACW4078**#
7'-111/4" (2419) 8'-0" (2438) 87 13/16" (2230)									ACW3480 ⁰⁺¹¹		ACW3880 ⁶⁻¹¹	ACW31080 ^{6+††}	ACW4080****

asement Window	Open	ing a												
Window Number	Ar	pening ea	Wic	ith		ight	Ar	ass rea :./(m²)	Aı	ent rea t./(m²)	Top of S to Top o Sill S Inches	f Inside Stop	Ar	Window rea
ACW1820	1.20	(0.11)	9 13/16"	(250)	17 ⁵ / ₈ "	(447)	1.38	(0.13)	1.55	(0.14)	62 1/16"	(1576)	3.11	t./(m ²) (0.29)
ACW1824	1.48	(0.14)	9 13/16"	(250)	21 5/8"	(549)	1.73	(0.16)	1.91	(0.18)	58 1/16"	(1475)	3.64	(0.34)
ACW1828	1.75	(0.16)	9 13/16"	(250)	25 5/8"	(650)	2.08	(0.19)	2.26	(0.21)	54 1/16"	(1373)	4.18	(0.39)
ACW1830	2.02	(0.19)	9 13/16"	(250)	29 5/8"	(752)	2.43	(0.23)	2.61	(0.24)	50 1/16"	(1271)	4.71	(0.44)
ACW1834	2.29	(0.21)	9 13/16"	(250)	33 5/8"	(853)	2.78	(0.26)	2.97	(0.28)	46 1/16"	(1170)	5.25	(0.49)
ACW1838	2.57	(0.24)	9 13/16"	(250)	37 5/8"	(955)	3.13	(0.29)	3.32	(0.31)	42 1/16"	(1068)	5.78	(0.54)
ACW1840	2.84	(0.26)	9 13/16"	(250)	41 5/8"	(1057)	3.48	(0.32)	3.67	(0.34)	38 1/16"	(967)	6.32	(0.59)
ACW1844	3.11	(0.29)	9 13/16"	(250)	45 5/8"	(1159)	3.83	(0.36)	4.03	(0.37)	34 1/16"	(865)	6.85	(0.64)
ACW1848	3.39	(0.31)	9 13/16"	(250)	49 5/8"	(1260)	4.18	(0.39)	4.38	(0.41)	30 1/16"	(763)	7.39	(0.69)
ACW1850	3.66	(0.34)	9 13/16"	(250)	53 5/8"	(1362)	4.53	(0.42)	4.73	(0.44)	26 1/16"	(662)	7.92	(0.74)
ACW1854	3.93	(0.37)	9 13/16"	(250)	57 5/8"	(1464)	4.88	(0.45)	5.09	(0.47)	22 1/16"	(560)	8.46	(0.79)
ACW1858	3.55	(0.33)	8 5/16"	(211)	61 5/8"	(1565)	5.23	(0.49)	5.44	(0.51)	18 1/16"	(459)	8.99	(0.84)
ACW1860	3.78	(0.35)	8 5/16"	(211)	65 5/8"	(1667)	5.58	(0.52)	5.79	(0.54)	14 1/16"	(357)	9.52	(0.88)
ACW1864†	4.68	(0.43)	9 11/16"	(246)	69 5/8"	(1768)	5.93	(0.55)	6.15	(0.57)	10 1/16"	(256)	10.06	(0.93)
ACW1868†	4.95	(0.46)	9 11/16"	(246)	73 5/8"	(1870)	6.28	(0.58)	6.50	(0.60)	6 1/16"	(154)	10.59	(0.98)
ACW1870†	5.22	(0.48)	9 11/16"	(246)	77 5/8"	(1972)	6.63	(0.62)	6.85	(0.64)	15 9/16"	(395)	11.13	(1.03)
ACW1874††	5.49	(0.51)	9 11/16"	(246)	81 5/8"	(2073)	6.98	(0.65)	7.20	(0.67)	11 9/16"	(294)	11.66	(1.08)
ACW1878††	5.76	(0.54)	9 11/16"	(246)	85 5/8"	(2175)	7.33	(0.68)	7.56	(0.70)	7 9/16"	(192)	12.20	(1.13)
ACW1880††	6.03	(0.56)	9 11/16"	(246)	89 5/8"	(2276)	7.68	(0.71)	7.91	(0.73)	3 9/16"	(90)	12.73	(1.18)
ACW2020	1.69	(0.16)	13 13/16"	(351)	17 5/8"	(447)	1.82	(0.17)	2.04	(0.19)	62 1/16"	(1576)	3.75	(0.35)
ACW2024	2.08	(0.19)	13 13/16"	(351)	21 5/8"	(549)	2.28	(0.21)	2.51	(0.23)	58 1/16"	(1475)	4.40	(0.41)
ACW2028	2.46	(0.23)	13 13/16"	(351)	25 5/8"	(650)	2.74	(0.25)	2.97	(0.28)	54 1/16"	(1373)	5.05	(0.47)
ACW2030	2.84	(0.26)	13 13/16"	(351)	29 5/8"	(752)	3.20	(0.30)	3.44	(0.32)	$50\ 1^{1}/_{16}$ "	(1271)	5.69	(0.53)
ACW2034	3.23	(0.30)	13 13/16"	(351)	33 5/8"	(853)	3.67	(0.34)	3.90	(0.36)	46 1/16"	(1170)	6.34	(0.59)
ACW2038	3.61	(0.34)	13 13/16"	(351)	37 5/8"	(955)	4.13	(0.38)	4.36	(0.41)	42 1/16"	(1068)	6.98	(0.65)
ACW2040	4.00	(0.37)	13 13/16"	(351)	41 5/8"	(1057)	4.59	(0.43)	4.83	(0.45)	38 1/16"	(967)	7.63	(0.71)
ACW2044	4.38	(0.41)	13 13/16"	(351)	45 5/8"	(1159)	5.05	(0.47)	5.29	(0.49)	34 1/16"	(865)	8.27	(0.77)
ACW2048	4.24	(0.39)	12 5/16"	(313)	49 5/8"	(1260)	5.51	(0.51)	5.76	(0.54)	30 1/16"	(763)	8.92	(0.83)
ACW2050	4.58	(0.43)	12 5/16"	(313)	53 5/8"	(1362)	5.97	(0.55)	6.22	(0.58)	26 1/16"	(662)	9.57	(0.89)
ACW2054	4.92	(0.46)	12 5/16"	(313)	57 5/8"	(1464)	6.43	(0.60)	6.69	(0.62)	22 1/16"	(560)	10.21	(0.95)
ACW2058	5.26	(0.49)	12 5/16"	(313)	61 5/8"	(1565)	6.89	(0.64)	7.15	(0.66)	18 1/16"	(459)	10.86	(1.01)
ACW2060	5.61	(0.52)	12 5/16"	(313)	65 5/8"	(1667)	7.35	(0.68)	7.61	(0.71)	14 1/16"	(357)	11.50	(1.07)
ACW2064†	6.52	(0.61)	13 1/2"	(343)	69 5/8"	(1768)	7.82	(0.73)	8.08	(0.75)	10 1/16"	(256)	12.15	(1.13)
ACW2068†	6.89	(0.64)	13 1/2"	(343)	73 5/8"	(1870)	8.28	(0.77)	8.54	(0.79)	6 1/16"	(154)	12.80	(1.19)
ACW2070†	7.27	(0.68)	13 1/2"	(343)	77 5/8"	(1972)	8.74	(0.81)	9.01	(0.84)	15 9/16"	(395)	13.44	(1.25)
ACW2074††	7.64	(0.71)	13 1/2"	(343)	81 5/8"	(2073)	9.20	(0.85)	9.47	(0.88)	11 9/16"	(294)	14.09	(1.31)
ACW2078††	8.02	(0.75)	13 1/2"	(343)	85 5/8"	(2175)	9.66	(0.90)	9.94	(0.92)	7 9/16"	(192)	14.73	(1.37)
ACW2080 ††	8.39	(0.78)	13 1/2"	(343)	89 5/8"	(2276)	10.12	(0.94)	10.40	(0.97)	3 9/16"	(90)	15.38	(1.43)
ACW2420	1.99	(0.18)	16 5/16"	(414)	17 5/8"	(447)	2.26	(0.21)	2.53	(0.24)	62 1/16"	(1576)	4.40	(0.41)
ACW2424	2.45	(0.23)	16 5/16"	(414)	21 5/8"	(549)	2.83	(0.26)	3.11	(0.29)	58 1/16"	(1475)	5.16	(0.48)
ACW2428	2.90	(0.27)	16 5/16"	(414)	25 5/8"	(650)	3.40	(0.32)	3.68	(0.34)	54 1/16"	(1373)	5.91	(0.55)
ACW2430	3.35	(0.31)	16 5/16"	(414)	29 5/8"	(752)	3.98	(0.37)	4.28	(0.40)	50 1/16"	(1271)	6.67	(0.62)
ACW2434	3.80	(0.35)	16 5/16"	(414)	33 5/8"	(853)	4.55	(0.42)	4.83	(0.45)	46 1/16"	(1170)	7.43	(0.69)
ACW2438	4.26	(0.40)	16 5/16"	(414)	37 5/8"	(955)	5.12	(0.48)	5.41	(0.50)	42 1/16"	(1068)	8.18	(0.76)
ACW2440 ◊*	5.92	(0.55)	20 1/2"	(521)	41 5/8"	(1057)	5.69	(0.53)	5.98	(0.56)	38 1/16"	(967)	8.94	(0.83)
ACW2444 ◊*	6.49	(0.60)	20 1/2"	(521)	45 5/8"	(1159)	6.27	(0.58)	6.56	(0.61)	34 1/16"	(865)	9.70	(0.90)
ACW2448 ◊*	7.06	(0.66)	20 1/2"	(521)	49 5/8"	(1260)	6.84	(0.64)	7.13	(0.66)	30 1/16"	(763)	10.46	(0.97)
ACW2450 ◊*	7.63	(0.71)	20 1/2"	(521)	53 5/8"	(1362)	7.41	(0.69)	7.71	(0.72)	26 1/16"	(662)	11.21	(1.04)
ACW2454 ◊*	8.20	(0.76)	20 1/2"	(521)	57 5/8"	(1464)	7.98	(0.74)	8.29	(0.77)	22 1/16"	(560)	11.97	(1.11)
ACW2458 ◊*	8.77	(0.81)	20 1/2"	(521)	61 5/8"	(1565)	8.55	(0.79)	8.86	(0.82)	18 1/16"	(459)	12.73	(1.18)
ACW2460 ◊*	9.34	(0.87)	20 1/2"	(521)	65 5/8"	(1667)	9.13	(0.85)	9.44	(0.88)	14 1/16"	(357)	13.48	(1.25)
ACW2464 ♦*†	9.95	(0.92)	20 5/8"	(524)	69 5/8"	(1768)	9.70	(0.90)	10.01	(0.93)	10 1/16"	(256)	14.24	(1.32)
ACW2468 ♦*†	10.52	(0.98)	20 5/8"	(524)	73 5/8"	(1870)	10.27	(0.95)	10.59	(0.98)	6 1/16"	(154)	15.00	(1.39
ACW2470 ♦*†	11.09	(1.03)	20 5/8"	(524)	77 5/8"	(1972)	10.84	(1.01)	11.16	(1.04)	15 9/16"	(395)	15.75	(1.46)
ACW2474 ♦*††	11.66	(1.08)	20 5/8"	(524)	81 5/8"	(2073)	11.42	(1.06)	11.74	(1.09)	11 9/16"	(294)	16.51	(1.53)
	12.23	(1.14)	20 5/8"	(524)	85 5/8"	(2175)	11.99	(1.11)	12.31	(1.14)	7 9/16"	(192)	17.27	(1.60)
ACW2478 ♦*††			20 5/8"	(524)	89 5/8"	(2276)	12.56	(1.17)	12.89	(1.20)	3 9/16"	(90)	18.02	(1.67)
ACW2480 ♦*††	12.80	(1.19)												
ACW2480 ♦*†† ACW2624	2.75	(0.26)	18 5/16"	(465)	21 5/8"	(549)	3.11	(0.29)	3.41	(0.32)	58 1/16"	(1475)	5.54	(0.51)
ACW2480 ♦*†† ACW2624 ACW2628	2.75 3.25	(0.26)	18 ⁵ / ₁₆ " 18 ⁵ / ₁₆ "	(465) (465)	21 ⁵ / ₈ " 25 ⁵ / ₈ "	(549) (650)	3.11 3.74	(0.29)	3.41 4.04	(0.38)	54 1/16"	(1373)	6.35	(0.59)
ACW2480 ♦*†† ACW2624	2.75	(0.26)	18 5/16"	(465)	21 5/8"	(549)	3.11	(0.29)	3.41					

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 $^{1}/_{2}$ " (2096).

of 6'-10 '/z" (2096).

* Dimensions in parentheses are in millimeters or square meters.

Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

*Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with a limited sash opening.

*Hinged for widest clear opening (straight-arm operator). All other sizes have hinge with wash mode (split-arm operator).

*Not available with triple-pane annealed glass.

[†]Not available with triple-pane annealed glass. ††Not available with triple-pane annealed or tempered glass.



Casement Window Opening and Area Specifications (continued)

Casement Window Opening and Area Specifications (continued)														
Window Number	Ar	Opening rea	Wic	lth		ight	Aı	ass rea	Ar	ent rea	to Top o	Subfloor of Inside Stop		rea
		t./(m²)	Inches/			/(mm)		t./(m²)		t./(m²)	Inches			t./(m²)
ACW2640 ◊*	6.50	(0.60)	22 1/2"	(572)	41 5/8"	(1057)	6.25	(0.58)	6.56	(0.61)	38 1/16"	(967)	9.60	(0.89
ACW2644 ◊*	7.13	(0.66)	22 1/2"	(572)	45 5/8"	(1159)	6.87	(0.64)	7.19	(0.67)	34 1/16"	(865)	10.41	(0.97
ACW2648 ◊*	7.75	(0.72)	22 1/2"	(572)	49 5/8"	(1260)	7.50	(0.70)	7.82	(0.73)	30 1/16"	(763)	11.22	(1.04
ACW2650 ◊ *	8.38	(0.78)	22 1/2"	(572)	53 5/8"	(1362)	8.13	(0.76)	8.45	(0.79)	26 1/16"	(662)	12.04	(1.12
ACW2654 ◊*	9.01	(0.84)	22 1/2"	(572)	57 5/8"	(1464)	8.76	(0.81)	9.09	(0.84)	22 1/16"	(560)	12.85	(1.19
ACW2658 ◊ *	9.63	(0.89)	22 1/2"	(572)	61 5/8"	(1565)	9.39	(0.87)	9.72	(0.90)	18 1/16"	(459)	13.66	(1.27
ACW2660 ◊*	10.26	(0.95)	22 1/2"	(572)	65 5/8"	(1667)	10.01	(0.93)	10.35	(0.96)	14 1/16"	(357)	14.47	(1.34
ACW2664 ♦*†	10.91	(1.01)	22 5/8"	(575)	69 5/8"	(1768)	10.64	(0.99)	10.98	(1.02)	10 1/16"	(256)	15.29	(1.42
ACW2668 ♦*†	11.54	(1.07)	22 5/8"	(575)	73 5/8"	(1870)	11.27	(1.05)	11.61	(1.08)	6 1/16"	(154)	16.10	(1.50
ACW2670 ♦*†	12.17	(1.13)	22 5/8"	(575)	77 ⁵ / ₈ "	(1972)	11.90	(1.11)	12.24	(1.14)	15 9/16"	(395)	16.91	(1.57
ACW2674 ♦*††	12.79	(1.19)	22 5/8"	(575)	81 5/8"	(2073)	12.52	(1.16)	12.87	(1.20)	11 9/16"	(294)	17.72	(1.65
ACW2678 ♦*††	13.42	(1.25)	22 5/8"	(575)	85 5/8"	(2175)	13.15	(1.22)	13.50	(1.25)	7 9/16"	(192)	18.54	(1.72
ACW2680 ♦*††	14.05	(1.31)	22 5/8"	(575)	89 5/8"	(2276)	13.78	(1.28)	14.13	(1.31)	3 9/16"	(90)	19.35	(1.80
									_					
ACW2824	3.05	(0.28)	20 5/16"	(516)	21 5/8"	(549)	3.38	(0.31)	3.71	(0.34)	58 1/16"	(1475)	5.91	(0.55
ACW2828	3.61	(0.34)	20 5/16"	(516)	25 5/8"	(650)	4.07	(0.38)	4.39	(0.41)	54 1/16"	(1373)	6.78	(0.63
ACW2830	4.17	(0.39)	20 5/16"	(516)	29 5/8"	(752)	4.75	(0.44)	5.08	(0.47)	50 1/16"	(1271)	7.65	(0.71
ACW2834	4.74	(0.44)	20 5/16"	(516)	33 5/8"	(853)	5.43	(0.50)	5.77	(0.54)	46 1/16"	(1170)	8.52	(0.79
ACW2838 ◊*	6.40	(0.59)	24 1/2"	(623)	37 5/8"	(955)	6.12	(0.57)	6.45	(0.60)	42 1/16"	(1068)	9.39	(0.87
ACW2840 ◊	5.87	(0.55)	20 5/16"	(516)	41 5/8"	(1057)	6.80	(0.63)	7.14	(0.66)	38 1/16"	(967)	10.25	(0.95
ACW2844 ◊	6.43	(0.60)	20 5/16"	(516)	45 5/8"	(1159)	7.48	(0.69)	7.83	(0.73)	34 1/16"	(865)	11.12	(1.03
ACW2848 ◊	6.99	(0.65)	20 5/16"	(516)	49 5/8"	(1260)	8.17	(0.76)	8.51	(0.79)	30 1/16"	(763)	11.99	(1.11
ACW2850 ◊	7.56	(0.70)	20 5/16"	(516)	53 5/8"	(1362)	8.85	(0.82)	9.20	(0.85)	26 1/16"	(662)	12.86	(1.19
ACW2854 ◊	9.44	(0.88)	23 19/32"	(599)	57 ⁵ / ₈ "	(1464)	9.53	(0.89)	9.89	(0.92)	22 1/16"	(560)	13.73	(1.28
ACW2858 ◊	10.09	(0.94)	23 19/32"	(599)	61 5/8"	(1565)	10.22	(0.95)	10.57	(0.98)	18 1/16"	(459)	14.59	(1.36
ACW2860 ◊ †	10.75	(1.00)	23 19/32"	(599)	65 5/8"	(1667)	10.90	(1.01)	11.26	(1.05)	14 1/16"	(357)	15.46	(1.44
ACW2864 ♦*†	9.95	(0.92)	20 9/16"	(522)	69 5/8"	(1768)	11.58	(1.08)	11.95	(1.11)	10 1/16"	(256)	16.33	(1.52
ACW2868 ♦*†	10.52	(0.98)		(522)		(1870)	12.27	(1.14)	12.63	(1.17)		(154)	17.20	(1.60
			20 9/16"		73 5/8"				_		6 1/16"			
ACW2870 ♦*†	11.09	(1.03)	20 9/16"	(522)	77 5/8"	(1972)	12.95	(1.20)	13.32	(1.24)	15 9/16"	(395)	18.07	(1.68
ACW2874 ♦*††	11.66	(1.08)	20 9/16"	(522)	81 5/8"	(2073)	13.63	(1.27)	14.00	(1.30)	11 9/16"	(294)	18.93	(1.76
ACW2878 ♦*††	12.23	(1.14)	20 9/16"	(522)	85 5/8"	(2175)	14.32	(1.33)	14.69	(1.36)	7 9/16"	(192)	19.80	(1.84
ACW2880 ♦*††	12.81	(1.19)	20 9/16"	(522)	89 5/8"	(2276)	15.00	(1.39)	15.38	(1.43)	3 9/16"	(90)	20.67	(1.92
ACW21028	3.97	(0.37)	22 5/16"	(567)	25 5/8"	(650)	4.40	(0.41)	4.75	(0.44)	54 1/16"	(1373)	7.22	(0.6
ACW21030	4.58	(0.43)	22 5/16"	(567)	29 5/8"	(752)	5.14	(0.48)	5.49	(0.51)	50 1/16"	(1271)	8.14	(0.76
ACW21034	5.20	(0.48)	22 5/16"	(567)	33 5/8"	(853)	5.87	(0.55)	6.23	(0.58)	46 1/16"	(1170)	9.06	(0.84
ACW21038 ◊	5.82	(0.54)	22 5/16"	(567)	37 5/8"	(955)	6.61	(0.61)	6.98	(0.65)	42 1/16"	(1068)	9.99	(0.93
ACW21040 ◊	6.44	(0.60)	22 5/16"	(567)	41 5/8"	(1057)	7.35	(0.68)	7.72	(0.72)	38 1/16"	(967)	10.91	(1.01
ACW21044 ◊	7.06	(0.66)	22 5/16"	(567)	45 ⁵ / ₈ "	(1159)	8.09	(0.75)	8.46	(0.79)	34 1/16"	(865)	11.83	(1.10
ACW21048♦	8.78	(0.82)	25 1/2"	(648)	49 5/8"	(1260)	8.83	(0.82)	9.20	(0.85)	30 1/16"	(763)	12.76	(1.19
ACW21050 ◊	9.49	(0.88)	25 1/2"	(648)	53 5/8"	(1362)	9.57	(0.89)	9.94	(0.92)	26 1/16"	(662)	13.68	(1.27
ACW21054♦	10.20	(0.95)	25 1/2"	(648)	57 5/8"	(1464)	10.31	(0.96)	10.69	(0.99)	22 1/16"	(560)	14.60	(1.36
						, ,		. ,	_					
ACW21058♦	10.91	(1.01)	25 1/2"	(648)	61 5/8"	(1565)	11.05	(1.03)	11.43	(1.06)	18 1/16"	(459)	15.53	(1.44
ACW21060 נ	11.61	(1.08)	25 1/2"	(648)	65 5/8"	(1667)	11.79	(1.10)	12.17	(1.13)	14 1/16"	(357)	16.45	(1.53
ACW21064 ♦*†	10.71	(0.99)	22 1/8"	(562)	69 5/8"	(1768)	12.52	(1.16)	12.91	(1.20)	10 1/16"	(256)	17.38	(1.6
ACW21068 ♦*†	11.32	(1.05)	22 1/8"	(562)	73 5/8"	(1870)	13.26	(1.23)	13.65	(1.27)	6 1/16"	(154)	18.30	(1.70
ACW21070 ♦*†	11.94	(1.11)	22 1/8"	(562)	77 5/8"	(1972)	14.00	(1.30)	14.40	(1.34)	15 9/16"	(395)	19.22	(1.79
ACW21074 ♦*††	12.56	(1.17)	22 1/8"	(562)	81 5/8"	(2073)	14.74	(1.37)	15.14	(1.41)	11 9/16"	(294)	20.15	(1.8
ACW21078 ♦*††	13.17	(1.22)	22 1/8"	(562)	85 5/8"	(2175)	15.48	(1.44)	15.88	(1.48)	7 9/16"	(192)	21.07	(1.96
ACW21080 ♦*††	13.77	(1.28)	22 1/8"	(562)	89 5/8"	(2276)	16.22	(1.51)	16.62	(1.54)	3 9/16"	(90)	21.99	(2.04
ACW3028	4.32	(0.40)	24 5/16"	(617)	25 5/8"	(650)	4.73	(0.44)	5.10	(0.47)	54 1/16"	(1373)	7.65	(0.7
ACW3030	5.00	(0.46)	24 5/16"	(617)	29 5/8"	(752)	5.52	(0.51)	5.90	(0.55)	50 1/16"	(1271)	8.63	(0.80
ACW3034	5.67	(0.53)	24 5/16"	(617)	33 5/8"	(853)	6.32	(0.59)	6.70	(0.62)	46 1/16"	(1170)	9.61	(0.89
ICW3038 ◊	6.35	(0.59)	24 5/16"	(617)	37 5/8"	(955)	7.11	(0.66)	7.50	(0.70)	42 1/16"	(1068)	10.59	(0.98
CW3040 ◊	7.91	(0.73)	27 7/16"	(696)	41 5/8"	(1057)	7.90	(0.73)	8.30	(0.77)	38 1/16"	(967)	11.57	(1.0
CW3044♦	8.68	(0.81)	27 7/16	(696)	45 5/8"	(1159)	8.70	(0.81)	9.09	(0.84)	34 1/16"	(865)	12.55	(1.1
ICW3044 ◊								(0.81)	_					
	9.44	(0.88)	27 7/16"	(696)	49 5/8"	(1260)	9.49		9.89	(0.92)	30 1/16"	(763)	13.52	(1.26
ACW3050 ♦	10.20	(0.95)	27 7/16"	(696)	53 5/8"	(1362)	10.29	(0.96)	10.69	(0.99)	26 1/16"	(662)	14.50	(1.35
ACW3054 ♦	10.96	(1.02)	27 7/16"	(696)	57 5/8"	(1464)	11.08	(1.03)	11.49	(1.07)	22 1/16"	(560)	15.48	(1.44
ACW3058 ◊	11.72	(1.09)	27 7/16"	(696)	61 5/8"	(1565)	11.88	(1.10)	12.28	(1.14)	18 1/16"	(459)	16.46	(1.53
	12.48	(1.16)	27 7/16"	(696)	65 5/8"	(1667)	12.67	(1.18)	13.08	(1.22)	14 1/16"	(357)	17.44	(1.62
ACW3060 ◊ †														
	10.77	(1.00)	22 1/4"	(565)	69 5/8"	(1768)	13.47	(1.25)	13.88	(1.29)	10 1/16"	(256)	18.42	(1.7
ACW3060 ◊ † ACW3064 ♦ *† ACW3068 ♦ *†		(1.00)	22 ¹ / ₄ " 22 ¹ / ₄ "	(565) (565)	69 ⁵ / ₈ " 73 ⁵ / ₈ "	(1768) (1870)	13.47 14.26	(1.25) (1.32)	13.88 14.68	(1.29)	10 ¹ / ₁₆ " 6 ¹ / ₁₆ "	(256) (154)	18.42 19.40	(1.71

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" *-Top of Subfloor to lop of Inside Sill Stop* is calculated based upon a structural header height of 6'-10'-1/2" (2096).
 *Dimensions in parentheses are in millimeters or square meters.

 *Meets or exceeds clear opening area of 5.7 sq. ft.

or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

Meets or exceeds clear opening area of 5.7 sq. ft.

or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with a limited sash opening.

^{*}Hinged for widest clear opening (straight-arm operator). All other sizes have hinge with wash mode (split-arm operator).

[†]Not available with triple-pane annealed glass. †Thot available with triple-pane annealed or tempered glass.

Casement Window Opening and Area Specifications (continued)

Casement Window Opening and Area Specifications (continued)														
Window	Class)naning	Clear Op	ening in	Full Open	Position	CI		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Subfloor	Ougrall	Mindou
Window Number		Opening rea	Wie	dth	Не	ight		ass rea		ent rea		of Inside Stop		Window rea
	Sq. F	t./(m²)	Inches		Inches	s/(mm)	Sq. F	t./(m²)	Sq. F	t./(m²)	Inches	/(mm)		t./(m²)
ACW3074 ♦*††	12.63	(1.17)	22 1/4"	(565)	81 5/8"	(2073)	15.85	(1.47)	16.27	(1.51)	11 9/16"	(294)	21.36	(1.98)
ACW3078 ♦*††	13.25	(1.23)	22 1/4"	(565)	85 5/8"	(2175)	16.64	(1.55)	17.07	(1.59)	7 9/16"	(192)	22.34	(2.08)
ACW3080 ♦*††	13.87	(1.29)	22 1/4"	(565)	89 5/8"	(2276)	17.44	(1.62)	17.87	(1.66)	3 9/16"	(90)	23.32	(2.17)
ACW3230*†	4.78	(0.44)	23 1/4"	(591)	29 5/8"	(752)	5.91	(0.55)	6.31	(0.59)	50 1/16"	(1271)	9.12	(0.85)
ACW3234*†	5.43	(0.50)	23 1/4"	(591)	33 5/8"	(853)	6.76	(0.63)	7.17	(0.67)	46 1/16"	(1170)	10.15	(0.94)
ACW3238 ♦*†	6.07	(0.56)	23 1/4"	(591)	37 5/8"	(955)	7.61	(0.71)	8.02	(0.75)	42 1/16"	(1068)	11.19	(1.04)
ACW3240 ♦*†	6.72	(0.62)	23 1/4"	(591)	41 5/8"	(1057)	8.46	(0.79)	8.87	(0.82)	38 1/16"	(967)	12.22	(1.14)
ACW3244 ♦*†	7.36	(0.68)	23 1/4"	(591)	45 5/8"	(1159)	9.31	(0.86)	9.73	(0.90)	34 1/16"	(865)	13.26	(1.23)
ACW3248 ♦*†	8.01	(0.74)	23 1/4"	(591)	49 5/8"	(1260)	10.16	(0.94)	10.58	(0.98)	30 1/16"	(763)	14.29	(1.33)
ACW3250 ♦*†	8.65	(0.80)	23 1/4"	(591)	53 5/8"	(1362)	11.01	(1.02)	11.43	(1.06)	26 1/16"	(662)	15.33	(1.42)
ACW3254 ♦*† ACW3258 ♦*†	9.30	(0.86)	23 1/4"	(591)	57 5/8"	(1464)	11.86	(1.10)	12.29	(1.14)	22 1/16"	(560)	16.36 17.40	(1.52)
ACW3260 ♦*†	10.59	(0.92)	23 1/4"	(591)	61 5/8"	(1565)	13.56	(1.18)	13.14	(1.22)	18 1/16"	(459)	18.43	(1.62)
ACW3264 ♦*†	11.24	(1.04)	23 1/4"	(591)	65 5/8"	(1667)	14.41	(1.26)	14.85	(1.30)	14 1/16"	(357)	19.47	(1.71)
ACW3268 ♦*†	11.88	(1.10)	23 1/4"	(591)	69 ⁵ / ₈ "	(1870)	15.26	(1.34)	15.70	(1.46)	10 ¹ / ₁₆ " 6 ¹ / ₁₆ "	(154)	20.50	(1.01)
ACW3270 ♦*†	12.53	(1.16)	23 1/4"	(591)	73 ⁵ / ₈ "	(1972)	16.11	(1.42)	16.55	(1.54)	15 9/16"	(395)	21.54	(2.00)
ACW3274 ♦*††	13.18	(1.22)	23 1/4"	(591)	81 5/8"	(2073)	16.96	(1.58)	17.40	(1.62)	11 9/16"	(294)	22.57	(2.10)
ACW3278 ♦*††	13.82	(1.28)	23 1/4"	(591)	85 5/8"	(2175)	17.81	(1.65)	18.26	(1.70)	7 9/16"	(192)	23.60	(2.19)
ACW3280 ♦*††	14.47	(1.34)	23 1/4"	(591)	89 5/8"	(2276)	18.66	(1.73)	19.11	(1.78)	3 9/16"	(90)	24.64	(2.29)
ACW3430*†	4.72	(0.44)	23"	(584)	29 5/8"	(752)	6.29	(0.58)	6.72	(0.62)	50 1/16"	(1271)	9.61	(0.89)
ACW3434*†	5.36	(0.50)	23"	(584)	33 5/8"	(853)	7.20	(0.67)	7.63	(0.71)	46 1/16"	(1170)	10.70	(0.99)
ACW3438 ♦*†	6.00	(0.56)	23"	(584)	37 5/8"	(955)	8.10	(0.75)	8.54	(0.79)	42 1/16"	(1068)	11.79	(1.10)
ACW3440 ♦*†	6.64	(0.62)	23"	(584)	41 5/8"	(1057)	9.01	(0.84)	9.45	(0.88)	38 1/16"	(967)	12.88	(1.20)
ACW3444 ♦*†	7.27	(0.68)	23"	(584)	45 5/8"	(1159)	9.92	(0.92)	10.36	(0.96)	34 1/16"	(865)	13.97	(1.30)
ACW3448 ♦*†	7.91	(0.73)	23"	(584)	49 5/8"	(1260)	10.82	(1.01)	11.27	(1.05)	30 1/16"	(763)	15.06	(1.40)
ACW3450 ♦*†	8.55	(0.79)	23"	(584)	53 5/8"	(1362)	11.73	(1.09)	12.18	(1.13)	26 1/16"	(662)	16.15	(1.50)
ACW3454 ♦*†	9.19	(0.85)	23"	(584)	57 5/8"	(1464)	12.63	(1.17)	13.09	(1.22)	22 1/16"	(560)	17.24	(1.60)
ACW3458 ♦*†	9.83	(0.91)	23"	(584)	61 5/8"	(1565)	13.54	(1.26)	13.99	(1.30)	18 1/16"	(459)	18.33	(1.70)
ACW3460 ♦*†	10.46	(0.97)	23"	(584)	65 5/8"	(1667)	14.44	(1.34)	14.90	(1.38)	14 1/16"	(357)	19.42	(1.80)
ACW3464 ♦*†	11.10	(1.03)	23"	(584)	69 5/8"	(1768)	15.35	(1.43)	15.81	(1.47)	10 1/16"	(256)	20.51	(1.91)
ACW3468 ♦*†	11.74	(1.09)	23"	(584)	73 5/8"	(1870)	16.25	(1.51)	16.72	(1.55)	6 1/16"	(154)	21.60	(2.01)
ACW3470 ♦*†	12.38	(1.15)	23"	(584)	77 5/8"	(1972)	17.16	(1.59)	17.63	(1.64)	15 9/16"	(395)	22.69	(2.11)
ACW3474 ♦*††	13.02	(1.21)	23"	(584)	81 5/8"	(2073)	18.07	(1.68)	18.54	(1.72)	11 9/16"	(294)	23.78	(2.21)
ACW3478 ♦*††	13.66	(1.27)	23"	(584)	85 5/8"	(2175)	18.97	(1.76)	19.45	(1.81)	7 9/16"	(192)	24.87	(2.31)
ACW3480 ♦*††	14.29	(1.33)	23"	(584)	89 5/8"	(2276)	19.88	(1.85)	20.36	(1.89)	3 9/16"	(90)	25.96	(2.41)
ACW3634*†	5.27	(0.49)	22 9/16"	(573)	33 5/8"	(853)	7.64	(0.71)	8.10	(0.75)	46 1/16"	(1170)	11.24	(1.04)
ACW3638 ♦*†	5.90	(0.55)	22 9/16"	(573)	37 5/8"	(955)	8.60	(0.80)	9.06	(0.84)	42 1/16"	(1068)	12.39	(1.15)
ACW3640 ♦*†	6.53	(0.61)	22 9/16"	(573)	41 5/8"	(1057)	9.56	(0.89)	10.03	(0.93)	38 1/16"	(967)	13.54	(1.26)
ACW3644 ♦*†	7.15	(0.66)	22 9/16"	(573)	45 5/8"	(1159)	10.52	(0.98)	10.99	(1.02)	34 1/16"	(865)	14.68	(1.36)
ACW3648 ♦*†	7.78	(0.72)	22 9/16"	(573)	49 5/8"	(1260)	11.49	(1.07)	11.96	(1.11)	30 1/16"	(763)	15.83	(1.47)
ACW3650 ♦*†	8.41	(0.78)	22 9/16"	(573)	53 5/8"	(1362)	12.45	(1.16)	12.92	(1.20)	26 1/16"	(662)	16.97	(1.58)
ACW3654 ♦*†	9.03	(0.84)	22 9/16"	(573)	57 5/8"	(1464)	13.41	(1.25)	13.89	(1.29)	22 1/16"	(560)	18.12	(1.68)
ACW3658 ♦*†	9.66	(0.90)	22 9/16"	(573)	61 5/8"	(1565)	14.37	(1.34)	14.85	(1.38)	18 1/16"	(459)	19.26	(1.79)
ACW3660 ♦*†	10.29	(0.96)	22 9/16"	(573)	65 5/8"	(1667)	15.33	(1.42)	15.81	(1.47)	14 1/16"	(357)	20.41	(1.90)
ACW3664 ♦*†	10.92	(1.01)	22 9/16"	(573)	69 5/8"	(1768)	16.29	(1.51)	16.78	(1.56)	10 1/16"	(256)	21.56	(2.00)
ACW3668 ♦*† ACW3670 ♦*†	11.54	(1.07)	22 9/16"	(573)	73 5/8"		17.25	(1.60)	17.74	(1.65)	6 1/16"	(154)	22.70	(2.11)
ACW3674 ♦*††	12.17	(1.13)	22 ⁹ / ₁₆ " 22 ⁹ / ₁₆ "	(573)	77 ⁵ / ₈ " 81 ⁵ / ₈ "	(1972)	18.21 19.17	(1.69)	18.71 19.67	(1.74)	15 ⁹ / ₁₆ " 11 ⁹ / ₁₆ "	(395)	23.85	(2.22)
ACW3678 ♦*††	13.43	(1.15)	22 9/16"	(573)	85 5/8"	(2175)	20.14	(1.75)	20.64	(1.92)	7 9/16"	(192)	26.14	(2.43)
ACW3680 ♦*††	14.05	(1.31)	22 9/16"	(573)	89 5/8"	(2276)	21.10	(1.96)	21.60	(2.01)	3 9/16"	(90)	27.29	(2.54)
ACW3834*††	5.18	(0.48)	22 1/4"	(565)	33 5/8"	(853)	8.08	(0.75)	8.57	(0.80)	46 1/16"	(1170)	11.79	(1.10)
ACW3838 ♦*††	5.80	(0.54)	22 1/4"	(565)	37 5/8"	(955)	9.10	(0.85)	9.59	(0.89)	42 1/16"	(1068)	12.99	(1.21)
ACW3840 ♦*††	6.42	(0.60)	22 1/4"	(565)	41 5/8"	(1057)	10.12	(0.94)	10.61	(0.99)	38 1/16"	(967)	14.19	(1.32)
ACW3844 ♦*††	7.04	(0.65)	22 1/4"	(565)	45 5/8"	(1159)	11.13	(1.03)	11.63	(1.08)	34 1/16"	(865)	15.39	(1.43)
ACW3848 ♦*††	7.65	(0.71)	22 1/4"	(565)	49 5/8"	(1260)	12.15	(1.13)	12.65	(1.18)	30 1/16"	(763)	16.59	(1.54)
ACW3850 ♦*††	8.27	(0.77)	22 1/4"	(565)	53 5/8"	(1362)	13.17	(1.22)	13.67	(1.27)	26 1/16"	(662)	17.80	(1.65)
ACW3854 ♦*††	8.89	(0.83)	22 1/4"	(565)	57 ⁵ / ₈ "	(1464)	14.18	(1.32)	14.69	(1.36)	22 1/16"	(560)	19.00	(1.77)
ACW3858 ♦*††	9.50	(0.88)	22 1/4"	(565)	61 5/8"	(1565)	15.20	(1.41)	15.71	(1.46)	18 1/16"	(459)	20.20	(1.88)
ACW3860 ♦*†	10.12	(0.94)	22 1/4"	(565)	65 5/8"	(1667)	16.22	(1.51)	16.73	(1.55)	14 1/16"	(357)	21.40	(1.99)
ACW3864 ♦*†	10.74	(1.00)	22 1/4"	(565)	69 5/8"	(1768)	17.23	(1.60)	17.75	(1.65)	10 1/16"	(256)	22.60	(2.10)
ACW3868 ♦*†	11.36	(1.06)	22 1/4"	(565)	73 5/8"	(1870)	18.25	(1.70)	18.76	(1.74)	6 1/16"	(154)	23.80	(2.21)
ACW3870 ♦*†	11.97	(1.11)	22 1/4"	(565)	77 5/8"	(1972)	19.27	(1.79)	19.78	(1.84)	15 9/16"	(395)	25.00	(2.32)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop"

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10' /2" (2096).
• Dimensions in parentheses are in millimeters or square meters.
• Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with a limited *Hinged for widest clear opening (straight-arm operator). All other sizes have hinge with wash mode (split-arm operator). Thot available with triple-pane annealed glass.

11 Not available with triple-pane annealed or tempered glass.



Casement Window Opening and Area Specifications (continued)

						(,							
Window Number	A	Opening rea t./(m²)	Clear Op Wid Inches	dth		Position ight s/(mm)	Ar	ass rea :./(m²)	Ai	ent rea t./(m²)	to Top o	Subfloor of Inside Stop ((mm)	Ar	Window rea t./(m²)
ACW3874 ♦*††	12.59	(1.17)	22 1/4"	(565)	81 5/8"	(2073)	20.28	(1.88)	20.80	(1.93)	11 9/16"	(294)	26.21	(2.43)
ACW3878 ♦*††	13.21	(1.23)	22 1/4"	(565)	85 5/8"	(2175)	21.30	(1.98)	21.82	(2.03)	7 9/16"	(192)	27.41	(2.55)
ACW3880 ♦*††	13.82	(1.28)	22 1/4"	(565)	89 5/8"	(2276)	22.32	(2.07)	22.84	(2.12)	3 9/16"	(90)	28.61	(2.66)
ACW31038 ♦*††	5.68	(0.53)	21 3/4"	(552)	37 5/8"	(955)	9.60	(0.89)	10.11	(0.94)	42 1/16"	(1068)	13.59	(1.26)
ACW31040 ♦*††	6.28	(0.58)	21 3/4"	(552)	41 5/8"	(1057)	10.67	(0.99)	11.18	(1.04)	38 1/16"	(967)	14.85	(1.38)
ACW31044 ♦*††	6.89	(0.64)	21 3/4"	(552)	45 5/8"	(1159)	11.74	(1.09)	12.26	(1.14)	34 1/16"	(865)	16.10	(1.50)
ACW31048 ♦*††	7.49	(0.70)	21 3/4"	(552)	49 5/8"	(1260)	12.81	(1.19)	13.33	(1.24)	30 1/16"	(763)	17.36	(1.61)
ACW31050 ♦*††	8.09	(0.75)	21 3/4"	(552)	53 5/8"	(1362)	13.89	(1.29)	14.41	(1.34)	26 1/16"	(662)	18.62	(1.73)
ACW31054 ♦*††	8.70	(0.81)	21 3/4"	(552)	57 5/8"	(1464)	14.96	(1.39)	15.49	(1.44)	22 1/16"	(560)	19.88	(1.85)
ACW31058 ♦*††	9.30	(0.86)	21 3/4"	(552)	61 5/8"	(1565)	16.03	(1.49)	16.56	(1.54)	18 1/16"	(459)	21.13	(1.96)
ACW31060 ♦*†	9.91	(0.92)	21 3/4"	(552)	65 5/8"	(1667)	17.10	(1.59)	17.64	(1.64)	14 1/16"	(357)	22.39	(2.08)
ACW31064 ♦*†	10.51	(0.98)	21 3/4"	(552)	69 5/8"	(1768)	18.17	(1.69)	18.71	(1.74)	10 1/16"	(256)	23.65	(2.20)
ACW31068 ♦*†	11.11	(1.03)	21 3/4"	(552)	73 5/8"	(1870)	19.25	(1.79)	19.79	(1.84)	6 1/16"	(154)	24.90	(2.31)
ACW31070 ♦*†	11.72	(1.09)	21 3/4"	(552)	77 5/8"	(1972)	20.32	(1.89)	20.86	(1.94)	15 9/16"	(395)	26.16	(2.43)
ACW31074 ♦*††	12.32	(1.14)	21 3/4"	(552)	81 5/8"	(2073)	21.39	(1.99)	21.94	(2.04)	11 9/16"	(294)	27.42	(2.55)
ACW31078 ♦*††	12.93	(1.20)	21 3/4"	(552)	85 5/8"	(2175)	22.46	(2.09)	23.01	(2.14)	7 9/16"	(192)	28.67	(2.66)
ACW31080 ♦*††	13.53	(1.26)	21 3/4"	(552)	89 5/8"	(2276)	23.54	(2.19)	24.09	(2.24)	3 9/16"	(90)	29.93	(2.78)
ACW4038 ♦*††	5.53	(0.51)	21 3/16"	(538)	37 5/8"	(955)	10.09	(0.94)	10.63	(0.99)	42 1/16"	(1068)	14.19	(1.32)
ACW4040 ♦*††	6.12	(0.57)	21 3/16"	(538)	41 5/8"	(1057)	11.22	(1.04)	11.76	(1.09)	38 1/16"	(967)	15.50	(1.44)
ACW4044 ♦*††	6.71	(0.62)	21 3/16"	(538)	45 5/8"	(1159)	12.35	(1.15)	12.89	(1.20)	34 1/16"	(865)	16.82	(1.56)
ACW4048 ♦*††	7.30	(0.68)	21 3/16"	(538)	49 5/8"	(1260)	13.48	(1.25)	14.02	(1.30)	30 1/16"	(763)	18.13	(1.68)
ACW4050 ♦*††	7.89	(0.73)	21 3/16"	(538)	53 5/8"	(1362)	14.60	(1.36)	15.15	(1.41)	26 1/16"	(662)	19.44	(1.81)
ACW4054 ♦*††	8.48	(0.79)	21 3/16"	(538)	57 5/8"	(1464)	15.73	(1.46)	16.29	(1.51)	22 1/16"	(560)	20.75	(1.93)
ACW4058 ♦*††	9.07	(0.84)	21 3/16"	(538)	61 5/8"	(1565)	16.86	(1.57)	17.42	(1.62)	18 1/16"	(459)	22.07	(2.05)
ACW4060 ♦*†	9.66	(0.90)	21 3/16"	(538)	65 5/8"	(1667)	17.99	(1.67)	18.55	(1.72)	14 1/16"	(357)	23.38	(2.17)
ACW4064 ♦*†	10.24	(0.95)	21 3/16"	(538)	69 5/8"	(1768)	19.12	(1.78)	19.68	(1.83)	10 1/16"	(256)	24.69	(2.29)
ACW4068 ♦*†	10.83	(1.01)	21 3/16"	(538)	73 5/8"	(1870)	20.24	(1.88)	20.81	(1.93)	6 1/16"	(154)	26.00	(2.42)
ACW4070 ♦*†	11.42	(1.06)	21 3/16"	(538)	77 5/8"	(1972)	21.37	(1.99)	21.94	(2.04)	15 ⁹ / ₁₆ "	(395)	27.32	(2.54)
ACW4074 ♦*††	12.01	(1.12)	21 3/16"	(538)	81 5/8"	(2073)	22.50	(2.09)	23.07	(2.14)	11 9/16"	(294)	28.63	(2.66)
ACW4078 ♦*††	12.60	(1.17)	21 3/16"	(538)	85 5/8"	(2175)	23.63	(2.20)	24.20	(2.25)	7 9/16"	(192)	29.94	(2.78)
ACW4080 ♦*††	13.19	(1.23)	21 3/16"	(538)	89 5/8"	(2276)	24.75	(2.30)	25.33	(2.35)	3 9/16"	(90)	31.25	(2.90)

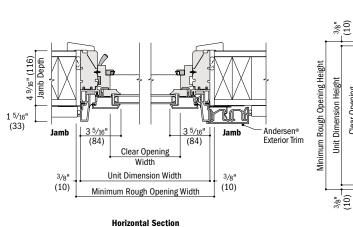
- "Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096).
- Dimensions in parentheses are in millimeters or square meters.
- ♦Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610) with a limited
- sash opening.
 *Hinged for widest clear opening (straight-arm operator). All other sizes have hinge with wash mode (split-arm operator).

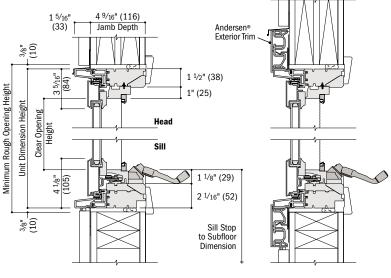
Vertical Section

- †Not available with triple-pane annealed glass. ††Not available with triple-pane annealed
- or tempered glass.

Casement Window Details

Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8





Vertical Section

See pages 60-62 for joining details.

- 4 %/s" (116) base jamb depth measurement is from back side of installation flange.
 Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

AWNING WINDOWS

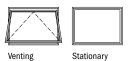
Table of Awning Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) -1:96

200.0 /3 (0) 2 0	(000) 2.00										
Window Dimension		11 ¹ / ₄ " 2'-3 ¹ / ₄ " (692)	2'-5 ¹ / ₄ " (743)	2'-7 1/4" (794)	2'-9 1/4" (845)	2'-11 1/4" (895)	3'-1 1/4" (946)	3'-3 1/4" (997)	3'-7 1/4" (1099)	3'-11 ¹ /4" (1200)	4'-3 ¹ / ₄ " (1302)
Minimum Rough Opening		2'-0" 2'-4" 610) (711)	2'-6" (762)	2'-8" (813)	2'-10" (864)	3'-0" (914)	3'-2" (965)	3'-4"	3'-8"	4'-0" (1219)	4'-4" (1321)
Unobstructed Glass		6 ⁵ /8" 20 ⁵ /8" 422) (523)	22 ⁵ /8" (574)	24 ⁵ /8" (625)	26 ⁵ /8" (676)	28 ⁵ /8" (726)	30 ⁵ /8" (777)	32 ⁵ /8" (828)	36 ⁵ / ₈ " (930)	40 ⁵ /8" (1031)	44 ⁵ /8" (1133)
	CUSTOM SIZE	S AVAILABLE									
1'-3 1/4" (387) 1'-4" (406) 7 13/16" (198)	AAN1814 AAI	N2014 AAN2414	AAN 2614	AAN 2814	AAN 21014	AAN 3014	AAN 3214	AAN 3414	AAN 3814	AAN 4014	AAN 4414
1.7 1/4" 1.3 1/4 (489) (387) (187) (1.5" (1.4" (AAN1818 AAI	N2018 AAN2418	AAN2618	AAN2818	AAN 21018	AAN 3018	AAN 3218	AAN 3418	AAN 3818	AAN 4018	AAN 4418
1'-9 1/4" (540) 1'-10" (559) 13 13/16" (351)		V20110 AAN 24110	AAN26110	AAN28110	AAN210110	AAN30110	AAN32110	AAN 34110	AAN 38110	AAN 40110	AAN 44110
1'-11 1/4" (591) 2'-0" (610) 15 ¹³ / ₁₆ " (401)		N2020 AAN2420	AAN2620	AAN2820	AAN21020	AAN3020	AAN3220	AAN3420	AAN3820	AAN4020	AAN4420
2'-3 1/4" (692) 2'-4" (711) 19 13/16" (503)											
2'-7 1/4" (794) 2'-8" (813) 23 13/16" (605)		N2024 AAN2424	AAN 2624	AAN 2824	AAN 21024	AAN 3024	AAN 3224	AAN 3424	AAN 3824	AAN 4024	AAN 4424
(895) 3'-0" (914) 27 ¹³ / ₁₆ " (706)	AAN1828 AAI	N2028 AAN2428	AAN 2628	AAN 2828	AAN 21028	AAN 3028	AAN3228	AAN 3428	AAN 3828	AAN 4028	AAN 4428
3'-3 1/4" (997) 3'-4" (1016) 31 13/16" (808)		N2030* AAN2430*	AAN2630*	AAN2830*	AAN21030*	AAN3030*	AAN3230*	AAN3430*	AAN3830*	AAN 4030*	AAN 4430*
	AAN1834*†AAN	I2034*†AAN2434*†	AAN2634*†	AAN2834*†	AAN21034*†	AAN3034*†	AAN3234*†	AAN3434*†	AAN3834*†	AAN 4034*†	AAN4434*†
3'-7 1/4" (1099) 3'-8" (1118) 35 13/16" (909)											
	AAN1838*†AAN	I2038*†AAN2438*†	AAN2638*†	AAN2838*†	AAN21038*†	AAN3038*†	AAN3238*†	AAN3438*†	AAN3838*††	AAN4038*#	AAN4438*#
3'-11 1/4" (1200) 4'-0" (1219) 39 13/16" (1011)	AAN1840*†AAN		AAN2640*†	AAN2840*†	AAN21040*†	AAN3040*†	AAN 3240*†	AAN3440*†	AAN3840*#	AAN4040*#	AAN4440*#



Custom-size windows are available in 1/8" (3) increments. See page 63 for custom sizes and specifications.



Choose venting or stationary.

Most sizes shown are available with PG upgrade.‡

Awning window must be installed to vent as shown, and should not be rotated and used as a hopper.

Grille patterns and details shown on page 37.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{•&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

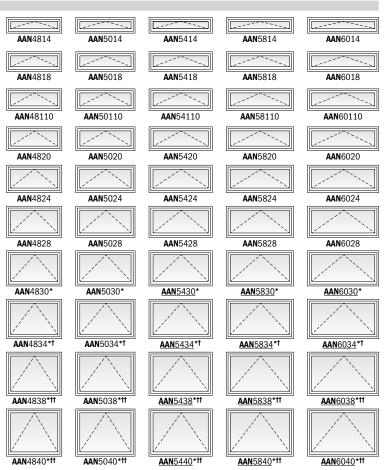
^{*}Tandem locks are standard.

^{*}PG upgrade is not available for venting sizes shown with an underscore on page 33 (i.e. **ACW**5830). *Not available with triple-pane annealed glass.

^{††}Not available with triple-pane annealed or tempered glass.

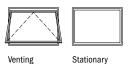


	4'-7 1/4"	4'-11 ¹ /4"	5'-3 1/4"	5'-7 ¹ /4"	5'-11 ¹ /4"
Ī	(1403)	(1505)	(1607)	(1708)	(1810)
	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"
Ī	(1422)	(1524)	(1626)	(1727)	(1829)
	48 5/8"	52 ⁵ /8"	56 ⁵ /8"	60 5/8"	64 5/8"
Ī	(1234)	(1336)	(1438)	(1539)	(1641)





Custom-size windows are available in 1/8" (3) increments. See page 63 for custom sizes and specifications.



Choose venting or stationary.

Most sizes shown are available with PG upgrade.[‡]

Awning window must be installed to vent as shown, and should not be rotated and used as a hopper.

Grille patterns and details shown on page 37.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

[‡]PG upgrade is not available for venting sizes shown with an underscore (i.e. ACW5830).

^{*}Tandem locks are standard. †Not available with triple-pane annealed glass.

^{††}Not available with triple-pane annealed or tempered glass.

AWNING WINDOWS

Awning Window Opening and Area Specifications

Awning Window O	pening	g and A													
Window Number		Clear Opening Area Sq. Ft./(m²)		Width Inches/(mm)		Full Open Position Depth Inches/(mm)		Glass Area Sq. Ft./(m²)		Vent Area Sq. Ft./(m²)		Top of Subfloor to Top of Inside Sill Stop Inches/(mm)		Overall Window Area Sq. Ft./(m²)	
AAN 1814	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	0.68	(0.06)	0.59	(0.05)	70 1/16"	(1779)	2.04	(0.19	
AAN1818	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	1.03	(0.10)	0.59	(0.05)	66 1/16"	(1678)	2.57	(0.24	
AAN 18110	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	1.21	(0.11)	0.59	(0.05)	64 1/16"	(1627)	2.84	(0.26	
AAN1820	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	1.38	(0.13)	0.59	(0.05)	62 1/16"	(1576)	3.11	(0.29	
AAN1824	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	1.73	(0.16)	0.59	(0.05)	58 1/16"	(1475)	3.64	(0.34	
AAN1828	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	2.08	(0.19)	0.59	(0.05)	54 1/16"	(1373)	4.18	(0.39	
AAN1830	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	2.43	(0.23)	0.59	(0.05)	50 1/16"	(1271)	4.71	(0.44	
AAN1834†	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	2.78	(0.26)	0.59	(0.05)	46 1/16"	(1170)	5.25	(0.49	
AAN1838†	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	3.13	(0.29)	0.59	(0.05)	42 1/16"	(1068)	5.78	(0.54	
AAN1840†	0.59	(0.05)	14 5/16"	(364)	5 7/8"	(150)	3.48	(0.32)	0.59	(0.05)	38 1/16"	(967)	6.32	(0.59	
AAN2014	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	0.90	(0.08)	0.75	(0.07)	70 1/16"	(1779)	2.46	(0.23	
AAN2018	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	1.36	(0.13)	0.75	(0.07)	66 1/16"	(1678)	3.11	(0.29	
AAN20110	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	1.59	(0.15)	0.75	(0.07)	64 1/16"	(1627)	3.43	(0.32	
AAN2020	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	1.82	(0.17)	0.75	(0.07)	62 1/16"	(1576)	3.75	(0.35	
AAN2024	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	2.28	(0.21)	0.75	(0.07)	58 1/16"	(1475)	4.40	(0.41	
AAN2028	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	2.74	(0.25)	0.75	(0.07)	54 1/16"	(1373)	5.05	(0.47	
AAN2030	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	3.21	(0.30)	0.75	(0.07)	50 1/16"	(1271)	5.69	(0.53	
AAN2034†	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	3.67	(0.34)	0.75	(0.07)	46 1/16"	(1170)	6.34	(0.59	
AAN2038†	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	4.13	(0.38)	0.75	(0.07)	42 1/16"	(1068)	6.98	(0.65	
AAN 2040†	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	4.59	(0.43)	0.75	(0.07)	38 1/16"	(967)	7.63	(0.71	
AAN 2414	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	1.12	(0.10)	0.91	(0.08)	70 1/16"	(1779)	2.89	(0.27	
AAN2418	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	1.69	(0.16)	0.91	(0.08)	66 1/16"	(1678)	3.64	(0.34	
AAN 24110	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	1.97	(0.18)	0.91	(0.08)	64 1/16"	(1627)	4.02	(0.3	
AAN2420	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	2.26	(0.21)	0.91	(0.08)	62 1/16"	(1576)	4.40	(0.42	
AAN2424	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	2.83	(0.26)	0.91	(0.08)	58 1/16"	(1475)	5.16	(0.48	
AAN2428	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	3.41	(0.32)	0.91	(0.08)	54 1/16"	(1373)	5.91	(0.5	
AAN2430	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	3.98	(0.37)	0.91	(0.08)	50 1/16"	(1271)	6.67	(0.62	
AAN2434†	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	4.55	(0.42)	0.91	(0.08)	46 1/16"	(1170)	7.43	(0.69	
AAN2438†	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	5.12	(0.48)	0.91	(0.08)	42 1/16"	(1068)	8.18	(0.76	
AAN2440†	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	5.69	(0.53)	0.91	(0.08)	38 1/16"	(967)	8.94	(0.83	
AAN2614 AAN2618	0.99	(0.09)	24 5/16"	(618)	5 7/8"	(150)	1.22	(0.11)	0.99	(0.09)	70 1/16"	(1779)	3.10	(0.29	
AAN26110	0.99	(0.09)	24 5/16"	(618)	5 7/8"	(150)	2.17	(0.17)	0.99	(0.09)	66 1/16"	(1678)	4.32	(0.36	
AAN26110 AAN2620	0.99		24 5/16"	(618)	5 ⁷ / ₈ "	(150)	2.17	(0.20)	0.99	(0.09)	64 1/16"	(1627)	4.32	(0.40	
AAN2624	0.99	(0.09)	24 ⁵ / ₁₆ " 24 ⁵ / ₁₆ "	(618)	5 7/8"	(150)	3.11	(0.23)	0.99	(0.09)	62 ¹ / ₁₆ " 58 ¹ / ₁₆ "	(1576)	5.54	(0.44	
AAN2628	0.99	(0.09)	24 5/16"	(618)	_	(150)	3.75	(0.29)	0.99	(0.09)	54 1/16"	(1373)	6.35	(0.59	
AAN2630	0.99	(0.09)	24 5/16	(618)	5 ⁷ / ₈ "	(150)	4.36	(0.33)	0.99	(0.09)	50 1/16"	(1271)	7.16	(0.6	
AAN2634†	0.99	(0.09)	24 5/16"	(618)	5 7/8"	(150)	4.99	(0.41)	0.99	(0.09)	46 1/16"	(1170)	7.97	(0.74	
AAN2638†	0.99	(0.09)	24 5/16"	(618)	5 7/8"	(150)	5.62	(0.52)	0.99	(0.09)	40 /16	(1068)	8.79	(0.75	
AAN2640†	0.99	(0.09)	24 5/16"	(618)	5 7/8"	(150)	6.25	(0.52)	0.99	(0.09)	38 1/16"	(967)	9.60	(0.89	
AAN2814	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	1.33	(0.12)	1.08	(0.10)	70 1/16"	(1779)	3.31	(0.3	
AAN2818	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	2.02	(0.12)	1.08	(0.10)	66 1/16"	(1678)	4.18	(0.39	
AAN28110	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	2.36	(0.22)	1.08	(0.10)	64 1/16"	(1627)	4.61	(0.43	
AAN2820	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	2.70	(0.25)	1.08	(0.10)	62 1/16"	(1576)	5.05	(0.47	
AAN2824	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	3.38	(0.31)	1.08	(0.10)	58 1/16"	(1475)	5.91	(0.55	
AAN2828	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	4.07	(0.31)	1.08	(0.10)	54 1/16"	(1373)	6.78	(0.63	
AAN2830	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	4.75	(0.44)	1.08	(0.10)	50 1/16"	(1271)	7.65	(0.71	
AAN2834†	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	5.43	(0.50)	1.08	(0.10)	46 1/16"	(1170)	8.52	(0.79	
AAN2838†	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	6.11	(0.57)	1.08	(0.10)	42 1/16"	(1068)	9.39	(0.87	
AAN2840†	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	6.80	(0.63)	1.08	(0.10)	38 1/16"	(967)	10.25	(0.95	
AAN21014	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	1.44	(0.13)	1.16	(0.11)	70 1/16"	(1779)	3.52	(0.33	
AAN21014 AAN21018	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	2.18	(0.20)	1.16	(0.11)	66 1/16"	(1678)	4.45	(0.42	
AAN210110	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	2.55	(0.24)	1.16	(0.11)	64 1/16"	(1627)	4.91	(0.46	
AAN21020	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	2.92	(0.27)	1.16	(0.11)	62 1/16"	(1576)	5.37	(0.50	
AAN21024	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	3.66	(0.34)	1.16	(0.11)	58 1/16"	(1475)	6.29	(0.5	
AAN21024 AAN21028	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	4.40	(0.41)	1.16	(0.11)	54 1/16"	(1373)	7.22	(0.6	
AAN21030	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	5.14	(0.41)	1.16	(0.11)	50 1/16"	(1271)	8.14	(0.7)	
		/	/ 16	7	- 78	,,				,,	/ 16	/		(
AAN21034†	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	5.87	(0.55)	1.16	(0.11)	46 1/16"	(1170)	9.06	(0.84	

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'- $10^{1/2}$ " (2096). • Dimensions in parentheses are in millimeters or square meters. †Not available with triple-pane annealed glass.

continued on next page



Awning Window Opening and Area Specifications (continued)

Awiiiig Willuow O	pennig	, ana .		pecifi ening in			lucu)							
Window Number	Clear Opening Area Sq. Ft./(m²)		Wie	dth	De	pth	Ar	ass rea	1A	ent rea	Top of S to Top of Sill S	f Inside Stop	1A	Window
AAN 21040†		, , ,	Inches			(150)		:./(m²)		t./(m²)	Inches			t./(m²)
AAN21040 T AAN3014	1.16	(0.11)	28 ⁵ / ₁₆ " 30 ⁵ / ₁₆ "	(719)	5 7/8"	(150)	7.35 1.55	(0.68)	1.16	(0.11)	38 ¹ / ₁₆ "	(967)	3.73	(0.35)
AAN3014 AAN3018	1.24			(770)	5 7/8"	(150)	2.34		1.24	. ,	70 1/16"	(1779)	4.71	
AAN3010	1.24	(0.12)	30 ⁵ / ₁₆ " 30 ⁵ / ₁₆ "	(770)	5 ⁷ / ₈ "	(150)	2.74	(0.22)	1.24	(0.12)	66 ¹ / ₁₆ " 64 ¹ / ₁₆ "	(1678)	5.20	(0.44)
AAN30210	1.24	(0.12)	30 5/16	(770)	5 7/8"	(150)			1.24	(0.12)			5.69	
AAN3020	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	3.14	(0.29)	1.24	(0.12)	62 ¹ / ₁₆ " 58 ¹ / ₁₆ "	(1576)	6.67	(0.53)
AAN3024 AAN3028	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	4.73	(0.44)	1.24	(0.12)	54 1/16"	(1373)	7.56	(0.62)
AAN3030	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	5.52	(0.51)	1.24	(0.12)	50 ¹ / ₁₆ "	(1271)	8.63	(0.80)
AAN3034†	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	6.32	(0.51)	1.24	(0.12)	46 1/16"	(1170)	9.61	(0.89)
AAN3038†	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	7.11	(0.66)	1.24	(0.12)	42 1/16"	(1068)	10.59	(0.98)
AAN3040†	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	7.90	(0.73)	1.24	(0.12)	38 1/16"	(967)	11.57	(1.07)
AAN3214	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	1.66	(0.15)	1.32	(0.12)	70 1/16"	(1779)	3.95	(0.37)
AAN3218	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	2.51	(0.23)	1.32	(0.12)	66 1/16"	(1678)	4.98	(0.46)
AAN32110	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	2.93	(0.27)	1.32	(0.12)	64 1/16"	(1627)	5.50	(0.51)
AAN3220	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	3.36	(0.31)	1.32	(0.12)	62 1/16"	(1576)	6.01	(0.56)
AAN3224	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	4.21	(0.39)	1.32	(0.12)	58 1/16"	(1475)	7.05	(0.65)
AAN3228	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	5.06	(0.47)	1.32	(0.12)	54 1/16"	(1373)	8.08	(0.75)
AAN3230	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	5.91	(0.55)	1.32	(0.12)	50 1/16"	(1271)	9.12	(0.85)
AAN3234†	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	6.76	(0.63)	1.32	(0.12)	46 1/16"	(1170)	10.15	(0.94)
AAN3238†	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	7.61	(0.71)	1.32	(0.12)	42 1/16"	(1068)	11.19	(1.04)
AAN3240†	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	8.46	(0.79)	1.32	(0.12)	38 1/16"	(967)	12.22	(1.14)
AAN3414	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	1.77	(0.16)	1.40	(0.13)	70 1/16"	(1779)	4.16	(0.39)
AAN3418	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	2.67	(0.25)	1.40	(0.13)	66 1/16"	(1678)	5.25	(0.49)
AAN 34110	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	3.12	(0.29)	1.40	(0.13)	64 1/16"	(1627)	5.79	(0.54)
AAN3420	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	3.58	(0.33)	1.40	(0.13)	62 1/16"	(1576)	6.34	(0.59)
AAN3424	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	4.48	(0.42)	1.40	(0.13)	58 1/16"	(1475)	7.43	(0.69)
AAN3428	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	5.39	(0.50)	1.40	(0.13)	54 1/16"	(1373)	8.52	(0.79)
AAN3430	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	6.29	(0.58)	1.40	(0.13)	50 1/16"	(1271)	9.61	(0.89)
AAN3434†	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	7.20	(0.67)	1.40	(0.13)	46 1/16"	(1170)	10.70	(0.99)
AAN3438†	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	8.10	(0.75)	1.40	(0.13)	42 1/16"	(1068)	11.79	(1.10)
AAN 3440†	1.40	(0.13)	34 5/16"	(872)	5 7/8"	(150)	9.01	(0.84)	1.40	(0.13)	38 1/16"	(967)	12.88	(1.20)
AAN 3814	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	1.98	(0.18)	1.57	(0.15)	70 1/16"	(1779)	4.58	(0.43)
AAN3818	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	3.00	(0.28)	1.57	(0.15)	66 1/16"	(1678)	5.78	(0.54)
AAN 38110	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	3.51	(0.33)	1.57	(0.15)	64 1/16"	(1627)	6.38	(0.59)
AAN3820	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	4.02	(0.37)	1.57	(0.15)	62 1/16"	(1576)	6.98	(0.65)
AAN3824	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	5.03	(0.47)	1.57	(0.15)	58 1/16"	(1475)	8.18	(0.76)
AAN3828	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	6.05	(0.56)	1.57	(0.15)	54 1/16"	(1373)	9.39	(0.87)
AAN 3830	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	7.07	(0.66)	1.57	(0.15)	50 1/16"	(1271)	10.59	(0.98)
AAN3834†	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	8.08	(0.75)	1.57	(0.15)	46 1/16"	(1170)	11.79	(1.10)
AAN3838††	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	9.10	(0.85)	1.57	(0.15)	42 1/16"	(1068)	12.99	(1.21)
AAN3840††	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	10.12	(0.94)	1.57	(0.15)	38 1/16"	(967)	14.19	(1.32)
AAN 4014	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	2.20	(0.20)	1.73	(0.16)	70 1/16"	(1779)	5.00	(0.46)
AAN 4018	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	3.33	(0.31)	1.73	(0.16)	66 1/16"	(1678)	6.32	(0.59)
AAN 40110	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	3.89	(0.36)	1.73	(0.16)	64 1/16"	(1627)	6.97	(0.65)
AAN 4020	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	4.46	(0.41)	1.73	(0.16)	62 1/16"	(1576)	7.63	(0.71)
AAN 4024	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	5.58	(0.52)	1.73	(0.16)	58 1/16"	(1475)	8.94	(0.83)
AAN4028	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	6.71	(0.62)	1.73	(0.16)	54 1/16"	(1373)	10.25	(0.95)
AAN 4030	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	7.84	(0.73)	1.73	(0.16)	50 1/16"	(1271)	11.57	(1.07)
AAN4034†	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	8.97	(0.83)	1.73	(0.16)	46 1/16"	(1170)	12.88	(1.20)
AAN4038††	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	10.09	(0.94)	1.73	(0.16)	42 1/16"	(1068)	14.19	(1.32)
AAN4444	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	11.22	(1.04)	1.73	(0.16)	38 1/16"	(967)	15.50	(1.44)
AAN4414	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	2.42	(0.22)	1.90	(0.18)	70 1/16"	(1779)	5.43	(0.50)
AAN44110	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	3.66	(0.34)	1.90	(0.18)	66 1/16"	(1678)	6.85	(0.64)
AAN44110	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	4.27	(0.40)	1.90	(0.18)	64 1/16"	(1627)	7.56	(0.70)
AAN4420	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	4.89	(0.45)	1.90	(0.18)	62 1/16"	(1576)	8.28	(0.77)
AAN4424	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	6.13	(0.57)	1.90	(0.18)	58 1/16"	(1475)	9.70	(0.90)
AAN4428	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	7.37	(0.68)	1.90	(0.18)	54 1/16"	(1373)	11.12	(1.03)
AAN4430	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	8.61	(0.80)	1.90	(0.18)	50 1/16"	(1271)	12.55	(1.17)
AAN 4434†	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	9.85	(0.92)	1.90	(0.18)	46 1/16"	(1170)	13.97	(1.30)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 \(^1/2\)" (2096).
• Dimensions in parentheses are in millimeters or square meters.

†Not available with triple-pane annealed glass.

†Not available with triple-pane annealed or tempered glass.

AWNING WINDOWS

Awning Window Opening and Area Specifications (continued)

Amining William Of	Cilling	ana r	Clear Opening in	Full Oper	Position					Top of Su	hfloor		
Window	Clear Op	ening	cical opening i	i i un opci	110310011	Gla	ass	Ve	ent	to Top of		Overall	Window
Number	Area	a	Width		epth		ea (/m²)		ea t /(m²)	Sill St			rea
AAN4438††	Sq. Ft./ 1.90	(0.18)	Inches/(mm) 46 ⁵ / ₁₆ " (1176		s/(mm) (150)	11.09	:./(m²) (1.03)	1.90	t./(m²) (0.18)	Inches/(42 ¹ / ₁₆ "	(1068)	15.39	t./(m²) (1.43)
AAN4440††		(0.18)			(150)	12.33		1.90	(0.18)		(967)	16.82	(1.43)
AAN4814			46 5/16" (1176				(1.15)		-				
AAN4818		(0.19)	50 5/ ₁₆ " (1278		(150)	2.63	(0.24)	2.06	(0.19)		(1779)	5.85	(0.54)
		(0.19)	50 5/16" (1278		(150)	3.98	(0.37)	2.06	(0.19)	,	(1678)	7.39	(0.69)
AAN48110		(0.19)	50 5/16" (1278		(150)	4.66	(0.43)	2.06	(0.19)		(1627)	8.15	(0.76)
AAN4820		(0.19)	50 5/16" (1278		(150)	5.33 6.68	(0.50)	2.06	(0.19)		(1576)	8.92 10.46	(0.83)
AAN4824 AAN4828		(0.19)	50 5/ ₁₆ " (1278		(150)	8.03	(0.62)	2.06	(0.19)		(1475)	11.99	(0.97)
AAN4830		(0.19)	50 5/ ₁₆ " (1278		(150)		(0.75)		(0.19)		(1373)		(1.11)
AAN4834†		(0.19)	50 5/ ₁₆ " (1278		(150)	9.38	(0.87)	2.06	(0.19)	, 10	,	13.53	(1.26)
AAN4838††		(0.19)	50 5/ ₁₆ " (1278		(150)	10.73	(1.00)	2.06	(0.19)		(1170)	15.06	(1.40)
		(0.19)	50 ⁵ / ₁₆ " (1278		(150)	12.08	(1.12)	2.06	(0.19)		(1068)	16.59	(1.54)
AAN4840 ††		(0.19)	50 5/16" (1278	-	(150)	13.43	(1.25)	2.06	(0.19)		(967)	18.13	(1.68)
AAN5014		(0.21)	54 5/16" (1380		(150)	2.85	(0.26)	2.22	(0.21)	7.10	(1779)	6.28	(0.58)
AAN5018		(0.21)	54 ⁵ / ₁₆ " (1380		(150)	4.31	(0.40)	2.22	(0.21)		(1678)	7.92	(0.74)
AAN50110		(0.21)	54 5/16" (1380		(150)	5.04	(0.47)	2.22	(0.21)		(1627)	8.74	(0.81)
AAN5020		(0.21)	54 ⁵ / ₁₆ " (1380	, .	(150)	5.77	(0.54)	2.22	(0.21)	- /10	(1576)	9.57	(0.89)
AAN5024		(0.21)	54 ⁵ / ₁₆ " (1380	-	(150)	7.23	(0.67)	2.22	(0.21)	,	(1475)	11.21	(1.04)
AAN5028		(0.21)	54 ⁵ / ₁₆ " (1380		(150)	9.36	(0.87)	2.22	(0.21)		(1373)	13.73	. ,
AAN5030		(0.21)	54 ⁵ / ₁₆ " (1380	,,,	(150)	10.16	(0.94)	2.22	(0.21)		(1271)	14.50	(1.35)
AAN5034†		(0.21)	54 ⁵ / ₁₆ " (1380		(150)	11.62	(1.08)	2.22	(0.21)		(1170)	16.15	(1.50)
AAN5038††		(0.21)	54 5/16" (1380		(150)	13.08	(1.22)	2.22	(0.21)		(1068)	17.80	(1.65)
AAN5040††		(0.21)	54 5/16" (1380		(150)	14.54	(1.35)	2.22	(0.21)		(967)	19.44	(1.81)
AAN5414		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	3.07	(0.29)	2.39	(0.22)		(1779)	6.70	(0.62)
AAN5418		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	4.64	(0.43)	2.39	(0.22)		(1678)	8.46	(0.79)
AAN54110		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	5.42	(0.50)	2.39	(0.22)		(1627)	9.33	(0.87)
AAN5420		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	6.21	(0.58)	2.39	(0.22)		(1576)	10.21	(0.95)
AAN5424		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	7.78	(0.72)	2.39	(0.22)		(1475)	11.97	(1.11)
AAN5428		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	8.69	(0.81)	2.39	(0.22)		(1373)	12.86	(1.19)
AAN5430		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	10.93	(1.02)	2.39	(0.22)		(1271)	15.48	(1.44)
AAN5434†		(0.22)	58 ⁵ / ₁₆ " (1481		(150)	12.50	(1.16)	2.39	(0.22)		(1170)	17.24	(1.60)
AAN5438††		(0.22)	58 5/16" (1481		(150)	14.07	(1.31)	2.39	(0.22)		(1068)	19.00	(1.77)
AAN5440††		(0.22)	58 5/16" (1481	-	(150)	15.64	(1.45)	2.39	(0.22)		(967)	20.75	(1.93)
AAN5814		(0.24)	62 5/16" (1583		(150)	3.28	(0.30)	2.55	(0.24)		(1779)	7.12	(0.66)
AAN5818		(0.24)	62 5/16" (1583		(150)	4.97	(0.46)	2.55	(0.24)		(1678)	8.99	(0.84)
AAN58110		(0.24)	62 5/16" (1583		(150)	5.81	(0.54)	2.55	(0.24)	- 710	(1627)	9.92	(0.92)
AAN5820		(0.24)	62 5/16" (1583	, .	(150)	6.65	(0.62)	2.55	(0.24)	,	(1576)	10.86	(1.01)
AAN5824		(0.24)	62 5/16" (1583		(150)	8.33	(0.77)	2.55	(0.24)		(1475)	12.73	(1.18)
AAN5828 AAN5830		(0.24)	62 5/16" (1583		(150)	10.02	(0.93)	2.55	(0.24)	7.10	(1373)	14.59	(1.36)
AAN5830 AAN5834†		(0.24)	62 ⁵ / ₁₆ " (1583 62 ⁵ / ₁₆ " (1583		(150)	11.70	(1.09)	2.55	(0.24)		(1271)	16.46	(1.53)
		. ,	, ,	, ,	. ,					,	,		. ,
AAN5838††		(0.24)	62 5/16" (1583		(150)	15.07	(1.40)	2.55	(0.24)		(1068)	20.20	(1.88)
AAN5840†† AAN6014		(0.24)	62 ⁵ / ₁₆ " (1583		(150)	16.75 3.50	(1.56)	2.55	(0.24)		(967)	7.55	(2.05)
AAN6018		(0.25)	66 5/16" (1684 66 5/16" (1684		(150)	5.29	(0.33)	2.71	(0.25)		(1779)	9.53	
		(0.25)			(150)		(0.49)	2.71	(0.25)		(1678)		(0.89)
AAN60110		(0.25)	66 5/16" (1684		(150)	6.19	(0.58)	2.71	(0.25)		(1627)	10.51	(0.98)
AAN6020		(0.25)	66 5/16" (1684		(150)	7.09	(0.66)	2.71	(0.25)		(1576)	11.50	(1.07)
AAN6024		(0.25)	66 5/16" (1684		(150)	8.88	(0.82)	2.71	(0.25)		(1475)	13.48	(1.25)
AAN6028		(0.25)	66 5/16" (1684		(150)	10.68	(0.99)	2.71	(0.25)		(1373)	15.46	(1.44)
AAN6034 †		(0.25)	66 5/16" (1684		(150)	12.47	(1.16)	2.71	(0.25)		(1271)	17.44	(1.62)
AAN6034†		(0.25)	66 5/16" (1684		(150)	14.27	(1.33)	2.71	(0.25)		(1170)	19.42	(1.80)
AAN6038††		(0.25)	66 5/16" (1684		(150)	16.06	(1.49)	2.71	(0.25)		(1068)	21.40	(1.99)
AAN6040††	2.71	(0.25)	66 5/16" (1684	5 7/8"	(150)	17.85	(1.66)	2.71	(0.25)	38 1/16"	(967)	23.38	(2.17)

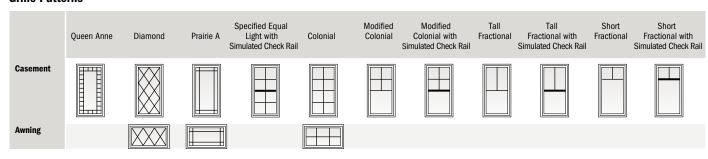
^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 \(^1/2\)" (2096).
• Dimensions in parentheses are in millimeters or square meters.

**TNOt available with triple-pane annealed glass.

**TNOT available with triple-pane annealed or tempered glass.

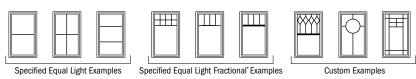


Grille Patterns



Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes.

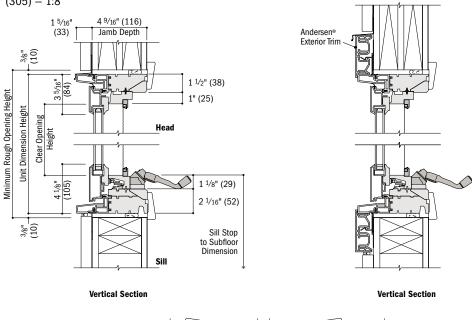
Six-light prairie, specified equal light, specified equal light fractional and custom patterns are also available. For more grille options, see page 19 or visit **andersenwindows.com/grilles**.

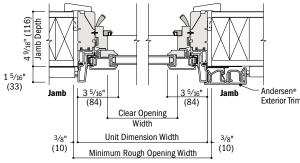


^{*}Bottom horizontal bar located at center or at custom dimensions.

Awning Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8





See pages 60-62 for joining details.

Horizontal Section

- 4 9/16" (116) base jamb depth measurement is from backside of installation flange.
- *Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

Table of Double-Hung Window Sizes Scale $\frac{1}{6}$ " (3) = 1'-0" (305) -1:96

Notes on the next page also apply to this page.

Scale $\frac{1}{8}$ " (3) = 1'-0"	(305) – 1:96									
Unit Dimension	1'-7 ¹ / ₄ " 1'-11 ¹ / ₄ ' (591)		743) 2'-7 ¹ / ₄ " (794)	2'-9 ¹ / ₄ " (845)	2'-11 1/4" (895)	3'-1 1/4" (946)	3'-3 1/4" (997)	3'-7 1/4" (1099)	3'-11 ¹ /4" (1200)	2:3 cottage or 3:2 reverse cottage sash ratio available
Minimum Rough Opening	1'-8" 2'-0"	\longrightarrow	'-6" 2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-8"	4'-0"	for all standard widths and heights up to 6'-7 ¹ / ₄ " (2013).
	(508) (610) 12 ⁵ /8" 16 ⁵ /8"		762) (813) 15/8" 24 5/8"	(864) 26 ⁵ /8"	(914) 28 ⁵ /8"	(965) 30 ⁵ /8"	(1016) 32 ⁵ /8"	(1118) 36 ⁵ /8"	(1219) 40 ⁵ /8"	CUSTOM WIDTHS — 15 ½" to 47 ½"
Unobstructed Glass (lower sash only)	(321) (422) CUSTOM WIDTHS —		(625)	(676)	(727)	(778)	(829)	(930)	(1032)	CUSTOM HEIGHTS — 31 ³ /4" to 80 ⁷ /8"
2'-11 1/4" (895) 3'-0" (914) (914) (325) (325)										2 3
2-111/4' (895) 3-0" (914) 12 13/16" (325)	ADH1830 ADH2030	ADH2430 ADH	12630 ADH2830	ADH21030	ADH3030	ADH3230	ADH 3430	ADH3830*	ADH4030*	Cottodo Reverse Cottodo
)))))))))))))))))))		ADII2430 ADII	ADII2830	ADIIZ1030	AD113030	ADII3230	ADII3430	ADII3630	ADII4030	Cottage Reverse Cottage
3'-31/4" (997) 3'-4" (1016) 14 13/16" (376)										
# O O B	ADH1834 ADH2034	ADH2434 ADH	12634 ADH2834	ADH21034	ADH3034	ADH3234	ADH3434	ADH3834*	ADH4034*	
3-7 1/4" (1099) 3-8" (1118) 16 ¹³ / ₁₆ " (427)										
	ADH1838 ADH2038	ADH2438 ADH	12638 ADH2838	ADH 21038	ADH3038	ADH 3238	ADH 3438	ADH3838*	ADH4038*	
3'-11 1/4" (1200) 4'-0" (1219) 18 ¹³ / ₁₆ " (478)										
31-11 (12 (12 (18 1										
	ADH1840 ADH2040	ADH2440 ADH	12640 ADH2840	ADH21040	ADH3040	ADH3240	ADH3440	ADH3840*	ADH4040*	
4'-3 1/4" (1302) 4'-4" (1321) 20 13/16" (529)										
4 2	ADH1844 ADH2044	ADH2444 ADH	12644 ADH2844	ADH21044	ADH3044	ADH 3244	ADH 3444	ADH3844*	ADH4044*	
1)										
4'-7 1/4" (1403) 4'-8" (1422) 22 13/16" (579)										
	ADH1848 ADH2048	ADH2448 ADH	12648 ADH2848	ADH 21048	ADH3048	ADH 3248	ADH 3448	ADH3848*	ADH 4048*	
/4" () () ()										
(1505) 5'-0" (1524) 24 13/16" (630)										
	ADH1850 ADH2050	ADH2450 ADH	12650 ADH2850	ADH 21050	ADH 3050	ADH3250¢	ADH3450°	ADH3850 [◊] *	ADH4050**	
"# O O "9										
5'-3 1/4" (1607) 5'-4" (1626) 26 13/16" (681)										
	ADU1954 ADU2054	ADH2454 ADH	IOCEA ADUOSEA	ADUO1054	ADU30548	ADU22540	ADH3454¢	ADU205 40*	ADH4054 ⁰ *	
	ADH1854 ADH2054	ADH2454 ADH	12654 ADH2854	ADH21054	ADH3054 ⁰	ADH3254♦	ADH3454V	ADH3854*	ADH4034*	
5'-71/4" (1708) 5'-8" (1727) 28 13/16" (732)										
(1) (1) (1) (2) (3) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1										
	ADH1858 ADH2058	ADH2458 ADH	12658 ADH2858	ADH21058¢	ADH3058	ADH32580	ADH3458¢	ADH3858 ⁰ *	ADH4058*	
/4"))))))))))))))))))))))))))										
5'-11 1/4" (1810) 6'-0" (1829) 30 13/16" (783)										
	ADULACO ADUCACA		JOSSO ARMONOS	ADU040000	ABUSSOS	ADMINISTRA	ADUS 4000	ABUSSOSS	ABU40000*	
	ADH1860 ADH2060	ADH2460 ADH	12660 ADH2860°	ADH 21060 ◊	ADH3060 [¢]	ADH3260 [♦]	ADH 3460 [♦]	ADH3860 [◊] *	ADH4060 [◊] *	
6'-3 1/4" (1911) 6'-4" (1930) 32 13/16" (833)										
6'-5' (16' (16' (18' (18' (18' (18' (18' (18' (18' (18										
	ADH1864 ADH2064	ADH2464 ADH	2664° ADH 2864°	ADH21064◊	ADH 3064 ◊	ADH3264¢	ADH3464°	ADH3864 [◊] *	ADH4064 [♦] *	
									ntinuad on novt	

continued on next page



Table of Double-Hung Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Unit Dimension Minimum Rough Opening Unobstructed Glass (lower sash only)	1'-7 1/4" 1'-11 (489) (591 1'-8" 2'-C (508) (610 12 5/8" 16 5/ (321) (423	(692) (1) (692) (2) -4" (711) (8" 20 5/8" (524)	2'-5 1/4" 2'-7 1/4" (743) (794) 2'-6" 2'-8" (762) (813) 22 5/8" 24 5/8" (575) (625)	2'-9 1/4" (845) 2'-10" (864) 26 5/8" (676)	2'-11 ¹ / ₄ " (895) 3'-0" (914) 28 ⁵ / ₈ " (727)	3'-1 ¹ /4" (946) 3'-2" (965) 30 ⁵ /8" (778)	3'-3 1/4" (997) 3'-4" (1016) 32 5/8" (829)	3'-7 1/4" (1099) 3'-8" (1118) 36 5/8" (930)	3'-11 ¹ / ₄ " (1200) 4'-0" (1219) 40 ⁵ / ₈ " (1031)	2:3 cottage or 3:2 reverse cottage sash ratio available for all standard widths and heights up to 6'-7 ¹ / ₄ " (2013). CUSTOM WIDTHS — 15 ¹ / ₄ " to 47 ¹ / ₄ " CUSTOM HEIGHTS — 31 ³ / ₄ " to 80 ⁷ / ₈ "
6-7 1/4" (2013) 6-8" (2032) 34 13/16" (884) HTS – 27 1/4" to 95 1/4"		i - 15 ¹ / ₄ " to 47 ¹ / ₄ 10 10 10 10 10 10 10 10 10 10 10 10 10 1		ADH21068 ^o	ADH3068 ⁶	ADH3268 ^o	ADH3468 ^o	ADH3868 ⁰ *	ADH4068 ⁰	2 3 3 2 2 Cottage Reverse Cottage
7-3 1/4" (2216) 7-4" (2235) 38 13/16" (986) CUSTOM HEIGHTS	ADH1874 ADH20	774 ADH2474 ⁶ AI	DH2674° ADH2874°	ADH 21074 ⁰	ADH3074°	ADH 3274 [◊]	ADH 3474 0 •	ADH387400**	ADH4074 ⁰ *	= = = = = = = = = = = = = = = = = = = =
7*11 1/4" (2419) 8*0" (2438) 42 13/16" (1087)	ADH1880 ADH2(880 ADH2480° AI	DH2680° ADH2880°	ADH21080*	ADH3080° •	ADH3280 [♦]	ADH 3480 ⁰	ADH3880 ⁰	ADH4080°	



Custom-size windows are available in 1/8" (3) increments. See page 64 for custom sizes and specifications, including windows with cottage and reverse cottage sash.

All sizes shown are available with PG upgrade.[‡] All cottage and reverse cottage sash double-hung window sizes are also available with PG upgrade.[‡]

For windows with dual-pane glass, two locks are standard on windows wider than $3'-3^{1/4}$ " (997). For windows with triple-pane glass or art glass, two locks are standard on sizes wider than 1'-7 1/8" (486) (all sizes shown). Two locks are standard for all windows with PG upgrade.

Grille patterns and details are shown on page 43.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[·] Dimensions in parentheses are in millimeters.

Two locks are standard for windows with triple-pane glass or art glass on sizes wider than 1'-7 1/8" (486) (all sizes shown). Two locks are standard for all windows with PG upgrade. ‡PG upgrade is not available for custom sizes less than 19 1/4" (489) wide.

Office or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 40-42.

Limited sash travel for windows with triple-pane glass or art glass. Sizes 3880 and 4080 are not available with art glass.

^{*}Two locks are standard for windows with dual-pane glass on sizes wider than 3'-3 1/4" (997).

DOUBLE-HUNG WINDOWS

Double-Hung Window Opening and Area Specifications

		and <i>F</i>	rea 5	респ	cation	IS								
Window Number	Clear Opening Area Sq. Ft./(m²)		Clear Op Wie		He	Position eight	IA I	ass rea	IA I	ent rea	to Top o	Subfloor of Inside Stop	Ar	Window
	Sq. Ft	:./(m²)	Inches	/(mm)	Inche	s/(mm)	Sq. Ft	t./(m²)	Sq. F	t./(m²)	Inches	s/(mm)	Sq. F	t./(m²)
ADH1830	1.37	(0.13)	15 ³ / ₁₆ "	(386)	13"	(330)	2.24	(0.21)	1.46	(0.14)	48 7/8"	(1242)	4.71	(0.44)
ADH1834	1.58	(0.15)	15 ³ / ₁₆ "	(386)	15"	(380)	2.59	(0.24)	1.67	(0.16)	44 7/8"	(1140)	5.25	(0.49)
ADH1838	1.79	(0.17)	15 ³ / ₁₆ "	(386)	17"	(431)	2.94	(0.27)	1.88	(0.17)	40 7/8"	(1039)	5.78	(0.54)
ADH1840	2.00	(0.19)	15 ³ / ₁₆ "	(386)	19"	(482)	3.29	(0.31)	2.09	(0.19)	36 7/8"	(937)	6.32	(0.59)
ADH1844	2.21	(0.21)	15 ³ / ₁₆ "	(386)	21"	(533)	3.64	(0.34)	2.30	(0.21)	32 7/8"	(836)	6.85	(0.64)
ADH1848	2.42	(0.23)	15 ³ / ₁₆ "	(386)	23"	(584)	3.99	(0.37)	2.51	(0.23)	28 7/8"	(734)	7.39	(0.69)
ADH1850	2.64	(0.24)	15 ³ / ₁₆ "	(386)	25"	(634)	4.34	(0.40)	2.72	(0.25)	24 7/8"	(632)	7.92	(0.74)
ADH1854	2.85	(0.26)	15 ³ / ₁₆ "	(386)	27"	(685)	4.69	(0.44)	2.94	(0.27)	20 7/8"	(531)	8.46	(0.79)
ADH1858	3.06	(0.28)	15 ³ / ₁₆ "	(386)	29"	(736)	5.04	(0.47)	3.15	(0.29)	16 7/8"	(429)	8.99	(0.84)
ADH1860	3.27	(0.30)	15 ³ / ₁₆ "	(386)	31"	(787)	5.39	(0.50)	3.36	(0.31)	12 7/8"	(328)	9.52	(0.88)
ADH1864	3.48	(0.32)	15 ³ / ₁₆ "	(386)	33"	(838)	5.74	(0.53)	3.56	(0.33)	8 7/8"	(226)	10.06	(0.93)
ADH1868	3.69	(0.34)	15 ³ / ₁₆ "	(386)	35"	(889)	6.09	(0.57)	3.78	(0.35)	4 7/8"	(124)	10.59	(0.98)
ADH1874	4.11	(0.38)	15 ³ / ₁₆ "	(386)	39"	(991)	6.79	(0.63)	4.20	(0.39)	10 ³ / ₈ "	(264)	11.66	(1.08)
ADH1880	4.53	(0.42)	15 ³ / ₁₆ "	(386)	43"	(1092)	7.49	(0.70)	4.62	(0.43)	2 3/8"	(60)	12.73	(1.18)
ADH2030	1.73	(0.16)	19 3/16"	(488)	13"	(330)	2.95	(0.27)	1.84	(0.17)	48 7/8"	(1242)	5.69	(0.53)
ADH2034	2.00	(0.19)	19 3/16"	(488)	15"	(380)	3.41	(0.32)	2.11	(0.20)	44 7/8"	(1140)	6.34	(0.59)
ADH2038	2.26	(0.21)	19 3/16"	(488)	17"	(431)	3.87	(0.36)	2.38	(0.22)	40 7/8"	(1039)	6.98	(0.65)
ADH2040	2.53	(0.24)	19 ³ / ₁₆ "	(488)	19"	(482)	4.33	(0.40)	2.64	(0.25)	36 7/8"	(937)	7.63	(0.71)
ADH2044	2.80	(0.26)	19 3/16"	(488)	21"	(533)	4.80	(0.45)	2.91	(0.27)	32 7/8"	(836)	8.27	(0.77)
ADH2048	3.06	(0.28)	19 3/16"	(488)	23"	(584)	5.26	(0.49)	3.18	(0.29)	28 7/8"	(734)	8.92	(0.83)
ADH2050	3.33	(0.31)	19 ³ / ₁₆ "	(488)	25"	(634)	5.72	(0.53)	3.44	(0.32)	24 7/8"	(632)	9.57	(0.89)
ADH2054	3.60	(0.33)	19 ³ / ₁₆ "	(488)	27"	(685)	6.18	(0.57)	3.71	(0.34)	20 7/8"	(531)	10.21	(0.95)
ADH2058	3.86	(0.36)	19 ³ / ₁₆ "	(488)	29"	(736)	6.64	(0.62)	3.98	(0.37)	16 7/8"	(429)	10.86	(1.01)
ADH2060	4.13	(0.38)	19 ³ / ₁₆ "	(488)	31"	(787)	7.10	(0.66)	4.24	(0.39)	12 7/8"	(328)	11.50	(1.07)
ADH2064	4.40	(0.41)	19 ³ / ₁₆ "	(488)	33"	(838)	7.56	(0.70)	4.50	(0.42)	8 7/8"	(226)	12.15	(1.13)
ADH2068	4.66	(0.43)	19 ³ / ₁₆ "	(488)	35"	(889)	8.02	(0.75)	4.77	(0.44)	4 7/8"	(124)	12.80	(1.19)
ADH2074	5.20	(0.48)	19 3/16"	(488)	39"	(991)	8.95	(0.83)	5.30	(0.49)	10 3/8"	(264)	14.09	(1.31)
ADH2080	5.73	(0.53)	19 3/16"	(488)	43"	(1092)	9.87	(0.92)	5.84	(0.54)	2 3/8"	(60)	15.38	(1.43)
ADH2430	2.09	(0.19)	23 3/16"	(589)	13"	(330)	3.66	(0.34)	2.23	(0.21)	48 7/8"	(1242)	6.67	(0.62)
ADH2434	2.41	(0.22)	23 3/16"	(589)	15"	(380)	4.24	(0.39)	2.55	(0.24)	44 7/8"	(1140)	7.43	(0.69)
ADH2438	2.73	(0.25)	23 3/16"	(589)	17"	(431)	4.81	(0.45)	2.87	(0.27)	40 7/8"	(1039)	8.18	(0.76)
ADH2440 ADH2444	3.06	(0.28)	23 3/16"	(589)	19"	(482)	5.38	(0.50)	3.19	(0.30)	36 7/8"	(937)	8.94 9.70	(0.83)
ADH2448	3.38	(0.31)	23 3/16"	(589)	21"	(533)	5.95 6.52	(0.55)	3.51	(0.33)	32 7/8"	(836)		(0.90)
ADH2440	4.02			(589)		(584)	7.10	(0.61)	4.16	(0.36)	28 7/8"	(734)	10.46	(0.97)
ADH2454	4.02	(0.37)	23 3/16"	(589)	25" 27"	(634)	7.10	(0.66)	4.10	(0.39)	24 '/8	(632)	11.21	(1.04)
ADH2458	4.67	(0.40)	23 3/16"	(589)	29"	(685)	8.24	(0.71)	4.40	(0.42)	16 7/8"	(429)	12.73	(1.11)
ADH2460	4.99	(0.45)	23 3/16"	(589)	31"	(787)	8.81	(0.77)	5.13	(0.43)	10 7/8	(328)	13.48	(1.10)
ADH2464	5.31	(0.49)	23 3/16"	(589)	33"	(838)	9.39	(0.87)	5.44	(0.51)	8 7/8"	(226)	14.24	(1.32)
ADH2468	5.63	(0.52)	23 3/16"	(589)	35"	(889)	9.96	(0.93)	5.76	(0.51)	4 7/8"	(124)	15.00	(1.32)
ADH2474 ◊	6.28	(0.52)	23 3/16"	(589)	39"	(991)	11.10	(1.03)	6.41	(0.60)	10 3/8"	(264)	16.51	(1.53)
ADH2480 ◊	6.92	(0.64)	23 3/16"	(589)	43"	(1092)	12.25	(1.14)	7.05	(0.66)	2 3/8"	(60)	18.02	(1.67)
ADH2630	2.27	(0.21)	25 3/16"	(640)	13"	(330)	4.02	(0.37)	2.42	(0.22)	48 7/8"	(1242)	7.16	(0.67)
ADH2634	2.62	(0.24)	25 3/16"	(640)	15"	(380)	4.65	(0.43)	2.77	(0.26)	44 7/8"	(1140)	7.97	(0.74)
ADH2638	2.97	(0.28)	25 3/16"	(640)	17"	(431)	5.27	(0.49)	3.12	(0.29)	40 7/8"	(1039)	8.79	(0.82)
ADH2640	3.32	(0.31)	25 3/16"	(640)	19"	(482)	5.90	(0.55)	3.47	(0.32)	36 7/8"	(937)	9.60	(0.89)
ADH2644	3.67	(0.34)	25 3/16"	(640)	21"	(533)	6.53	(0.61)	3.82	(0.35)	32 7/8"	(836)	10.41	(0.97)
ADH2648	4.02	(0.37)	25 3/16"	(640)	23"	(584)	7.16	(0.66)	4.17	(0.39)	28 7/8"	(734)	11.22	(1.04)
ADH2650	4.37	(0.41)	25 3/16"	(640)	25"	(634)	7.79	(0.72)	4.52	(0.42)	24 7/8"	(632)	12.04	(1.12)
ADH2654	4.72	(0.44)	25 3/16"	(640)	27"	(685)	8.41	(0.78)	4.87	(0.45)	20 7/8"	(531)	12.85	(1.19)
ADH2658	5.07	(0.47)	25 3/16"	(640)	29"	(736)	9.04	(0.84)	5.22	(0.48)	16 7/8"	(429)	13.66	(1.27)
ADH2660	5.42	(0.50)	25 3/16"	(640)	31"	(787)	9.67	(0.90)	5.57	(0.52)	12 7/8"	(328)	14.47	(1.34)
ADH2664 ◊	5.77	(0.54)	25 3/16"	(640)	33"	(838)	10.30	(0.96)	5.91	(0.55)	8 7/8"	(226)	15.29	(1.42)
ADH2668 ◊	6.12	(0.57)	25 3/16"	(640)	35"	(889)	10.92	(1.01)	6.26	(0.58)	4 7/8"	(124)	16.10	(1.50)
ADH2674♦	6.82	(0.63)	25 3/16"	(640)	39"	(991)	12.18	(1.13)	6.96	(0.65)	10 3/8"	(264)	17.72	(1.65)
ADH2680 ◊	7.52	(0.70)	25 3/16"	(640)	43"	(1092)	13.44	(1.25)	7.66	(0.71)	2 3/8"	(60)	19.35	(1.80)
ADH2830	2.45	(0.23)	27 3/16"	(691)	13"	(330)	4.37	(0.41)	2.61	(0.24)	48 7/8"	(1242)	7.65	(0.71)
ADH2834	2.83	(0.26)	27 3/16"	(691)	15"	(380)	5.06	(0.47)	2.99	(0.28)	44 7/8"	(1140)	8.52	(0.79)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 \(^1/_2\)" (2096) except for units greater than 81 \(^3/_4\)" (2076) in height that are calculated using a header height of 8' (2438).
• Dimensions in parentheses are in millimeters or square meters.

OMeets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

continued on next page



Double-Hung Window Opening and Area Specifications (continued)

ouble-Hung Wind	iow op	ening			-		i (contini	ued)			T	SL.41		
Window Number	Ar	Opening	Wie	dth	·	en Position leight	Ar	ass rea	l Ai	ent rea	to Top o	Subfloor of Inside Stop		ea
		t./(m²)	Inches		Inch	es/(mm)		./(m²)		t./(m²)		/(mm)		t./(m²)
ADH2838	3.21	(0.30)	27 3/16"	(691)	17"	(431)	5.74	(0.53)	3.37	(0.31)	40 7/8"	(1039)	9.39	(0.87
DH2840	3.58	(0.33)	27 3/16"	(691)	19"	(482)	6.42	(0.60)	3.74	(0.35)	36 7/8"	(937)	10.25	(0.95
ADH2844	3.96	(0.37)	27 3/16"	(691)	21"	(533)	7.11	(0.66)	4.12	(0.38)	32 7/8"	(836)	11.12	(1.03
DH2848	4.34	(0.40)	27 3/16"	691)	23"	(584)	7.79	(0.72)	4.50	(0.42)	28 7/8"	(734)	11.99	(1.11
ADH2850	4.72	(0.44)	27 3/16"	(691)	25"	(634)	8.47	(0.79)	4.88	(0.45)	24 7/8"	(632)	12.86	(1.19
DH2854	5.10	(0.47)	27 3/16"	(691)	27"	(685)	9.16	(0.85)	5.25	(0.49)	20 7/8"	(531)	13.73	(1.28
ADH2858	5.47	(0.51)	27 3/16"	(691)	29"	(736)	9.84	(0.91)	5.63	(0.52)	16 7/8"	(429)	14.59	(1.36
DH2860 ♦	5.85	(0.54)	27 3/16"	(691)	31"	(787)	10.52	(0.98)	6.01	(0.56)	12 7/8"	(328)	15.46	(1.44
ADH2864 ♦ ADH2868 ♦	6.23	(0.58)	27 3/16"	(691)	33"	(838)	11.21	(1.04)	6.38	(0.59)	8 7/8"	(226)	16.33	(1.52
	6.61	(0.61)	27 3/16"	(691)	35"	(889)	11.89	(1.10)	6.76	(0.63)	4 7/8"	(124)	17.20	(1.60
DH2874♦	7.36	(0.68)	27 3/16"	(691)	39" 43"	(991)	13.26	(1.23)	7.51	(0.70)	10 3/8"	(264)	18.93 20.67	(1.76
ADH2880 ◊ ADH21030	8.12 2.63	(0.75)	27 ³ / ₁₆ " 29 ³ / ₁₆ "	(691)	13"	(1092)	14.62 4.73	(1.36)	8.27 2.80	(0.77)	2 3/8"	(60)	8.14	(1.92
		(0.24)		(742)	_	(330)		(0.44)	_	(0.26)	48 7/8"			(0.76
ADH21034	3.04	(0.28)	29 3/16"	(742)	15"	(380)	5.47	(0.51)	3.21	(0.30)	44 7/8"	(1140)	9.06	(0.84
DH21038	3.44	(0.32)	29 3/16"	(742)	17"	(431)	6.21	(0.58)	3.61	(0.34)	40 7/8"	(1039)	9.99	(0.93
DH21040	3.85	(0.36)	29 3/16"	(742)	19"	(482)	6.95	(0.65)	4.02	(0.37)	36 7/8"	(937)	10.91	(1.0
.DH21044 .DH21048	4.25	(0.40)	29 3/16"	(742)	21"	(533)	7.69 8.42	(0.71)	4.42	(0.41)	32 7/8"	(836)	11.83 12.76	(1.1)
DH21048 DH21050		(0.43)	29 3/16"	(742)	_	(584)		(0.78)		(0.45)	28 7/8"	(734)		(1.1
DH21050 DH21054	5.06	(0.47)	29 3/16"	(742)	25" 27"	(634)	9.16	(0.85)	5.24	(0.49)	24 7/8"	(632)	13.68	(1.2
DH21054 DH21058◊	5.47	(0.51)	29 3/16"	(742)	29"	(685)	10.64	(0.92)	5.64 6.05	(0.52)	20 7/8"	(531)	14.60 15.53	(1.3
		(0.55)	29 3/16"	(742)		(736)		(0.99)		(0.56)	16 7/8"	(429)		(1.4
DH21060 \$	6.28	(0.58)	29 3/16"	(742)	31"	(787)	11.38	(1.06)	6.45	(0.60)	12 7/8"	(328)	16.45	(1.5
DH21064 Ø	7.09	(0.62)	29 3/16"	(742)	_	(838)	12.12	(1.13)	6.85	(0.64)	8 7/8"	(226)	17.38	(1.6
DH21068 ◊ DH21074 ◊	7.90	(0.66)	29 ³ / ₁₆ " 29 ³ / ₁₆ "	(742)	35" 39"	(889)	12.86 14.34	(1.19)	7.25 8.07	(0.67)	4 7/8"	(124)	18.30	(1.7
DH21074♥	8.71	(0.73)		(742)	43"	(1092)		(1.33)	8.88	(0.75)	10 ³ / ₈ "		20.15	(1.8
DH3030	2.81	(0.81)	29 3/16"	(742)	13"		15.81 5.09	(1.47)	2.99	(0.82)	2 ³ / ₈ " 48 ⁷ / ₈ "	(60)	8.63	(2.0
DH3034	3.25	(0.26)	31 ³ / ₁₆ " 31 ³ / ₁₆ "	(792)	15"	(330)	5.88	(0.47)	3.43	(0.28)	44 7/8"	(1140)	9.61	(0.8
DH3034	3.68	(0.34)	31 3/16"	(792)	17"	(431)	6.67	(0.62)	3.86	(0.36)	40 7/8"	(1039)	10.59	(0.9
DH3040	4.11	(0.34)	31 3/16"	(792)	19"	(482)	7.47	(0.69)	4.29	(0.40)	36 7/8"	(937)	11.57	(1.0
DH3044	4.54	(0.42)	31 3/16"	(792)	21"	(533)	8.26	(0.77)	4.73	(0.44)	32 7/8"	(836)	12.55	(1.1
DH3048	4.98	(0.42)	31 3/16"	(792)	23"	(584)	9.06	(0.84)	5.16	(0.48)	28 7/8"	(734)	13.52	(1.2
DH3050	5.41	(0.50)	31 3/16"	(792)	25"	(634)	9.85	(0.92)	5.59	(0.52)	24 7/8"	(632)	14.50	(1.3
DH3054 ◊	5.84	(0.54)	31 3/16"	(792)	27"	(685)	10.65	(0.99)	6.03	(0.56)	20 7/8"	(531)	15.48	(1.4
DH3058♦	6.28	(0.58)	31 3/16"	(792)	29"	(736)	11.44	(1.06)	6.46	(0.60)	16 7/8"	(429)	16.46	(1.5
DH3060 ◊	6.71	(0.62)	31 3/16"	(792)	31"	(787)	12.24	(1.14)	6.89	(0.64)	12 7/8"	(328)	17.44	(1.6
DH3064 ◊	7.14	(0.66)	31 3/16"	(792)	33"	(838)	13.03	(1.21)	7.32	(0.68)	8 7/8"	(226)	18.42	(1.7
DH3068 ◊	7.58	(0.70)	31 3/16"	(792)	35"	(889)	13.82	(1.28)	7.75	(0.72)	4 7/8"	(124)	19.40	(1.8
DH3074 ◊	8.44	(0.78)	31 3/16"	(792)	39"	(991)	15.41	(1.43)	8.62	(0.80)	10 3/8"	(264)	21.36	(1.9
DH3080 ◊	9.31	(0.86)	31 3/16"	(792)	43"	(1092)	17.00	(1.58)	9.48	(0.88)	2 3/8"	(60)	23.32	(2.1
DH3230	2.99	(0.28)	33 3/16"	(843)	13"	(330)	5.44	(0.51)	3.19	(0.30)	48 7/8"	(1242)	9.12	(0.8
DH3234	3.45	(0.32)	33 3/16"	(843)	15"	(380)	6.29	(0.58)	3.65	(0.34)	44 7/8"	(1140)	10.15	(0.9
DH3238	3.91	(0.36)	33 3/16"	(843)	17"	(431)	7.14	(0.66)	4.11	(0.38)	40 7/8"	(1039)	11.19	(1.0
DH3240	4.38	(0.41)	33 3/16"	(843)	19"	(482)	7.99	(0.74)	4.57	(0.42)	36 7/8"	(937)	12.22	(1.1
DH3244	4.84	(0.45)	33 3/16"	(843)	21"	(533)	8.84	(0.82)	5.03	(0.47)	32 7/8"	(836)	13.26	(1.2
DH 3248	5.30	(0.49)	33 3/16"	(843)	23"	(584)	9.69	(0.90)	5.49	(0.51)	28 7/8"	(734)	14.29	(1.3
DH3250 ♦	5.76	(0.53)	33 3/16"	(843)	25"	(634)	10.54	(0.98)	5.95	(0.55)	24 7/8"	(632)	15.33	(1.4
DH3254◊	6.22	(0.58)	33 3/16"	(843)	27"	(685)	11.39	(1.06)	6.41	(0.60)	20 7/8"	(531)	16.36	(1.5
DH3258◊	6.68	(0.62)	33 3/16"	(843)	29"	(736)	12.24	(1.14)	6.87	(0.64)	16 7/8"	(429)	17.40	(1.6
DH3260◊	7.14	(0.66)	33 3/16"	(843)	31"	(787)	13.09	(1.22)	7.34	(0.68)	12 7/8"	(328)	18.43	(1.7
DH3264♦	7.60	(0.71)	33 3/16"	(843)	33"	(838)	13.94	(1.30)	7.79	(0.72)	8 7/8"	(226)	19.47	(1.8
DH3268◊	8.06	(0.75)	33 3/16"	(843)	35"	(889)	14.79	(1.37)	8.25	(0.77)	4 7/8"	(124)	20.50	(1.9
DH3274♦	8.99	(0.83)	33 3/16"	(843)	39"	(991)	16.49	(1.53)	9.17	(0.85)	10 3/8"	(264)	22.57	(2.1
DH3280 ◊	9.91	(0.92)	33 3/16"	(843)	43"	(1092)	18.19	(1.69)	10.09	(0.94)	2 3/8"	(60)	24.64	(2.2
DH3430	3.17	(0.29)	35 3/16"	(894)	13"	(330)	5.80	(0.54)	3.38	(0.31)	48 7/8"	(1242)	9.61	(0.8
DH3434	3.66	(0.34)	35 3/16"	(894)	15"	(380)	6.70	(0.62)	3.87	(0.36)	44 7/8"	(1140)	10.70	(0.9
DH3438	4.15	(0.39)	35 3/16"	(894)	17"	(431)	7.61	(0.71)	4.36	(0.40)	40 7/8"	(1039)	11.79	(1.1
IDH3440	4.64	(0.43)	35 3/16"	(894)	19"	(482)	8.51	(0.79)	4.84	(0.45)	36 7/8"	(937)	12.88	(1.20
		/	, 10			/		/		/	- / 0	,		

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 \(^1/2\)" (2096) except for units greater than 81 \(^3/_*\)" (2076) in height that are calculated using a header height of 8' (2438).
• Dimensions in parentheses are in millimeters or square meters.

OMeets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

continued on next page

DOUBLE-HUNG WINDOWS

Double-Hung Window Opening and Area Specifications (continued)

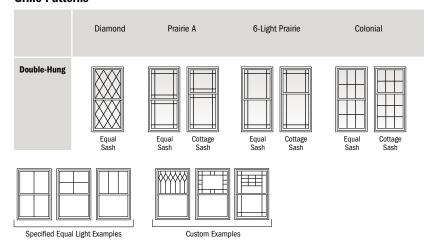
Double-Halle Will		3	,	uca 5			(00	a ou,						
Window Number	A	Opening rea t./(m²)	Clear Op Wid Inches	dth	н	en Position eight es/(mm)	Ar	ass ea /(m²)	A	ent rea t./(m²)	to Top o	Subfloor of Inside Stop s/(mm)	1A	Window rea t./(m²)
ADH3444	5.13	(0.48)	35 3/16"	(894)	21"	(533)	9.42	(0.87)	5.33	(0.50)	32 7/8"	(836)	13.97	(1.30)
ADH3448	5.62	(0.52)	35 3/16"	(894)	23"	(584)	10.32	(0.96)	5.82	(0.54)	28 7/8"	(734)	15.06	(1.40)
ADH3450 ◊	6.11	(0.57)	35 3/16"	(894)	25"	(634)	11.23	(1.04)	6.31	(0.59)	24 7/8"	(632)	16.15	(1.50)
ADH3454 ◊	6.59	(0.61)	35 3/16"	(894)	27"	(685)	12.14	(1.13)	6.80	(0.63)	20 7/8"	(531)	17.24	(1.60)
ADH3458◊	7.08	(0.66)	35 3/16"	(894)	29"	(736)	13.04	(1.21)	7.29	(0.68)	16 ⁷ / ₈ "	(429)	18.33	(1.70)
ADH3460 ◊	7.57	(0.70)	35 3/16"	(894)	31"	(787)	13.95	(1.30)	7.78	(0.72)	12 7/8"	(328)	19.42	(1.80)
ADH3464◊	8.06	(0.75)	35 3/16"	(894)	33"	(838)	14.85	(1.38)	8.26	(0.77)	8 7/8"	(226)	20.51	(1.91)
ADH3468◊	8.55	(0.79)	35 3/16"	(894)	35"	(889)	15.76	(1.46)	8.74	(0.81)	4 7/8"	(124)	21.60	(2.01)
ADH3474◊	9.53	(0.89)	35 3/16"	(894)	39"	(991)	17.57	(1.63)	9.72	(0.90)	10 3/8"	(264)	23.78	(2.21)
ADH3480 ◊	10.50	(0.98)	35 3/16"	(894)	43"	(1092)	19.38	(1.80)	10.70	(0.99)	2 3/8"	(60)	25.96	(2.41)
ADH3830	3.53	(0.33)	39 3/16"	(996)	13"	(330)	6.51	(0.60)	3.76	(0.35)	48 7/8"	(1242)	10.59	(0.98)
ADH3834	4.08	(0.38)	39 3/16"	(996)	15"	(380)	7.52	(0.70)	4.31	(0.40)	44 7/8"	(1140)	11.79	(1.10)
ADH3838	4.62	(0.43)	39 3/16"	(996)	17"	(431)	8.54	(0.79)	4.85	(0.45)	40 7/8"	(1039)	12.99	(1.21)
ADH3840	5.17	(0.48)	39 3/16"	(996)	19"	(482)	9.56	(0.89)	5.40	(0.50)	36 7/8"	(937)	14.19	(1.32)
ADH3844	5.71	(0.53)	39 3/16"	(996)	21"	(533)	10.57	(0.98)	5.94	(0.55)	32 7/8"	(836)	15.39	(1.43)
ADH3848	6.25	(0.58)	39 3/16"	(996)	23"	(584)	11.59	(1.08)	6.48	(0.60)	28 7/8"	(734)	16.59	(1.54)
ADH3850 ◊	6.80	(0.63)	39 3/16"	(996)	25"	(634)	12.61	(1.17)	7.03	(0.65)	24 7/8"	(632)	17.80	(1.65)
ADH3854 ◊	7.34	(0.68)	39 3/16"	(996)	27"	(685)	13.62	(1.27)	7.57	(0.70)	20 7/8"	(531)	19.00	(1.76)
ADH3858 ◊	7.89	(0.73)	39 3/16"	(996)	29"	(736)	14.64	(1.36)	8.12	(0.75)	16 ⁷ / ₈ "	(429)	20.20	(1.88)
ADH3860 ◊	8.43	(0.78)	39 3/16"	(996)	31"	(787)	15.66	(1.45)	8.66	(0.80)	12 7/8"	(328)	21.40	(1.99)
ADH 3864♦	8.98	(0.83)	39 3/16"	(996)	33"	(838)	16.67	(1.55)	9.19	(0.85)	8 7/8"	(226)	22.60	(2.10)
ADH3868◊	9.52	(0.88)	39 3/16"	(996)	35"	(889)	17.69	(1.64)	9.74	(0.90)	4 7/8"	(124)	23.80	(2.21)
ADH3874◊	10.61	(0.99)	39 3/16"	(996)	39"	(991)	19.72	(1.83)	10.83	(1.01)	10 ³ / ₈ "	(264)	26.21	(2.43)
ADH3880 ◊	11.70	(1.09)	39 3/16"	(996)	43"	(1092)	21.76	(2.02)	11.92	(1.11)	2 3/8"	(60)	28.61	(2.66)
ADH4030	3.89	(0.36)	43 3/16"	(1097)	13"	(330)	7.22	(0.67)	4.15	(0.39)	48 7/8"	(1242)	11.57	(1.07)
ADH4034	4.49	(0.42)	43 3/16"	(1097)	15"	(380)	8.35	(0.78)	4.75	(0.44)	44 7/8"	(1140)	12.88	(1.20)
ADH4038	5.09	(0.47)	43 3/16"	(1097)	17"	(431)	9.47	(0.88)	5.35	(0.50)	40 7/8"	(1039)	14.19	(1.32)
ADH 4040	5.69	(0.53)	43 3/16"	(1097)	19"	(482)	10.60	(0.98)	5.95	(0.55)	36 7/8"	(937)	15.50	(1.44)
ADH4044	6.29	(0.58)	43 3/16"	(1097)	21"	(533)	11.73	(1.09)	6.55	(0.61)	32 7/8"	(836)	16.82	(1.56)
ADH 4048	6.89	(0.64)	43 3/16"	(1097)	23"	(584)	12.86	(1.19)	7.15	(0.66)	28 7/8"	(734)	18.13	(1.68)
ADH 4050 ◊	7.49	(0.70)	43 3/16"	(1097)	25"	(634)	13.99	(1.30)	7.75	(0.72)	24 7/8"	(632)	19.44	(1.81)
ADH 4054♦	8.09	(0.75)	43 3/16"	(1097)	27"	(685)	15.11	(1.40)	8.35	(0.78)	20 7/8"	(531)	20.75	(1.93)
ADH 4058♦	8.69	(0.81)	43 3/16"	(1097)	29"	(736)	16.24	(1.51)	8.95	(0.83)	16 7/8"	(429)	22.07	(2.05)
ADH 4060♦	9.29	(0.86)	43 3/16"	(1097)	31"	(787)	17.37	(1.61)	9.55	(0.89)	12 7/8"	(328)	23.38	(2.17)
ADH 4064♦	9.89	(0.92)	43 3/16"	(1097)	33"	(838)	18.50	(1.72)	10.13	(0.94)	8 7/8"	(226)	24.96	(2.29)
ADH 4068♦	10.49	(0.97)	43 3/16"	(1097)	35"	(889)	19.62	(1.82)	10.73	(1.00)	4 7/8"	(124)	26.00	(2.42)
ADH 4074♦	11.69	(1.09)	43 3/16"	(1097)	39"	(991)	21.88	(2.03)	11.93	(1.11)	10 3/8"	(264)	28.63	(2.66)
ADH4080 ◊	12.89	(1.20)	43 3/16"	(1097)	43"	(1092)	24.14	(2.24)	13.13	(1.22)	2 3/8"	(60)	31.25	(2.90)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 \(^1/2\)" (2096) except for units greater than 81 \(^3/_*\)" (2076) in height that are calculated using a header height of 8' (2438).
• Dimensions in parentheses are in millimeters or square meters.

Objects or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).



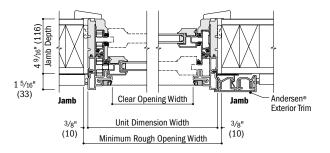
Grille Patterns



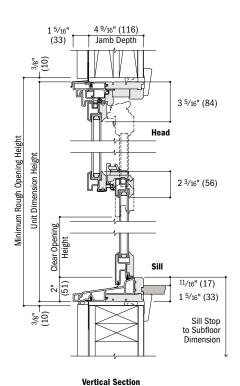
Double-hung window patterns are also available in Upper Sash Only (USO) configurations. For picture window patterns that require alignment with double-hung patterns, identify the double-hung sash style (equal, cottage, reverse cottage) when ordering. Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes. Specified equal light and custom patterns are also available. Some restrictions apply. For more grille options, see page 19 or visit andersenwindows.com/grilles.

Double-Hung Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



Horizontal Section



Andersen® Exterior Trim

Vertical Section

See pages 60-62 for joining details.

• 4 ⁹/₁₆" (116) base jamb depth measurement is from back side of installation flange.

in millimeters.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
 Dimensions in parentheses are
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on
- pages 226-227.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

Table of Picture Window Sizes

Notes on the next page also apply to this page.

Scale $\frac{1}{8}$ " (3) = 1'-0"	(305) – 1:	96										
Window Dimension	1'-3 1/4" (387)	1'-7 1/4" (489)	1'-11 1/4"	2'-3 1/4" (692)	2'-5 1/4" (743)	2'-7 1/4" (794)	2'-9 ¹ / ₄ " (845)	2'-11 ¹ /4" (895)	3'-1 ¹ /4" (946)	3'-3 ¹ /4" (997)	3'-7 1/4" (1099)	3'-11 ¹ /4" (1200)
Minimum Rough Opening	1'-4" (406)	1'-8"	2'-0"	2'-4"	2'-6"	2'-8" (813)	2'-10" (864)	3'-0" (914)	3'-2" (965)	3'-4" (1016)	3'-8"	4'-0" (1219)
Unobstructed Glass	8 ⁵ /8" (219)	12 ⁵ /8" (321)	16 ⁵ /8" (422)	20 ⁵ /8" (524)	22 ⁵ /8" (575)	24 ⁵ /8" (625)	26 ⁵ /8" (676)	28 ⁵ /8" (727)	30 ⁵ /8" (778)	32 ⁵ /8" (829)	36 ⁵ /8" (930)	40 5/8"
14"	CUSTOM V							71 ¹ / ₄ " x 95 ¹ / ₄		(020)	(655)	(1992)
1'-11 1/4' (591) 2'-0" (610) 15 13/16" (401)	APW1420	APW1820	APW2020	APW2420	APW2620	APW2820	APW21020	APW 3020	APW 3220	APW 3420	APW 3820	APW 4020
2'-3 1/4" (692) 2'-4" (711) 19 13/16" (503)												
2'-7 1/4" (794) 2'-8" (813) 23 ¹³ / ₁₆ " (604)	APW1424	APW1824	APW2024	APW2424	APW2624	APW2824	APW21024	APW3024	APW3224	APW 3424	APW3824	APW 4024
No.	APW1428	APW1828	APW2028	APW2428	APW2628	APW2828	APW21028	APW3028	APW3228	APW3428	APW3828	APW4028
2-111/4" (895) 3-0" (914) 27 ¹³ /16" (706)		ADW1830	ADW2020	APW2420	ADW2620	APW 2830	APW 21030	APW3030	APW3230	APW 3430	APW 3830	APW 4030
3'-3 1/4" (997) 3'-4" (1016) 31 13/16" (808)	APW1430	APW 1830	APW2030	APW2430	APW2630	AFW2630	AFW21030	APW3030	AFW3230	AFW3430	AFW3630	AFW4030
31-(3)	APW 1434	APW1834	APW 2034	APW2434	APW 2634	APW2834	APW 21034	APW 3034	APW 3234	APW 3434	APW 3834	APW 4034
3'-7 1/4" (1099) 3'-8" (1118) 35 ¹³ / ₁₆ " (910)												
	APW1438	APW1838	APW 2038	APW2438	APW2638	APW2838	APW21038	APW3038	APW3238	APW3438	APW 3838	APW4038
3'-11 1/4" (1200) 4'-0" (1219) 39 13/16" (1011)												
	APW1440	APW1840	APW 2040	APW2440	APW2640	APW2840	APW21040	APW 3040	APW3240	APW 3440	APW 3840	APW 4040
4'-3 1/4" (1302) 4'-4" (1321) 43 13/16" (1113)												
	APW1444	APW1844	APW 2044	APW2444	APW 2644	APW 2844	APW 21044	APW 3044	APW 3244	APW 3444	APW 3844	APW 4044
4'-7 1/4" (1403) 4'-8" (1422) 47 13/16" (1214)												
1,4	APW 1448	APW 1848	APW 2048	APW2448	APW2648	APW2848	APW 21048	APW 3048	APW 3248	APW 3448	APW 3848	APW 4048
1/4" 5) 0" 4) (16"												
4'-11 1/4" (1505) 5'-0" (1524) 51 13/16" (1316)												
	APW1450	APW1850	APW2050	APW2450	APW2650	APW2850	APW21050	APW3050	APW3250	APW3450	APW3850	APW4050
5'-3 1/4" (1607) 5'-4" (1626) 55 13/16" (1418)												
	APW 1454	APW1854	APW 2054	APW2454	APW2654	APW2854	APW 21054	APW 3054	APW 3254	APW 3454	APW 3854	APW 4054
3)												
5-71/4" (1708) 5-8" (1727) 5913/16" (1519)												
	APW1458	APW1858	APW2058	APW2458	APW2658	APW2858	APW21058	APW3058	APW3258	APW 3458	APW 3858	APW 4058
5'-11 1/4" (1810) 6'-0" (1829) 63 13/16" (1621)												
6-0" (1810) (1829) (1829) (1829) (1621)												
	APW 1460	APW 1860	APW 2060	APW 2460	APW2660	APW 2860	APW 21060	APW 3060	APW 3260	APW 3460	APW 3860	APW 4060



4'-3 1/4"	4'-7 1/4"	4'-11 1/4"	5'-3 1/4"	5'-7 1/4"	5'-11 1/4"	6'-3 1/4"
(1302)	(1403)	(1505)	(1607)	(1708)	(1810)	(1911)
4'-4" (1321)	4'-8" (1422)	5'-0" (1524)	5'-4" (1626)	5'-8"	6'-0" (1829)	6'-4" (1930)
44 ⁵ /8"	48 5/8"	52 ⁵ /8"	56 ⁵ /8"	60 ⁵ /8"	64 ⁵ /8"	68 ⁵ /8"
(1133)	(1335)	(1337)	(1438)	(1540)	(1641)	(1743)
APW4420	APW4820	APW5020	APW5420	APW 5820	APW6020	APW 6420
APW4424	APW4824	APW5024	APW5424	APW5824	APW6024	APW6424
APW 4428	APW 4828	APW5028	APW5428	APW 5828	APW6028	APW 6428
APW4430	APW 4830	APW5030	APW 5430	APW 5830	APW 6030	APW 6430
APW4434	APW4834	APW5034	APW 5434	APW 5834	APW6034	APW6434
APW4438	APW 4838	APW5038	APW5438	APW5838	APW6038	APW6438
APW 4440	APW 4840	APW 5040	APW 5440	APW 5840	APW 6040	APW 6440
APW 4444	APW4844	APW 5044	APW5444	APW 5844	APW 6044	APW 6444
APW4444	AFW4044	APW3044	APW3444	APW3644	APW0044	AFW0444
APW 4448	APW 4848	APW 5048	APW 5448	APW 5848	APW 6048	APW 6448
APW 4450	APW 4850	APW5050	APW 5450	APW 5850	APW6050	APW 6450
APW 4454	APW 4854	APW 5054	APW5454	APW 5854	APW6054	APW 6454
A P344 4 = 2	ABWAAASSA	APMENTS	APINE	AFWEGES	AFWOOTO	APWASS
APW4458	APW4858	APW5058	APW5458	APW 5858	APW6058	APW 6458
APW 4460	APW4860	APW5060	APW 5460	APW5860	APW6060	APW 6460
						at a constant of



Custom-size windows are available in $^1/\text{s"}$ (3) increments. See page 65 for custom sizes and specifications.

All sizes shown are available with PG upgrade.

Picture window must be installed as shown and should not be rotated. Tall bottom rail is designed to align with bottom rail of double-hung and casement windows.

Grille patterns shown on page 46.

Details shown on page 51.

‡PG upgrade is not available for custom sizes equal to or less than 19 1/4" (489) wide and tall.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension. • "Minimum Rough Opening" dimensions

 [&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
 Dimensions in parentheses are

Dimensions in parentheses are in millimeters.

Table of Picture Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

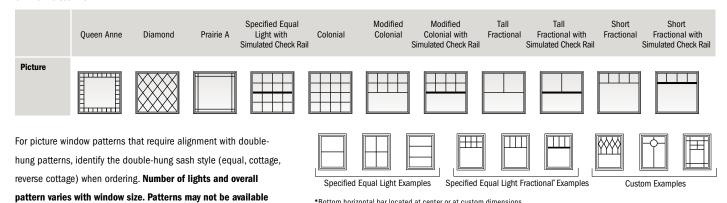
Notes on the next page also apply to this page.

Window Dimension	1'-3 1/4" (387)	1'-7 1/4" (489)	1'-11 ¹ / ₄ " (591)	2'-3 1/4" (692)	2'-5 ¹ / ₄ " (743)	2'-7 1/4" (794)	2'-9 ¹ / ₄ " (845)	2'-11 ¹ /4" (895)	3'-1 ¹ /4" (946)	3'-3 ¹ /4" (997)	3'-7 1/4" (1099)	3'-11 ¹ /4" (1200)
Minimum Rough Opening	1'-4" (406)	1'-8" (508)	2'-0" (610)	2'-4" (711)	2'-6" (762)	2'-8" (813)	2'-10" (864)	3'-0" (914)	3'-2" (965)	3'-4" (1016)	3'-8" (1118)	4'-0" (1219)
Unobstructed Glass	8 ⁵ /8" (219)	12 ⁵ /8" (321)	16 ⁵ /8" (422)	20 ⁵ /8" (524)	22 ⁵ /8" (575)	24 ⁵ /8" (625)	26 ⁵ /8" (676)	28 ⁵ /8" (727)	30 ⁵ /8" (778)	32 ⁵ /8" (829)	36 ⁵ /8" (930)	40 ⁵ /8" (1032)
	CUSTOM W	IDTHS – 1	5 1/4" to 95	1/4" (larges	t dimensions	s are 95 1/4"	x 71 1/4" or 7	'1 ¹ /4" x 95 ¹ /4	")			
6'-3 1/4" (1911) 6'-4" (1930) 67 13/16" (1722) S - 15 1/4" to 95 1/4"												
·	APW 1464 A	APW1864	APW2064	APW 2464	APW 2664	APW 2864	APW 21064	APW3064	APW 3264	APW3464	APW3864	APW4064
6'-7 1/4" (2013) 6'-8" (2032) 71 13/16" (1824) CUSTOM HEIGHTS	APW1468 A	APW1868	APW2068	APW2468	APW2668	APW2868	APW21068	APW 3068	APW3268	APW 3468	APW3868	APW 4068
7-31/4" (2216) 7-4" (2235) 79.13/16" (2027)			APW2074 APW2074		APW2674	APW2874	APW21074	APW3074	APW3274	APW3474	APW3874	APW4074
7-11 1/4" (2419) 8-0" (2438) 87 13/16" (2230)	APW1480 A	APW1880	APW2080	APW2480	APW2680	APW2880	APW21080	APW 3080	APW3280	APW 3480	APW3880	APW4080

^{. &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

in all configurations or sizes. Specified equal light, specified equal light fractional and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.

Grille Patterns



^{*}Bottom horizontal bar located at center or at custom dimensions.

[•] William Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

 $^{^{}ullet}$ PG upgrade is not available for custom sizes equal to or less than 19 $^{1}/_{4}$ " (489) wide and tall.



4'-3 ¹ /4"	4'-7 ¹ /4"	4'-11 ¹ /4"	5'-3 ¹ /4"	5'-7 ¹ /4"	5'-11 ¹ /4"
(1302)	(1403)	(1505)	(1607)	(1708)	(1810)
4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"
(1321)	(1422)	(1524)	(1626)	(1727)	(1829)
44 5/8"	48 5/8"	52 ⁵ /8"	56 ⁵ /8"	60 ⁵ /8"	64 5/8"
(1133)	(1335)	(1337)	(1438)	(1540)	(1641)
APW 4464	APW 4864	APW 5064	APW 5464	APW 5864	APW6064
APW4468	APW4868	APW5068	APW5468	APW5868	APW6068

APW5474

APW5480*

APW5874*

APW5880*

APW6074*

APW6080* continued on next page



Custom-size windows are available in 1/8" (3) increments. See page 65 for custom sizes and specifications.

All sizes shown are available with PG upgrade.‡

Picture window must be installed as shown and should not be rotated. Tall bottom rail is designed to align with bottom rail of double-hung and casement windows.

Grille patterns shown on page 46. Details shown on page 51.

APW4474

APW4480

APW4874

APW4880

APW5074

APW5080*

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters. ‡PG upgrades is not available for custom sizes equal to or less than 19 \(^1/_4\)" (489) wide and tall. *Tempered glass required. Some visual distortion may occur.

PICTURE WINDOWS

Table of Picture Window Sizes (continued) Scale \(^{1}/8\)" (3) = 1'-0\" (305) - 1:96

Scale $\frac{1}{8}$ " (3) = 1'-0" (3	05) — 1:96					
Window Dimension	6'-7 ¹ /4" (2013)	6'-11 ¹ /4" (2115)	7'-3 ¹ /4" (2216)	7'-7 ¹ / ₄ " (2318)	7'-11 ¹ / ₄ " (2419)	1
Minimum	6'-8"	7'-0"	7'-4"	7'-8"	8'-0"	
Minimum Rough Opening	(2032)	(2133)	(2235)	(2336)	(2438)	
Unobstructed Glass	72 ⁵ /8"	76 ⁵ /8"	80 5/8"	84 5/8"	88 ⁵ /8"	
Onobstructed diass	(1845)	(1946)	(2048)	(2149)	(2251)	7
E	CUSTOM WIDTHS $-$ 15	1/4" to 95 1/4" (largest dime	ensions are 95 ¹ /4" x 71 ¹ /4'	or 71 ¹ /4" x 95 ¹ /4")		
1'-11 1/4" (591) 2'-0" (610) 15 13/16" (401)						Custom-size windows
1'-1 (5) (6) (6) (7)	APW6820	APW 7020	APW 7420	APW 7820	APW8020	are available in
14 C C 19 C 14						
2'-3 1/4" (692) 2'-4" (711) 19 13/16" (503)						1/8" (3) increments.
- S	APW 6824	APW 7024	APW 7424	APW 7824	APW8024	See page 65 for
2'-7 1/4" (794) 2'-8" (813) 23 13/16" (604)						custom sizes and
23 6 2 C	APW6828	APW 7028	APW 7428	APW 7828	APW8028	specifications.
(5) 1/4" 2'-71/4" (794) (794) (813) (813) (913/16" (604) (604)	7.1. HOSES	74 11.020	74 W 120	711 W 1 925	11 H3025	
2'-11'/4" (895) 3'-0" (914) 27 13/16" (706)						All sizes shown
21 21	APW6830	APW 7030	APW 7430	APW 7830	APW8030	are available with
/4") (16" (16"						PG upgrade [‡]
3'-3 1/4" (997) 3'-4" (1016) 31 13/16" (808)						r d upgrade.
8 8	APW 6834	APW 7034	APW 7434	APW 7834	APW8034	Picture window must
10 10 10 10 10 10 10 10 10 10 10 10 10 1						be installed as shown
3'-7 1/4" (1099) 3'-8" (1118) 35 13/16" (910)						
3 0 3	APW6838	APW 7038	APW 7438	APW 7838	APW8038	and should not be
	AFW0030	APW7036	APW1436	AFW/030	APW0030	rotated. Tall bottom
3'-11 1/4" (1200) 4'-0" (1219) 39 13/16" (1011)						rail is designed to
3'-11 (120 4'-((121 39 ¹³ 39 ¹³ (101						align with bottom rail
	APW6840	APW 7040	APW 7440	APW 7840	APW8040	of double-hung and
2) [1] [16] [3]						casement windows.
(1302) 4'-4" 4'-4" (1321) 43 13/16" (1113)						
4 9 4 9						Grille patterns shown
	APW 6844	APW 7044	APW7444	APW 7844	APW8044	on page 46. Details
/4" 33) 33) 22) 716" 4)						shown on page 51.
4'-7 1/4" (1403) 4'-8" (1422) 47 13/16" (1214)						
4						
	APW 6848	APW 7048	APW 7448	APW 7848	APW8048	
/4" 5) 116" 5)						
(1505) 5'-0" (1524) 51 13/16" (1316)						
5 5						
	APW6850	APW 7050	APW 7450	APW 7850	APW8050*	
=						
5'-3 1/4" (1607) 5'-4" (1626) 55 13/16" (1418)						
5'-3 (1) (1) (1) (1) (1)						 "Window Dimension" always refers to outside
	APW 6854	APW 7054	APW 7454	APW 7854*	APW8054*	frame-to-frame dimension. • "Minimum Rough
	AFW0854	AFW7054	AFW1454	AFW1834*	AFW8034	Opening" dimensions may need to be increased
3)						to allow for use of
5'-7 1/4" (1708) 5'-8" (1727) 59 13/16" (1519)						building wraps, flashing, sill panning, brackets,
55						fasteners or other items. See pages 226-227 for
	APW6858	APW 7058	APW 7458*	APW7858*	APW8058*	more details. • Dimensions in parentheses
						are in millimeters. ‡PG upgrade is not
1/4" 0) 9) 11)						available for custom sizes equal to or less than
6'-0" (1829) (1829) (1829) (1621)						19 ¹ / ₄ " (489) wide and tall.
2						*Tempered glass required. Some visual distortion
	APW 6860	APW 7060*	APW7460*	APW7860*	APW8060*	may occur.
					•	



icture Window Are	ea Spe	cifica	tions	
Window Number	Ar	ass ea	Ar	Window
A DIAM 400		t./(m²)		t./(m²)
APW1420 APW1424	1.18	(0.09)	2.46	(0.23)
APW1428	1.42	(0.11)	3.31	(0.27)
APW1430	1.66		3.73	
		(0.15)		(0.35)
APW1434	1.90	(0.18)	4.16	(0.39)
APW1438	2.14	(0.20)	4.58	(0.43)
APW1440	2.38	(0.22)	5.00	(0.46)
APW1444	2.62	(0.24)	5.43	(0.50)
APW1448	2.85	(0.26)	5.85	(0.54)
APW1450	3.09	(0.29)	6.27	(0.58)
APW1454	3.33	(0.31)	6.70	(0.62)
APW1458	3.57	(0.33)	7.12	(0.66)
APW1460	3.81	(0.35)	7.55	(0.70)
APW1464	4.05	(0.38)	7.97	(0.74)
APW1468	4.29	(0.40)	8.39	(0.78)
APW1474	4.77	(0.44)	9.24	(0.86)
APW1480	5.24	(0.49)	10.09	(0.94)
APW1820	1.38	(0.13)	3.11	(0.29)
APW1824	1.73	(0.16)	3.64	(0.34)
APW1828	2.08	(0.19)	4.18	(0.39)
APW1830	2.43	(0.23)	4.71	(0.44)
APW1834	2.78	(0.26)	5.25	(0.49)
APW1838	3.13	(0.29)	5.78	(0.54)
APW1840	3.48	(0.32)	6.32	(0.59)
APW1844	3.83	(0.36)	6.85	(0.64)
APW1848	4.18	(0.39)	7.39	(0.69)
APW1850	4.53	(0.42)	7.92	(0.74)
APW1854	4.88	(0.45)	8.46	(0.79)
APW1858	5.23	(0.49)	8.99	(0.84)
APW1860	5.58	(0.52)	9.52	(0.88)
APW1864	5.93	(0.55)	10.06	(0.93)
APW1868	6.28	(0.58)	10.59	(0.98)
APW1874	6.98	(0.65)	11.66	(1.08)
APW1880	7.68	(0.71)	12.73	(1.18)
APW2020	1.82	(0.17)	3.75	(0.35)
APW2024	2.28	(0.21)	4.40	(0.41)
APW2028	2.74	(0.25)	5.05	(0.47)
APW2030	3.20	(0.30)	5.69	(0.53)
APW2034	3.67	(0.34)	6.34	(0.59)
APW2038	4.13	(0.38)	6.98	(0.65)
APW2040	4.59	(0.43)	7.63	(0.71)
APW2044	5.05	(0.47)	8.27	(0.77)
APW2048	5.51	(0.51)	8.92	(0.83)
APW2050	5.97	(0.55)	9.57	(0.89)
APW2054	6.43	(0.60)	10.21	(0.95)
APW2058	6.89	(0.64)	10.86	(1.01)
APW2060	7.35	(0.68)	11.50	(1.07)
	7.82	(0.73)	12.15	(1.13)
		(0.77)		
APW2068	8.28	(0.77)	12.80	(1.19)
APW2068 APW2074	8.28 9.20	(0.85)	14.09	(1.31)
APW2068 APW2074 APW2080	8.28 9.20 10.12	(0.85)	14.09 15.38	(1.31) (1.43)
APW2068 APW2074 APW2080 APW2420	8.28 9.20 10.12 2.26	(0.85) (0.94) (0.21)	14.09 15.38 4.40	(1.31) (1.43) (0.41)
APW2068 APW2074 APW2080 APW2420 APW2424	8.28 9.20 10.12 2.26 2.83	(0.85) (0.94) (0.21) (0.26)	14.09 15.38 4.40 5.16	(1.31) (1.43) (0.41) (0.48)
APW2064 APW2068 APW2074 APW2080 APW2420 APW2424 APW2428	8.28 9.20 10.12 2.26 2.83 3.40	(0.85) (0.94) (0.21) (0.26) (0.32)	14.09 15.38 4.40 5.16 5.91	(1.31) (1.43) (0.41) (0.48) (0.55)
APW2068 APW2074 APW2080 APW2420 APW2424 APW2428 APW2430	8.28 9.20 10.12 2.26 2.83 3.40 3.98	(0.85) (0.94) (0.21) (0.26) (0.32) (0.37)	14.09 15.38 4.40 5.16 5.91 6.67	(1.31) (1.43) (0.41) (0.48) (0.55) (0.62)
APW2068 APW2074 APW2080 APW2420 APW2424 APW2428 APW2430 APW2434	8.28 9.20 10.12 2.26 2.83 3.40 3.98 4.55	(0.85) (0.94) (0.21) (0.26) (0.32) (0.37) (0.42)	14.09 15.38 4.40 5.16 5.91 6.67 7.43	(1.31) (1.43) (0.41) (0.48) (0.55) (0.62) (0.69)
APW2068 APW2074 APW2080 APW2420 APW2424 APW2428 APW2430 APW2434 APW2438	8.28 9.20 10.12 2.26 2.83 3.40 3.98 4.55 5.12	(0.85) (0.94) (0.21) (0.26) (0.32) (0.37) (0.42) (0.48)	14.09 15.38 4.40 5.16 5.91 6.67 7.43 8.18	(1.31) (1.43) (0.41) (0.48) (0.55) (0.62) (0.69) (0.76)
APW2068 APW2074 APW2080 APW2420 APW2424 APW2428 APW2430 APW2434 APW2438 APW2438 APW2440	8.28 9.20 10.12 2.26 2.83 3.40 3.98 4.55 5.12 5.69	(0.85) (0.94) (0.21) (0.26) (0.32) (0.37) (0.42) (0.48) (0.53)	14.09 15.38 4.40 5.16 5.91 6.67 7.43 8.18 8.94	(1.31) (1.43) (0.41) (0.48) (0.55) (0.62) (0.69) (0.76) (0.83)
APW2068 APW2074 APW2080 APW2420 APW2424 APW2428 APW2430 APW2434 APW2438 APW2438 APW2444	8.28 9.20 10.12 2.26 2.83 3.40 3.98 4.55 5.12 5.69 6.27	(0.85) (0.94) (0.21) (0.26) (0.32) (0.37) (0.42) (0.48) (0.53)	14.09 15.38 4.40 5.16 5.91 6.67 7.43 8.18 8.94 9.70	(1.31) (1.43) (0.41) (0.48) (0.55) (0.62) (0.69) (0.76) (0.83) (0.90)
APW2068 APW2074 APW2080 APW2420 APW2424 APW2428 APW2430 APW2434 APW2438 APW2438 APW2440	8.28 9.20 10.12 2.26 2.83 3.40 3.98 4.55 5.12 5.69	(0.85) (0.94) (0.21) (0.26) (0.32) (0.37) (0.42) (0.48) (0.53)	14.09 15.38 4.40 5.16 5.91 6.67 7.43 8.18 8.94	(1.31) (1.43) (0.41) (0.48) (0.55) (0.62) (0.69) (0.76) (0.83)

Window	Gla	ass	Overall	Window	
Number	Ar	ea	Area Sq. Ft./(m²)		
APW 2454	7.98	t./(m²) (0.74)	11.97	(1.11)	
APW2458	8.55	(0.79)	12.73	(1.11)	
APW2460	9.13	(0.75)	13.48	(1.15)	
APW2464	9.70	(0.90)	14.24	(1.32)	
APW2468	10.27	(0.95)	15.00	(1.39)	
APW2474	11.42	(1.06)	16.51	(1.53)	
APW2480 APW2620	12.56	(1.17)	18.02	(1.67)	
APW2624	2.48	(0.23)	4.72	(0.44)	
APW2628	3.11	(0.29)	5.54	(0.51)	
	3.74	(0.35)	6.35	(0.59)	
APW2630	4.36	(0.41)	7.16	(0.67)	
APW2634	4.99	(0.46)	7.97	(0.74)	
APW2638	5.62	(0.52)	8.79	(0.82)	
APW2640	6.25	(0.58)	9.60	(0.89)	
APW2644	6.87	(0.64)	10.41	(0.97)	
APW2648	7.50	(0.70)	11.22	(1.04)	
APW2650	8.13	(0.76)	12.04	(1.12)	
APW2654	8.76	(0.81)	12.85	(1.19)	
APW2658	9.39	(0.87)	13.66	(1.27)	
APW2660	10.01	(0.93)	14.47	(1.34)	
APW2664	10.64	(0.99)	15.29	(1.42)	
APW2668	11.27	(1.05)	16.10	(1.50)	
APW2674	12.52	(1.16)	17.72	(1.65)	
APW2680	13.78	(1.28)	19.35	(1.80)	
APW2820	2.70	(0.25)	5.05	(0.47)	
APW2824	3.38	(0.31)	5.91	(0.55)	
APW2828	4.07	(0.38)	6.78	(0.63)	
APW2830	4.75	(0.44)	7.65	(0.71)	
APW2834	5.43	(0.50)	8.52	(0.79)	
APW2838	6.12	(0.57)	9.39	(0.87)	
APW2840	6.80	(0.63)	10.25	(0.95)	
APW2844	7.48	(0.69)	11.12	(1.03)	
APW2848	8.17	(0.76)	11.99	(1.11)	
APW2850	8.85	(0.82)	12.86	(1.19)	
APW2854	9.53	(0.89)	13.73	(1.28)	
APW2858	10.22	(0.95)	14.59	(1.36)	
APW2860	10.90	(1.01)	15.46	(1.44)	
APW2864	11.58	(1.08)	16.33	(1.52)	
APW2868	12.27	(1.14)	17.20	(1.60)	
APW2874	13.63	(1.27)	18.93	(1.76)	
APW2880	15.00	(1.39)	20.67	(1.92)	
APW21020	2.92	(0.27)	5.37	(0.50)	
APW21024	3.66	(0.34)	6.29	(0.58)	
APW21024	3.66	(0.34)	6.29	(0.58)	
APW21028	4.40	(0.41)	7.22	(0.67)	
APW21030	5.14	(0.48)	8.14	(0.76)	
APW21034	5.87	(0.55)	9.06	(0.84)	
APW21038	6.61	(0.61)	9.99	(0.93)	
APW 21040	7.35	(0.68)	10.91	(1.01)	
APW 21044	8.09	(0.75)	11.83	(1.10)	
APW21048	8.83	(0.82)	12.76	(1.19)	
APW21050	9.57	(0.89)	13.68	(1.27)	
APW21054	10.31	(0.96)	14.60	(1.36)	
APW21058	11.05	(1.03)	15.53	(1.44)	
APW 21060	11.79	(1.10)	16.45	(1.53)	
APW 21064	12.52	(1.16)	17.38	(1.61)	
APW21068	13.26	(1.23)	18.30	(1.70)	
APW 21074	14.74	(1.37)	20.15	(1.87)	
APW21080	16.22	(1.51)	21.99	(2.04)	
APW3020	3.14	(0.29)	5.69	(0.53)	
APW3024	3.93	(0.37)	6.67	(0.62)	

Window Number	1A	ass ea t./(m²)	Ar	Window ea t./(m²)
APW3028	4.73	(0.44)	7.65	(0.71)
APW3030	5.52	(0.51)	8.63	(0.80)
APW 3034	6.32	(0.59)	9.61	(0.89)
APW3038	7.11	(0.66)	10.59	(0.98)
APW 3040	7.90	(0.73)	11.57	(1.07)
APW 3044	8.70	(0.81)	12.55	(1.17)
APW 3044	8.70	(0.81)	12.55	(1.17)
APW3048	9.49	(0.88)	13.52	(1.26)
APW3050	10.29	(0.96)	14.50	(1.35)
APW3054	11.08	(1.03)	15.48	(1.44)
APW3058	11.88	(1.10)	16.46	(1.53)
APW3060	12.67	(1.18)	17.44	(1.62)
APW 3064	13.47	(1.25)	18.42	(1.71)
APW3068	14.26	(1.32)	19.40	(1.80)
APW 3074	15.85	(1.47)	21.36	(1.98)
APW3080	17.44	(1.62)	23.32	(2.17)
APW3220	3.36	(0.31)	6.01	(0.56)
APW3224	4.21	(0.39)	7.05	(0.65)
APW3228	5.06	(0.47)	8.08	(0.75)
APW3230	5.91	(0.55)	9.12	(0.85)
APW3234	6.76	(0.63)	10.15	(0.94)
APW3238	7.61	(0.71)	11.19	(1.04)
APW3240	8.46	(0.79)	12.22	(1.14)
APW3244	9.31	(0.86)	13.26	(1.23)
APW3248	10.16	(0.94)	14.29	(1.33)
APW3250	11.01	(1.02)	15.33	(1.42)
APW3254	11.86	(1.10)	16.36	(1.52)
APW3258	12.71	(1.18)	17.40	(1.62)
APW3260	13.56	(1.26)	18.43	(1.71)
APW3264	14.41	(1.34)	19.47	(1.81)
APW3268	15.26	(1.42)	20.50	(1.90)
APW3274 APW3280	16.96	(1.58)	22.57	(2.10)
APW3420	18.66 3.58	(0.33)	6.34	(2.29)
APW3424	4.48	(0.33)	7.43	(0.59)
APW3428	5.39	(0.50)	8.52	(0.79)
APW3430	6.29	(0.58)	9.61	(0.89)
APW3434	7.20	(0.67)	10.70	(0.99)
APW3438	8.10	(0.75)	11.79	(1.10)
APW 3440	9.01	(0.84)	12.88	(1.20)
APW 3444	9.92	(0.92)	13.97	(1.30)
APW 3448	10.82	(1.01)	15.06	(1.40)
APW 3450	11.73	(1.09)	16.15	(1.50)
APW 3454	12.63	(1.17)	17.24	(1.60)
APW3458	13.54	(1.26)	18.33	(1.70)
APW3460	14.44	(1.34)	19.42	(1.80)
APW 3464	15.35	(1.43)	20.51	(1.91)
APW3468	16.25	(1.51)	21.60	(2.01)
APW 3474	18.07	(1.68)	23.78	(2.21)
APW 3480	19.88	(1.85)	25.96	(2.41)
APW3820	4.02	(0.37)	6.98	(0.65)
APW3824	5.03	(0.47)	8.18	(0.76)
APW3828	6.05	(0.56)	9.39	(0.87)
APW 3830	7.07	(0.66)	10.59	(0.98)
APW 3834	8.08	(0.75)	11.79	(1.10)
APW3838	9.10	(0.85)	12.99	(1.21)
APW 3840	10.12	(0.94)	14.19	(1.32)
APW 3844	11.13	(1.03)	15.39	(1.43)
APW3848	12.15	(1.13)	16.59	(1.54)
APW3850	13.17	(1.22)	17.80	(1.65)

[•] Dimensions in parentheses are in square meters.

PICTURE WINDOWS

Picture Window Area Specifications (continued)

Winnber GISSER Coversity (Fr/Fr) APW3854 14.18 (1.32) 19.00 (1.77) APW3858 15.20 (1.41) 20.20 (1.88) APW3860 16.22 (1.51) 21.40 (1.90) APW3868 18.25 (1.70) 23.80 (2.21) APW3880 22.32 (2.07) 28.61 (2.60) APW4020 4.45 (0.41) 7.63 (0.71) APW4024 5.58 (0.52) 8.94 (0.83) APW4028 6.71 (0.62) 10.25 (0.71) APW4030 7.84 (0.73) 11.57 (1.07) APW4038 10.09 (0.94) 14.19 (1.22) APW40404 11.23 (1.61) 15.50 (1.44) APW4058 18.62 (1.51) 16.62 (1.52) APW4059 14.60 (1.50) 19.41 (1.81) APW4050 17.99 (1.67) 2.20 (2.05)	i ictuic William Alt	sa Spe	Julioa	UU115 (continueu)
APW3854 14.18 (1.32) 19.00 (1.77) APW3868 15.20 (1.41) 20.20 (1.88) APW3864 17.23 (1.60) 22.60 (2.10) APW3868 18.25 (1.70) 23.80 (2.21) APW3880 22.32 (2.07) 28.61 (2.66) APW4020 4.45 (0.41) 7.63 (0.71) APW4024 5.58 (0.52) 8.94 (0.83) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 11.57 (1.07) APW4030 7.84 (0.73) 11.57 (1.07) APW4040 11.22 (1.04) 15.50 (1.44) APW40404 12.35 (1.15) 16.82 (1.56) APW4054 15.73 (1.46) 20.75 (1.93) APW4058 16.86 (1.55) (1.48) (2		Ar	ea	1A	ea
APW3858 15.20 (1.4t) 20.20 (1.8s) APW3860 16.22 (1.5t) 21.40 (1.99) APW3868 18.25 (1.70) 23.80 (2.2t) APW3874 20.28 (1.8t) 26.21 (2.4d) APW3880 22.32 (2.07) 28.61 (2.66) APW4024 5.58 (0.52) 8.94 (0.83) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 12.88 (1.20) APW4038 10.09 (0.94) 14.19 (1.32) APW40404 11.22 (1.01) 14.62 (1.55) (1.48) APW4050 14.60 (1.36) 19.44 (1.81) APW4050 14.60 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4064 19.12 (1.78) <th< th=""><th>APW3854</th><th></th><th></th><th></th><th></th></th<>	APW3854				
APW3860 16.22 (1.51) 21.40 (1.99) APW3864 17.23 (1.60) 22.60 (2.10) APW3868 18.25 (1.70) 23.80 (2.21) APW3874 20.28 (1.88) 26.21 (2.43) APW3880 22.32 (2.07) 28.61 (2.66) APW4020 4.45 (0.41) 7.63 (0.71) APW40308 6.71 (0.62) 10.25 (0.93) APW40304 8.97 (0.83) 12.88 (1.00) APW4038 10.09 (0.94) 14.19 (1.32) APW4038 10.09 (0.94) 14.19 (1.32) APW4044 12.35 (1.15) 16.82 (1.56) APW40404 12.35 (1.15) 16.82 (1.56) APW40404 12.35 (1.15) 16.82 (1.56) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38					
APW3864 17.23 (1.60) 22.60 (2.10) APW3868 18.25 (1.70) 23.80 (2.21) APW3880 22.32 (2.07) 28.61 (2.66) APW3880 22.32 (2.07) 28.61 (2.66) APW4020 4.45 (0.41) 7.63 (0.71) APW4028 6.71 (0.62) 10.25 (0.50) APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 12.88 (1.20) APW4038 10.09 (0.94) 14.19 (1.32) APW40404 12.25 (1.15) 16.82 (1.56) APW40404 12.35 (1.15) 16.82 (1.56) APW40408 13.48 (1.25) 18.13 (1.68) APW40408 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4060 17.99 (1.67) 23.38 (2.60) APW4064 19.12 (1.78) 24.69 (2.29) APW4060 17.99 (1.67) 23.38 (2.60) APW4074 22.50 (2.09) 28.63 (2.66) APW4408 24.75 (2.30) 2.66) APW4420 4.89 (0.45) 8			-		
APW3868 18.25 (1.70) 23.80 (2.21) APW3874 20.28 (1.88) 26.21 (2.43) APW3880 22.32 (2.07) 28.61 (2.66) APW4020 4.45 (0.41) 7.63 (0.71) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW4040 11.22 (1.04) 15.50 (1.44) APW4040 11.23 (1.15) 16.82 (1.56) APW4040 13.48 (1.25) 18.13 (1.68) APW4040 15.73 (1.46) 20.75 (1.93) APW4058 16.86 (1.57) 22.07 (2.05) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63		-			
APW3874 20.28 (1.88) 26.21 (2.43) APW3880 22.32 (2.07) 28.61 (2.66) APW4020 4.45 (0.41) 7.63 (0.71) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 12.88 (1.20) APW4034 8.97 (0.83) 12.88 (1.20) APW4040 11.22 (1.04) 15.50 (1.44) APW4044 12.35 (1.15) 16.82 (1.56) APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 22.07 (2.05) APW4074 22.50 (2.09) 28.63 (2.66) APW4408 24.75 (2.30) 11.25 (1					
APW3880 22.32 (2.07) 28.61 (2.66) APW4020 4.45 (0.41) 7.63 (0.71) APW4024 5.58 (0.52) 8.94 (0.83) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW40404 12.35 (1.15) 16.82 (1.56) APW40408 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4054 15.73 (1.61) 20.75 (1.93) APW4058 16.86 (1.57) 22.07 (2.05) APW4068 20.24 (1.88) 26.00 (2.42) APW4068 20.24 (1.88) 26.00 (2.42) APW4408 20.25 (2.09) 28.63					
APW4020 4.45 (0.41) 7.63 (0.71) APW4024 5.58 (0.52) 8.94 (0.83) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW4044 12.35 (1.15) 16.82 (1.56) APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 12.45 (1.51) APW4054 15.73 (1.46) 20.75 (1.93) APW4060 17.99 (1.67) 23.38 (2.17) APW4068 20.24 (1.88) 26.00 (2.29) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4088 20.24 (1.88) 26.00 (2					
APW4024 5.58 (0.52) 8.94 (0.83) APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 12.88 (1.20) APW40404 11.22 (1.04) 15.50 (1.44) APW4044 12.35 (1.15) 16.82 (1.56) APW4050 14.60 (1.36) 19.44 (1.81) APW4054 15.73 (1.46) 20.75 (1.93) APW4050 16.86 (1.57) 22.07 (1.93) APW4064 19.12 (1.78) 24.69 (2.29) APW4068 20.24 (1.88) 26.00 (2.42) APW4080 24.75 (2.30) 31.25 (2.90) APW4424 6.13 (0.57) 9.70 (0.90) APW4428 7.37 (0.68) 11.12 (1.03) APW4433 18.0 (0.57) 9.70 (0.90		-			
APW4028 6.71 (0.62) 10.25 (0.95) APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 12.88 (1.20) APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW4044 12.35 (1.15) 16.82 (1.56) APW4048 13.48 (1.25) 18.13 (1.68) APW4056 14.60 (1.36) 19.44 (1.81) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4068 20.24 (1.88) 26.00 (2.29) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4424 6.13 (0.57) 9.70 (0.90) APW4428 7.37 (0.68) 11.12 (1			. ,		
APW4030 7.84 (0.73) 11.57 (1.07) APW4034 8.97 (0.83) 12.88 (1.20) APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4064 19.12 (1.78) 24.69 (2.29) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.99) APW4420 4.89 (0.45) 8.27 (0.77 APW4428 7.37 (0.68) 11.12 (1.03) APW44438 11.09 (1.03) 15.39 (. ,		
APW4034 8.97 (0.83) 12.88 (1.20) APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW4044 12.35 (1.15) 16.82 (1.56) APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4054 15.73 (1.46) 20.75 (1.93) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4428 7.37 (0.68) 11.12 (1.03) APW44438 11.09 (1.03) 15.39 <th< th=""><th></th><th></th><th></th><th></th><th></th></th<>					
APW4038 10.09 (0.94) 14.19 (1.32) APW4040 11.22 (1.04) 15.50 (1.44) APW4044 12.35 (1.15) 16.82 (1.56) APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4068 20.24 (1.88) 26.00 (2.42) APW4080 24.75 (2.30) 31.25 (2.90) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4428 7.37 (0.68) 11.12 (1.03) APW4440 8.61 (0.80) 12.55 (1.71 APW4438 11.09 (1.03) 15.39 (1.43) APW44440 12.33 (1.15) 16.82					
APW4040					
APW4044 12.35 (1.15) 16.82 (1.56) APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4054 15.73 (1.46) 20.75 (1.93) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4064 19.12 (1.78) 24.69 (2.29) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4424 6.13 (0.57) 9.70 (0.90) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.71 APW4444 13.57 (1.26) 18.24 (1.69) APW44444 13.57 (1.26) 18.24					
APW4048 13.48 (1.25) 18.13 (1.68) APW4050 14.60 (1.36) 19.44 (1.81) APW4054 15.73 (1.46) 20.75 (1.93) APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4448 14.80 (1.37) 19.66 (
APW4050					
APW4054					
APW4058 16.86 (1.57) 22.07 (2.05) APW4060 17.99 (1.67) 23.38 (2.17) APW4064 19.12 (1.78) 24.69 (2.29) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4433 11.09 (1.03) 15.39 (1.43) APW4444 13.57 (1.26) 18.24 (1.69) APW4444 13.57 (1.26) 18.24 (1.69) APW4444 13.57 (1.26) 18.24 (1.69) APW4445 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09					
APW4060 17.99 (1.67) 23.38 (2.17) APW4064 19.12 (1.78) 24.69 (2.29) APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4444 13.57 (1.26) 18.24 (1.69) APW4445 17.28 (1.61) 22.51 (2.90) APW4456 18.52 (1.72) 23.93 (
APW4064					
APW4068 20.24 (1.88) 26.00 (2.42) APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4424 6.13 (0.57) 9.70 (0.90) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4445 14.80 (1.37) 19.66 (1.83) APW4445 17.28 (1.61) 22.51 (2.69) APW4456 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.			(1.67)		(2.17)
APW4074 22.50 (2.09) 28.63 (2.66) APW4080 24.75 (2.30) 31.25 (2.90) APW4420 4.89 (0.45) 8.27 (0.77) APW4424 6.13 (0.57) 9.70 (0.90) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4444 14.80 (1.37) 19.66 (1.83) APW4445 17.28 (1.61) 22.51 (2.69) APW4450 18.52 (1.72) 23.93 (2.22) APW4446 19.76 (1.84) 25.36 (2.36) APW4460 19.76 (1.84) 25.36 (2.	APW4064	19.12	(1.78)	24.69	(2.29)
APW4080					(2.42)
APW4420	APW 4074	22.50	(2.09)	28.63	(2.66)
APW4424 6.13 (0.57) 9.70 (0.90) APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.	APW4080	24.75	(2.30)	31.25	(2.90)
APW4428 7.37 (0.68) 11.12 (1.03) APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.39) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4480 27.19 (2.53) 33.90 (3.15) APW4824 6.68 (0.62) 10.46	APW4420	4.89	(0.45)	8.27	(0.77)
APW4430 8.61 (0.80) 12.55 (1.17) APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4468 22.24 (2.07) 28.21 (2.62) APW4468 22.24 (2.07) 28.21 (2.62) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4828 8.03 (0.75) 11.99 (APW4424	6.13	(0.57)	9.70	(0.90)
APW4434 9.85 (0.92) 13.97 (1.30) APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4468 22.24 (2.07) 28.21 (2.62) APW4480 27.19 (2.53) 33.90 (3.15) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 <th< th=""><th>APW4428</th><th>7.37</th><th>(0.68)</th><th>11.12</th><th>(1.03)</th></th<>	APW4428	7.37	(0.68)	11.12	(1.03)
APW4438 11.09 (1.03) 15.39 (1.43) APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4828 8.03 (0.75) 11.99 (1.11) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 <th< th=""><th>APW4430</th><th>8.61</th><th>(0.80)</th><th>12.55</th><th>(1.17)</th></th<>	APW 4430	8.61	(0.80)	12.55	(1.17)
APW4440 12.33 (1.15) 16.82 (1.56) APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4468 22.24 (2.07) 28.21 (2.62) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.50) APW4844 16.73 (1.00) 15.06	APW 4434	9.85	(0.92)	13.97	(1.30)
APW4444 13.57 (1.26) 18.24 (1.69) APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4474 24.72 (2.30) 31.05 (2.88) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.50) APW4834 10.73 (1.00) 15.06 (1.40) APW48480 13.43 (1.25) 18.13	APW 4438	11.09	(1.03)	15.39	(1.43)
APW4448 14.80 (1.37) 19.66 (1.83) APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4474 24.72 (2.30) 31.05 (2.88) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 16.13 (1.50) 21.20	APW 4440	12.33	(1.15)	16.82	(1.56)
APW4450 16.04 (1.49) 21.09 (1.96) APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4474 24.72 (2.30) 31.05 (2.88) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66	APW 4444	13.57	(1.26)	18.24	(1.69)
APW4454 17.28 (1.61) 22.51 (2.09) APW4458 18.52 (1.72) 23.93 (2.22) APW4460 19.76 (1.84) 25.36 (2.36) APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4474 24.72 (2.30) 31.05 (2.88) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4844 14.78 (1.37) 19.66 (1.83) APW4850 17.48 (1.62) 22.73 (2.11) APW4860 21.53 (2.00) 27.34 (2.54) APW4860 21.53 (2.00) 27.34 (2.54) APW4860 22.88 (2.13) 28.87 (2.68) APW4860 24.23 (2.25) 30.41 (2.83) APW4860 29.63 (2.75) 36.55 (3.40) APW4880 29.63 (2.75) 36.55 (3.40) APW4880 29.63 (2.75) 36.55 (3.40) APW4880 29.63 (2.75) 36.55 (3.40) APW4800 5.77 (0.54) 9.57 (0.89) APW5020 5.77 (0.54) 9.57 (0.89)	APW 4448	14.80	(1.37)	19.66	(1.83)
APW4458	APW 4450	16.04	(1.49)	21.09	(1.96)
APW4460	APW 4454	17.28	(1.61)	22.51	(2.09)
APW4464 21.00 (1.95) 26.78 (2.49) APW4468 22.24 (2.07) 28.21 (2.62) APW4474 24.72 (2.30) 31.05 (2.88) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4854 18.83 (1.75) 24.27 (APW4458	18.52	(1.72)	23.93	(2.22)
APW4468 22.24 (2.07) 28.21 (2.62) APW4474 24.72 (2.30) 31.05 (2.88) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4854 18.83 (1.75) 24.27 (2.25) APW4856 20.18 (1.87) 25.80 (APW 4460	19.76	(1.84)	25.36	(2.36)
APW4474 24.72 (2.30) 31.05 (2.88) APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4864 22.80 (2.13) 28.87 (APW 4464	21.00	(1.95)	26.78	(2.49)
APW4480 27.19 (2.53) 33.90 (3.15) APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4864 24.23 (2.25) 30.41 (APW4468	22.24	(2.07)	28.21	(2.62)
APW4820 5.33 (0.50) 8.92 (0.83) APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (APW 4474	24.72	(2.30)	31.05	(2.88)
APW4824 6.68 (0.62) 10.46 (0.97) APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 <th< th=""><th>APW4480</th><th>27.19</th><th>(2.53)</th><th>33.90</th><th>(3.15)</th></th<>	APW 4480	27.19	(2.53)	33.90	(3.15)
APW4828 8.03 (0.75) 11.99 (1.11) APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57	APW 4820	5.33	(0.50)	8.92	(0.83)
APW4830 9.38 (0.87) 13.52 (1.26) APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 <th< th=""><th>APW4824</th><th>6.68</th><th>(0.62)</th><th>10.46</th><th>(0.97)</th></th<>	APW4824	6.68	(0.62)	10.46	(0.97)
APW4834 10.73 (1.00) 15.06 (1.40) APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW4828	8.03	(0.75)	11.99	(1.11)
APW4838 12.08 (1.12) 16.59 (1.54) APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW 4830	9.38	(0.87)	13.52	(1.26)
APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4858 18.83 (1.75) 24.27 (2.25) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW 4834	10.73	(1.00)	15.06	(1.40)
APW4840 13.43 (1.25) 18.13 (1.68) APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4858 18.83 (1.75) 24.27 (2.25) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW 4838	12.08		16.59	
APW4844 14.78 (1.37) 19.66 (1.83) APW4848 16.13 (1.50) 21.20 (1.97) APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW 4840	13.43		18.13	
APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW 4844	14.78	(1.37)	19.66	
APW4850 17.48 (1.62) 22.73 (2.11) APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)	APW4848				
APW4854 18.83 (1.75) 24.27 (2.25) APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW4858 20.18 (1.87) 25.80 (2.40) APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW4860 21.53 (2.00) 27.34 (2.54) APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW4864 22.88 (2.13) 28.87 (2.68) APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW4868 24.23 (2.25) 30.41 (2.83) APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW4874 26.93 (2.50) 33.48 (3.11) APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW4880 29.63 (2.75) 36.55 (3.40) APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW5020 5.77 (0.54) 9.57 (0.89) APW5024 7.23 (0.67) 11.21 (1.04)					
APW 5024 7.23 (0.67) 11.21 (1.04)					
8.69 (U.81) 12.86 (1.19)					
	APW0U28	8.69	(U.81)	12.86	(1.19)

			ı			
Window	Gl	ass	Overall	Window		
Number	Ar	ea	Area			
ADMENDO		t./(m²)		t./(m²)		
APW5030	10.15	(0.94)	14.50	(1.35)		
APW5034	11.62	(1.08)	16.15	(1.50)		
APW5038	13.08	(1.22)	17.80	(1.65)		
APW5040	14.54	(1.35)	19.44	(1.81)		
APW5044	16.00	(1.49)	21.09	(1.96)		
APW5048 APW5050	17.46	(1.62)	22.73	(2.11)		
APW5050 APW5054	18.92	(1.76)	24.38	(2.26)		
APW5058	20.38	(1.89)	26.02	(2.42)		
APW5060		(2.03)	29.32	(2.57)		
APW5064	23.30			(2.72)		
APW5068	26.23	(2.30)	30.96	(2.88)		
APW5074	29.15	(2.71)	35.90	(3.34)		
APW5080	32.07	(2.98)	39.19	(3.64)		
APW5420	6.21	(0.58)	10.21	(0.95)		
APW5424	7.78	(0.72)	11.97	(1.11)		
APW5428	9.35	(0.72)	13.73	(1.11)		
APW5430	10.93	(1.02)	15.48	(1.44)		
APW5434	12.50	(1.16)	17.24	(1.60)		
APW5438	14.07	(1.31)	19.00	(1.77)		
APW5440	15.64	(1.45)	20.75	(1.93)		
APW5444	17.22	(1.60)	22.51	(2.09)		
APW 5448	18.79	(1.75)	24.27	(2.25)		
APW 5450	20.36	(1.89)	26.02	(2.42)		
APW5454	21.93	(2.04)	27.78	(2.58)		
APW5458	23.50	(2.18)	29.54	(2.74)		
APW5460	25.08	(2.33)	31.30	(2.91)		
APW 5464	26.65	(2.48)	33.05	(3.07)		
APW 5468	28.22	(2.62)	34.81	(3.23)		
APW 5474	31.37	(2.91)	38.32	(3.56)		
APW 5480	34.51	(3.21)	41.84	(3.89)		
APW5820	6.65	(0.62)	10.86	(1.01)		
APW5824	8.33	(0.77)	12.73	(1.18)		
APW5828	10.02	(0.93)	14.59	(1.36)		
APW5830	11.70	(1.09)	16.46	(1.53)		
APW5834	13.38	(1.24)	18.33	(1.70)		
APW5838	15.07	(1.40)	20.20	(1.88)		
APW5840	16.75	(1.56)	22.07	(2.05)		
APW5844	18.43	(1.71)	23.93	(2.22)		
APW5848	20.12	(1.87)	25.80	(2.40)		
APW5850	21.80	(2.03)	27.67	(2.57)		
APW5854	23.48	(2.18)	29.54	(2.74)		
APW5858	25.17	(2.34)	31.41	(2.92)		
APW5860	26.85	(2.49)	33.27	(3.09)		
APW5864	28.53	(2.65)	35.14	(3.26)		
APW5868	30.22	(2.81)	37.01	(3.44)		
APW5874	33.58	(3.12)	40.75	(3.79)		
APW5880	36.95	(3.43)	44.48	(4.13)		
APW6020	7.09	(0.66)	11.50	(1.07)		
APW6024	8.88	(0.82)	13.48	(1.25)		
APW6028	10.68	(0.99)	15.46	(1.44)		
APW6030	12.47	(1.16)	17.44	(1.62)		
APW6034	14.27	(1.33)	19.42	(1.80)		
APW6038	16.06	(1.49)	21.40	(1.99)		
APW6040	17.85	(1.66)	23.38	(2.17)		
APW6044	19.65	(1.83)	25.36	(2.36)		
APW6048	21.44	(1.99)	27.34	(2.54)		
APW6050	23.24	(2.16)	29.32	(2.72)		
APW6054	25.03	(2.33)	31.30	(2.91)		
APW6058	26.83	(2.49)	33.27	(3.09)		
APW6060	28.62	(2.66)	35.25	(3.27)		

Number	Window		ass	Overall Window Area			
APW6068 32.21 (2.99) 39.21 (3.64) APW6074 35.80 (3.33) 43.17 (4.01) APW6080 39.39 (3.66) 47.13 (4.38) APW6420 7.53 (0.70) 12.15 (1.13) APW6424 9.43 (0.88) 14.24 (1.32) APW6428 11.34 (1.05) 16.33 (1.52) APW6428 11.34 (1.05) 16.33 (1.52) APW6430 13.24 (1.23) 18.42 (1.71) APW6438 17.05 (1.58) 22.60 (2.10) APW6440 18.96 (1.76) 24.69 (2.29) APW6444 20.87 (1.94) 26.78 (2.49) APW6445 22.77 (2.12) 28.87 (2.68) APW6450 24.68 (2.29) 30.96 (2.88) APW6454 26.58 (2.47) 33.05 (3.07) APW6458 28.49 (2.65) 35.14 (3.26) APW6450 30.39 (2.82) 37.23 (3.46) APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6830 14.02 (1.30) 19.40 (1.80) APW6831 16.03 (1.49) 21.60 (2.01) APW6838 18.05 (1.68) 23.80 (2.11) APW6844 22.08 (2.05) 28.20 (2.62) APW6846 20.07 (1.86) 25.00 (2.42) APW6840 20.07 (1.86) 25.00 (2.42) APW6840 20.07 (1.86) 25.00 (2.42) APW6840 20.07 (1.86) 25.00 (2.42) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6859 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW6858 30.15 (2.80) 37.01 (3.44) APW7020 8.40 (0.78) 13.44 (2.97) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7044 23.30 (2.16) 29.63 (2.54) APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7059 3.94 (3.15) 41.19 (3.83) APW7444 24.52 (2.28) 31.05 (2.89) APW7449 3.30 (2.16) 29.63 (2.69) APW7440 3.94 (3.15) 41.19 (3.83) APW7450 3.94 (3.15) 41.19 (3.83) APW7440 3.94 (3.15) 41.19 (3.83) APW7450 3.99 (3.86) 14.73 (1.77) APW7440 3.57 (3.29) 33.48 (3.11) APW7450 3.99 (3.80) 3.34 (3	Number						
APW6074 35.80 (3.33) 43.17 (4.01) APW6080 39.39 (3.66) 47.13 (4.38) APW6420 7.53 (0.70) 12.15 (1.13) APW6424 9.43 (0.88) 14.24 (1.32) APW6428 11.34 (1.05) 16.33 (1.52) APW6430 13.24 (1.23) 18.42 (1.71) APW6434 15.15 (1.41) 20.51 (1.91) APW6434 15.15 (1.41) 20.51 (1.91) APW6434 18.96 (1.76) 24.69 (2.29) APW6440 APW6444 20.87 (1.94) 26.78 (2.49) APW6450 APW6450 APW6450 APW6454 APW6458 APW6458 APW6458 APW6658 APW6658 APW6680 APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6838 APW6830 APW6830 APW6830 APW6830 APW6834 16.03 (1.49) 21.60 (2.01) APW6838 18.05 (1.68) 23.80 (2.21) APW6838 APW6844 22.07 (2.24) 30.40 (2.82) APW6848 APW6858 APW7020 APW6858 APW7024 APW7024 APW7028 APW7024 APW7028 APW7024 APW7028 APW7028 APW7029 APW7030 APW7030 APW7040 APW7030 APW7040 APW7030 APW7040 APW70	APW6064	30.42	(2.83)	37.23	(3.46)		
APW6080 39.39 (3.66) 47.13 (4.38) APW6420 7.53 (0.70) 12.15 (1.13) APW6424 9.43 (0.88) 14.24 (1.32) APW6428 11.34 (1.05) 16.33 (1.52) APW6430 13.24 (1.23) 18.42 (1.71) APW6434 15.15 (1.41) 20.51 (1.91) APW6438 17.05 (1.58) 22.60 (2.10) APW6440 18.96 (1.76) 24.69 (2.29) APW6440 20.87 (1.94) 26.78 (2.49) APW6444 20.87 (1.94) 26.78 (2.49) APW6450 24.68 (2.29) 30.96 (2.88) APW6450 24.68 (2.29) 30.96 (2.88) APW6454 26.58 (2.47) 33.05 (3.07) APW6458 28.49 (2.65) 35.14 (3.26) APW6460 30.39 (2.82) 37.23 (3.46) APW6820 7.97 (0.74) 12.80 (1.19) APW6828 12.00 (1.11) 17.20 (1.60) APW6838 18.05 (1.68) 23.80 (2.21) APW6839 14.02 (1.30) 19.40 (1.80) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6840 20.07 (1.86) 26.00 (2.42) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6858 31.16 (2.24) 30.40 (2.82) APW6858 30.15 (2.80) 37.01 (3.44) APW6858 31.15 (2.80) 37.01 (3.44) APW6858 30.15 (2.80) 37.01 (3.44) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.68) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.68) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.68) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7040 21.17 (1.97) 27.32 (2.54) APW7041 23.30 (2.16) 29.63 (2.75) APW7042 10.53 (0.98) 15.75 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7030 14.79 (1.37) 20.38 (1.89) APW7044 23.30 (2.16) 29.63 (2.75) APW7049 25.64 (2.90) 38.88 (3.61) APW7030 15.56 (1.45) 21.36 (1.98) APW7044 23.30 (2.16) 29.63 (2.75) APW7044 23.30 (2.16) 29.63 (2.75) APW7048 25.43 (2.36) 31.94 (2.97) APW7049 22.80 (0.79) 38.82 (3.66) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 29.00	APW6068	32.21	(2.99)	39.21	(3.64)		
APW6420 7.53 (0.70) 12.15 (1.13) APW6424 9.43 (0.88) 14.24 (1.32) APW6428 11.34 (1.05) 16.33 (1.52) APW6430 13.24 (1.23) 18.42 (1.71) APW6434 15.15 (1.41) 20.51 (1.91) APW6438 17.05 (1.58) 22.60 (2.10) APW6440 18.96 (1.76) 24.69 (2.29) APW6440 20.87 (1.94) 26.78 (2.49) APW6444 20.87 (1.94) 26.78 (2.49) APW6455 24.68 (2.29) 30.96 (2.88) APW6456 24.68 (2.29) 30.96 (2.88) APW6456 26.58 (2.47) 33.05 (3.07) APW6458 28.49 (2.65) 35.14 (3.26) APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6838 18.05 (1.68) 23.80 (2.21) APW6838 16.03 (1.49) 21.60 (2.01) APW6838 16.03 (1.49) 21.60 (2.01) APW6838 16.03 (1.49) 21.60 (2.01) APW6844 22.08 (2.05) 28.20 (2.62) APW6846 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.66) APW7020 8.40 (0.78) 13.44 (1.25) APW7030 14.79 (1.37) 20.38 (1.89) APW7030 14.79 (1.37) 20.38 (1.89) APW7044 23.30 (2.16) 29.63 (2.75) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7050 3.394 (3.15) 41.19 (3.83) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.26 (2.49) 33.48 (3.11) APW7044 22.52 (2.90) 38.32 (3.66) APW7044 23.30 (2.16) 29.63 (2.75) APW7040 21.17 (1.97) 27.32 (2.54) APW7044 23.30 (2.16) 29.63 (2.75) APW7044 23.30 (2.16) 29.63 (2.75) APW7049 25.65 (2.66) 36.57 (3.04) APW7050 3.56 (2.76) 36.57 (3.04) APW7044 22.82 (2.09) 38.38 (3.61) APW70450 3.394 (3.15) 41.19 (3.83) APW7450 3.394 (3.15) 41.19 (3.83) APW7450 3.394 (3.15) 41.19 (3.83) APW7450 3.394 (3.15) 41.19 (3.36) APW7450 3.39	APW 6074	35.80	(3.33)	43.17	(4.01)		
APW6424 9.43 (0.88) 14.24 (1.32) APW6428 11.34 (1.05) 16.33 (1.52) APW6430 13.24 (1.23) 18.42 (1.71) APW6434 15.15 (1.41) 20.51 (1.91) APW6438 17.05 (1.58) 22.60 (2.10) APW6440 18.96 (1.76) 24.69 (2.29) APW6444 20.87 (1.94) 26.78 (2.49) APW6450 24.68 (2.29) 30.96 (2.88) APW6450 24.68 (2.29) 30.96 (2.88) APW6454 26.58 (2.47) 33.05 (3.07) APW6460 30.39 (2.82) 37.23 (3.46) APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6830 14.02 (1.30) 19.40 (1.80) APW6834 16.03 (1.49) 21.60 (2.01) APW6838 18.05 (1.68) 23.80 (2.21) APW6838 18.05 (1.68) 23.80 (2.21) APW6844 22.08 (2.05) 28.20 (2.62) APW6850 26.12 (2.43) 32.61 (3.03) APW6852 21.00 (1.11) 17.20 (1.60) APW6853 21.00 (1.11) 17.20 (1.60) APW6853 21.00 (1.11) 17.20 (1.60) APW6854 22.08 (2.05) 28.20 (2.62) APW6864 24.10 (2.24) 30.40 (2.82) APW685 26.12 (2.43) 32.61 (3.03) APW685 26.12 (2.43) 32.61 (3.03) APW685 30.15 (2.80) 37.01 (3.44) APW686 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.66) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7044 23.30 (2.16) 2.63 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7044 33.03 (2.16) 2.63 (3.61) APW7428 13.32 (2.24) 18.93 (1.76) APW7429 13.32 (2.24) 18.93 (1.76) APW7440 22.28 (2.07) 28.63 (2.14) APW7450 33.94 (3.15) 41.19 (3.83) APW7454 33.32 (2.29) 38.32 (3.56) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 39.00 (2.69) 35.90 (3.34) APW7450 39.00 (2.69) 35.	APW6080	39.39	(3.66)	47.13	(4.38)		
APW6428	APW6420	7.53	(0.70)	12.15	(1.13)		
APW6430	APW6424	9.43	(0.88)	14.24	(1.32)		
APW6434	APW6428	11.34	(1.05)	16.33	(1.52)		
APW6438	APW6430	13.24	(1.23)	18.42	(1.71)		
APW6440 18.96 (1.76) 24.69 (2.29) APW6444 20.87 (1.94) 26.78 (2.49) APW6448 22.77 (2.12) 28.87 (2.68) APW6450 24.68 (2.29) 30.96 (2.88) APW6454 26.58 (2.47) 33.05 (3.07) APW6458 28.49 (2.65) 35.14 (3.26) APW6460 30.39 (2.82) 37.23 (3.46) APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6830 14.02 (1.30) 19.40 (1.80) APW6830 14.02 (1.30) 19.40 (1.80) APW6838 18.05 (1.68) 23.80 (2.21) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6840 20.07 (1.86) 26.00 (2.42) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6850 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6858 30.15 (2.80) 37.01 (3.44) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 31.81 (2.96) 38.88 (3.61) APW7050 3.54 (2.36) 31.94 (2.97) APW7050 3.54 (2.26) 38.88 (3.61) APW7050 3.54 (2.26) 38.88 (3.61) APW7050 3.54 (2.26) 38.88 (3.61) APW7050 3.56 (1.45) 21.36 (1.98) APW7044 10.53 (2.66) 34.25 (3.18) APW7050 3.54 (2.26) 38.88 (3.61) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 31.81 (2.96) 38.88 (3.61) APW7050 3.54 (2.96) 36.57 (3.40) APW7050 3.56 (1.45) 21.36 (1.98) APW7050 3.56 (1.45) 21.36 (1.98) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 3.1.61 (3.32) 43.17 (4.01) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7450 3.9.4 (3.57) 33.48 (3.11) APW7450 3.9.2 (0.66) 35.90 (3.34) APW7450 3.9.2 (0.66) 14.73 (1.37) APW7460 35.71 (3.	APW6434	15.15	(1.41)	20.51	(1.91)		
APW6444	APW6438	17.05	(1.58)	22.60	(2.10)		
APW6448	APW6440	18.96	(1.76)	24.69	(2.29)		
APW6450	APW6444	20.87	(1.94)	26.78	(2.49)		
APW6454	APW6448	22.77	(2.12)	28.87	(2.68)		
APW6458	APW6450	24.68	(2.29)	30.96	(2.88)		
APW6460 30.39 (2.82) 37.23 (3.46) APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6830 14.02 (1.30) 19.40 (1.80) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7050 32.45 (2.36) 31.94 (2.97) APW7050 33.94 (3.15) 41.19 (3.83) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 33.34 (3.11) 40.75 (3.79) APW7456 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7450 3.28 (2.89) 35.90 (3.34) APW7450 3.57 (3.40) 35.71 (3.32) 43.17 (4.01) APW7450 3.58 (2.60) 36.86 (1.4.73 (1.37) APW7450 3.58 (2.90) 38.32 (3.56) APW7456 3.51 (3.39) 41.69 (1.57) (3.39) APW7456 3.51 (3.39) 41.73 (1.37) APW7450 3.51 (3.39) 41.73 (3.31) 40.75 (3.79) APW7450 3.51 (3.39) 41.73 (1.37) APW7450 3.51 (3.50) 41.73 (1.37) APW7450 3.51 (3.50) 41.73 (1.37) APW7450 3.51 (3.50) 41.73 (1.37) APW7450 3.51 (3.50	APW6454	26.58	(2.47)	33.05	(3.07)		
APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6830 14.02 (1.30) 19.40 (1.80) APW6838 18.05 (1.68) 23.80 (2.21) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.8 (2.76) 36.57 (3.40) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7440 22.28 (2.07) 28.63 (2.66) APW7456 33.47 (3.11) 40.75 (3.79) APW7456 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7450 9.28 (0.86) 14.73 (1.37)	APW6458	28.49	(2.65)	35.14	(3.26)		
APW6820 7.97 (0.74) 12.80 (1.19) APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6830 14.02 (1.30) 19.40 (1.80) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 <th< td=""><th>APW6460</th><td></td><td></td><td></td><td></td></th<>	APW6460						
APW6824 9.98 (0.98) 15.00 (1.39) APW6828 12.00 (1.11) 17.20 (1.60) APW6830 14.02 (1.30) 19.40 (1.80) APW6834 16.03 (1.49) 21.60 (2.01) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7020 10.53 (0.98) 15.75 (1.46) APW7020 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7030 14.79 (1.37) 20.38 (1.89) APW7030 14.79 (1.37) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.11 (1.97) 27.32 (2.54) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 15.66 (1.45) 21.36 (1.98) APW7040 11.08 (1.03) 16.51 (1.53) APW7040 11.08 (1.03) 16.51 (1.53) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7440 11.08 (1.03) 16.51 (1.53) APW7440 12.28 (2.07) 28.63 (2.66) APW7444 11.08 (1.03) 16.51 (1.53) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7456 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7450 9.28 (0.86) 14.73 (1.37) APW7450 19.28 (0.86) 14.73 (1.37)	APW6820	7.97		12.80			
APW6828 12.00 (1.11) 17.20 (1.60) APW6830 14.02 (1.30) 19.40 (1.80) APW6834 16.03 (1.49) 21.60 (2.01) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7050 32.30 (2.16) 29.63 (2.75) APW7050 33.94 (3.15) 41.19 (3.83) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7448 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7448 26.75 (2.49) 33.48 (3.11) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7450 9.28 (0.86) 14.73 (1.37) APW7460 35.71 (3.32) 43.17 (4.01) APW7450 9.28 (0.86) 14.73 (1.37) APW7820 9.28 (0.86) 14.73 (1.37)					. ,		
APW6830							
APW6834 16.03 (1.49) 21.60 (2.01) APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7040 21.17 (1.97) 27.32 (2.54) APW7050 27.55 (2.56) 34.25 <					. ,		
APW6838 18.05 (1.68) 23.80 (2.21) APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7050 27.55 (2.56) 34.25 <					. ,		
APW6840 20.07 (1.86) 26.00 (2.42) APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7030 14.79 (1.37) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.13 (2.36) 31.94 (2.97) APW7050 32.30 (2.16) 29.63 (2.75) APW7050 32.30 (2.16) 29.63 (2.75) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7420 11.08 (1.03) 16.51 (1.53) APW7420 15.56 (1.45) 21.36 (1.98) APW7428 13.32 (1.24) 18.93 (1.76) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 33.47 (3.11) 40.75 (3.79) APW7450 35.71 (3.32) 43.17 (4.01) APW7450 35.71 (3.32) 43.17 (4.01) APW7450 35.71 (3.32) 43.17 (4.01) APW7450 39.28 (0.86) 14.73 (1.37) APW7850 39.28 (0.86) 14.73 (1.37)			. ,				
APW6844 22.08 (2.05) 28.20 (2.62) APW6848 24.10 (2.24) 30.40 (2.82) APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.13 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7420 11.08 (1.03) 16.51 (1.53) APW7420 15.56 (1.45) 21.36 (1.98) APW7440 12.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 33.47 (3.11) 40.75 (3.79) APW7450 35.71 (3.32) 43.17 (4.01) APW7458 33.47 (3.11) 40.75 (3.79) APW7480 35.71 (3.32) 43.17 (4.01) APW7480 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7820 19.28 (0.86) 14.73 (1.37) APW7820 19.28 (0.86) 14.73 (1.37)							
APW6848							
APW6850 26.12 (2.43) 32.61 (3.03) APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.40) APW7058 31.81 (2.96) 38.88							
APW6854 28.13 (2.61) 34.81 (3.23) APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.1.17 (1.97) 27.32 (2.54) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 23.39 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09							
APW6858 30.15 (2.80) 37.01 (3.44) APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.13 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7444 17.80 (1.65) 23.78 (2.21) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 35.71 (3.22) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7480 9.28 (0.86) 14.73 (1.37) APW7480 9.28 (0.86) 14.73 (1.37) APW7480 9.28 (0.86) 14.73 (1.37) APW7450 9.28 (0.86) 14.73 (1.37) APW7820 9.28 (0.86) 14.73 (1.37) APW7820 19.80 (1.80) 19.80 (1.84)							
APW6860 32.17 (2.99) 39.21 (3.64) APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.17 (1.97) 27.32 (2.54) APW7040 22.13 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7420 11.08 (1.03) 16.51 (1.53) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7444 17.80 (1.65) 23.78 (2.21) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7820 9.28 (0.86) 14.73 (1.37) APW7828 13.98 (1.30) 19.80 (1.84)							
APW7020 8.40 (0.78) 13.44 (1.25) APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7040 22.17 (1.97) 27.32 (2.54) APW7040 22.54 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7420 11.08 (1.03) 16.51 (1.53) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7430 15.56 (1.45) 23.78 (2.21) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 24.52 (2.28) 31.05 (2.88) APW7440 24.52 (2.28) 31.05 (2.88) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 35.71 (3.32) 43.17 (4.01) APW7450 9.28 (0.86) 14.73 (1.37) APW7820 9.28 (0.86) 14.73 (1.37)							
APW7024 10.53 (0.98) 15.75 (1.46) APW7028 12.66 (1.18) 18.07 (1.68) APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7044 23.30 (2.16) 29.63 (2.75) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 33.94 (3.15) 41.19 (3.83) APW7050 33.94 (3.15) 41.19 (3.83) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7430 15.56 (1.45) 21.36 (1.98) APW7440 22.28 (2.07) 28.63 (2.66) APW7440 24.52 (2.28) 31.05 (2.88) APW7440 29.00 (2.69) 35.90 (3.34) APW7450 39.28 (0.86) 14.73 (1.37) APW7458 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7828 13.98 (1.30) 19.80 (1.84)							
APW7028							
APW7030 14.79 (1.37) 20.38 (1.89) APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7044 23.30 (2.16) 29.63 (2.75) APW7050 27.55 (2.56) 34.25 (3.18) APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7444 17.80 (1.65) 23.78 (2.21) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7450 35.71 (3.32) 43.17 (4.01) APW7450 35.71 (3.32) 43.17 (4.01) APW7450 9.28 (0.86) 14.73 (1.37) APW7450 9.28 (0.86) 14.73 (1.37) APW7450 9.28 (0.86) 14.73 (1.37) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7820 19.28 (0.86) 14.73 (1.37) APW7820 19.28 (0.86) 14.73 (1.37)							
APW7034 16.92 (1.57) 22.69 (2.11) APW7038 19.04 (1.77) 25.00 (2.32) APW7040 21.17 (1.97) 27.32 (2.54) APW7044 23.30 (2.16) 29.63 (2.75) APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7456 33.47 (3.11) 40.75 (3.79) APW7458 33.47 (3.11) 40.75 (3.79) APW7450 9.28 (0.86) 14.73 (1.37) APW7450 9.28 (0.86) 14.73 (1.37) APW7450 9.28 (0.86) 14.73 (1.37) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7828 13.98 (1.30) 19.80 (1.84)							
APW7038							
APW7040 21.17 (1.97) 27.32 (2.54) APW7044 23.30 (2.16) 29.63 (2.75) APW7048 25.43 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 <			. ,				
APW7044 23.30 (2.16) 29.63 (2.75) APW7048 25.43 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7456 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)							
APW7048 25.43 (2.36) 31.94 (2.97) APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 <				-			
APW7050 27.55 (2.56) 34.25 (3.18) APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)					(2.75)		
APW7054 29.68 (2.76) 36.57 (3.40) APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.60) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 <	APW7048	25.43	(2.36)	31.94	(2.97)		
APW7058 31.81 (2.96) 38.88 (3.61) APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 <t< td=""><th>APW7050</th><td>27.55</td><td>(2.56)</td><td>34.25</td><td>(3.18)</td></t<>	APW 7050	27.55	(2.56)	34.25	(3.18)		
APW7060 33.94 (3.15) 41.19 (3.83) APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 <t< td=""><th>APW7054</th><td>29.68</td><td>(2.76)</td><td>36.57</td><td>(3.40)</td></t<>	APW 7054	29.68	(2.76)	36.57	(3.40)		
APW7420 8.84 (0.82) 14.09 (1.31) APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.60) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 <t< td=""><th></th><td></td><td></td><td></td><td></td></t<>							
APW7424 11.08 (1.03) 16.51 (1.53) APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 <							
APW7428 13.32 (1.24) 18.93 (1.76) APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)			(0.82)				
APW7430 15.56 (1.45) 21.36 (1.98) APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)							
APW7434 17.80 (1.65) 23.78 (2.21) APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7828 13.98 (1.30) 19.80 (1.84)		13.32	(1.24)	18.93	(1.76)		
APW7438 20.04 (1.86) 26.21 (2.43) APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)		15.56	(1.45)		(1.98)		
APW7440 22.28 (2.07) 28.63 (2.66) APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)		17.80	(1.65)	23.78	(2.21)		
APW7444 24.52 (2.28) 31.05 (2.88) APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)			(1.86)	26.21			
APW7448 26.75 (2.49) 33.48 (3.11) APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW 7440	22.28	(2.07)	28.63	(2.66)		
APW7450 29.00 (2.69) 35.90 (3.34) APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW7444	24.52	(2.28)	31.05	(2.88)		
APW7454 31.23 (2.90) 38.32 (3.56) APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW 7448	26.75	(2.49)	33.48	(3.11)		
APW7458 33.47 (3.11) 40.75 (3.79) APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW7450	29.00	(2.69)	35.90	(3.34)		
APW7460 35.71 (3.32) 43.17 (4.01) APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW7454	31.23	(2.90)	38.32	(3.56)		
APW7820 9.28 (0.86) 14.73 (1.37) APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW 7458	33.47	(3.11)	40.75	(3.79)		
APW7824 11.63 (1.08) 17.26 (1.60) APW7828 13.98 (1.30) 19.80 (1.84)	APW 7460	35.71	(3.32)	43.17	(4.01)		
APW7828 13.98 (1.30) 19.80 (1.84)	APW7820	9.28	(0.86)	14.73	(1.37)		
	APW7824	11.63	(1.08)	17.26	(1.60)		
Dimensions in parentheses are in square meters	APW7828	13.98	(1.30)	19.80	(1.84)		
	Dimensions in parenthoses are	in cause	meters				

continued on next page



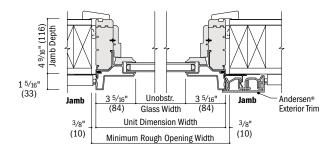
Picture Window Area Specifications (continued)

	-				
Window Number		ea	Overall Window Area		
Number		t./(m²)		t./(m²)	
APW 7830	16.33	(1.52)	22.34	(2.08)	
APW7834	18.68	(1.74)	24.87	(2.31)	
APW7838	21.03	(1.95)	27.41	(2.55)	
APW 7840	23.38	(2.17)	29.94	(2.78)	
APW 7844	25.73	(2.39)	32.48	(3.02)	
APW 7848	28.08	(2.61)	35.01	(3.25)	
APW 7850	30.43	(2.83)	37.55	(3.49)	
APW 7854	32.78	(3.05)	40.08	(3.72)	
APW7858	35.13	(3.26)	42.62	(3.96)	
APW 7860	37.48	(3.48)	45.15	(4.19)	
APW8020	9.72	(0.90)	15.38	(1.43)	
APW8024	12.18	(1.13)	18.02	(1.67)	
APW8028	14.64	(1.36)	20.67	(1.92)	
APW8030	17.10	(1.59)	23.32	(2.17)	
APW8034	19.57	(1.82)	25.96	(2.41)	
APW8038	22.03	(2.05)	28.61	(2.66)	
APW8040	24.49	(2.28)	31.25	(2.90)	
APW8044	26.95	(2.50)	33.90	(3.15)	
APW8048	29.41	(2.73)	36.55	(3.40)	
APW8050	31.87	(2.96)	39.19	(3.64)	
APW8054	34.33	(3.19)	41.84	(3.89)	
APW8058	36.79	(3.42)	44.48	(4.13)	
APW8060	39.25	(3.65)	47.13	(4.38)	

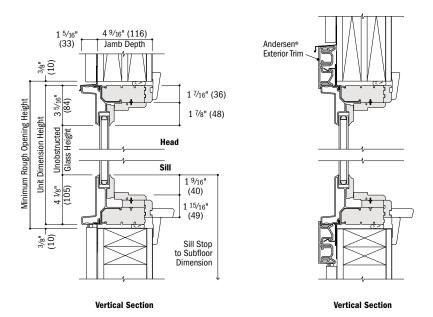
[•] Dimensions in parentheses are in square meters.

Picture Window Details

Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section



See pages 60-62 for joining details.

- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
 Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

Table of Transom Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the next page also apply to this page.

Scale $\frac{1}{8}$ " (3) = 1'-0" ((305) - 1:96	6										
Unit Dimension	1'-3 ¹ /4" (387)	1'-7 1/4" (489)	1'-11 1/4" (591)	2'-3 1/4" (692)	2'-5 1/4" (743)	2'-7 1/4" (794)	2'-9 1/4" (845)	2'-11 ¹ /4" (895)	3'-1 ¹ /4" (946)	3'-3 ¹ /4" (997)	3'-7 ¹ /4" (1099)	3'-11 ¹ /4" (1200)
Minimum Rough Opening	1'-4" (406)	1'-8"	(610)	(711)	2'-6"	2'-8"	2'-10"	3'-0"	3'-2" (965)	3'-4"	3'-8"	4'-0" (1219)
Unobstructed Glass	8 ⁵ /8" (219)	12 ⁵ /8' (321)	16 ⁵ /8" (422)	20 5/8"	22 ⁵ /8" (575)	24 ⁵ /8" (625)	26 ⁵ /8" (676)	28 ⁵ /8" (727)	30 ⁵ /8" (778)	32 ⁵ /8" (829)	36 ⁵ /8" (930)	40 ⁵ / ₈ " (1032)
11.3 1/4" 11.1/4" (286) 11.4" (206) (406) (305) 8 5/8" 4 5/8" (117) (219) (117)		ATF1810	ATF 2010	ATF2410	ATF 2610	s are 95 ¹/4 ATF 2810	T x 71 ¹/4" or 7 ATF 21010	71 1/4" x 95 1/4 ATF3010	4") ATF3210	ATF3410	ATF3810	ATF 4010
1,4			SIZES AVAII	LABLE – ven	iting							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATF1416 ATF1416 ATF1416	ATF1814 ATV1814	ATF2014 ATV2014	ATF2414 ATV2414	ATF2614 ATV2614	ATF2814 ATV2814	ATF21014 ATV21014	ATF3014 ATV3014	ATF3214 ATV3214	ATF3414 ATV3414	ATF3814 ATV3814	ATF4014 ATV4014
1/4" (8) (6" (7) (7)												
1'-5 1/4" (438) 1'-6" (457) 10 5/8" (270)	ATF1416	ATF1816	ATF2016	ATF2416	ATF2616	ATF2816	ATF21016	ATF3016	ATF3216	ATF3416	ATF3816	ATF4016
5	MOTSI	ATV1816	ATV 2016	ATV 2416	ATV 2616	ATV2816	ATV21016	ATV 3016	ATV 3216	ATV 3416	ATV 3816	ATV 4016
1'-7 1/4" (489) 1'-8" (508) 12 5/8" (321)												
11.12	ATF1418	ATF1818	ATF2018	ATF2418	ATF2618	ATF2818	ATF21018	ATF3018	ATF3218	ATF3418	ATF3818	ATF4018
		ATV1818	ATV2018	ATV2418	ATV 2618	ATV2818	ATV21018	ATV 3018	ATV 3218	ATV 3418	ATV 3818	ATV 4018
1'-9 1/4" (540) 1'-10" (559) 14 5/8" (371)												
11.5	ATF14110	ATF18110	ATF20110		ATF26110	ATF28110	ATF210110	ATF30110	ATF32110	ATF34110	ATF38110	ATF40110
		ATV18110	ATV20110	ATV24110	ATV26110	ATV29110	ATV210110	ATV20110	ATV32110	ATV24110	ATV38110	ATV40110
(591) 2'-0" (610) 16 5/8" (422)		ATV18110	ATV 20110	ATV 24110	ATV 26110	ATV 28110	ATV 210110	ATV 30110	AIV32110	ATV 34110	AIV38110	ATV 40110
11-11 (5) (6) (6)	ATF1420	ATF1820	ATF 2020	ATF 2420	ATF 2620	ATF2820	ATF 21020	ATF3020	ATF 3220	ATF 3420	ATF3820	ATF 4020
±4 = ±1 =		ATV1820	ATV2020	ATV2420	ATV2620	ATV2820	ATV21020	ATV3020	ATV3220	ATV3420	ATV3820	ATV 4020
2'-1 1/4" (641) 2'-2" (660) 18 5/8" (473)	ATF1422	ATF1822	ATF 2022	ATF2422	ATF2622	ATF2822	ATF 21022	ATF3022	ATF3222	ATF3422	ATF3822	ATF 4022
	AIF1422		AII 2022	A112422	A112022	A112022	AITZ1022	AIT3022	AITSZZZ	AII 3422	AITSOZZ	A114022
		ATV1822	ATV2022	ATV2422	ATV2622	ATV2822	ATV21022	ATV3022	ATV3222	ATV3422	ATV3822	ATV 4022
2'-3 1/4" (692) 2'-4" (711) 20 5/8" (524)												
26 (, ,)	ATF1424	ATF1824	ATF2024	ATF2424	ATF2624	ATF2824	ATF21024	ATF3024	ATF3224	ATF3424	ATF3824	ATF4024
-		ATV1824	ATV2024	ATV2424	ATV2624	ATV2824	ATV 21024	ATV3024	ATV3224	ATV3424	ATV3824	ATV 4024
2'-5 1/4" (743) 2'-6" (762) 22 5/8" (575)												
	ATF1426	ATF1826	ATF2026	ATF2426	ATF 2626	ATF2826	ATF21026	ATF3026	ATF3226	ATF3426	ATF3826	ATF 4026
		ATV1826	ATV2026	ATV 2426	ATV 2626	ATV 2826	ATV 21026	ATV 3026	ATV3226	ATV 3426	ATV 3826	ATV 4026
2'-7 1/4" (794) 2'-8" (813) 24 5/8" (625)												
2'-1'7 (7 (8 (8 (8 (9 (9 (9 (9 (9 (9 (9 (9 (9 (9 (9 (9 (9	ATF1428	ATF1828	ATF2028	ATF2428	ATF2628	ATF2828	ATF21028	ATF3028	ATF3228	ATF3428	ATF3828	ATF4028
		\wedge	\triangle									
		ATV1828	ATV 2028	ATV 2428	ATV2628	ATV2828	ATV 21028	ATV3028	ATV3228	ATV 3428	ATV3828	ATV 4028



4'-3 1/4"	4'-7 1/4"	4'-11 1/4"	5'-3 ¹ /4"	5'-7 ¹ /4"	5'-11 ¹ /4"
(1302)	(1403)	(1505)	(1607)	(1708)	(1810)
(1321)	4'-8"	5'-0"	5'-4" (1626)	5'-8" (1727)	6'-0" (1829)
44 5/8"	, ,	52 ⁵ /8"	. ,		, ,
(1133)	48 ⁵ /8" (1335)	(1337)	56 ⁵ /8" (1438)	60 ⁵ /8" (1540)	64 ⁵ /8" (1641)
ATF 4410	ATF4810	ATF5010	ATF 5410	ATF5810	ATF6010
		A====01.1		A=== 0.1.4	
ATF 4414	ATF4814	ATF 5014	ATF 5414	ATF 5814	ATF 6014
ATV4414	ATV 4814	ATV 5014	ATV 5414	ATV 5814	ATV 6014
ATF4416	ATF4916	ATE 016	ATE 41C	ATE 010	ATECO1C
AIF4410	ATF4816	ATF 5016	ATF 5416	ATF 5816	ATF 6016
ATV4416	ATV4816	ATV 5016	ATV 5416	ATV 5816	ATV 6016
A== 4.4.2	ATT 404 °	A====0.4.0	A=== 1/2	A===010	A==0015
ATF4418	ATF4818	ATF5018	ATF 5418	ATF5818	ATF6018
ATM/4/10	ATV 4818	ATUE 010	ATUE 410	ATUE 04.0	ATMC040
ATV 4418	AIV4818	ATV5018	ATV 5418	ATV 5818	ATV6018
ATF 44110	ATF48110	ATF 50110	ATF 54110	ATF58110	ATF60110
ATV 44110	ATV 48110	ATV 50110	ATV 54110	ATV 58110	ATV60110
ATF 4420	ATF 4820	ATF 5020	ATF 5420	ATF 5820	ATF6020
AII 4420	A114020	A113020	AIT 5420	AIT 3020	AITOOZO
A711122			17 I 100	A=#5000	1
ATV 4420	ATV 4820	ATV 5020	ATV 5420	ATV5820	ATV6020
ATF4422	ATF 4822	ATF5022	ATF 5422	ATF5822	ATF6022
ATV 4422	ATV4822	ATV 5022	ATV 5422	ATV 5822	ATV 6022
ATF4424	ATF4824	ATF 5024	ATF5424	ATF5824	ATF 6024
ATV 4424	ATV4824	ATV 5024	ATV 5424	ATV 5824	ATV 6024
AIV4424	AIV4024	A1V3024	AIVS424	A113024	A110024
ATF4426	ATF4826	ATF 5026	ATF 5426	ATF5826	ATF6026
ATV 4426	ATV 4826	ATV 5026	ATV 5426	ATV 5826	ATV 6026
A== 4.422	ATTACC	A===000	A THE ACC	A===000	A== 2222
ATF 4428	ATF4828	ATF 5028	ATF 5428	ATF5828	ATF6028
11127 5.10		1117	11k	1116	الخــــــــــــــــــــــــــــــــــــ

ATV4428

ATV4828

ATV5028

ATV5428

ATV5828

ATV6028 continued on next page



Custom-size windows are available in $^{1}/8"$ (3) increments. See page 65 for custom sizes and specifications.



Fixed



Venting

Choose fixed (ATF) or venting (ATV).

Most sizes shown are available with PG upgrade.‡

Venting window must be installed to vent as shown, and should not be rotated and used as a hopper.

Grille patterns shown on page 58.

Details shown on page 59.

 $[\]bullet$ "Window Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

[‡]PG upgrade is not available for fixed transom sizes <u>ATF1410</u> and <u>ATF1414</u> shown with an underscore on page 52.

Table of Transom Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the next page also apply to this page.

Window Dimension	1'-3 1/4"	1'-7 ¹ /4" (489)	1'-11 ¹ / ₄ " (591)	2'-3 ¹ / ₄ " (692)	2'-5 1/4" (743)	2'-7 1/4" (794)	2'-9 ¹ / ₄ " (845)	2'-11 ¹ /4" (895)	3'-1 ¹ / ₄ " (946)	3'-3 ¹ / ₄ " (997)	3'-7 ¹ /4" (1099)	3'-11 ¹ /4" (1200)
Minimum Rough Opening	1'-4"	1'-8"	2'-0"	2'-4"	2'-6" (762)	2'-8" (813)	2'-10" (864)	3'-0"	3'-2" (965)	3'-4" (1016)	3'-8" (1118)	4'-0" (1219)
Unobstructed Glass	8 5/8" (219)	12 ⁵ /8" (321)	16 ⁵ /8" (422)	20 ⁵ /8" (524)	22 ⁵ /8" (575)	24 ⁵ /8" (625)	26 ⁵ /8" (676)	28 ⁵ /8" (727)	30 ⁵ /8" (778)	32 ⁵ /8" (829)	36 ⁵ /8" (930)	40 ⁵ /8" (1032)
	CUSTOM SIZ	ZES AVAILABL	E									
211 1/4" (895) 3'-0" (914) 28 5/8" (727)	ATF1430	ATF 1830	ATF 2030	ATF 2430	ATF 2630	ATF 2830	ATF21030	ATF3030	ATF3230	ATF 3430	ATF3830	ATF 4030
3'-3 1/4" (997) 3'-4" (1016) 32 5/8" (829)	ATF1434	ATF1834	ATF2034	ATF2434	ATF2634	ATF2834	ATF21034	ATF3034	ATF3234	ATF3434	ATF3834	ATF4034

Fixed Transom Window Area Specifications

Window Number	1A	ass ea t./(m²)	Overall Window Area Sq. Ft./(m²)		
ATF 1410	0.27	(0.03)	1.19	(0.11)	
ATF1414	0.51	(0.05)	1.62	(0.15)	
ATF 1416	0.63	(0.06)	1.83	(0.17)	
ATF1418	0.75	(0.07)	2.04	(0.19)	
ATF 14110	0.87	(0.08)	2.25	(0.21)	
ATF1420	0.99	(0.09)	2.46	(0.23)	
ATF1422	1.11	(0.10)	2.67	(0.25)	
ATF1424	1.23	(0.11)	2.89	(0.27)	
ATF1426	1.35	(0.13)	3.10	(0.29)	
ATF 1428	1.47	(0.14)	3.31	(0.31)	
ATF 1430	1.71	(0.16)	3.73	(0.35)	
ATF 1434	1.95	(0.18)	4.16	(0.39)	
ATF 1810	0.40	(0.04)	1.50	(0.14)	
ATF 1814	0.75	(0.07)	2.04	(0.19)	
ATF1816	0.93	(0.09)	2.31	(0.21)	
ATF1818	1.10	(0.10)	2.57	(0.24)	
ATF18110	1.28	(0.12)	2.84	(0.26)	
ATF 1820	1.45	(0.13)	3.11	(0.29)	
ATF1822	1.63	(0.15)	3.38	(0.31)	
ATF1824	1.80	(0.17)	3.64	(0.34)	
ATF1826	1.98	(0.18)	3.91	(0.36)	
ATF1828	2.15	(0.20)	4.18	(0.39)	
ATF1830	2.50	(0.23)	4.71	(0.44)	
ATF1834	2.85	(0.26)	5.25	(0.49)	
ATF2010	0.53	(0.05)	1.82	(0.17)	
ATF 2014	0.99	(0.09)	2.46	(0.23)	
ATF 2016	1.22	(0.11)	2.79	(0.26)	
ATF2018	1.45	(0.13)	3.11	(0.29)	
ATF 20110	1.68	(0.16)	3.43	(0.32)	
ATF 2020	1.91	(0.18)	3.75	(0.35)	
ATF2022	2.14	(0.20)	4.08	(0.38)	
ATF 2024	2.37	(0.22)	4.40	(0.41)	
ATF 2026	2.61	(0.24)	4.72	(0.44)	
ATF2028	2.84	(0.26)	5.05	(0.47)	
ATF 2030	3.30	(0.31)	5.69	(0.53)	
ATF 2034	3.76	(0.35)	6.34	(0.59)	
ATF 2410	0.66	(0.06)	2.13	(0.20)	
ATF 2414	1.23	(0.11)	2.89	(0.27)	
ATF 2416	1.52	(0.14)	3.26	(0.30)	
ATF2418	1.80	(0.17)	3.64	(0.34)	

[•] Dimensions in parentheses are in square meters.

continued on next page

Venting Transom Window Opening and Area Specifications

Window				Full Open Position	Glass		Top of Subfloor to Top of Inside	Overall Window	
Number	Clear Oper Sq. Ft./(n		Width Inches/(mm)	Depth Inches/(mm)	Area Sq. Ft./(m ²)	Vent Sq. Ft./(m ²)	Sill Stop Inches/(mm)	Area Sq. Ft./(m²)	
ATV 1814		.05)	14 5/16" (363)	5 7/8" (150)	0.75 (0.07)	0.59 (0.05)	69 ¹ / ₂ " (1764)	2.04 (0.19)	
ATV 2014	0.75 (0	.07)	18 5/16" (465)	5 7/8" (150)	0.99 (0.09)	0.75 (0.07)	69 ¹ / ₂ " (1764)	2.46 (0.23)	
ATV 2414	0.91 (0	.08)	22 5/16" (567)	5 7/8" (150)	1.23 (0.11)	0.91 (0.08)	69 ¹ / ₂ " (1764)	2.89 (0.27)	
ATV 2614	0.99 (0	.09)	24 5/16" (617)	5 7/8" (150)	1.35 (0.13)	0.99 (0.09)	69 ¹ / ₂ " (1764)	3.10 (0.29)	
ATV 2814	1.08 (0	.10)	26 5/16" (668)	5 7/8" (150)	1.47 (0.14)	1.08 (0.10)	69 ¹ / ₂ " (1764)	3.31 (0.31)	
ATV 21014	1.16 (0	.11)	28 5/16" (719)	5 7/8" (150)	1.59 (0.15)	1.16 (0.11)	69 ¹ / ₂ " (1764)	3.52 (0.33)	
ATV 3014	1.24 (0	.12)	30 5/16" (770)	5 7/8" (150)	1.71 (0.16)	1.24 (0.12)	69 ¹ / ₂ " (1764)	3.73 (0.35)	
ATV 3214	1.32 (0	.12)	32 5/16" (821)	5 7/8" (150)	1.83 (0.17)	1.32 (0.12)	69 ¹ / ₂ " (1764)	3.95 (0.37)	
ATV 3414	1.40 (0	.13)	34 5/16" (871)	5 7/8" (150)	1.95 (0.18)	1.40 (0.13)	69 ¹ / ₂ " (1764)	4.16 (0.39)	
ATV 3814	1.57 (0	.15)	38 5/16" (973)	5 7/8" (150)	2.19 (0.20)	1.57 (0.15)	69 ¹ / ₂ " (1764)	4.58 (0.43)	
ATV 4014	1.73 (0	.16)	42 5/16" (1075)	5 7/8" (150)	2.43 (0.23)	1.73 (0.16)	69 ¹ / ₂ " (1764)	5.00 (0.46)	
ATV 4414	1.90 (0	.18)	46 5/16" (1176)	5 7/8" (150)	2.66 (0.25)	1.90 (0.18)	69 ¹ / ₂ " (1764)	5.43 (0.50)	
ATV 4814	2.06 (0	.19)	50 5/16" (1278)	5 7/8" (150)	2.90 (0.27)	2.06 (0.19)	69 ¹ / ₂ " (1764)	5.85 (0.54)	
ATV 5014	2.22 (0	.21)	54 5/16" (1379)	5 7/8" (150)	3.14 (0.29)	2.22 (0.21)	69 ¹ / ₂ " (1764)	6.28 (0.58)	
ATV 5414	2.39 (0	.22)	58 ⁵ / ₁₆ " (1481)	5 7/8" (150)	3.38 (0.31)	2.39 (0.22)	69 ¹ / ₂ " (1764)	6.70 (0.62)	
ATV 5814	2.55 (0	.24)	62 5/16" (1538)	5 7/8" (150)	3.62 (0.34)	2.55 (0.24)	69 ¹ / ₂ " (1764)	7.12 (0.66)	
ATV 6014	2.71 (0	.25)	66 ⁵ / ₁₆ " (1684)	5 7/8" (150)	3.86 (0.36)	2.71 (0.25)	69 ¹ / ₂ " (1764)	7.55 (0.70)	
ATV 1816	0.59 (0	.05)	14 5/16" (363)	5 7/8" (150)	0.93 (0.09)	0.59 (0.05)	67 1/2" (1714)	2.31 (0.21)	
ATV 2016	0.75 (0	.07)	18 ⁵ / ₁₆ " (465)	5 7/8" (150)	1.22 (0.11)	0.75 (0.07)	67 ¹ / ₂ " (1714)	2.79 (0.26)	
ATV 2416	0.91 (0	.08)	22 5/16" (567)	5 7/8" (150)	1.52 (0.14)	0.91 (0.08)	67 ¹ / ₂ " (1714)	3.26 (0.30)	
ATV 2616	0.99 (0	.09)	24 5/16" (617)	5 7/8" (150)	1.66 (0.15)	0.99 (0.09)	67 ¹ / ₂ " (1714)	3.50 (0.33)	
ATV 2816	1.08 (0	.10)	26 5/16" (668)	5 7/8" (150)	1.81 (0.17)	1.08 (0.10)	67 ¹ / ₂ " (1714)	3.74 (0.35)	
ATV 21016	1.16 (0	.11)	28 5/16" (719)	5 7/8" (150)	1.96 (0.18)	1.16 (0.11)	67 ¹ / ₂ " (1714)	3.98 (0.37)	
ATV 3016	1.24 (0	.12)	30 5/16" (770)	5 7/8" (150)	2.11 (0.20)	1.24 (0.12)	67 ¹ / ₂ " (1714)	4.22 (0.39)	
ATV 3216	1.32 (0	.12)	32 5/16" (821)	5 7/8" (150)	2.25 (0.21)	1.32 (0.12)	67 ¹ / ₂ " (1714)	4.46 (0.41)	
ATV 3416	1.40 (0	.13)	34 5/16" (871)	5 7/8" (150)	2.40 (0.22)	1.40 (0.13)	67 1/2" (1714)	4.70 (0.44)	
ATV3816	1.57 (0	.15)	38 5/16" (973)	5 7/8" (150)	2.69 (0.25)	1.57 (0.15)	67 1/2" (1714)	5.18 (0.48)	
ATV 4016	1.73 (0	.16)	42 5/16" (1075)	5 7/8" (150)	2.99 (0.28)	1.73 (0.16)	67 1/2" (1714)	5.66 (0.53)	
ATV 4416	1.90 (0	.18)	46 5/16" (1176)	5 7/8" (150)	3.28 (0.30)	1.90 (0.18)	67 1/2" (1714)	6.14 (0.57)	
ATV 4816	2.06 (0	.19)	50 5/16" (1278)	5 7/8" (150)	3.58 (0.33)	2.06 (0.19)	67 1/2" (1714)	6.62 (0.61)	
ATV 5016	2.22 (0	.21)	54 5/16" (1379)	5 7/8" (150)	3.87 (0.36)	2.22 (0.21)	67 1/2" (1714)	7.10 (0.66)	
ATV 5416	2.39 (0	.22)	58 ⁵ / ₁₆ " (1481)	5 7/8" (150)	4.17 (0.39)	2.39 (0.22)	67 1/2" (1714)	7.58 (0.70)	
ATV 5816	2.55 (0	.24)	62 5/16" (1538)	5 7/8" (150)	4.46 (0.41)	2.55 (0.24)	67 1/2" (1714)	8.06 (0.75)	
ATV 6016	2.71 (0	.25)	66 5/16" (1684)	5 7/8" (150)	4.76 (0.44)	2.71 (0.25)	67 1/2" (1714)	8.54 (0.79)	
ATV1818	0.59 (0	.05)	14 5/16" (363)	5 7/8" (150)	1.10 (0.10)	0.59 (0.05)	65 1/2" (1663)	2.57 (0.24)	
ATV 2018	0.75 (0	.07)	18 5/16" (465)	5 7/8" (150)	1.45 (0.13)	0.75 (0.07)	65 1/2" (1663)	3.11 (0.29)	
ATV 2418	0.91 (0	.08)	22 5/16" (567)	5 7/8" (150)	1.80 (0.17)	0.91 (0.08)	65 1/2" (1663)	3.64 (0.34)	
ATV 2618	0.99 (0	.09)	24 5/16" (617)	5 7/8" (150)	1.98 (0.18)	0.99 (0.09)	65 ¹ / ₂ " (1663)	3.91 (0.36)	
ATV 2818	1.08 (0	.10)	26 5/16" (668)	5 7/8" (150)	2.15 (0.20)	1.08 (0.10)	65 ¹ / ₂ " (1663)	4.18 (0.39)	
ATV 21018	1.16 (0	.11)	28 5/16" (719)	5 7/8" (150)	2.33 (0.22)	1.16 (0.11)	65 ¹ / ₂ " (1663)	4.45 (0.41)	
ATV 3018	1.24 (0	.12)	30 5/16" (770)	5 7/8" (150)	2.50 (0.23)	1.24 (0.12)	65 1/2" (1663)	4.71 (0.44)	
ATV3218	1.32 (0	.12)	32 5/16" (821)	5 7/8" (150)	2.68 (0.25)	1.32 (0.12)	65 ¹ / ₂ " (1663)	4.98 (0.46)	

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of $6'-10^{-1}/2''$ (2096).

[•] Dimensions in parentheses are in millimeters or square meters.



4'-3 1/4"	4'-7 1/4"	4'-11 1/4"	5'-3 1/4"	5'-7 1/4"	5'-11 1/4"
(1302)	(1403)	(1505)	(1607)	(1708)	(1810)
4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"
(1321)	(1422)	(1524)	(1626)	(1727)	(1829)
44 5/8"	48 ⁵ /8"	52 ⁵ /8"	56 ⁵ /8"	60 ⁵ /8"	64 5/8"
T (1133)	(1335)	[(1337)	[(1438)]	[(1540)	T (1641)
ATF 4430	ATF4830	ATF5030	ATF5430	ATF5830	ATF6030
ATF4430 ATF4434	ATF4830 ATF4834	ATF5030 ATF5034	ATF5430	ATF5830 ATF5834	ATF6030 ATF6034





Custom-size windows are available in 1/8" (3) increments. See page 65 for custom sizes and specifications. Choose fixed (ATF) or venting (ATV). Most sizes shown are available with PG upgrade.‡ Venting sizes shown on pages 52-53. Grille patterns shown on page 58. Details shown on page 59.

Fixed Transom Window Area Specifications (continued)

Specifications	(continu	ed)		
Window Number	Ar	ass ea t./(m²)	Ar	Window ea t./(m²)
ATF24110	2.09	(0.19)	4.02	(0.37)
ATF2420	2.37	(0.22)	4.40	(0.41)
ATF2422	2.66	(0.25)	4.78	(0.44)
ATF2424	2.95	(0.27)	5.16	(0.48)
ATF2426	3.23	(0.30)	5.54	(0.51)
ATF2428	3.52	(0.33)	5.91	(0.55)
ATF2430	4.09	(0.38)	6.67	(0.62)
ATF2434	4.66	(0.43)	7.43	(0.69)
ATF2610	0.72	(0.07)	2.29	(0.21)
ATF2614	1.35	(0.13)	3.10	(0.29)
ATF2616	1.66	(0.15)	3.50	(0.33)
ATF2618	1.98	(0.18)	3.91	(0.36)
ATF26110	2.29	(0.21)	4.32	(0.40)
ATF2620	2.61	(0.24)	4.72	(0.44)
ATF2622	2.92	(0.27)	5.13	(0.48)
ATF2624	3.23	(0.30)	5.54	(0.51)
ATF2626	3.55	(0.33)	5.94	(0.55)
ATF2628	3.86	(0.36)	6.35	(0.59)
ATF2630	4.49	(0.42)	7.16	(0.67)
ATF2634	5.12	(0.48)	7.97	(0.74)
ATF2810	0.79	(0.07)	2.44	(0.23)
ATF2814	1.47	(0.14)	3.31	(0.31)
ATF2816	1.81	(0.17)	3.74	(0.35)
ATF2818	2.15	(0.20)	4.18	(0.39)
ATF28110	2.49	(0.23)	4.61	(0.43)
ATF2820	2.84	(0.26)	5.05	(0.47)
ATF2822	3.18	(0.30)	5.48	(0.51)
ATF2824	3.52	(0.33)	5.91	(0.55)
ATF2826	3.86	(0.36)	6.35	(0.59)
ATF2828	4.20	(0.39)	6.78	(0.63)
ATF2830	4.89	(0.45)	7.65	(0.71)
ATF2834	5.57	(0.52)	8.52	(0.79)
ATF21010	0.85	(80.0)	2.60	(0.24)
ATF21014	1.59	(0.15)	3.52	(0.33)
ATF21016	1.96	(0.18)	3.98	(0.37)
ATF21018	2.33	(0.22)	4.44	(0.41)

[•] Dimensions in parentheses are in square meters.

continued on next page

Venting Transom Window Opening and Area Specifications (continued)

Tonang nanc	, o	•	Class On	oning in I	Tull Onen	Docition			(oonting c	u)				
Window		- '	Clear Op	ening in I	-uii Open	Position	Gl	ass				Subfloor of Inside	Overall	Window
Number	Clear Openia		Wid	dth	De	pth	Ar	ea		ent	Sill	Stop	Ar	ea
	Sq. Ft./(m ²		Inches,		Inches			./(m²)		t./(m²)		/(mm)		t./(m²)
ATV 3418	1.40 (0.1		34 5/16"	(871)	5 7/8"	(150)	2.85	(0.27)	1.40	(0.13)	65 1/2"	(1663)	5.25	(0.49)
ATV3818	1.57 (0.1	5) 3	38 5/16"	(973)	5 7/8"	(150)	3.20	(0.30)	1.57	(0.15)	65 1/2"	(1663)	5.78	(0.54)
ATV 4018	1.73 (0.1	6) 4	42 5/16"	(1075)	5 7/8"	(150)	3.55	(0.33)	1.73	(0.16)	65 1/2"	(1663)	6.32	(0.59)
ATV 4418	1.90 (0.1	8) 4	46 5/16"	(1176)	5 7/8"	(150)	3.90	(0.36)	1.90	(0.18)	65 1/2"	(1663)	6.85	(0.64)
ATV 4818	2.06 (0.1	9) 5	50 5/16"	(1278)	5 7/8"	(150)	4.25	(0.40)	2.06	(0.19)	65 1/2"	(1663)	7.39	(0.69)
ATV5018	2.22 (0.2	1) 5	54 5/16"	(1379)	5 7/8"	(150)	4.60	(0.43)	2.22	(0.21)	65 1/2"	(1663)	7.92	(0.74)
ATV5418	2.39 (0.2	2) 5	58 5/16"	(1481)	5 7/8"	(150)	4.95	(0.46)	2.39	(0.22)	65 1/2"	(1663)	8.46	(0.79)
ATV5818	2.55 (0.2	4) (62 5/16"	(1538)	5 7/8"	(150)	5.30	(0.49)	2.55	(0.24)	65 1/2"	(1663)	8.99	(0.84)
ATV6018	2.71 (0.2	5) 6	66 5/16"	(1684)	5 7/8"	(150)	5.65	(0.53)	2.71	(0.25)	65 1/2"	(1663)	9.53	(0.88)
ATV 18110	0.59 (0.0	5) :	14 5/16"	(363)	5 7/8"	(150)	1.28	(0.12)	0.59	(0.05)	63 1/2"	(1612)	2.84	(0.26)
ATV 20110	0.75 (0.0	7) :	18 5/16"	(465)	5 7/8"	(150)	1.68	(0.16)	0.75	(0.07)	63 1/2"	(1612)	3.43	(0.32)
ATV 24110	0.91 (0.0	8) 2	22 5/16"	(567)	5 7/8"	(150)	2.09	(0.19)	0.91	(80.0)	63 1/2"	(1612)	4.02	(0.37)
ATV 26110	0.99 (0.0	9) 2	24 5/16"	(617)	5 7/8"	(150)	2.29	(0.21)	0.99	(0.09)	63 1/2"	(1612)	4.32	(0.40)
ATV 28110	1.08 (0.1	0) 2	26 5/16"	(668)	5 7/8"	(150)	2.49	(0.23)	1.08	(0.10)	63 1/2"	(1612)	4.61	(0.43)
ATV 210110	1.16 (0.1	1) 2	28 5/16"	(719)	5 7/8"	(150)	2.70	(0.25)	1.16	(0.11)	63 1/2"	(1612)	4.91	(0.46)
ATV 30110	1.24 (0.1	2) 3	30 5/16"	(770)	5 7/8"	(150)	2.90	(0.27)	1.24	(0.12)	63 1/2"	(1612)	5.20	(0.48)
ATV 32110	1.32 (0.1	2) 3	32 5/16"	(821)	5 7/8"	(150)	3.10	(0.29)	1.32	(0.12)	63 1/2"	(1612)	5.50	(0.51)
ATV 34110	1.40 (0.1	3) 3	34 5/16"	(871)	5 7/8"	(150)	3.31	(0.31)	1.40	(0.13)	63 1/2"	(1612)	5.79	(0.54)
ATV 38110	1.57 (0.1	5) 3	38 5/16"	(973)	5 7/8"	(150)	3.71	(0.34)	1.57	(0.15)	63 1/2"	(1612)	6.38	(0.59)
ATV 40110	1.73 (0.1	6) 4	42 5/16"	(1075)	5 7/8"	(150)	4.12	(0.38)	1.73	(0.16)	63 1/2"	(1612)	6.97	(0.65)
ATV 44110	1.90 (0.1	8) 4	46 5/16"	(1176)	5 7/8"	(150)	4.55	(0.42)	1.90	(0.18)	63 1/2"	(1612)	7.56	(0.70)
ATV 48110	2.06 (0.1	9) 5	50 5/16"	(1278)	5 7/8"	(150)	4.93	(0.46)	2.06	(0.19)	63 1/2"	(1612)	8.15	(0.76)
ATV 50110	2.22 (0.2	1) 5	54 5/16"	(1379)	5 7/8"	(150)	5.33	(0.50)	2.22	(0.21)	63 1/2"	(1612)	8.74	(0.81)
ATV 54110	2.39 (0.2	2) 5	58 5/16"	(1481)	5 7/8"	(150)	5.74	(0.53)	2.39	(0.22)	63 1/2"	(1612)	9.33	(0.87)
ATV 58110	2.55 (0.2	4) (62 5/16"	(1538)	5 7/8"	(150)	6.14	(0.57)	2.55	(0.24)	63 1/2"	(1612)	9.92	(0.92)
ATV 60110	2.71 (0.2	5) 6	66 5/16"	(1684)	5 7/8"	(150)	6.55	(0.61)	2.71	(0.25)	63 1/2"	(1612)	10.51	(0.98)
ATV 1820	0.59 (0.0	5) :	14 5/16"	(363)	5 7/8"	(150)	1.45	(0.13)	0.59	(0.05)	61 1/2"	(1561)	3.11	(0.29)
ATV 2020	0.75 (0.0	7) :	18 5/16"	(465)	5 7/8"	(150)	1.91	(0.18)	0.75	(0.07)	61 1/2"	(1561)	3.75	(0.35)
ATV 2420	0.91 (0.0	8) 2	22 5/16"	(567)	5 7/8"	(150)	2.38	(0.22)	0.91	(80.0)	61 1/2"	(1561)	4.40	(0.41)
ATV 2620	0.99 (0.0	9) 2	24 5/16"	(617)	5 7/8"	(150)	2.61	(0.24)	0.99	(0.09)	61 1/2"	(1561)	4.72	(0.44)
ATV 2820	1.08 (0.1	0) 2	26 5/16"	(668)	5 7/8"	(150)	2.84	(0.26)	1.08	(0.10)	61 1/2"	(1561)	5.05	(0.47)
ATV 21020	1.16 (0.1	1) 2	28 5/16"	(719)	5 7/8"	(150)	3.07	(0.28)	1.16	(0.11)	61 1/2"	(1561)	5.37	(0.50)
ATV 3020	1.24 (0.1	2) 3	30 5/16"	(770)	5 7/8"	(150)	3.30	(0.31)	1.24	(0.12)	61 1/2"	(1561)	5.69	(0.53)
ATV 3220	1.32 (0.1	2) 3	32 5/16"	(821)	5 7/8"	(150)	3.53	(0.33)	1.32	(0.12)	61 1/2"	(1561)	6.01	(0.56)
ATV 3420	1.40 (0.1	3) 3	34 5/16"	(871)	5 7/8"	(150)	3.76	(0.35)	1.40	(0.13)	61 1/2"	(1561)	6.34	(0.59)
ATV 3820	1.57 (0.1	5) 3	38 5/16"	(973)	5 7/8"	(150)	4.22	(0.39)	1.57	(0.15)	61 1/2"	(1561)	6.98	(0.65)
ATV 4020	1.73 (0.1	6)	42 5/16"	(1075)	5 7/8"	(150)	4.68	(0.43)	1.73	(0.16)	61 1/2"	(1561)	7.63	(0.71)
ATV 4420	1.90 (0.1	8)	46 5/16"	(1176)	5 7/8"	(150)	5.14	(0.48)	1.90	(0.18)	61 1/2"	(1561)	8.28	(0.77)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6'-10 1/2" (2096).

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

Dimensions in parentheses are in millimeters.

‡PG upgrade is not available for fixed transom sizes <u>ATF1410</u> and <u>ATF1414</u> shown with an underscore on page 52.

[•] Dimensions in parentheses are in millimeters or square meters.

Table of Transom Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on page 55 also apply to this page.

Minimum G-4" G-8" T-0" T-4" T-8" Ready C2359 C2336	Unit Dimension	6'-3 ¹ / ₄ " (1911)	6'-7 ¹ /4" (2013)	6'-11 ¹ /4" (2115)	7'-3 ¹ /4" (2216)	7'-7 ¹ /4" (2318)	7'-11 ¹ /4" (2419)
Company Comp	Minimum	, ,	` '	, ,			` ′
(1743) (1845) (1946) (2048) (2048) (2149) (2251) CUSTOM WIDTHS — fixed 15 L4" to 95 M4" (largest dimensions are 95 L4" X 71 L4" or 71 L4" x 95 L4") ATF6410 ATF6810 ATF6810 ATF7010 ATF7410 ATF7810 ATF810 ATF6414 ATF6414 ATF7014 ATF7014 ATF7414 ATF7814 ATF814 ATF8014 ATF6416 ATF6816 ATF7016 ATF7016 ATF7816 ATF8016 ATF6416 ATF6816 ATF7016 ATF7016 ATF7816 ATF8016 ATF6410 ATF6818 ATF6818 ATF7018 ATF7418 ATF7818 ATF8018 ATF6410 ATF6810 ATF8010 ATF7010 ATF7410 ATF7810 ATF8010 ATF6410 ATF6810 ATF8010 ATF7010 ATF7410 ATF7810 ATF8010 ATF6410 ATF6810 ATF8018 ATF7018 ATF7018 ATF7418 ATF7818 ATF8018 ATF6410 ATF6810 ATF8010 ATF7010 ATF7410 ATF7810 ATF8010 ATF6410 ATF6810 ATF8020 ATF8020 ATF8020 ATF6420 ATF6820 ATF8020 ATF7020 ATF7420 ATF7820 ATF8020 ATF6420 ATF6820 ATF8020 ATF7020 ATF7420 ATF7822 ATF8022 ATF6420 ATF6820 ATF8020 ATF7020 ATF7420 ATF7820 ATF8020 ATF6420 ATF6820 ATF8026 ATF7022 ATF7422 ATF7822 ATF8022 ATF6428 ATF6828 ATF7028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF6828 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF6828 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF8028 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF8028 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF8030 ATF8030 ATF8030 ATF8030 ATF8030 ATF8030		•	•	•	•	•	•
(1743) (1845) (1946) (2048) (2048) (2149) (2251) CUSTOM WIDTHS — fixed 15 L4" to 95 M4" (largest dimensions are 95 L4" X 71 L4" or 71 L4" x 95 L4") ATF6410 ATF6810 ATF6810 ATF7010 ATF7410 ATF7810 ATF810 ATF6414 ATF6414 ATF7014 ATF7014 ATF7414 ATF7814 ATF814 ATF8014 ATF6416 ATF6816 ATF7016 ATF7016 ATF7816 ATF8016 ATF6416 ATF6816 ATF7016 ATF7016 ATF7816 ATF8016 ATF6410 ATF6818 ATF6818 ATF7018 ATF7418 ATF7818 ATF8018 ATF6410 ATF6810 ATF8010 ATF7010 ATF7410 ATF7810 ATF8010 ATF6410 ATF6810 ATF8010 ATF7010 ATF7410 ATF7810 ATF8010 ATF6410 ATF6810 ATF8018 ATF7018 ATF7018 ATF7418 ATF7818 ATF8018 ATF6410 ATF6810 ATF8010 ATF7010 ATF7410 ATF7810 ATF8010 ATF6410 ATF6810 ATF8020 ATF8020 ATF8020 ATF6420 ATF6820 ATF8020 ATF7020 ATF7420 ATF7820 ATF8020 ATF6420 ATF6820 ATF8020 ATF7020 ATF7420 ATF7822 ATF8022 ATF6420 ATF6820 ATF8020 ATF7020 ATF7420 ATF7820 ATF8020 ATF6420 ATF6820 ATF8026 ATF7022 ATF7422 ATF7822 ATF8022 ATF6428 ATF6828 ATF7028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF6828 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF6828 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF8028 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF8028 ATF8028 ATF7028 ATF7428 ATF7828 ATF8028 ATF8030 ATF8030 ATF8030 ATF8030 ATF8030 ATF8030		68 ⁵ /8"	72 ⁵ /8"	76 ⁵ /8"	80 5/8"	84 5/8"	88 ⁵ /8"
No.	Unobstructed Glass	•					•
Second S		CUSTOM WIDTHS — fix	ted 15 ¹/4" to 95 ¹/4" (larges	st dimensions are 95 1/4"	x 71 ¹ / ₄ " or 71 ¹ / ₄ " x 95 ¹ / ₄ ")		
Second S	1/4" 86) -0" 05) 5/8" 17)						
##F6414 AFF6416 AFF6816 AFF7016 AFF7016 AFF7010 AFF78110 AFF80110 ##F64110 AFF6818 AFF7018 AFF70110 AFF78110 AFF80110 ##F64110 AFF68110 AFF70110 AFF70110 AFF78110 AFF80210 ##F6420 AFF6820 AFF7020 AFF7020 AFF7020 AFF7020 AFF7020 AFF7020 AFF8020 ##F6420 AFF6820 AFF7022 AFF7024 AFF702	(2) (2) (3) (3) (3) (4) (4) (4) (4) (4) (5) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6	ATF 6410	ATF6810	ATF 7010	ATF 7410	ATF 7810	ATF8010
##F6414 AFF6416 AFF6816 AFF7016 AFF7016 AFF7010 AFF78110 AFF80110 ##F64110 AFF6818 AFF7018 AFF70110 AFF78110 AFF80110 ##F64110 AFF68110 AFF70110 AFF70110 AFF78110 AFF80210 ##F6420 AFF6820 AFF7020 AFF7020 AFF7020 AFF7020 AFF7020 AFF7020 AFF8020 ##F6420 AFF6820 AFF7022 AFF7024 AFF702	14. (406) 219 219 219 1.44						
### ATF6416 ATF6816 ATF7016 ATF7416 ATF7416 ATF7816 ATF8016 #### ATF6418 ATF6818 ATF7018 ATF7418 ATF7818 ATF8018 #### ATF6418 ATF6818 ATF7018 ATF7418 ATF7818 ATF8018 #### ATF6418 ATF6818 ATF7018 ATF7418 ATF7818 ATF8018 #### ATF6410 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 #### ATF6410 ATF68110 ATF70110 ATF78110 ATF7810 ATF8020 #### ATF6420 ATF6820 ATF7020 ATF7020 ATF7420 ATF7820 ATF8020 #### ATF6420 ATF6822 ATF7022 ATF7022 ATF7422 ATF7822 ATF8022 #### ATF6424 ATF6824 ATF7024 ATF7424 ATF7824 ATF8024 #### ATF6424 ATF6826 ATF7026 ATF7426 ATF7826 ATF7826 ATF8026 #### ATF6428 ATF6828 ATF7028 ATF7428 ATF7828 ATF8028 #### ATF6430 ATF6830 ATF6830 ATF7030 ATF7430 ATF7830 ATF7830 ATF8030	D.	ATF 6414	ATF6814	ATF 7014	ATF 7414	ATF 7814	ATF 8014
Note	5 1/4 38) 38) 6" 5/8" 70)						
ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF6420 ATF6820 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF8020 ATF6422 ATF6822 ATF7022 ATF702	11. 6 (4) (4) (10) (2) (11. 6)	ATF6416	ATF6816	ATF 7016	ATF 7416	ATF7816	ATF8016
ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF6420 ATF6820 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF8020 ATF6422 ATF6822 ATF7022 ATF702	1/4" (9) (8) (1) (1)						
ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF6420 ATF6820 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF8020 ATF6422 ATF6822 ATF7022 ATF702	(48 (48 11'-7 (50 (32 (32	ATFO 14.0	ATFORM	ATF7040	ATE 7.44.0	ATE 7040	ATFOOLO
ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF78110 ATF80110 ATF6420 ATF6820 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF7020 ATF8020 ATF6422 ATF6822 ATF7022 ATF702	TA C II C III C	AIF0418	AIF0818	AIF/018	AIF/418	AIF/818	AIF8U18
ATF64110 ATF68110 ATF70110 ATF74110 ATF78110 ATF80110 ATF64110 ATF68110 ATF80110 ATF64110 ATF68110 ATF80110 ATF68110 ATF70110 ATF78110 ATF80110 ATF78110 ATF80110 ATF80110 ATF80110 ATF80110 ATF80110 ATF80110 ATF80110 ATF80110 ATF80110 ATF8020 ATF7820 ATF8020 ATF7820 ATF8020 ATF8020 ATF8020 ATF8022 ATF7022 ATF7422 ATF7822 ATF8022 ATF8022 ATF6424 ATF6824 ATF7024 ATF7424 ATF7824 ATF8024 ATF6426 ATF8026 ATF6426 ATF8026 ATF8026 ATF6428 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF8028 ATF6428 ATF8030 ATF8030 ATF6430 ATF8030 ATF8030 ATF6430 ATF8030 ATF8030	-9 1/ 540 -10 559 4 5/ 371						
ATF6420 ATF820 ATF7020 ATF7420 ATF7420 ATF820 ATF820 ATF6421 ATF6822 ATF7022 ATF7422 ATF7822 ATF8022 ***T (1 1 1 1 2 - 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ATF64110	ATF68110	ATF 70110	ATF 74110	ATF 78110	ATF80110
ATF6420 ATF820 ATF7020 ATF7420 ATF7420 ATF820 ATF820 ATF6421 ATF6822 ATF7022 ATF7422 ATF7822 ATF8022 ***T (1 1 1 1 2 - 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1/4 91) 10) 5/8" 22)						
ATF6422 ATF7022 ATF7022 ATF7022 ATF8022 ATF6422 ATF8022 ATF6424 ATF8024 ATF6426 ATF8026 ATF6426 ATF7024 AT	11-11 (5) (6) (6) (4)	ATE(420	ATEGO20	ATE7020	ATE7420	ATE 7920	ATESONO
ATF6422 ATF6822 ATF7022 ATF7422 ATF8022 ***/*******************************	⁴	A1F0420	AIF0020	AIF7020	AIF/420	AIF/620	AIFOUZU
ATF6422 ATF6822 ATF7022 ATF7422 ATF8022 ***/*******************************	2'-2' (660) (473)						
ATF6424 ATF7024 ATF7424 ATF7824 ATF8024 ***/** (C ***) (C ***	24	ATF6422	ATF6822	ATF7022	ATF7422	ATF7822	ATF8022
ATF6424 ATF7024 ATF7424 ATF7824 ATF8024 ***/** (C ***) (C ***	1/4" (2) (2) (1) (3/8" (4)						
ATF6426 ATF7026 ATF7426 ATF8026 ATF6426 ATF8026 ATF6428 ATF8028 ATF6428 ATF7028 ATF7428 ATF7828 ATF8028 ATF6428 ATF7028 ATF7428 ATF8028 ATF6428 ATF7028 ATF7028 ATF7428 ATF8028	2'-3 (66 (71 (52)						
ATF6426 ATF7026 ATF7426 ATF7826 ATF8026 **** **** **** *** *** *** **		ATF6424	ATF6824	ATF7024	ATF7424	ATF7824	ATF8024
ATF6426 ATF7026 ATF7426 ATF7826 ATF8026 **** **** **** *** *** *** **	5 1/4 743) 762) 762) 575)						
## 1	-1 C 4 C 8 E	ATF6426	ATF6826	ATF7026	ATF7426	ATF7826	ATF8026
ATF6428 ATF7028 ATF7428 ATF7828 ATF8028 ***/* (G) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	Alloizo	7.11. 9626		7		
ATF6428 ATF7028 ATF7428 ATF7828 ATF8028 ***/* (G) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2'-8 (813 (813 (625						
ATF6430 ATF7030 ATF7430 ATF7830 ATF8030	21	ATF6428	ATF6828	ATF7028	ATF7428	ATF7828	ATF8028
ATF6430 ATF7030 ATF7430 ATF7830 ATF8030	1/4" 5) 3)" 4) 7)						
ATF6430 ATF7030 ATF7430 ATF7830 ATF8030	(89) 3'-((91) (72)						
	7	ATF 6430	ATF6830	ATF7030	ATF 7430	ATF7830	ATF8030
	/4" 7) 1" 1" (8" 5)						
3-3 1/4" (997) 3-4" (1016) 32 5/8" (625)	32 5/ (62!						
ATF6434 ATF6834 ATF734 ATF7434 ATF7834 ATF8034	··	ATF 6434	ATF6834	ATF 734	ATF 7434	ATF7834	ATF8034

Fixed Transom Window Area Specifications (continued)

•	•	,			
Window Number	Ar	ass ea t./(m²)	Overall Window Area Sq. Ft./(m²)		
ATF210110	2.70	(0.25)	4.91	(0.46)	
ATF21020	3.07	(0.28)	5.37	(0.50)	
ATF21022	3.44	(0.32)	5.83	(0.54)	
ATF21024	3.81	(0.35)	6.29	(0.58)	
ATF21026	4.17	(0.39)	6.75	(0.63)	
ATF21028	4.54	(0.42)	7.22	(0.67)	
ATF21030	5.28	(0.49)	8.14	(0.76)	
ATF21034	6.02	(0.56)	9.06	(0.84)	
ATF3010	0.91	(0.08)	2.75	(0.26)	
ATF3014	1.71	(0.16)	3.73	(0.35)	
ATF3016	2.11	(0.20)	4.22	(0.39)	

 $[\]ensuremath{^{\bullet}}$ Dimensions in parentheses are in square meters. $\ensuremath{\textit{continued on next page}}$

Venting Transom Window Opening and Area Specifications (continued)

Window Number		pening ./(m²)	Clear Op Wid Inches		De	Position pth /(mm)	Ar	ass rea c./(m²)		ent t./(m²)	to Top o	Subfloor of Inside Stop ((mm)	Overall Ar Sq. Ft	
ATV 4820	2.06	(0.19)	50 5/16"	(1278)	5 7/8"	(150)	5.60	(0.52)	2.06	(0.19)	61 1/2"	(1561)	8.92	(0.83)
ATV 5020	2.22	(0.21)	54 5/16"	(1379)	5 7/8"	(150)	6.06	(0.56)	2.22	(0.21)	61 1/2"	(1561)	9.57	(0.89)
ATV 5420	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(150)	6.53	(0.61)	2.39	(0.22)	61 1/2"	(1561)	10.21	(0.62)
ATV 5820	2.55	(0.24)	62 5/16"	(1538)	5 7/8"	(150)	6.99	(0.65)	2.55	(0.24)	61 1/2"	(1561)	10.86	(0.66)
ATV 6020	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(150)	7.45	(0.69)	2.71	(0.25)	61 1/2"	(1561)	11.50	(0.70)
ATV1822	0.59	(0.05)	14 5/16"	(363)	5 7/8"	(150)	1.63	(0.15)	0.59	(0.05)	59 1/2"	(1510)	3.38	(0.31)
ATV2022	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	2.14	(0.20)	0.75	(0.07)	59 1/2"	(1510)	4.08	(0.38)
ATV2422	0.91	(80.0)	22 5/16"	(567)	5 7/8"	(150)	2.66	(0.25)	0.91	(80.0)	59 1/2"	(1510)	4.78	(0.44)
ATV2622	0.99	(0.09)	24 5/16"	(617)	5 7/8"	(150)	2.92	(0.27)	0.99	(0.09)	59 1/2"	(1510)	5.13	(0.48)
ATV2822	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	3.18	(0.30)	1.08	(0.10)	59 1/2"	(1510)	5.48	(0.51)
ATV 21022	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	3.44	(0.32)	1.16	(0.11)	59 1/2"	(1510)	5.83	(0.54)
ATV3022	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	3.69	(0.34)	1.24	(0.12)	59 1/2"	(1510)	6.18	(0.57)
ATV 3222	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	3.95	(0.37)	1.32	(0.12)	59 1/2"	(1510)	6.53	(0.61)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of $6'-10^{-1}/2$ " (2096).

continued on next page

[•] Dimensions in parentheses are in millimeters or square meters.



Fixed Transom Window Area

Specification	ns (continu	ed)		
Window Number	Ar	ass ea t./(m²)	Ar	Window ea t./(m²)
ATF3018	2.50	(0.23)	4.71	(0.44)
ATF30110	2.90	(0.27)	5.20	(0.48)
ATF3020	3.30	(0.31)	5.69	(0.53)
ATF3022	3.69	(0.34)	6.18	(0.57)
ATF3024	4.09	(0.38)	6.67	(0.62)
ATF3026	4.49	(0.42)	7.16	(0.67)
ATF3028	4.89	(0.42)	7.65	(0.71)
ATF3030	5.68	(0.53)	8.63	(0.80)
ATF3034	6.47	(0.60)	9.61	(0.89)
ATF3210	0.98	(0.00)	2.91	(0.27)
ATF3214				
	1.83	(0.17)	3.94	(0.37)
ATF3216	2.25	(0.21)	4.46	(0.41)
ATF3218	2.68	(0.25)	4.98	(0.46)
ATF32110	3.10	(0.29)	5.50	(0.51)
ATF3220	3.53	(0.33)	6.01	(0.56)
ATF3222	3.95	(0.37)	6.53	(0.61)
ATF3224	4.38	(0.41)	7.05	(0.65)
ATF3226	4.80	(0.45)	7.57	(0.70)
ATF3228	5.23	(0.49)	8.08	(0.75)
ATF3230	6.08	(0.56)	9.12	(0.85)
ATF3234	6.93	(0.64)	10.15	(0.94)
ATF3410	1.04	(0.10)	3.07	(0.28)
ATF3414	1.95	(0.18)	4.16	(0.39)
ATF 3416	2.40	(0.22)	4.70	(0.44)
ATF3418	2.85	(0.26)	5.25	(0.49)
ATF 34110	3.31	(0.31)	5.79	(0.54)
ATF 3420	3.76	(0.35)	6.34	(0.59)
ATF3422	4.21	(0.39)	6.88	(0.64)
ATF3424	4.66	(0.43)	7.43	(0.69)
ATF3426	5.12	(0.48)	7.97	(0.74)
ATF3428	5.57	(0.52)	8.52	(0.79)
ATF 3430	6.47	(0.60)	9.61	(0.89)
ATF3434	7.38	(0.69)	10.70	(0.99)
ATF3810	1.17	(0.11)	3.38	(0.31)
ATF3814	2.19	(0.20)	4.58	(0.43)
ATF3816	2.69	(0.25)	5.18	(0.48)
ATF3818	3.20	(0.30)	5.78	(0.54)
ATF38110	3.71	(0.34)	6.38	(0.59)
ATF3820	4.22	(0.39)	6.98	(0.65)
ATF3822	4.73	(0.44)	7.58	(0.70)
ATF3824	5.24	(0.44)	8.18	(0.76)
ATF3826	5.74	(0.53)	8.79	(0.82)
		-	9.39	
ATF3828	6.25	(0.58)		(0.87)
ATF3830	7.27	(0.68)	10.59	(0.98)
ATF3834	8.29	(0.77)	11.79	(1.10)
ATF4010	1.30	(0.12)	3.69	(0.34)
ATF4014	2.42	(0.23)	5.00	(0.46)
ATF 4016	2.99	(0.28)	5.66	(0.53)
ATF4018	3.55	(0.33)	6.32	(0.59)
ATF 40110	4.12	(0.38)	6.97	(0.65)
ATF 4020	4.68	(0.43)	7.63	(0.71)
ATF 4022	5.24	(0.49)	8.29	(0.77)
ATF 4024	5.81	(0.54)	8.94	(0.83)
ATF 4026	6.37	(0.59)	9.60	(0.89)
ATF 4028	6.94	(0.64)	10.25	(0.95)
ATF 4030	8.06	(0.75)	11.57	(1.07)
ATF 4034	9.19	(0.85)	12.88	(1.20)
ATF 4410	1.42	(0.13)	4.00	(0.37)
	_			

[•] Dimensions in parentheses are in square meters.

continued on next page

Venting Transom Window Opening and Area Specifications (continued)

Venting Trans	som W	indov	/ Uper	ning a	nd Are	a Spe	cifica	tions	(continue	d)				
			Clear Op	pening in I	Full Open	Position						Subfloor		
Window Number	Clear O	pening	Wi	dth	De	nth		ass ea	Ve	ent		of Inside Stop		Window ea
	Sq. Ft			/(mm)	Inches			./(m²)		t./(m²)		/(mm)		t./(m²)
ATV3422	1.40	(0.13)	34 5/16"	(871)	5 7/8"	(150)	4.21	(0.39)	1.40	(0.13)	59 1/2"	(1510)	6.88	(0.64)
ATV 3822	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	4.73	(0.44)	1.57	(0.15)	59 1/2"	(1510)	7.58	(0.70)
ATV 4022	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	5.24	(0.49)	1.73	(0.16)	59 1/2"	(1510)	8.29	(0.77)
ATV 4422	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	5.76	(0.54)	1.90	(0.18)	59 1/2"	(1510)	8.99	(0.83)
ATV 4822	2.06	(0.19)	50 5/16"	(1278)	5 7/8"	(150)	6.28	(0.58)	2.06	(0.19)	59 1/2"	(1510)	9.69	(0.90)
ATV5022	2.22	(0.21)	54 5/16"	(1379)	5 7/8"	(150)	6.79	(0.63)	2.22	(0.21)	59 1/2"	(1510)	10.39	(0.97)
ATV5422	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(150)	7.31	(0.68)	2.39	(0.22)	59 1/2"	(1510)	11.09	(1.03)
ATV5822	2.55	(0.24)	62 5/16"	(1538)	5 7/8"	(150)	7.83	(0.73)	2.55	(0.24)	59 1/2"	(1510)	11.79	(1.10)
ATV6022	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(150)	8.34	(0.78)	2.71	(0.25)	59 1/2"	(1510)	12.49	(1.16)
ATV 1824	0.59	(0.05)	14 5/16"	(363)	5 7/8"	(150)	1.80	(0.17)	0.59	(0.05)	57 1/2"	(1460)	3.64	(0.34)
ATV 2024	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	2.38	(0.22)	0.75	(0.07)	57 1/2"	(1460)	4.40	(0.41)
ATV 2424	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	2.95	(0.27)	0.91	(0.08)	57 1/2"	(1460)	5.16	(0.48)
ATV 2624	0.99	(0.09)	24 5/16"	(617)	5 7/8"	(150)	3.23	(0.30)	0.99	(0.09)	57 1/2"	(1460)	5.54	(0.51)
ATV 2824	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	3.52	(0.33)	1.08	(0.10)	57 1/2"	(1460)	5.91	(0.55)
ATV 21024	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	3.81	(0.35)	1.16	(0.11)	57 1/2"	(1460)	6.29	(0.58)
ATV 3024	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	4.09	(0.38)	1.24	(0.12)	57 1/2"	(1460)	6.67	(0.62)
ATV3224	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	4.38	(0.41)	1.32	(0.12)	57 1/2"	(1460)	7.05	(0.65)
ATV3424	1.40	(0.13)	34 5/16"	(871)	5 7/8"	(150)	4.66	(0.43)	1.40	(0.13)	57 1/2"	(1460)	7.43	(0.69)
ATV3824	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	5.24	(0.49)	1.57	(0.15)	57 1/2"	(1460)	8.18	(0.76)
ATV4034	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	5.81	(0.54)	1.73	(0.16)	57 1/2"	(1460)	8.94	(0.83)
ATV4424	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	6.38	(0.59)	1.90	(0.18)	57 1/2"	(1460)	9.70	(0.90)
ATV4824	2.06	(0.19)	50 5/16"	(1278)	5 7/8"	(150)	6.95	(0.65)	2.06	(0.19)	57 1/2"	(1460)	10.46	(0.97)
ATV5024	2.22	(0.13)	54 5/16"	(1379)	5 7/8"	(150)	7.53	(0.03)	2.22	(0.13)	57 1/2"	(1460)	11.21	(1.04)
ATV5424	2.39	(0.21)	58 5/16"	(1481)		(150)	8.10	(0.75)	2.39	(0.22)	57 1/2"	(1460)	11.97	(1.11)
ATV5824	2.55	(0.24)	62 5/16"	(1538)	5 7/8"	(150)	8.67	(0.73)	2.55	(0.24)	57 1/2"	(1460)	12.73	(1.11)
ATV6024	2.71	, ,			5 7/8"		9.24		2.71					
ATV1826		(0.25)	66 5/16"	(1684)	5 7/8"	(150)		(0.86)	_	(0.25)	57 ¹ / ₂ "	(1460)	13.48	(1.25)
	0.59	(0.05)	14 5/16"	(363)	5 7/8"	(150)	1.98	(0.18)	0.59	(0.05)	55 1/2"	(1409)	3.91	(0.36)
ATV2026	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	2.61	(0.24)	0.75	(0.07)	55 1/2"	(1409)	4.72	(0.44)
ATV2226	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	3.23	(0.30)	0.91	(0.08)	55 1/2"	(1409)	5.54	(0.51)
ATV2426	0.99	(0.09)	24 5/16"	(617)	5 7/8"	(150)	3.55	(0.33)	0.99	(0.09)	55 1/2"	(1409)	5.94	(0.55)
ATV2626	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	3.86	(0.36)	1.08	(0.10)	55 1/2"	(1409)	6.35	(0.59)
ATV2826	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	4.18	(0.39)	1.16	(0.11)	55 1/2"	(1409)	6.75	(0.63)
ATV3026	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	4.49	(0.42)	1.24	(0.12)	55 1/2"	(1409)	7.16	(0.67)
ATV3226	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	4.80	(0.45)	1.32	(0.12)	55 1/2"	(1409)	7.57	(0.70)
ATV3426	1.40	(0.13)	34 5/16"	(871)	5 7/8"	(150)	5.12	(0.48)	1.40	(0.13)	55 1/2"	(1409)	7.97	(0.74)
ATV3826	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	5.74	(0.53)	1.57	(0.15)	55 1/2"	(1409)	8.79	(0.82)
ATV 4026	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	6.37	(0.59)	1.73	(0.16)	55 1/2"	(1409)	9.60	(0.89)
ATV 4426	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	7.00	(0.65)	1.90	(0.18)	55 1/2"	(1409)	10.41	(0.97)
ATV 4826	2.06	(0.19)	50 5/16"	(1278)	5 7/8"	(150)	7.63	(0.71)	2.06	(0.19)	55 1/2"	(1409)	11.22	(1.04)
ATV5026	2.22	(0.21)	54 5/16"	(1379)	5 7/8"	(150)	8.26	(0.77)	2.22	(0.21)	55 1/2"	(1409)	12.04	(1.12)
ATV 5426	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(150)	8.88	(0.83)	2.39	(0.22)	55 1/2"	(1409)	12.85	(1.19)
ATV5826	2.55	(0.24)	62 5/16"	(1538)	5 7/8"	(150)	9.55	(0.89)	2.55	(0.24)	55 1/2"	(1409)	13.66	(1.27)
ATV6026	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(150)	10.14	(0.94)	2.71	(0.25)	55 1/2"	(1409)	14.47	(1.34)
ATV1828	0.59	(0.05)	14 5/16"	(363)	5 7/8"	(150)	2.15	(0.20)	0.59	(0.05)	53 1/2"	(1358)	4.18	(0.39)
ATV2028	0.75	(0.07)	18 5/16"	(465)	5 7/8"	(150)	2.84	(0.26)	0.75	(0.07)	53 1/2"	(1358)	5.05	(0.47)
ATV2428	0.91	(0.08)	22 5/16"	(567)	5 7/8"	(150)	3.52	(0.33)	0.91	(0.08)	53 1/2"	(1358)	5.91	(0.55)
ATV2628	0.99	(0.09)	24 5/16"	(617)	5 7/8"	(150)	3.86	(0.36)	0.99	(0.09)	53 1/2"	(1358)	6.35	(0.59)
ATV2828	1.08	(0.10)	26 5/16"	(668)	5 7/8"	(150)	4.20	(0.39)	1.08	(0.10)	53 1/2"	(1358)	6.78	(0.63)
ATV21028	1.16	(0.11)	28 5/16"	(719)	5 7/8"	(150)	4.54	(0.42)	1.16	(0.11)	53 1/2"	(1358)	7.22	(0.67)
ATV3028	1.24	(0.12)	30 5/16"	(770)	5 7/8"	(150)	4.89	(0.45)	1.24	(0.12)	53 1/2"	(1358)	7.56	(0.70)
ATV3228	1.32	(0.12)	32 5/16"	(821)	5 7/8"	(150)	5.23	(0.49)	1.32	(0.12)	53 1/2"	(1358)	8.08	(0.75)
ATV3428	1.40	(0.13)	34 5/16"	(871)	5 7/8"	(150)	5.57	(0.52)	1.40	(0.13)	53 1/2"	(1358)	8.52	(0.79)
ATV3828	1.57	(0.15)	38 5/16"	(973)	5 7/8"	(150)	6.25	(0.58)	1.57	(0.15)	53 1/2"	(1358)	9.39	(0.87)
ATV 4028	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(150)	6.94	(0.64)	1.73	(0.16)	53 1/2"	(1358)	10.25	(0.95)
ATV 4428	1.90	(0.18)	46 5/16"	(1176)	5 7/8"	(150)	7.62	(0.71)	1.90	(0.18)	53 1/2"	(1358)	11.12	(1.03)
ATV 4828	2.06	(0.19)	50 5/16"	(1278)	5 7/8"	(150)	8.30	(0.77)	2.06	(0.19)	53 1/2"	(1358)	11.99	(1.11)
ATV 5028	2.22	(0.21)	54 5/16"	(1379)	5 7/8"	(150)	8.99	(0.83)	2.22	(0.21)	53 1/2"	(1358)	12.86	(1.19)
ATV 5428	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(150)	9.67	(0.90)	2.39	(0.22)	53 1/2"	(1358)	13.73	(1.28)
ATV5828	2.55	(0.24)	62 5/16"	(1538)	5 7/8"	(150)	10.35	(0.96)	2.55	(0.24)	53 1/2"	(1358)	14.59	(1.36)
ATV6028	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(150)	11.04	(1.03)	2.71	(0.25)	53 1/2"	(1358)	15.46	(1.44)

^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6° - $10^{\circ}/_{2}^{\circ}$ (2096).
• Dimensions in parentheses are in millimeters or square meters.

Fixed Transom Window Area Specifications (continued)

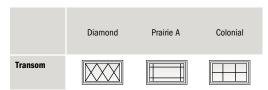
Window Number	Ar	ass ea	Overall Window Area		
******		t./(m²)		t./(m²)	
ATF4414	2.66	(0.25)	5.43	(0.50)	
ATF4416	3.28	(0.30)	6.14	(0.57)	
ATF4418 ATF44110	3.90	(0.36)	6.85	(0.64)	
	4.52	(0.42)	7.56	(0.70)	
ATF4420	5.14	(0.48)	8.27	(0.77)	
ATF4422	5.76	(0.54)	8.99	(0.83)	
ATF4424	6.38	(0.59)	9.70	(0.90)	
ATF4426 ATF4428	7.00	(0.65)	10.41	(0.97)	
ATF4430	7.62	(0.71)	11.12	(1.03)	
ATF4434	8.86	. ,	12.55	(1.17)	
	10.10	(0.94)	13.97	(1.30)	
ATF4810	1.55	(0.14)	4.32	(0.40)	
ATF4814	2.90	(0.27)	5.85	(0.54)	
ATF4816	3.58	(0.33)	6.62	(0.61)	
ATF4818	4.25	(0.40)	7.39	(0.69)	
ATF48110	4.93	(0.46)	8.15	(0.76)	
ATF4820	5.60	(0.52)	8.92	(0.83)	
ATF4822	6.28	(0.58)	9.69	(0.90)	
ATF4824	6.95	(0.65)	10.46	(0.97)	
ATF4826	7.63	(0.71)	11.22	(1.04)	
ATF4828	8.30	(0.77)	11.99	(1.11)	
ATF4830	9.65	(0.90)	13.52	(1.26)	
ATF4834	11.00	(1.02)	15.06	(1.40)	
ATF5010	1.68	(0.16)	4.63	(0.43)	
ATF5014	3.14	(0.29)	6.27	(0.58)	
ATF5016	3.87	(0.36)	7.10	(0.66)	
ATF5018	4.60	(0.43)	7.92	(0.74)	
ATF50110	5.33	(0.50)	8.74	(0.81)	
ATF5020	6.06	(0.56)	9.57	(0.89)	
ATF5022	6.79	(0.63)	10.39	(0.97)	
ATF5024	7.52	(0.70)	11.21	(1.04)	
ATF5026	8.26	(0.77)	12.04	(1.12)	
ATF5028	8.99	(0.83)	12.86	(1.19)	
ATF5030	10.45	(0.97)	14.50	(1.35)	
ATF5034	11.91	(1.11)	16.15	(1.50)	
ATF5410	1.81	(0.17)	4.94	(0.46)	
ATF5414	3.38	(0.31)	6.70	(0.62)	
ATF5416	4.17	(0.39)	7.58	(0.70)	
ATF5418	4.95	(0.46)	8.46	(0.79)	
ATF54110	5.74	(0.53)	9.33	(0.87)	
ATF5420	6.52	(0.61)	10.21	(0.95)	
ATF5422	7.31	(0.68)	11.09	(1.03)	
ATF5424	8.10	(0.75)	11.97	(1.11)	
ATF5426	8.88	(0.83)	12.85	(1.19)	
ATF5428	9.67	(0.90)	13.73	(1.28)	
ATF5430	11.24	(1.04)	15.48	(1.44)	
ATF5434	12.81	(1.19)	17.24	(1.60)	
ATF5810	1.94	(0.18)	5.25	(0.49)	

Window	Gla	ass	Overall	Window
Number		ea		ea t./(m²)
ATF 5814	3.62	t./(m²) (0.34)	7.12	(0.66)
ATF5816	4.46	(0.41)	8.06	(0.75)
ATF5818	5.30	(0.49)	8.99	(0.84)
ATF58110	6.14	(0.57)	9.92	(0.92)
ATF5820	6.99	(0.65)	10.86	(1.01)
ATF5822	7.83	(0.73)	11.79	(1.10)
ATF5824	8.67	(0.81)	12.73	(1.18)
ATF5826	9.51	(0.88)	13.66	(1.27)
ATF5828	10.35	(0.96)	14.59	(1.36)
ATF5830	12.04	(1.12)	16.46	(1.53)
ATF5834	13.72	(1.27)	18.33	(1.70)
ATF6010	2.06	(0.19)	5.57	(0.52)
ATF6014	3.86	(0.13)	7.55	(0.70)
ATF6016	4.76	(0.44)	8.54	(0.79)
ATF6018	5.65	(0.53)	9.52	(0.73)
ATF60110	6.55	(0.61)	10.51	(0.98)
ATF6020	7.45	(0.69)	11.50	(1.07)
ATF6022	8.34	(0.09)	12.49	(1.16)
ATF6024	9.24	(0.86)	13.48	(1.25)
ATF6026	10.14	(0.94)	14.47	(1.34)
ATF6028	11.04	(1.03)	15.46	(1.44)
ATF6030	12.83	(1.19)		(1.62)
ATF6034	14.62	(1.19)	17.44	(1.80)
ATF6410	2.19	(0.20)	5.88	(0.55)
ATF6414	4.10	(0.20)	7.97	(0.74)
ATF6416	5.05	(0.47)	9.01	(0.84)
ATF6418	6.00	(0.56)	10.06	(0.93)
ATF64110	6.96	(0.65)	11.10	(1.03)
ATF6420	7.91	(0.73)	12.15	(1.13)
ATF6422	8.86	(0.73)	13.19	(1.23)
ATF6424	9.81	(0.82)	14.24	(1.32)
ATF6426	10.77	(1.00)	15.29	(1.42)
ATF6428	11.72	(1.00)	16.33	(1.42)
ATF6430	13.62	(1.03)	18.42	(1.71)
ATF6434	15.53		20.51	(1.71)
ATF6810	2.32	(1.44)	6.19	
ATF6814	4.34	(0.22)	8.39	(0.58)
ATF6816	5.34	(0.40)		
ATF6818	6.35	(0.50)	9.49	(0.88)
ATF68110 ATF6820	7.36	(0.68)	11.69	(1.09)
ATF6822	8.37	(0.78)	12.80	(1.19)
ATF6824	9.38	(0.87)	13.90	(1.29)
ATF6826	10.39	(0.97)	15.00	(1.39)
ATF6828	11.39	(1.06)	16.10	
ATF6830	12.40	(1.15)	17.20	(1.60)
ATF6834	14.42 16.44		19.40	(1.80)
ATF7010	2.45	(1.53)	21.60	(2.01)
AIF1010	2.40	(0.23)	6.50	(0.60)

Window Number	Ar	ass ea	Overall Window Area Sq. Ft./(m²)		
ATF 7014	4.57	t./(m²) (0.42)	8.82	t./(m²) (0.82)	
ATF7016	5.64	(0.52)	9.97	(0.93)	
ATF7018	6.70	(0.62)	11.13	(1.03)	
ATF70110	7.77	(0.72)	12.29	(1.14)	
ATF7020	8.83	(0.82)	13.44	(1.25)	
ATF7022	9.89	(0.92)	14.60	(1.36)	
ATF7024	10.96	(1.02)	15.75	(1.46)	
ATF7026	12.02	(1.12)	16.91	(1.57)	
ATF7028	13.09	(1.22)	18.07	(1.68)	
ATF7030	15.21	(1.41)	20.38	(1.89)	
ATF7034	17.34	(1.61)	22.69	(2.11)	
ATF7410	2.57	(0.24)	6.82	(0.63)	
ATF7414	4.81	(0.45)	9.24	(0.86)	
ATF7416	5.93	(0.55)	10.45	(0.97)	
ATF7418	7.05	(0.65)	11.66	(1.08)	
ATF74110	8.17	(0.76)	12.88	(1.20)	
ATF7420	9.29	(0.86)	14.09	(1.31)	
ATF7422	10.41	(0.97)	15.03	(1.40)	
ATF7424	11.53	(1.07)	16.51	(1.53)	
ATF7426	12.65	(1.18)	17.72	(1.65)	
ATF7428	13.77	(1.28)	18.93	(1.76)	
ATF7430	16.01	(1.49)	21.36	(1.98)	
ATF7434	18.25	(1.70)	23.78	(2.21)	
ATF7810	2.70	(0.25)	7.13	(0.66)	
ATF7814	5.05	(0.47)	9.66	(0.90)	
ATF7816	6.23	(0.58)	10.93	(1.02)	
ATF7818	7.40	(0.69)	12.20	(1.13)	
ATF78110	8.58	(0.80)	13.47	(1.25)	
ATF 7820	9.75	(0.91)	14.73	(1.37)	
ATF7822	10.93	(1.02)	16.00	(1.49)	
ATF 7824	12.10	(1.12)	17.27	(1.60)	
ATF 7826	13.28	(1.23)	18.54	(1.72)	
ATF7828	14.45	(1.34)	19.80	(1.84)	
ATF7830	16.80	(1.56)	22.34	(2.08)	
ATF7834	19.15	(1.78)	24.87	(2.31)	
ATF8010	2.83	(0.26)	7.44	(0.69)	
ATF8014	5.29	(0.49)	10.09	(0.94)	
ATF8016	6.52	(0.61)	11.41	(1.06)	
ATF8018	7.75	(0.72)	12.73	(1.18)	
ATF80110	8.98	(0.83)	14.06	(1.31)	
ATF8020	10.21	(0.95)	15.38	(1.43)	
ATF8022	11.44	(1.06)	16.70	(1.55)	
ATF8024	12.67	(1.18)	18.02	(1.67)	
ATF8026	13.91	(1.29)	19.35	(1.80)	
ATF8028	15.41	(1.43)	20.67	(1.92)	
ATF8030	17.60	(1.64)	23.32	(2.17)	
ATF8034	20.06	(1.86)	26.96	(2.50)	
Dimensions in parenth					

[•] Dimensions in parentheses are in square meters.

Grille Patterns



Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes. Specified equal light and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.



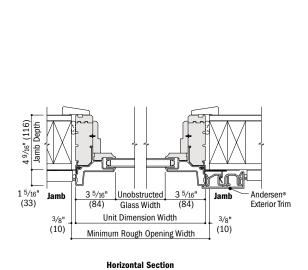


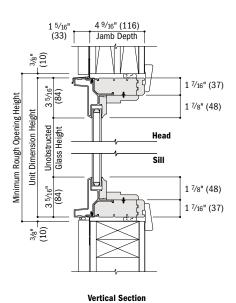
Specified Equal Light Examples



Fixed Transom Window Details

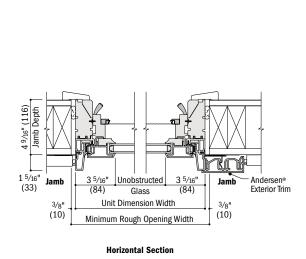
Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8

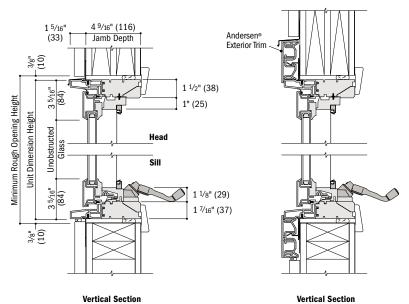




Venting Transom Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



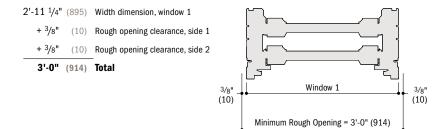


See pages 60-62 for joining details.

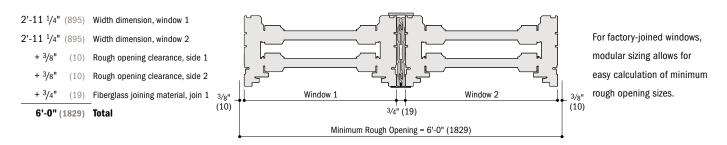
- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
 Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instruction at andersenwindows.com.

Minimum Rough Opening Calculation Examples

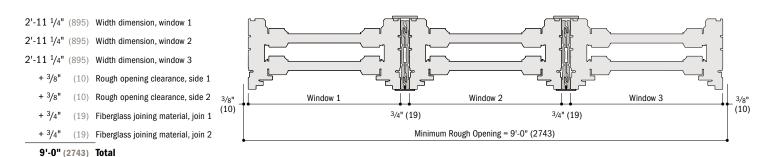
Single Window



Two Vertical (ribbon) Joined Windows



Three Vertical (ribbon) Joined Windows



[•] Dimensions in parentheses are in millimeters

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

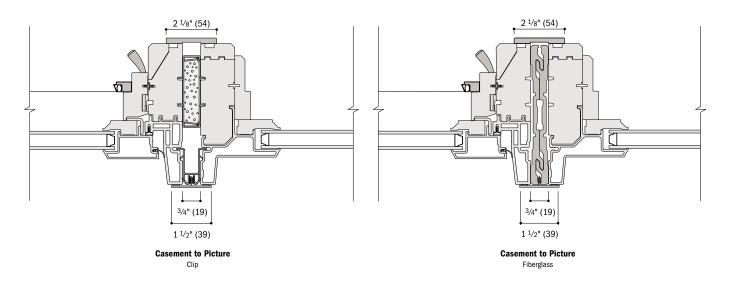


Vertical (ribbon) Joining Details

Scale 3" (76) = 1'-0" (305) - 1:4

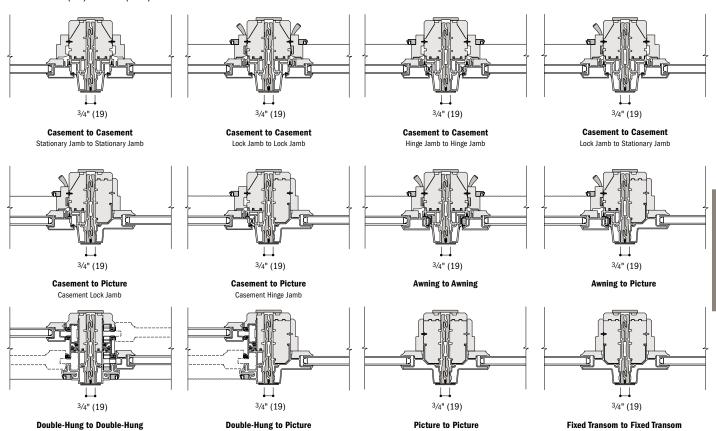
Windows can be joined to other windows using clips or 4 9/16" (116) fiberglass joining material. See page 112 for specialty window joining details.

Overall Window Dimension Width - Sum of individual window widths plus 3/4" (19) per join. Overall Minimum Rough Opening Width - Overall window dimension width plus 3/4" (19).



Vertical (ribbon) Easy Connect Fiberglass Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- Not all combinations are shown above; visit andersenwindows.com or contact your Andersen supplier for additional joining details.

WINDOWS

Horizontal (stack) Joining Details

Scale 3" (76) = 1'-0" (305) - 1:4

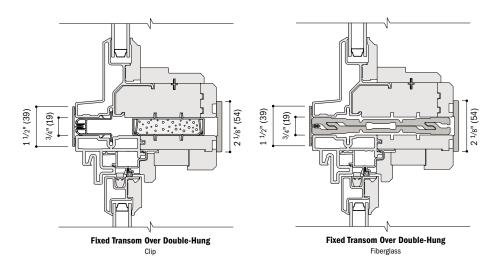
Windows can be joined to other windows using clips or 4 % (116) fiberglass joining material. See page 112 for specialty window joining details.

Overall Window Dimension Height -

Sum of individual window heights plus 3/4" (19) per join.

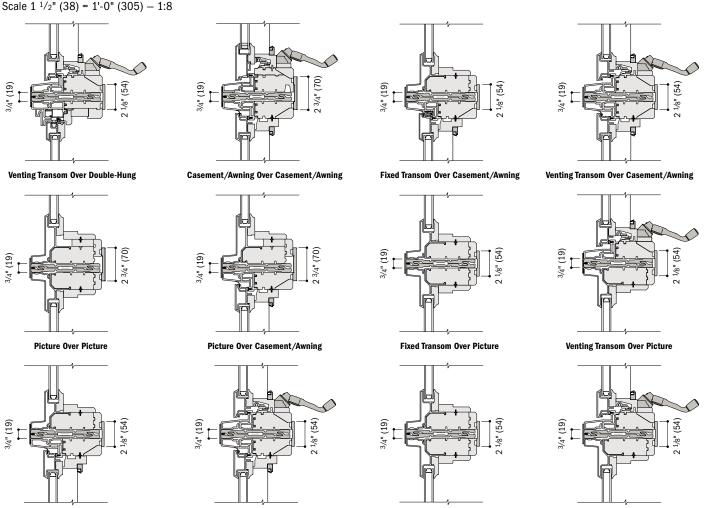
Overall Minimum Rough Opening Height -

Overall window dimension height plus 3/4" (19).



Horizontal (stack) Easy Connect Fiberglass Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



For more information on joining, refer to the combination designs section starting on page 196.

- * Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.

Fixed Transom Over Venting Transom

- * Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
 Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

Venting Transom Over Venting Transom

- Fixed transom windows (ATF) can only be joined to venting transoms windows (ATV) vertically and double-hung windows (ADH) can only be joinined to double-hung windows (ADH) vertically. Not all combinations are shown above; visit andersenwindows.com or contact your Andersen supplier for additional joining details.

Fixed Transom Over Fixed Transom

Venting Transom Over Fixed Transom



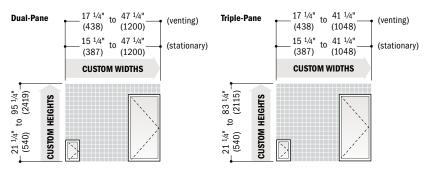
Custom Sizes and Specification Formulas



A-Series custom-size windows are available in 1/8" (3) increments between minimum and maximum widths and heights shown.

Some restrictions apply. For specialty windows and windows with PG upgrade, contact your Andersen supplier for custom sizing and specifications. Clear opening dimensions for custom-sized windows are also available in iQ+; contact your Andersen supplier.

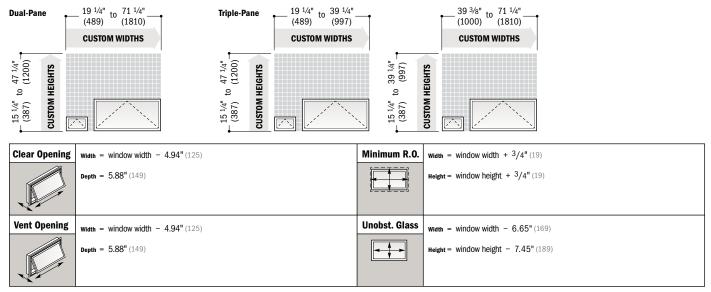
Casement Windows (venting & stationary)



Clear Opening	Width = Clear opening width for custom-sized casement windows is based on window width and hinge type. Contact you Andersen supplier for clear opening width. Height = Window height - 5.65" (144)	Minimum R.O.	Width = window width + $3/4$ " (19) Height = window height + $3/4$ " (19)
Vent Opening	width = window width -6.54 " (166) Height = window height -5.65 " (144)	Unobst. Glass	Width = window width - 6.65" (169) Height = window height - 7.45" (189)

[•] All casement windows wider than 2'-3 1/4" (692) and taller than 3'-11 1/4" (1200) meet or exceed clear opening area of 5.7 sq. ft. or .053 m², clear opening width of 20" (508) and clear opening height of 24" (610).

Awning Windows (venting & stationary)



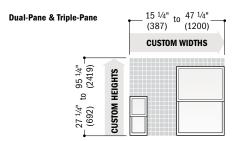
[•] Awning windows do not meet clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

[•] Dimensions in parentheses are in millimeters.

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

Double-Hung Windows

Equal Sash Ratio



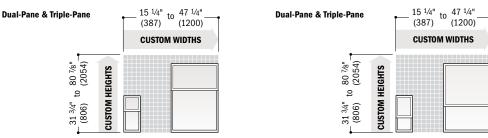
Clear Opening*	width = window width -4.06 " (103)	Minimum R.O.	width = window width + $3/4$ " (19)
+	Height = (window height \div 2) - 4.65" (118)		Height = window height + 3/4" (19)
Vent Opening*	width = window width -4.06 " (103)	Unobst. Glass	Width = window width - 6.65" (169)
	Height = (window height \div 2) - 3.84" (98)	+++	Single Sash Height = (window height -9.65 " (245)) $\div 2$ Total Sash Height = window height -9.65 " (245)

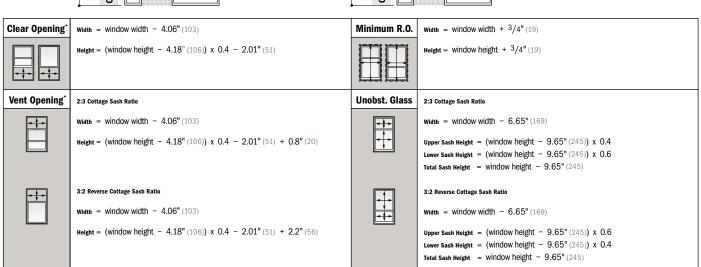
- Windows wider than 3'-1 1/4" (946) and taller than 4'-11 1/4" (1505) meet or exceed clear opening area of 5.7 sq. ft. or .053 m², clear opening width of 20" (508) and clear opening height of 24" (610).

- Two locks are standard for windows with triple-pane glass or art glass on sizes wider than 1°-1° 1/8° (486).
 Two locks are standard for windows with dual-pane glass or sizes wider than 3°-3° 1/4° (997).
 Windows with triple-pane or art glass wider than 2'-11° 1/4° (895) and taller than 5°-11° 1/4° (1810) may have limited sash travel. Contact your Andersen supplier for clear opening and vent opening specifications.

2:3 Cottage Sash Ratio

3:2 Reverse Cottage Sash Ratio





- Two locks are standard for windows with triple-pane glass or art glass on sizes wider than 1'-7 1/8" (486).
- Two locks are standard for windows with dual-pane glass on sizes wider than 3'-3 1/4" (997).

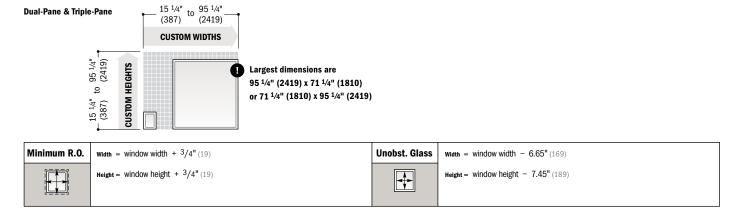
 *Windows with triple-pane or art glass wider than 2'-11 1/4" (895) and taller than 4'-11 1/4" (1505) may have limited sash travel. Contact your Andersen supplier for clear opening and vent opening specifications.

[·] Dimensions in parentheses are in millimeters.

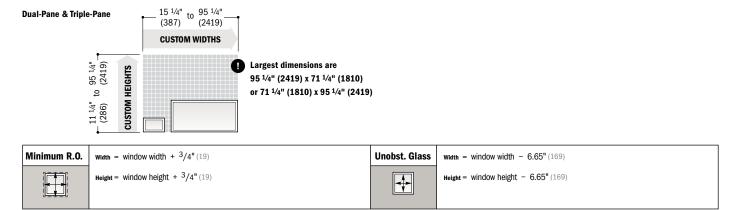
[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.



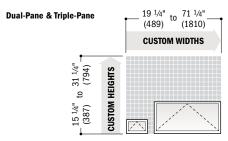
Picture Windows



Fixed Transom Windows



Venting Transom Windows



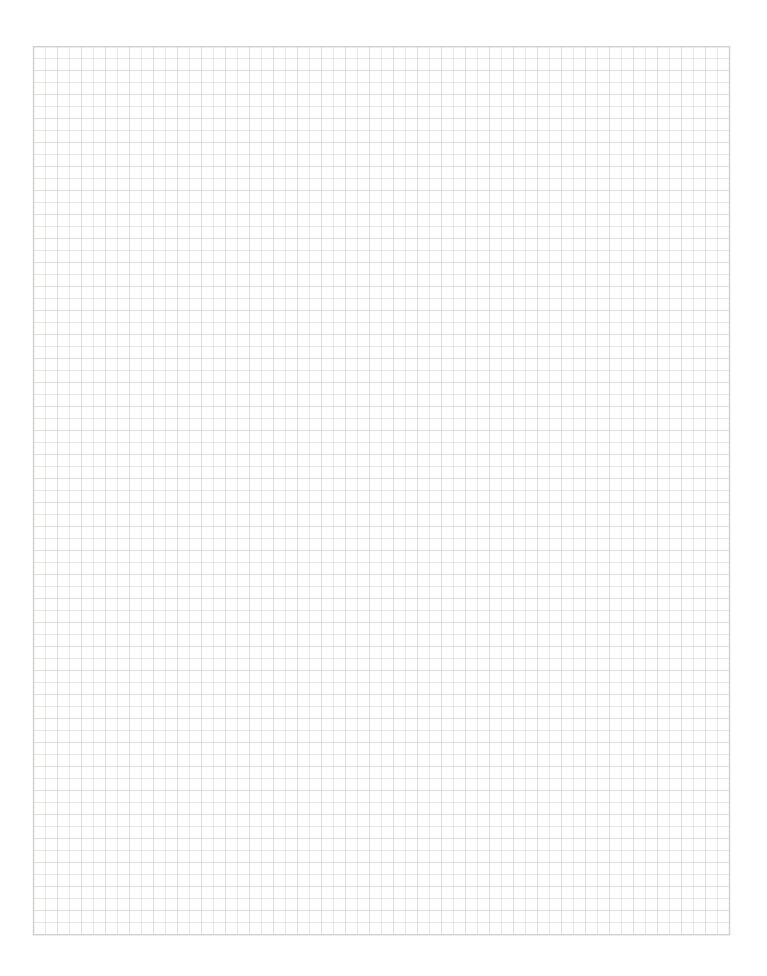
Clear Opening	Width = window width - 4.94 " (125) Depth = 5.88 " (149)	Minimum R.O.	Width = window width + $3/4$ " (19) Height = window height + $3/4$ " (19)
Vent Opening	Width = window width - 4.94" (125)	Unobst. Glass	неіght = window height - 6.65" (169)
	$Depth = 5.88^{m} (149)$		Width = Window width - 6.65" (169)

[•] Venting transom windows do not meet clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

[•] Dimensions in parentheses are in millimeters.

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

NOTES



SPECIALTY WINDOWS

Half Circle, Elliptical & Quarter Circle

Tables of Sizes
Direct-Set Specifications
Sash-Set Specifications
Grille Patterns

Unequal Leg Arch

Table of Sizes 74-75
Direct-Set Specifications
Sash-Set Specifications
Grille Patterns

Octagon, Circle & Oval

Tables of Sizes
Direct-Set Specifications
Sash-Set Specifications
Grille Patterns

Table of Sizes	80-95
Direct-Set Specifications 84-85,	90-91
Sash-Set Specifications	94-97
Grille Patterns	105

$Springline^{^{\text{\tiny TM}}}$

Table of Sizes 98-104, 106, 108
Direct-Set Specifications 105, 107
Sash-Set Specifications 108-110
Grille Patterns 105
Window Details 111
Joining Details 112
Combination Designs 196
Product Performance



Dimensions in parentheses are in millimeters.



FEATURES

FRAME

♠ The frame is constructed with wood and protected with a heavy-duty extruded aluminum cladding. Standard cladding finish meets AAMA 2604. An optional finish that meets the AAMA 2605 standard is also available. This construction produces a rigid frame and a low-maintenance, durable exterior with no exposed ends.

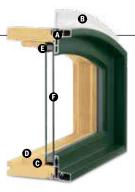
(38) around the perimeter of the unit to help properly position the unit in the opening. Installation clips are standard for increased structural anchoring to building members.

Mounted around the frame perimeter, the clips rotate into position and can be bent into place against the framing members to suit all jamb conditions.

© Wood frame members are treated with a water-repellent preservative for long-lasting protection and performance. Radii are made of laminated continuous veneers. Lineal components are solid or engineered wood with a pine core.

SASH

• Natural wood interiors are treated with a water-repellent wood preservative for long-lasting protection and performance.



Direct-Set Arch Window

Available in direct-set or sash-set construction. Direct-set windows have glass glazed directly into the frame and maximize glass area. Sash-set windows feature a stationary sash and provide common sight lines with other A-Series venting windows. Sash are constructed with wood and protected with a heavy-duty aluminum cladding. This construction produces a rigid sash and a low-maintenance durable exterior.*

Traditional architectural style:

- · Classic chamfer detailing
- Look of mortise-and-tenon joinery
- Silicone glazing filet bead combined with two-sided tape provides superior weathertightness.

G GLASS

In addition to stainless steel glass spacers, black or white glass spacers are available to allow the spacer to blend in with the unit color.

3/4" (19) dual-pane glass construction provides exceptional energy performance. High-Performance dual-pane glass options include:

- · Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun™ glass
- · Low-E4 SmartSun HeatLock glass
- · Low-E4 Sun glass

For even greater energy performance, 1" (25) triple-pane glass is available in these options:

- · Low-E4 glass
- · Low-E4 Enhanced glass
- · Low-E4 Enhanced HeatLock glass
- · Low-E4 SmartSun glass
- Low-E4 SmartSun Enhanced glass
- Low-E4 SmartSun Enhanced HeatLock glass

Tempered glass and other glass options are available; see your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 15 for more details.

Between-the-Glass Art Glass

Available in a variety of original patterns. For details, see page 16 or visit andersenwindows.com/artglass.

PERFORMANCE OPTIONS

Performance Grade (PG) Upgrades

Performance Grade (PG) upgrades are now available for all A-Series windows in most sizes of standard non-impact windows allowing these units to achieve higher performance ratings. PG upgrade ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. For up-to-date performance information of individual products, visit andersenwindows.com.

Stormwatch

A-Series windows available with Stormwatch® Protection include impact-resistant glass in addition to structural upgrades for coastal areas. For a copy of the A-Series Coastal Product Guide, visit andersenwindows.com/coastal.

EXTERIORS & INTERIORS

EXTERIOR COLORS



INTERIOR WOOD SPECIES



FACTORY-FINISHED INTERIORS



All wood interiors are unfinished unless a finish is specified. Clear coat available on all wood species; all other factory finishes on pine, maple and oak. Shown above on pine. Naturally occurring variations in grain, color and texture of wood make each window one of a kind.

INTERIOR PAINT COLORS



Also available in 11 exterior colors shown above; contact your Andersen supplier. Painted colors on pine or maple.

4-TONE INTERIORS

Mix and match up to four interior wood species, stains and/or colors for your window's frame, sash, grilles and extension jambs to achieve a look unique to your project.

*Visit andersenwindows.com/warranty for details.

**Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa,
with color and characteristics similar to Central American mahoganies.

Printing limitations prevent exact duplication of colors. See your Andersen supplier for actual color samples.

Dimensions in parentheses are in millimeters.



ACCESSORIES Sold Separately

FRAME

Extension Jambs

Extension jambs are available in pine, maple, vertical grain Douglas fir, oak, mahogany* and cherry, precut to fit your unit. Available in 1/16" (1.5) increments up to $7 \frac{1}{8}$ " (181) and can be prefinished in six stain colors as well as all interior paint options to match the interior of the unit. This option is also available factory applied.

Interior Arch Casing

Available in Colonial or Ranch styles. Arch casings come with transition blocks or plinth blocks, depending on the product. For easy integration and consistency, casing dimensions are consistent with Wood Moulding and Millwork Producers Association specifications. Available in pine, maple, vertical grain Douglas fir, oak, mahogany* and cherry. Additional species are available.



21/4" (57) Colonial style. WM366



21/2" (64) Colonial style. WM351



31/2" (89) Colonial style. WM444



21/4" (57) Ranch style. WM324 $2\frac{1}{2}$ " (64) Ranch style. WM315

Plinth Blocks

For enhancing casing transitions. Decorated with a radial sunburst, or use the reverse side flush face.



For arch windows with 2 1/4" (57) and 21/2" (64) casing, use 2%" (73) x 4" (102) size plinth block. For arch windows with 3 ½" (89) casing, use 37/8" (98) x 5 1/4" (133) size plinth block



For half circle, circle, elliptical and oval windows with 2 1/4" (57) and 2 1/2" (64) casing, use 27/8" (73) size plinth block. For half circle, circle, elliptical and oval windows with 3 1/2" (89) casing, use 3 7/8" (98) size plinth block.

GRILLES

Grilles are available in a variety of configurations and widths. See page 19 for details.

EXTERIOR TRIM

Available with Andersen exterior trim. See exterior trim section starting on page 189.

> *Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.

> > Extended

Gothic

Extended Arch

Quatrefoil

Springline

Flanker

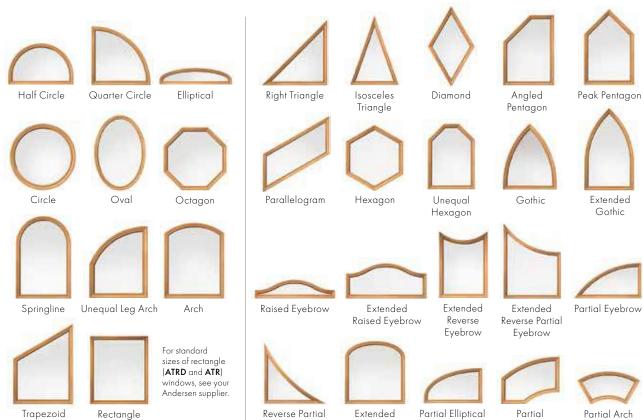
Eyebrow

Quarter Arch

SPECIALTY SHAPES

A-Series specialty windows are available in a variety of shapes and sizes. Profiles may vary dependent upon shape. Standard shapes include half circle, quarter circle, elliptical, circle, oval, octagon, Springline,™ unequal leg arch, arch, trapezoid and rectangle. Additional shapes, shown below on the right, are available by special order.

Elliptical

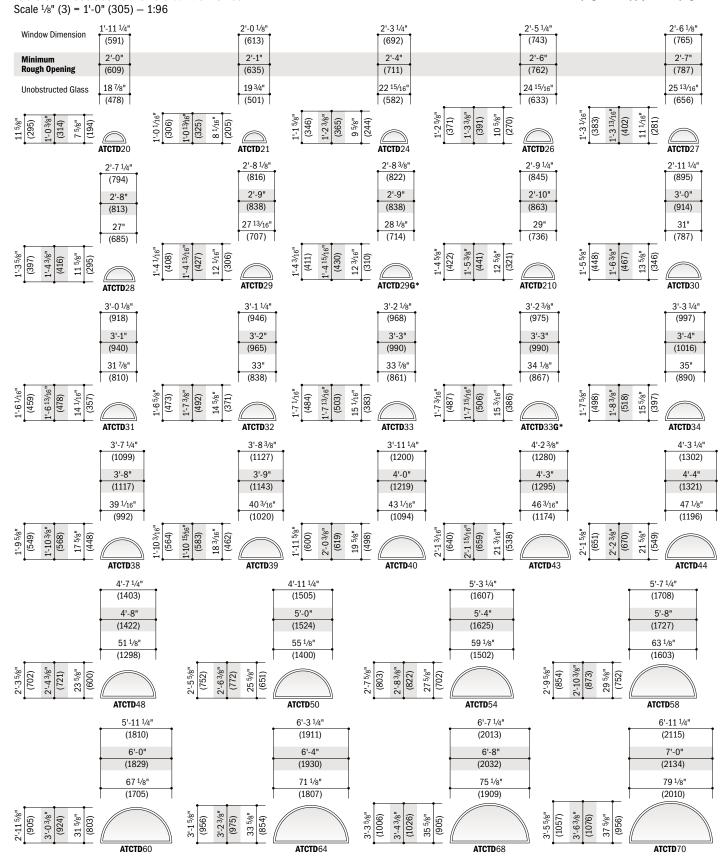


Eyebrow

Dimensions in parentheses are in millimeters.

Table of Direct-Set Half Circle Window Sizes

Notes on the next page also apply to this page.



^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

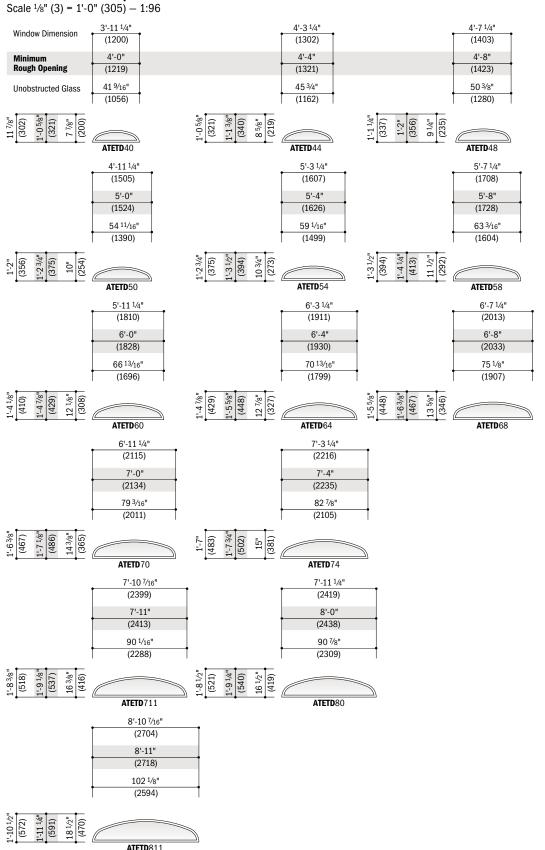
[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

^{*}Sized to fit over a stationary A-Series gliding patio door.



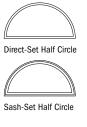
Table of Direct-Set Elliptical Window Sizes





Custom-size windows are available in $^{1}/8"$ (3) increments.

Contact your Andersen supplier for more information.





Sash-Set Elliptical

Direct-set half circle (ATCTD) and direct-set elliptical (ATETD) window sizes shown. Use window and minimum rough opening dimensions shown for sash-set half circle (ATCT) and sash-set elliptical (ATET) window sizes. For sash-set unobstructed glass dimensions, see page 78.

All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown on page 73.

Details shown on page 111.

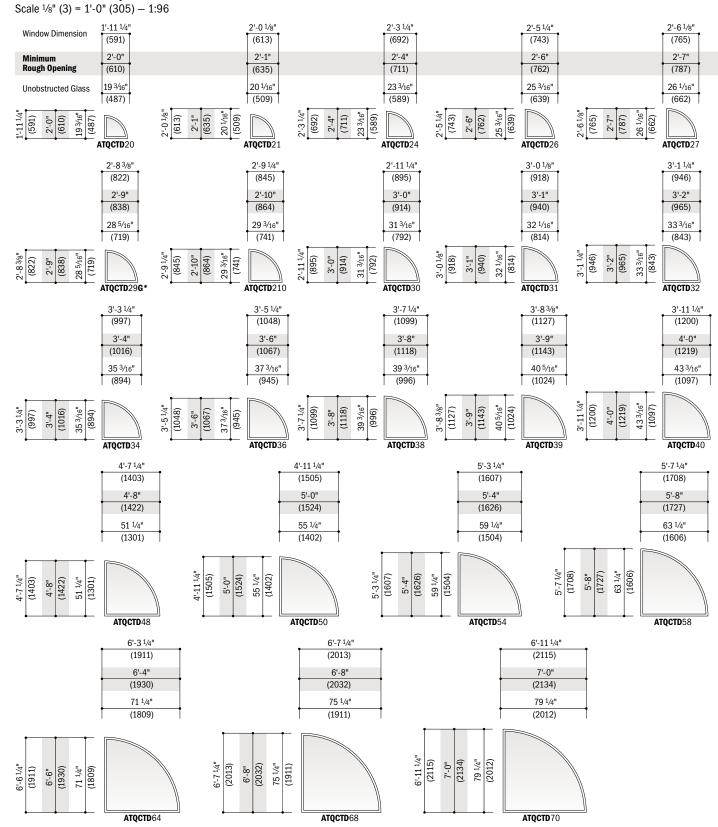
 [&]quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

Table of Direct-Set Quarter Circle Window Sizes

Notes on the next page also apply to this page.



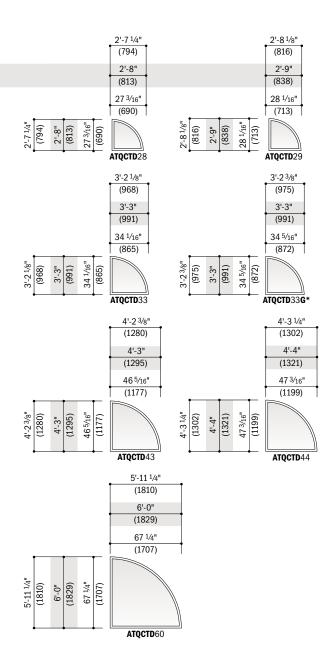
^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

^{*}Sized to fit over a stationary A-Series gliding patio door.

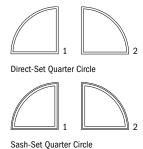






Custom-size windows are available in 1/8" (3) increments.

Contact your Andersen supplier for more information.



Direct-set quarter circle (ATQCTD) window sizes shown. Choose left facing (1) or right facing (2) as viewed from the exterior. Use window and minimum rough opening dimensions shown for sash-set quarter circle (**ATQCT**) window sizes. For sash-set unobstructed glass dimensions, see page 79.

All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown below. Details shown on page 111.

Grille Patterns

	Colonial	Renaissance	Sunburst
Half Circle			
Quarter Circle			
Elliptical			

Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes. Specified equal light and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.



Custom Examples

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

^{*}Sized to fit over a stationary A-Series gliding patio door.

Table of Direct-Set Unequal Leg Arch Window Sizes Notes on the next page also apply to this page. Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96 1'-3 1/4" 1'-7 1/4" 1'-11 1/4" 2'-0 1/8" 2'-3 1/4" 2'-5 1/4" 2'-6 1/8" 2'-7 1/4" 2'-8 1/8" 2'-8 3/8" Window Dimension (387) (489) (591) (613) (692) (743) (765) (794) (816) (822) 1'-4" 1'-8" 2'-0" 2'-4" 2'-7" 2'-9" 2'-9" 2'-1" 2'-6" 2'-8" Minimum **Rough Opening** (406) (508) (610) (635) (711) (762) (787) (813) (838) (838) **CUSTOM SIZES AVAILABLE** 42"(1067) Radius 36"(914) 60" (1524) 60" (1524) 60" (1524) 66" (1676) Chord Height **CUSTOM SIZES AVAILABLE** 1'-8" (508) (488)1'-9 1/4" 1'-10" (226) (437)13 5/8" (346) 1/4" (591)2'-0" (019) 16 3/4" (425) 15 5/8" (397) 16 1/8" (410) 16" (406) 1/4" (711) (692)19 5/8" (498) 18 7/8" (480) 2'-31 564) 20" 507 1/4" (813) 2'-8" 24 3/4" (628) 24 1/8" (613) 23 5/8" (600) (641)24" (609) 22 7/8 (582) 22 ATUD2028 ATUD2128 ATUD2628 ATUD2828 ATUD2928 ATUD2928G* 14" 3'-0" (914)31 7/8" (810) 28 1/8" 26 7/8" (683) (892) 4 283/4" 5/8 28" **ATUD**1830 **ATUD**2030 **ATUD**2130 **ATUD**2430 ATUD2630 **ATUD**2730 **ATUD**2830 **ATUD**2930 ATUD2930G* 3'-3 1/4" 3'-7 1/4" 3'-8 3/8" 3'-11 1/4" 4'-2 3/8" 4'-3 1/4" 4'-7 1/4" Window Dimension (997)(1099)(1127)(1200)(1280)(1302)(1403)3'-4" 3'-8" 3'-9" 4'-0" 4'-3" 4'-4" 4'-8" Minimum **Rough Opening** (1219) (1295) (1321) (1422) (1016) (1118) (1143) **CUSTOM SIZES AVAILABLE** 96"(2438) 96"(2438) 96"(2438) 108"(2743) 108"(2743) 120"(3048) Radius 15/16" (329) (316) Chord Height **CUSTOM SIZES AVAILABLE** (208) 1-8" Shoulder Height 1'-9 1/4" (437) (223) 1'-10" 8 ^{13/16}" (224) 7 3/4" (198) 11" (279) 1'-11 1/4" (591) 2'-0" (610) $\frac{10^{13/16}}{(275)}$ 10 ⁵/₁₆" (262) 12 3/8" (314) 13" **ATUD**3920 ATUD4320 ATUD4420 **ATUD**4820 1/4" (692) (711)(350) 2'-3 17" 431) **ATUD**3424 **ATUD**3824 **ATUD**3924 **ATUD**4024 **ATUD**4324 **ATUD**4424 **ATUD**4824 ¹4 (813) 2'-8" 21 1/2" (547) 20 3/8" (518) 18 3/4" 21" (533) $18^{13/16}$ ATUD3428 ATUD3828 ATUD3928 ATUD4028 ATUD4328 ATUD4428 ATUD4828 14" (914) 3-0" 25 1/2" (648) 22 3/4" (579) (619) 25" (634) 21 3/4 (553)

ATUD3930

ATUD4030

ATUD4430

ATUD4330

ATUD4830

ATUD3830

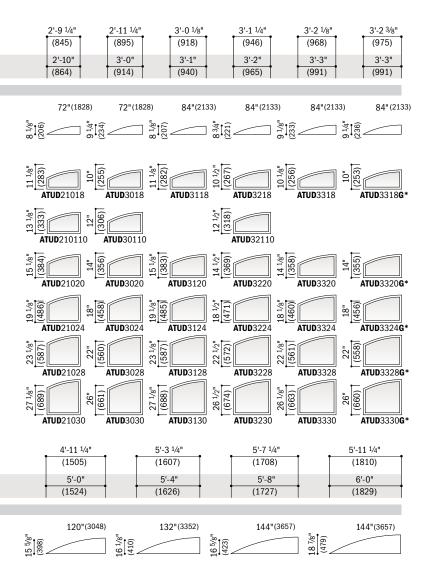
^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

^{*}Sized to fit over a stationary A-Series gliding patio door.

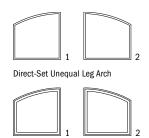






Custom-size windows are available in 1/8" (3) increments.

Contact your Andersen supplier for more information.



Sash-Set Unequal Leg Arch

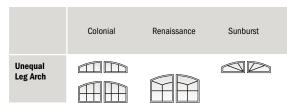
Direct-set unequal leg arch (ATUD) window sizes shown.

Choose left facing (1) or right facing (2) as viewed from the exterior. Use window and minimum rough opening dimensions shown for sash-set unequal leg arch (ATU) window sizes.

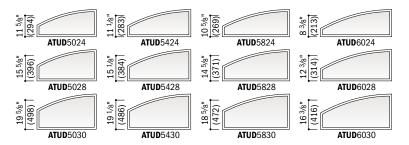
All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown below. Details shown on page 111.

Grille Patterns



Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes. Specified equal light and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.



 $[\]mbox{\ \ }$ "Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

^{*}Sized to fit over a stationary A-Series gliding patio door.

SPECIALTY WINDOWS

Table of Direct-Set Octagon Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	1'-11 1/4"	2'-3 1/4"	2'-11 1/4"	3'-11 ¹ /4"	5'-11 ¹ / ₄ "
Willdow Diffielision	(591)	(692)	(895)	(1200)	(1810)
Minimum	2'-0"	2'-4"	3'-0"	4'-0"	6'-0"
Rough Opening	(610)	(711)	(914)	(1219)	(1829)
Unobstructed Glass	19 1/4"	23 1/4"	31 1/4"	43 1/4"	67 1/4"
	(489)	(591)	(794)	(1099)	(1708)

ATOCD30

ATOCD24

ATOCD40

ATOCD60



Custom-size octagon and circle windows are available in 1/8" (3) increments. Contact your Andersen supplier for more information. Oval windows are not available in custom sizes.

Table of Direct-Set Circle Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

	ACRD20	ACRD24	ACRD30	ACRD40	ACRD60
	(489)	(591)	(794)	(1099)	(1708)
Unobstructed Glass	19 1/4"	23 1/4"	31 1/4"	43 1/4"	67 1/4"
Rough Opening	(610)	(711)	(914)	(1219)	(1829)
Minimum	2'-0"	2'-4"	3'-0"	4'-0"	6'-0"
WINDOW DIMENSION	(591)	(692)	(895)	(1200)	(1810)
Window Dimension	1'-11 ¹ /4"	2'-3 1/4"	2'-11 1/4"	3'-11 1/4"	5'-11 1/4"





Direct-Set Octagon

Sash-Set Octagon





Direct-Set Circle

Sash-Set Circle

Table of Direct-Set Oval Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	1'-7 ¹ / ₄ " (489)	1'-11 ¹ / ₄ " (591)	2'-11 ¹ / _{4"} (895)
Minimum Rough Opening	1'-8"	2'-0" (610)	3'-0" (914)
Unobstructed Glass	15 ½" (387)	19 1/4" (489)	31 ¹ / ₄ " (794)
2:31/4" (692) 2:4" (711) 231/4"	OVLD 1824	2-1114" (895) 3-0" (914) 3114" (794)	4'-7 ½" (1403) 4'-8" (1422) (1422) (1302) (1302)
	2'-3 1/4" (692) 2'-4" (711) 23 1/4" (591)	2'-11 \(^1/4''\) (895) 3'-0'' (914) 31 \(^1/4''\) (794)	4'-7 ¹ / ₄ " (1403) 4'-8" (1422) 51 ¹ / ₄ " (1302)
17 1/4" (489) 1-8" (508) 15 1/4"	OVLD2418	1-11 14" (591) (1914" (1914" (1914") (1914")	2'-11'44" (895) 3-0" (914) (794) (794)

Direct-set octagon (ATOCD) and direct-set circle (ACRD) window sizes shown. Use window and minimum rough opening dimensions shown for sash-set octagon (ATOC) and sash-set circle (ACR) window sizes. For sash-set unobstructed glass dimensions, see page 79. All sizes shown, along

with custom sizes, are available with PG upgrade.



Direct-Set Oval

Oval windows are available direct-set only, and can be installed either vertically or horizontally. All sizes shown are available with PG upgrade.

Details shown on page 111.

Grille patterns are available in colonial, Renaissance, sunburst, specified equal light and custom patterns. For more grille options, see page 19 or visit andersenwindows.com/grilles.









^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[·] Dimensions in parentheses are in millimeters.



Direct-Set Half Circle Window Area Specifications

Window Number	Ar	ess ea t./(m²)
ATCTD20	0.75	(0.07)
ATCTD21	0.83	(0.08)
ATCTD24	1.15	(0.11)
ATCTD26	1.39	(0.13)
ATCTD27	1.50	(0.14)
ATCTD28	1.65	(0.15)
ATCTD29	1.77	(0.16)
ATCTD29G	1.80	(0.17)
ATCTD210	1.93	(0.18)
ATCTD30	2.23	(0.21)
ATCTD31	2.37	(0.22)
ATCTD32	2.55	(0.24)
ATCTD33	2.70	(0.25)
ATCTD33G	2.75	(0.26)
ATCTD34	2.90	(0.27)
ATCTD38	3.66	(0.34)
ATCTD39	3.89	(0.36)
ATCTD40	4.50	(0.42)
ATCTD43	5.22	(0.49)
ATCTD44	5.43	(0.50)
ATCTD48	6.45	(0.60)
ATCTD50	7.56	(0.70)
ATCTD54	8.75	(0.81)
ATCTD58	10.03	(0.93)
ATCTD60	11.40	(1.06)
ATCTD64	12.86	(1.19)
ATCTD68	14.40	(1.34)
ATCTD70	16.03	(1.49)

[•] Dimensions in parentheses are in square meters.

Direct-Set Elliptical Window Area Specifications

aroa opoomoationo			
Window Number	Glass Area Sq. Ft./(m²)		
ATETD40	1.69	(0.16)	
ATETD44	2.01	(0.19)	
ATETD48	2.57	(0.24)	
ATETD50	2.86	(0.27)	
ATETD54	3.41	(0.32)	
ATETD58	3.98	(0.37)	
ATETD60	4.27	(0.40)	
ATETD64	4.82	(0.45)	
ATETD68	5.60	(0.52)	
ATETD70	6.26	(0.58)	
ATETD74	6.62	(0.62)	
ATETD711	7.92	(0.74)	
ATETD80	8.00	(0.74)	
ATETD811	10.13	(0.94)	

[•] Dimensions in parentheses are in square meters.

Direct-Set Octagon Window Area Specifications

	-	
Window Number	Glass Area Sq. Ft./(m²)	
ATOCD20	2.13	(0.20)
ATOCD24	3.11	(0.29)
ATOCD30	5.62	(0.52)
ATOCD40	10.76	(1.00)
ATOCD60	26.02	(2.42)

[•] Dimensions in parentheses are in square meters.

Direct-Set Circle & Oval Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)	
ACRD20	2.02	(0.19)
ACRD24	2.95	(0.27)
ACRD30	5.33	(0.49)
ACRD40	10.20	(0.95)
ACRD60	24.67	(2.29)
AOVLD1824/AOVLD2418	1.93	(0.18)
AOVLD2030/AOVLD3020	3.27	(0.30)
AOVLD 3048/ AOVLD 4830	8.71	(0.81)

[•] Dimensions in parentheses are in square meters.

Direct-Set Quarter Circle Window Area Specifications

ATQCTD20 1.90 (0.18) ATQCTD21 2.08 (0.19) ATQCTD24 2.80 (0.26) ATQCTD26 3.32 (0.31) ATQCTD27 3.56 (0.33) ATQCTD28 3.88 (0.36) ATQCTD29 4.14 (0.38) ATQCTD29G 4.22 (0.39) ATQCTD30 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33 6.14 (0.57) ATQCTD34 6.56 (0.61) ATQCTD34 6.56 (0.61) ATQCTD38 8.64 (0.80) ATQCTD38 8.64 (0.80) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50	Window Number	Glass Area Sq. Ft./(m²)	
ATQCTD24 2.80 (0.26) ATQCTD26 3.32 (0.31) ATQCTD27 3.56 (0.33) ATQCTD28 3.88 (0.36) ATQCTD29 4.14 (0.38) ATQCTD29 4.14 (0.38) ATQCTD29G 4.22 (0.39) ATQCTD210 4.49 (0.42) ATQCTD31 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33 6.14 (0.57) ATQCTD34 6.56 (0.61) ATQCTD35 7.34 (0.68) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD40 9.94 (0.92) ATQCTD41 11.89 (1.10) ATQCTD42 11.89 (1.10) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD20	1.90	(0.18)
ATQCTD26 3.32 (0.31) ATQCTD27 3.56 (0.33) ATQCTD28 3.88 (0.36) ATQCTD29 4.14 (0.38) ATQCTD29G 4.22 (0.39) ATQCTD210 4.49 (0.42) ATQCTD30 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD38 8.16 (0.76) ATQCTD38 8.64 (0.80) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 <th>ATQCTD21</th> <th>2.08</th> <th>(0.19)</th>	ATQCTD21	2.08	(0.19)
ATQCTD27 3.56 (0.33) ATQCTD28 3.88 (0.36) ATQCTD29 4.14 (0.38) ATQCTD29G 4.22 (0.39) ATQCTD210 4.49 (0.42) ATQCTD31 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD34 6.56 (0.61) ATQCTD38 8.16 (0.76) ATQCTD38 8.64 (0.80) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD40 11.89 (1.10) ATQCTD41 11.89 (1.10) ATQCTD42 11.89 (1.10) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD45 16.31 (1.52) ATQCTD56 16.31 (1.52) ATQCTD57 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD24	2.80	(0.26)
ATQCTD28 3.88 (0.36) ATQCTD29 4.14 (0.38) ATQCTD29G 4.22 (0.39) ATQCTD210 4.49 (0.42) ATQCTD31 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD38 8.64 (0.80) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD40 11.45 (1.06) ATQCTD41 11.89 (1.10) ATQCTD42 11.89 (1.10) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD45 16.31 (1.52) ATQCTD56 16.31 (1.52) ATQCTD57 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD26	3.32	(0.31)
ATQCTD29 4.14 (0.38) ATQCTD29G 4.22 (0.39) ATQCTD210 4.49 (0.42) ATQCTD30 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD38 8.16 (0.76) ATQCTD38 8.64 (0.80) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68<	ATQCTD27	3.56	(0.33)
ATQCTD29G 4.22 (0.39) ATQCTD210 4.49 (0.42) ATQCTD31 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD40 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD55 21.44 (1.99) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD28	3.88	(0.36)
ATQCTD210 4.49 (0.42) ATQCTD30 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD29	4.14	(0.38)
ATQCTD30 5.13 (0.48) ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD29G	4.22	(0.39)
ATQCTD31 5.43 (0.50) ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD40 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD210	4.49	(0.42)
ATQCTD32 5.83 (0.54) ATQCTD33 6.14 (0.57) ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD30	5.13	(0.48)
ATQCTD33 6.14 (0.57) ATQCTD336 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD34 6.56 (0.61) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD44 11.89 (1.10) ATQCTD45 16.31 (1.52) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD31	5.43	(0.50)
ATQCTD33G 6.23 (0.58) ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD32	5.83	(0.54)
ATQCTD34 6.56 (0.61) ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD33	6.14	(0.57)
ATQCTD36 7.34 (0.68) ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD33G	6.23	(0.58)
ATQCTD38 8.16 (0.76) ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD34	6.56	(0.61)
ATQCTD39 8.64 (0.80) ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD36	7.34	(0.68)
ATQCTD40 9.94 (0.92) ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD38	8.16	(0.76)
ATQCTD43 11.45 (1.06) ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD39	8.64	(0.80)
ATQCTD44 11.89 (1.10) ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD40	9.94	(0.92)
ATQCTD48 14.01 (1.30) ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD43	11.45	(1.06)
ATQCTD50 16.31 (1.52) ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD44	11.89	(1.10)
ATQCTD54 18.79 (1.75) ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD48	14.01	(1.30)
ATQCTD58 21.44 (1.99) ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD50	16.31	(1.52)
ATQCTD60 24.26 (2.25) ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD54	18.79	(1.75)
ATQCTD64 27.26 (2.53) ATQCTD68 30.43 (2.83)	ATQCTD58	21.44	(1.99)
ATQCTD 68 30.43 (2.83)	ATQCTD60	24.26	(2.25)
	ATQCTD64	27.26	(2.53)
ATQCTD 70 33.78 (3.14)	ATQCTD68	30.43	(2.83)
	ATQCTD70	33.78	(3.14)

[•] Dimensions in parentheses are in square meters.

Direct-Set Unequal Leg Arch Window Area Specifications

Williadiv Alca Specia	nications	
Window	Glass Area	
Number		t./(m²)
ATUD1418	1.11	(0.10)
ATUD 14110	1.27	(0.12)
ATUD1420	1.42	(0.13)
ATUD1424	1.74	(0.16)
ATUD1428	2.05	(0.19)
ATUD1430	2.36	(0.22)
ATUD1818	1.46	(0.14)
ATUD18110	1.67	(0.16)
ATUD1820	1.89	(0.18)
ATUD1824	2.31	(0.21)
ATUD1828	2.73	
	3.16	(0.25)
ATUD1830	_	(0.29)
ATUD2018	1.79	(0.17)
ATUD20110	2.06	(0.19)
ATUD2020	2.32	(0.22)
ATUD2024	2.86	(0.27)
ATUD2028	3.39	(0.32)
ATUD2030	3.93	(0.36)
ATUD 2118	1.91	(0.18)
ATUD2120	2.47	(0.23)
ATUD 2124	3.03	(0.28)
ATUD2128	3.59	(0.33)
ATUD2130	4.15	(0.39)
ATUD2418	2.13	(0.20)
ATUD24110	2.45	(0.23)
ATUD2420	2.78	(0.26)
ATUD2424	3.42	(0.32)
ATUD2428	4.07	(0.38)
ATUD2430	4.71	(0.44)
ATUD2618	2.26	(0.21)
ATUD26110	2.61	(0.24)
ATUD2620		
ATUD2624	2.96 3.66	(0.27)
		(0.34)
ATUD2628	4.36	(0.41)
ATUD2630 ATUD2718	5.06	(0.47)
	2.35	(0.22)
ATUD2720	3.08	(0.29)
ATUD2724	3.80	(0.35)
ATUD2728	4.53	(0.42)
ATUD2730	5.25	(0.49)
ATUD2818	2.42	(0.22)
ATUD28110	2.80	(0.26)
ATUD2820	3.18	(0.29)
ATUD2824	3.93	(0.37)
ATUD2828	4.69	(0.44)
ATUD 2830	5.45	(0.51)
ATUD2918	2.47	(0.23)
ATUD2920	3.25	(0.30)
ATUD2924	4.03	(0.37)
ATUD2928	4.81	(0.45)
ATUD2930	5.59	(0.52)
ATUD2918G	2.48	(0.23)
ATUD2920G	3.27	(0.30)
ATUD2924G	4.06	(0.38)
ATUD2928G	4.84	(0.45)
ATUD2930G		
	5.63	(0.52)
ATUD21018	2.58	(0.24)
ATUD210110	2.98	(0.28)
ATUD21020	3.39	(0.31)
ATUD21024	4.20	(0.39)

Window Number	Aı	ass ea
		t./(m²)
ATUD21028	5.01	(0.47)
ATUD21030	5.83	(0.54)
ATUD3018	2.68	(0.25)
ATUD30110	3.11	(0.29)
ATUD3020	3.55	(0.33)
ATUD3024	4.42	(0.41)
ATUD3028	5.28	(0.49)
ATUD3030	6.15	(0.57)
ATUD3118	2.83	(0.26)
ATUD3120	3.72	(0.35)
ATUD3124	4.61	(0.43)
ATUD3128	5.50	(0.51)
ATUD3130	6.40	(0.59)
ATUD3218	2.88	(0.27)
ATUD32110	3.35	(0.31)
ATUD3220 ATUD3224	3.81	(0.35)
	4.73	(0.44)
ATUD3228	5.66	(0.53)
ATUD3230	6.58	(0.61)
ATUD3318	2.93	(0.27)
ATUD3320 ATUD3324	3.88 4.82	(0.36)
		(0.45)
ATUD3328	5.77	(0.54)
ATUD3330	6.72	(0.62)
ATUD3318G	2.94	(0.27)
ATUD3320G	3.89	(0.36)
ATUD3324G	4.85	(0.45)
ATUD3328G	5.80	(0.54)
ATUD3330G	6.76	(0.63)
ATUD3418	2.98	(0.28)
ATUD34110	3.47	(0.32)
ATUD3420 ATUD3424	3.96	(0.37)
ATUD3428	4.94	(0.46)
ATUD3420 ATUD3430	5.92 6.90	(0.55)
ATUD3430 ATUD3818	3.27	(0.30)
ATUD3818	3.81	(0.35)
ATUD38110	4.36	(0.40)
ATUD3824	5.45	(0.51)
ATUD3828	6.54	(0.61)
ATUAD3830	7.63	(0.71)
ATUAD3918	3.31	(0.31)
ATUAD3920	4.43	(0.41)
ATUAD3924	5.55	(0.52)
ATUAD3928	6.67	(0.62)
ATUAD3930	7.79	(0.72)
ATUAD40110	4.00	(0.37)
ATUAD40110	4.60	(0.43)
ATUAD4024	5.80	(0.54)
ATUAD4028	7.00	(0.65)
ATUAD4020	8.20	(0.76)
ATUAD4318	4.92	(0.46)
	6.21	(0.58)
ATUAD 4320		(0.70)
ATUAD4320 ATUAD4324	7.50	(0.70)
ATUAD4320 ATUAD4324 ATUAD4328	7.50 8.79	(0.82)
ATUAD4320 ATUAD4324 ATUAD4328 ATUAD44110	7.50 8.79 4.31	(0.82)
ATUAD4320 ATUAD4324 ATUAD4328 ATUAD44110 ATUAD4420	7.50 8.79 4.31 4.97	(0.82) (0.40) (0.46)
ATUAD4320 ATUAD4324 ATUAD4328 ATUAD44110	7.50 8.79 4.31	(0.82)

[•] Dimensions in parentheses are in square meters.

continued on next page

Direct-Set Unequal Leg Arch Window Area Specifications (continued)

Window Number	Glass Area Sq. Ft./(m²)	
ATUAD4430	8.90	(0.83)
ATUAD 48110	4.61	(0.43)
ATUAD 4820	5.32	(0.49)
ATUAD4824	6.74	(0.63)
ATUAD4828	8.17	(0.76)
ATUAD 4830	9.59	(0.89)
ATUAD5024	7.01	(0.65)
ATUAD5028	8.54	(0.79)
ATUAD5030	10.08	(0.94)
ATUAD5424	7.45	(0.69)
ATUAD5428	9.09	(0.84)
ATUAD5430	10.74	(1.00)
ATUAD5824	7.87	(0.73)
ATUAD5828	9.63	(0.89)
ATUAD5830	11.38	(1.06)
ATUAD6024	8.05	(0.75)
ATUAD6028	9.91	(0.92)
ATUAD6030	11.78	(1.09)

[•] Dimensions in parentheses are in square meters.

Sash-Set Unequal Leg Arch Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)
ATU 1418	0.69 (0.06)
ATU 14110	0.81 (0.08)
ATU 1420	0.93 (0.09)
ATU1424	1.17 (0.11)
ATU1428	1.41 (0.13)
ATU 1430	1.65 (0.15)
ATU1818	0.98 (0.09)
ATU 18110	1.15 (0.11)
ATU1820	1.33 (0.12)
ATU1824	1.68 (0.16)
ATU1828	2.03 (0.19)
ATU1830	2.38 (0.22)
ATU2018	1.24 (0.12)
ATU 20110	1.47 (0.14)
ATU2020	1.70 (0.16)
ATU 2024	2.16 (0.20)

ATU 2120	1.83 (0.17)
ATU 2124	2.31 (0.21)
ATU2128	2.80 (0.26)
ATU2130	3.28 (0.30)
ATU2418	1.51 (0.14)
ATU 24110	1.80 (0.17)
ATU 2420	2.09 (0.19)
ATU2424	2.66 (0.25)
ATU2428	3.23 (0.30)
ATU2430	3.80 (0.35)
ATU2618	1.61 (0.15)
ATU 26110	1.92 (0.18)
ATU2620	2.24 (0.21)
ATU2624	2.86 (0.27)
ATU2628	3.49 (0.32)
ATU2630	4.12 (0.38)
ATU 2718	1.69 (0.16)
ATU 2720	2.34 (0.22)
ATU 2724	2.99 (0.28)
ATU2728	3.64 (0.34)
ATU 2730	4.30 (0.40)
ATU2818	1.74 (0.16)
ATU28110	2.08 (0.19)
ATU2820	2.42 (0.22)
ATU2824	3.10 (0.29)
ATU2828	3.79 (0.35)
ATU2830	4.47 (0.42)
ATU2918	1.77 (0.16)
ATU2920	2.48 (0.23)
ATU 2924	3.19 (0.30)
ATU2928	3.89 (0.36)
ATU2930	4.60 (0.43)
ATU2918G	1.78 (0.17)
ATU2920G	2.50 (0.23)
ATU2924G	3.21 (0.30)
ATU2928G	3.92 (0.36)
ATU2930G	4.64 (0.43)
ATU 21018	1.86 (0.17)

Glass

Area Sq. Ft./(m²)

2.62 (0.24)

3.08 (0.29)

1.34 (0.12)

Window Number

ATU2028

ATU2030

ATU2118

Window Number	Glass Area Sq. Ft./(m²)
ATU210110	2.23 (0.21)
ATU21020	2.60 (0.24)
ATU21024	3.34 (0.31)
ATU21028	4.08 (0.38)
ATU21030	4.82 (0.45)
ATU3018	1.93 (0.18)
ATU30110	2.33 (0.22)
ATU3020	2.73 (0.25)
ATU3024	3.52 (0.33)
ATU3028	4.32 (0.40)
ATU3030	5.11 (0.47)
ATU3118	2.06 (0.19)
ATU3120	2.88 (0.27)
ATU 3124	3.70 (0.34)
ATU3128	4.51 (0.42)
ATU3130	5.33 (0.50)
ATU3218	2.10 (0.20)
ATU 32110	2.53 (0.23)
ATU3220	2.95 (0.27)
ATU 3224	3.80 (0.35)
ATU 3228	4.65 (0.43)
ATU 3230	5.50 (0.51)
ATU 3318	2.13 (0.20)
ATU 3320	3.00 (0.28)
ATU3324	3.88 (0.36)
ATU3328	4.75 (0.44)
ATU3330	5.63 (0.52)
ATU3318G	2.14 (0.20)
ATU3320G	3.02 (0.28)
ATU3324G	3.90 (0.36)
ATU3328G	4.78 (0.44)
ATU3330G	5.66 (0.53)
ATU3418	2.16 (0.20)
ATU34110	2.62 (0.24)
ATU3420	3.07 (0.29)
ATU3424	3.98 (0.37)
ATU3428	4.88 (0.45)
ATUA 3430	5.79 (0.54)
ATUA 3818	2.38 (0.22)
ATUA 38110	2.89 (0.27)
ATUA 3820	3.40 (0.32)

Window Number	Ar	ass ea t./(m²)
ATUA 3824	4.42	(0.41)
ATUA 3828	5.43	(0.50)
ATUA 3830	6.45	(0.60)
ATUA 3918	2.41	(0.22)
ATUA 3920	3.46	(0.32)
ATUA 3924	4.50	(0.42)
ATUA 3928	5.55	(0.52)
ATUA 3930	6.60	(0.61)
ATUA 40110	3.02	(0.28)
ATUA 4020	3.58	(0.33)
ATUA 4024	4.71	(0.44)
ATUA 4028	5.84	(0.54)
ATUA 4030	6.96	(0.65)
ATUA 4318	3.85	(0.36)
ATUA 4320	5.06	(0.47)
ATUA 4324	6.28	(0.58)
ATUA 4328	7.49	(0.70)
ATUA 44110	3.26	(0.30)
ATUA 4420	3.88	(0.36)
ATUA 4424	5.12	(0.48)
ATUA 4428	6.36	(0.59)
ATUA 4430	7.60	(0.71)
ATUA 48110	3.49	(0.32)
ATUA 4820	4.17	(0.39)
ATUA 4824	5.52	(0.51)
ATUA 4828	6.87	(0.64)
ATUA 4830	8.22	(0.76)
ATUA 5024	5.72	(0.53)
ATUA 5028	7.18	(0.67)
ATUA5030	8.64	(0.80)
ATUA 5424	6.09	(0.57)
ATUA 5428	7.66	(0.71)
ATUA5430	9.23	(0.86)
ATUA5824	6.45	(0.60)
ATUA 5828	8.13	(0.76)
ATUA 5830	9.81	(0.91)
ATUA 6024	6.56	(0.61)
ATUA 6028	8.36	(0.78)
ATUA 6030	10.15	(0.94)
Dimensions in parentheses are	in square	e meters.

Sash-Set Half Circle Window Unobstructed Glass Dimensions and Area Specifications

Window Number	Unobst Gla Wic Inches	ss Ith	Unobst Gla Hei Inches	iss ght	Α	ass rea t./(m²)
ATCT20	15 ³ / ₁₆ "	(386)	5"	(126)	0.38	(0.04)
ATCT21	16 1/8"	(410)	5 7/16"	(137)	0.44	(0.04)
ATCT24	19 1/2"	(495)	7"	(177)	0.69	(0.06)
ATCT26	21 9/16"	(548)	8"	(202)	0.88	(80.0)
ATCT27	22 1/2"	(572)	8 7/16"	(214)	0.97	(0.09)
ATCT28	23 11/16"	(601)	9"	(228)	1.09	(0.10)
ATCT29	24 9/16"	(624)	9 7/16"	(239)	1.19	(0.11)
ATCT29G	24 13/16"	(631)	9 9/16"	(242)	1.22	(0.11)
ATCT210	25 1/8"	(654)	10"	(253)	1.32	(0.12)
ATCT30	27 13/16"	(706)	11"	(279)	1.57	(0.15)
ATCT31	28 11/16"	(729)	11 7/16"	(290)	1.69	(0.16)
ATCT32	29 7/8"	(758)	12"	(304)	1.85	(0.17)
ATCT33	30 3/4"	(781)	12 7/16"	(315)	1.98	(0.18)
ATCT33G	31"	(788)	12 9/16"	(318)	2.02	(0.19)

Window Number	Unobstructed Glass Width Inches/(mm)		Unobst Gla Hei Inches	iss ght	Glass Area Sq. Ft./(m²)		
ATCT34	31 15/16"	(810)	13"	(329)	2.15	(0.20)	
ATCT38	36"	(914)	15"	(380)	2.81	(0.26)	
ATCT39	37 1/8"	(943)	15 9/16"	(395)	3.01	(0.28)	
ATCT40	40 1/16"	(1017)	17"	(431)	3.56	(0.33)	
ATCT43	43 3/16"	(1098)	18 9/16"	(471)	4.21	(0.39)	
ATCT44	44 1/8"	(1120)	19"	(482)	4.40	(0.41)	
ATCT48	48 1/8"	(1223)	21"	(533)	5.32	(0.49)	
ATCT50	52 ³ / ₁₆ "	(1325)	23"	(583)	6.33	(0.59)	
ATCT54	56 ³ / ₁₆ "	(1428)	25"	(634)	7.43	(0.69)	
ATCT58	60 1/4"	(1530)	27"	(685)	8.62	(0.80)	
ATCT60	64 1/4"	(1632)	29"	(736)	9.89	(0.92)	
ATCT64	68 1/4"	(1734)	31"	(787)	11.25	(1.04)	
ATCT68	72 5/16"	(1836)	33"	(837)	12.70	(1.18)	
ATCT70	76 5/16"	(1938)	35"	(888)	14.23	(1.32)	

[•] Dimensions in parentheses are in millimeters or square meters.

Sash-Set Elliptical Window Unobstructed Glass Dimensions and Area Specifications

Window Number	Unobstructed Glass Width Inches/(mm)		Unobst Gla Heig Inches	ss ght	Glass Area Sq. Ft./(m²)		
ATET40	36 1/2"	(927)	5 1/4"	(133)	0.94	(0.09)	
ATET44	40 3/4"	(1035)	6"	(152)	1.18	(0.11)	
ATET48	46 7/16"	(1179)	6 5/8"	(167)	1.63	(0.15)	
ATET50	50 5/8"	(1286)	7 3/8"	(187)	1.84	(0.17)	
ATET54	55 1/2"	(1410)	8 1/8"	(206)	2.30	(0.21)	
ATET58	60 1/16"	(1525)	8 7/8"	(225)	2.78	(0.26)	
ATET60	63"	(1601)	9 1/2"	(241)	3.01	(0.28)	
ATET64	67 1/8"	(1705)	10 1/4"	(260)	3.48	(0.32)	
ATET68	71 7/8"	(1826)	11"	(279)	4.17	(0.39)	
ATET 70	76 1/8"	(1934)	11 3/4"	(298)	4.74	(0.44)	
ATET74	79 3/8"	(2016)	12 3/8"	(314)	5.05	(0.47)	
ATET 711	86 11/16"	(2201)	13 3/4"	(348)	6.20	(0.58)	
ATET80	87 1/2"	(2222)	13 7/8"	(352)	6.27	(0.58)	
ATET 811	98 13/16"	(2509)	15 7/8"	(402)	8.18	(0.76)	

[·] Dimensions in parentheses are in millimeters or square meters.



Sash-Set Quarter Circle Window Unobstructed Glass Dimensions and Area Specifications

Window Number	Gla Wie	tructed ass dth s/mm	Gla Hei	tructed ass ght s/mm	Glass Area Sq. Ft./(m²)	
ATQCT20	16 5/16"	(414)	16 5/16"	(414)	1.33	(0.12)
ATQCT21	17 3/16"	(437)	17 3/16"	(437)	1.48	(0.14)
ATQCT24	20 3/8"	(517)	20 3/8"	(517)	2.10	(0.19)
ATQCT26	22 3/8"	(568)	22 3/8"	(568)	2.55	(0.24)
ATQCT27	23 1/4"	(591)	23 1/4"	(591)	2.76	(0.26)
ATQCT28	24 3/8"	(620)	24 3/8"	(620)	3.04	(0.28)
ATQCT29	25 1/4"	(642)	25 1/4"	(642)	3.27	(0.30)
ATQCT29G	25 1/2"	(648)	25 1/2"	(648)	3.34	(0.31)
ATQCT210	26 7/16"	(671)	26 7/16"	(671)	3.58	(0.33)
ATQCT30	28 7/16"	(722)	28 7/16"	(722)	4.16	(0.39)
ATQCT31	29 5/16"	(744)	29 5/16"	(744)	4.43	(0.41)
ATQCT32	30 7/16"	(773)	30 7/16"	(773)	4.79	(0.44)
ATQCT33	31 5/16"	(795)	31 5/16"	(795)	5.08	(0.47)
ATQCT33G	31 9/16"	(802)	31 9/16"	(802)	5.16	(0.48)
ATQCT34	32 7/16"	(824)	32 7/16"	(824)	5.46	(0.51)
ATQCT36	34 7/16"	(875)	34 7/16"	(875)	6.17	(0.57)
ATQCT38	36 7/16"	(926)	36 7/16"	(926)	6.93	(0.64)
ATQCT39	37 9/16"	(955)	37 9/16"	(955)	7.37	(0.68)
ATQCT40	40 7/16"	(1028)	40 7/16"	(1028)	8.57	(0.80)
ATQCT43	43 5/8"	(1107)	43 5/8"	(1107)	9.98	(0.93)
ATQCT44	44 1/2"	(1130)	44 1/2"	(1130)	10.39	(0.97)
ATQCT48	48 1/2"	(1232)	48 1/2"	(1232)	12.38	(1.15)
ATQCT50	52 1/2"	(1333)	52 1/2"	(1333)	14.55	(1.35)
ATQCT54	56 1/2"	(1435)	56 1/2"	(1435)	16.89	(1.57)
ATQCT58	60 1/2"	(1537)	60 1/2"	(1537)	19.41	(1.80)
ATQCT60	64 1/2"	(1639)	64 1/2"	(1639)	22.10	(2.05)
ATQCT64	68 1/2"	(1740)	68 1/2"	(1740)	24.97	(2.32)
ATQCT68	72 1/2"	(1842)	72 1/2"	(1842)	28.01	(2.60)
ATQCT70	76 1/2"	(1944)	76 1/2"	(1944)	31.22	(2.90)

[•] Dimensions in parentheses are in millimeters or square meters.

Sash-Set Octagon & Circle Window Unobstructed Glass Dimensions and Area Specifications

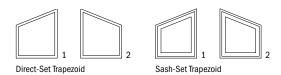
Window Number	Unobstructed Glass Width Inches/(mm)	Unobstructed Glass Height Inches/(mm)	Glass Area Sq. Ft./(m²)		
ATOC20	16 5/8" (421)	16 5/8" (421)	1.58 (0.15)		
ATOC24	20 5/8" (523)	20 5/8" (523)	2.44 (0.23)		
ATOC 30	28 5/8" (726)	28 5/8" (726)	4.70 (0.44)		
ATOC40	40 5/8" (1031)	40 5/8" (1031)	9.48 (0.88)		
ATOC 60	64 5/8" (1641)	64 5/8" (1641)	24.00 (2.23)		
ACR20	16 ⁵ / ₈ " (421)	16 5/8" (421)	1.50 (0.14)		
ACR24	20 5/8" (523)	20 5/8" (523)	2.31 (0.21)		
ACR30	28 5/8" (726)	28 5/8" (726)	4.46 (0.41)		
ACR40	40 5/8" (1031)	40 5/8" (1031)	8.99 (0.83)		
ACR60	64 5/8" (1641)	64 5/8" (1641)	22.76 (2.11)		

[•] Dimensions in parentheses are in millimeters or square meters.

Custom-Sized Trapezoid Windows



Trapezoid windows are available in custom sizes in 1/8" (3) increments.



Available direct-set or sash-set. Choose left facing (1) or right facing (2) as viewed from the exterior. Available with PG upgrade.

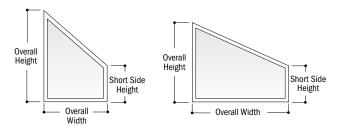
Design Criteria

Listed below are some factors that must be considered when deciding on a custom-size trapezoid window.

Minimum and Maximum Limits

Trapezoid windows may be assembled in custom sizes with these limitations:

- · MAXIMUM FRAME AREA: 65 sq. ft. or 6.04 m² for Low-E4* tempered glass
- · Square footage is based on a square or rectangular shape
- · For direct-set windows, no side may be less than 6" (152) and is dependent on slope
- \cdot For sash-set windows, no side may be less than 8 $^{1}/_{2}\text{"}$ (216) and is dependent on slope
- · Minimum cut angle is 12°



Specify overall width at sill, overall height, and short side height.

Slope is often designed to match a roof's pitch. Contact your Andersen supplier for more information.

Details shown on page 111.

Grille patterns are available in custom patterns. For more grille options, see page 19 or visit **andersenwindows.com/grilles**.

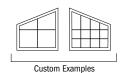


Table of Direct-Set Arch Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on page 85 also apply to this page.

ocale 78	5 (5) - 1	-0 (303) – 1.90								
Minimun	Dimension n		1'-11 ¹ / ₄ " (591) 2'-0"	2'-0 ½" (613) 2'-1"	2'-3 ¹ / ₄ " (692) 2'-4"	2'-5 ¹ / ₄ " (743) 2'-6"	2'-6 ¹ / ₈ " (765) 2'-7"	2'-7 ¹ / ₄ " (794) 2'-8"	2'-8 ¹ / ₈ " (816) 2'-9"	2'-8 ³ / ₈ " (822) 2'-9"	2'-9 ¹ / ₄ " (845) 2'-10"
Rough 0			(610) 19 ½"	(635) 20 ½"	(711) 23 ½"	(762) 25 ½4"	(787) 26 ½"	(813) 27 ½"	(838) 28 ½"	(838) 28 ³ /8"	(864) 29 ¹ / ₄ "
Unobstru	icted Glass		(489)	(511)	(591)	(641)	(664)	(692)	(714)	(721)	(743)
Window	hoidht	Radius	24"(610	30"(762)) 30"(762) 30"(762	36"(914) 36"(914	36"(914)	36"(914)	36"(914)
shown in		Chord Height	#. (9)	$ \int_{0}^{2} \frac{17/32}{(64)} $	(83)	3 13/16"	3 5/16"	3 9/16"	(96)	3 27/32"	(103)
ght + 3/4" (19)	eight – 4" (102)	Shoulder Height 4"	ATAD2010	1-1 55/32 (350) (320) (320)	TAD2410	17-3 1/16 (382) ATAD2610	ATAD2710	1-2 13/16 (376) ATAD 2810	T-3 1/32 (382) (382) (382) (382)	ATAD2910G*	#91/9 82 888 ATAD21010
; = window hei	ass = window height - 4" (102) CUSTOM SIZES AVAILABLE	Shoule 23 1/4" (591)	#\f\ \(\frac{1}{2}\) \(\frac{1}\) \(\frac{1}{2}\) \(\frac{1}{2	TAD2120	TAD2420	TAD2620	2-2 9/16 ATAD 2720	22 13/16" (681) (681) (781)	T-3 1/32 ATAD2920	**************************************	### ATAD21020
Minimum Rough Opening = window height + 3/4"	Unobstructed Glass = window height - 4" (102) CUSTOM SIZES AVAILABLE	27 1/4"	#\frac{1}{4} \frac{1}{1} \frac{1} \frac{1}{1} \frac{1}{1} \frac{1}{1} \frac{1}{1} \frac{1}	ZE, 25-25 ATAD2124	TAD2424	"91/1 L'.7 ATAD2624	#91/6 9-17 ATAD 2724	75-6 13/16" ATAD2824	TAD2924	TAD2924G*	## (GG) ATAD21024
Minimum	ח	31 1/4"	210 1/4" (870) ATAD 2028	#25/32 6-,2 ATAD2128	#25/10 17.32 ATAD2428	#9 ¹ / ₁ 11-7 ATAD2628	ATAD2728	2-10 13/16". (884) (884)	TAD2928	TAD2928G*	Z-11 5/16" 883 ATAD21028
		35 1/4" (895)	3,77 C-16 (226) ATAD 2030	$\begin{array}{c} 31.26/32.\\ (060) \\ \text{ATAD} \\ 2130 \\ \end{array}$	#25/12-18 (826) ATAD2430	33 1/1e" (865) ATAD2630	3'-2 9/16" ATAD 2730	#91/51 2-16 (986) ATAD2830	33 1/32" (991) (991) (991)	28/8 8-8 ATAD2930G*	#91/g·€-1.6 (66) ATAD21030
		39 1/4"	#\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		#26/21 9-18 ATAD2434	3-71/16" (1094) ATAD2634		36 13/16" ATAD2834			ATAD21034
		43 1/4" (1099)	3-10 1/4" (1175) ATAD 2038		3-10 17/32" (1182) ATAD2438	31.11/16" (1195) ATAD 2638		3'-10 13/16" (1189) ATAD 2838			$3.11 \frac{1}{2} \sqrt{1202}$ $3.11 \frac{1}{2} \sqrt{1202}$ ATAD 21038
		47 1/4" (1200)	4-2 1/4" (1276) ATAD 2040		4.2 17/32" (1283) (1283) ATAD 2440	4'-3 1/16" (1297) ATAD 2640		$4.2 ^{13} \! / _{16}^{u}$			4'-3 5/16" (1303) (1303)
		51 1/4" (1302)	41-6 1/4" (1378) ATAD 2044		4-6 17 ₃₂ " (1385)	4-7 1/16" (1398) ATAD2644		46.13/16" (1392) ATAD 2844			4'-7 5/16" (1405) (1405) (1405)
		55 1/4" (1403)	4.10 1/4" (1480) ATAD 2048		4-10 17/32" (1486) (1488) ALAD	4-11 1/16" (1500) ATAD2648		4'-10 13/16" (1494)			4-11 \$/46" A-111 \$/407)

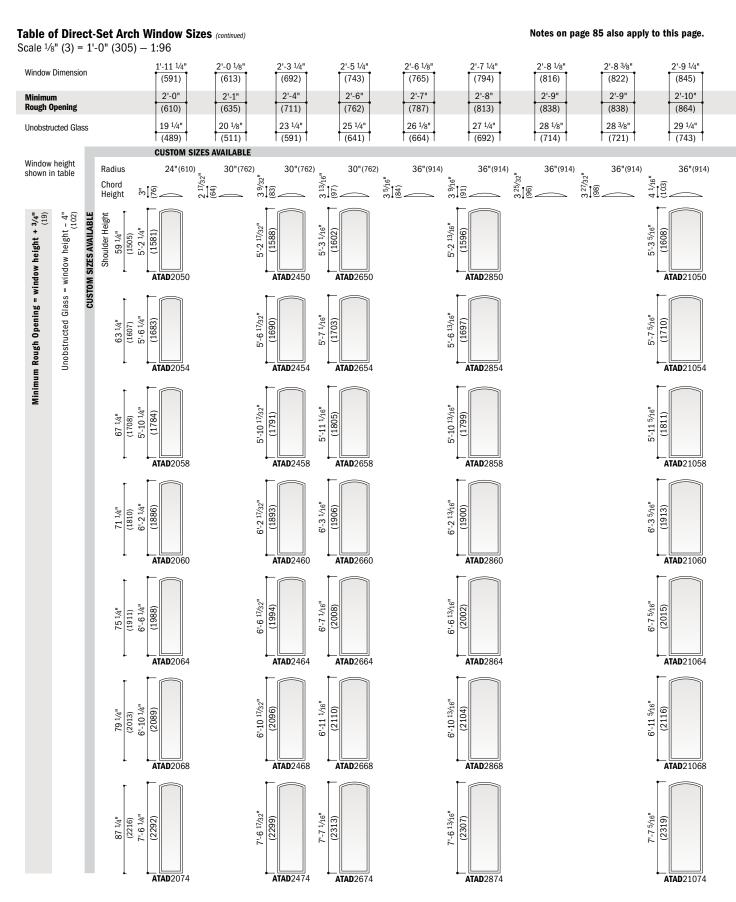
^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.
• Sized to fit over a stationary A-Series gliding patio door.



Notes on page 85 also apply to this page.

(895) 3'-0" (914) (31 ½4" 3 3	3'-1 1/4" 918) (946) 3'-1" (945) 3'-2" (965) 2 1/6" (845)	3'-2 ½" (968) (975) 3'-3" (991) (991) (991) (991) (987) (867) (3'-2 ½% (975) (975) (975) (975) (991) (991) (991) (987)	(997) 3'-4" (1016) 35 ½"	3'-7 1/4" (1099) 3'-8" (1118) 39 1/4" (997)	3'-8 3/8" (1127) 3'-9" (1143) 40 3/8" (1026)	3'-11 ¹ / ₄ " (1200) 4'-0" (1219) 43 ¹ / ₄ " (1099)	4'-2 ³ /8" (1280) 4'-3" (1295) 46 ³ /8" (1178)
1.3 7/8" 4 5/8" [403] (117) (117) (117) (117) (117) (117) (113) (113)	36"(914) 42"(1067) 42"(106	42"(1067) 42"(42"(1067) 42"(42"((409) (124)	1.4 13/32 5 5/32 (1219) 48" (1219	1.4 11/16, 5 7/16, 1 (1218) (421)	1.5 15/32 6 7/32 1 (158) 484 (1519) 484 (151	60"(1524) (453) (171) (1733) (1733) ATAD4310
2'-3 7/8" 2'-4 3/8" 2'-4 3/82" 2'-4 3/82"	D3120 ATAD3220	### ##################################	"8/1 4-7 ATAD3420	2'-4 13/32 (721) (721) (721)	2.4 11/16 (729) (729) (729) (729)	Z;-2 15/32 (148) ATAD4020	2. 4 25/32 " (731) (731) (731) (731) (731) (731) (731)
28 3/32" (809) (816) (816)	MD3124 ATAD3224	(80) ATAD3324 ATAD3324	#87 87-8 7-8 4 G* ATAD3424	ATAD3824	ATAD3924	## ATAD4024	".78 25/32 8-,78 25/32 ATAD4324
2 - 11 7/8" (911) 3 - 0 3/32" (917)	ATAD3228	### (917) ATAD3328 ATAD3328	(10) (10) (10) (10) (10) (10) (10) (10)	3-0 13/32 (654)	## (250) ATAD3928	ATAD4028	**************************************
3.378" 3.4378" 3.4332" 3.4332"	MD3130 E	3 - 3 7 8 - 3		3-4 13/32" (1026) (1026) (1027)	3-4 11/16" 3-4 11/16" (1033) (1033)	3:515/32 ATAD 4030	3.4 25/32" (1036) (1036)
#%/ CF1111 (4111) ATAD3034	"26/81 7.18 (8011) ATAD3234		1121) 8-E 1121) 8-E ATAD3434	31-8 13/35 ATAD3834		#26/31 6-18 (1120) ATAD4034	
3'-11 7'8" (1216) (1216) 3'-11 7'8"			44.0 1/8 1/8 1/8 1/8 1/8 1/8 1/8 1/8 1/8 1/8	4-013/32" (1229) ATAD 3838		4-1 15/32" (1256) (1256)	
4.3 7/8" (1317) (1317)	4.3 19/32" (1311)		## 1/8 (1)	4.4 13/32" (1331) (1331) (1331)		4-5 15/32" (1358) (1368)	
47.7 %" (1419) (1419) (1419)	**C5\(\frac{1}{19\(\frac{1}{2}\)}\) **TAD3244** **TAD3244***		1425) (1425) ATAD 3444	4-8 13/32" (1432) (1432)		4.9 16/32" (1460)	
4*-11 7/8** (1520) 8400000000000000000000000000000000000	4.11 19/32" (1514) ATAD3248		#8/t 0-19 ATAD 3448	#26-0 13/32 (1534) ATAD3848		#25/1 12/35 ATAD4048 continued on next page	

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.
• Sized to fit over a stationary A-Series gliding patio door.



^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

4'-2 3/8"

(1280)



3'-1 1/4"

(946)

3'-2 1/8"

(968)

3'-2 3/8"

(975)

3'-3 1/4"

(997)

3'-7 1/4"

(1099)

3'-83/8"

(1127)

3'-0 1/8"

(918)

2'-11 1/4"

(895)

Notes on page 85 also apply to this page.

3'-11 1/4"

(1200)

3'-0" (914) 31 ½" (794)	3'-1" 3'-2" (940) (965) 32 ½" (816) (845)	3'-3" 3'-3" (991) 34 1/8" 34 3/8" (867) (873)	3'-4" (1016) 35 ¹ / ₄ " (895)	3'-8" 3'-9" (1118) (1143) 39 1/4" 40 3/8 (1997) (1026)	(1219) 43 ½"	4'-3" (1295) 46 ³ / ₈ " (1178)
4 57/32" 4 27/32" 4 27/32"	36"(914) 45"(1007) 36"(914) 45"(1007) 42"(1007)	42" (1067) 42" (1067) 42" (1067)	42"(1067)	48"(1219) 48"((1219) 48"(1219) 25" (121) (12	60"(1524)
	ATAD3250	5'-41/8"	22	ATAD3850	12,52 15/25 12,52 15/25 ATAD4050	
1724) ATAD3054	(2121) ATAD 3254	51-8 1/8"	5'-8 13/52"		25-9 15/52 EDITION	
E-117/8" (1825)	25-11 19/32 ATAD 3258	6-01/8"	ATAD3458	ATAD3858	8.115/32" (1866) ATAD4058	
6-3 7/8" (1927) ATAD 3060	e-3 19/32 ⁿ (1920) ATAD 3260	6'-4.1/8"	6-4 13/32" (1940)	ATAD 3860	6-5 15/32" (1968) ATAD 4060	
*8/2 L-:9 ATAD3064	126/61 7-18 TAD3264	6-8 1/8"	.9	ATAD3864	6,-9 15/32" (2069) (2069) ATAD4064	
6'-11 7/8" (2130) (2130)	6'-11 19/ _{32"} (2124) ATAD3268	7.0 1/8"	5	ATAD3868	7.1 15/32" (2171) (2171) (2171) (ABOPPER)	
7-7 7/8" (2333)	7-719/32"	7-8 1/8"	7'-8 13/32"		(2374)	

ATAD3274

ATAD3474

ATAD3874

ATAD3074

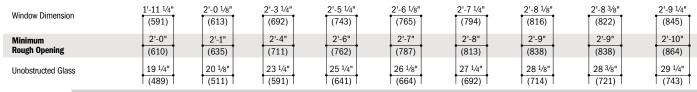
ATAD4074 continued on next page

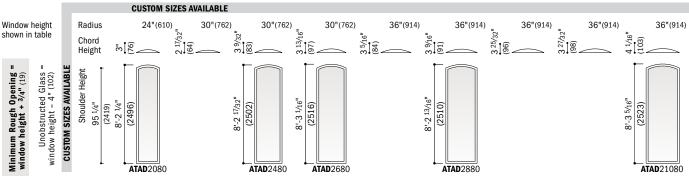
^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

Table of Direct-Set Arch Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on page 85 also apply to this page.





Direct-Set Arch Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)	Window Number	Glass Area Sq. Ft./(m²)
ATAD2010	1.27 (0.12)	ATAD2464	11.90 (1.11)
ATAD2020	2.88 (0.27)	ATAD2468	12.54 (1.17)
ATAD2024	3.41 (0.32)	ATAD2474	13.84 (1.29)
ATAD2028	3.95 (0.37)	ATAD 2480	15.13 (1.41)
ATAD2030	4.48 (0.42)	ATAD2610	1.77 (0.16)
ATAD2034	5.02 (0.47)	ATAD2620	3.87 (0.36)
ATAD2038	5.55 (0.52)	ATAD2624	4.57 (0.42)
ATAD 2040	6.09 (0.57)	ATAD2628	5.27 (0.49)
ATAD 2044	6.62 (0.62)	ATAD2630	5.98 (0.56)
ATAD2048	7.16 (0.66)	ATAD2634	6.68 (0.62)
ATAD2050	7.69 (0.71)	ATAD2638	7.38 (0.69)
ATAD 2054	8.23 (0.76)	ATAD 2640	8.08 (0.75)
ATAD2058	8.76 (0.81)	ATAD 2644	8.78 (0.82)
ATAD2060	9.29 (0.86)	ATAD2648	9.48 (0.88)
ATAD2064	9.83 (0.91)	ATAD2650	10.18 (0.95)
ATAD2068	10.36 (0.96)	ATAD2654	10.88 (1.01)
ATAD 2074	11.43 (1.06)	ATAD2658	11.59 (1.08)
ATAD2080	12.50 (1.16)	ATAD2660	12.29 (1.14)
ATAD 2110	1.28 (0.12)	ATAD 2664	12.99 (1.21)
ATAD2120	2.96 (0.27)	ATAD2668	13.69 (1.27)
ATAD2124	3.52 (0.33)	ATAD2674	15.09 (1.40)
ATAD2128	4.08 (0.38)	ATAD2680	16.50 (1.53)
ATAD2130	4.64 (0.43)	ATAD 2710	1.76 (0.16)
ATAD 2410	1.57 (0.15)	ATAD2720	3.94 (0.37)
ATAD2420	3.50 (0.33)	ATAD2724	4.66 (0.43)
ATAD 2424	4.15 (0.39)	ATAD2728	5.39 (0.50)
ATAD2428	4.79 (0.45)	ATAD 2730	6.11 (0.57)
ATAD 2430	5.44 (0.51)	ATAD 2810	1.87 (0.17)
ATAD2434	6.09 (0.57)	ATAD2820	4.14 (0.38)
ATAD2438	6.73 (0.63)	ATAD2824	4.90 (0.46)
ATAD 2440	7.38 (0.69)	ATAD2828	5.66 (0.53)
ATAD 2444	8.02 (0.75)	ATAD 2830	6.41 (0.60)
ATAD 2448	8.67 (0.81)	ATAD 2834	7.17 (0.67)
ATAD 2450	9.32 (0.87)	ATAD2838	7.93 (0.74)
ATAD 2454	9.96 (0.93)	ATAD 2840	8.68 (0.81)
ATAD2458	10.61 (0.99)	ATAD 2844	9.44 (0.88)
ATAD 2460	11.25 (1.05)	ATAD2848	10.20 (0.95)

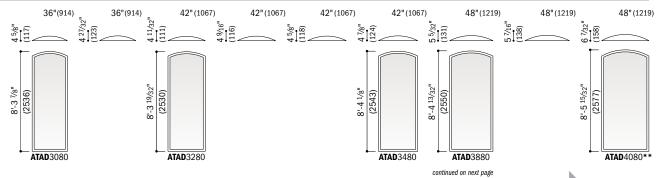
Window Number	Ar	ass ea t./(m²)
ATAD2850	10.95	(1.02)
ATAD2854	11.71	(1.09)
ATAD2858	12.47	(1.16)
ATAD2860	13.22	(1.23)
ATAD2864	13.98	(1.30)
ATAD2868	14.74	(1.37)
ATAD2874	16.25	(1.51)
ATAD2880	17.77	(1.65)
ATAD2910	1.96	(0.18)
ATAD2920	4.30	(0.40)
ATAD2924	5.09	(0.47)
ATAD2928	5.87	(0.54)
ATAD2930	6.65	(0.62)
ATAD2910G	1.99	(0.18)
ATAD2920G	4.35	(0.40)
ATAD 2924G	5.14	(0.48)
ATAD2928G	5.93	(0.55)
ATAD2930G	6.72	(0.62)
ATAD 21010	2.08	(0.19)
ATAD21020	4.52	(0.42)
ATAD21024	5.33	(0.50)
ATAD21028	6.14	(0.57)
ATAD21030	6.95	(0.65)
ATAD21034	7.77	(0.72)
ATAD21038	8.58	(0.80)
ATAD 21040	9.39	(0.87)
ATAD21044	10.20	(0.95)
ATAD21048	11.02	(1.02)
ATAD21050	11.83	(1.10)
ATAD21054	12.64	(1.17)
ATAD21058	13.45	(1.25)
ATAD 21060	14.27	(1.33)
ATAD 21064	15.08	(1.40)
ATAD21068	15.89	(1.48)
ATAD 21074	17.52	(1.63)
ATAD 21080	19.14	(1.78)
ATAD3010	2.31	(0.21)

Window Number	A	ass rea
ATAD3020	4.91	t./(m ²) (0.46)
ATAD3024	5.78	(0.54)
ATAD3028	6.65	(0.62)
ATAD3030	7.51	(0.70)
ATAD3034	8.38	(0.78)
ATAD3038	9.25	(0.86)
ATAD3040	10.12	(0.94)
ATAD3044	10.99	(1.02)
ATAD3048	11.85	(1.10)
ATAD3050	12.72	(1.18)
ATAD3054	13.59	(1.26)
ATAD3058	14.46	(1.34)
ATAD3060	15.33	(1.42)
ATAD3064	16.19	(1.50)
ATAD3068	17.06	(1.59)
ATAD 3074	18.80	(1.75)
ATAD3080	20.53	(1.91)
ATAD3110	2.41	(0.22)
ATAD3120	5.09	(0.47)
ATAD3124	5.98	(0.56)
ATAD3128	6.87	(0.64)
ATAD3130	7.76	(0.72)
ATAD3210	2.41	(0.22)
ATAD3220	5.18	(0.48)
ATAD3224	6.10	(0.57)
ATAD3228	7.02	(0.65)
ATAD3230	7.95	(0.74)
ATAD3234	8.87	(0.82)
ATAD3238	9.80	(0.91)
ATAD3240	10.72	(1.00)
ATAD3244	11.64	(1.08)
ATAD3248	12.57	(1.17)
ATAD3250	13.49	(1.25)
ATAD3254	14.41	(1.34)
ATAD3258	15.34	(1.42)

Dimensions in parentheses are in square meters.
 continued on next page



2'-11 1/4"	3'-0 1/8"	3'-1 1/4"	3'-2 1/8"	3'-2 3/8"	3'-3 1/4"	3'-7 1/4"	3'-8 3/8"	3'-11 ¹ /4"
(895)	(918)	(946)	(968)	(975)	(997)	(1099)	(1127)	(1200)
3'-0"	3'-1"	3'-2"	3'-3"	3'-3"	3'-4"	3'-8"	3'-9"	4'-0"
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	→	
(914)	(940)	(965)	(991)	(991)	(1016)	(1118)	(1143)	(1219)
31 1/4"	32 1/8"	33 1/4"	34 1/8"	34 3/8"	35 1/4"	39 1/4"	40 3/8"	43 1/4"
					• • • • • • • • • • • • • • • • • • • •			
Ī (794) Ī	(816)	(845)	(867)	(873)	(895)	(997)	(1026)	(1099)



Direct-Set Arch Window Area Specifications (continued)

Specifications (continu	ied)		
Window Number	Glass Area Sq. Ft./(m²)		
ATAD3260	16.26	(1.51)	
ATAD3264	17.18	(1.60)	
ATAD3268	18.11	(1.68)	
ATAD3274	19.95	(1.85)	
ATAD3280	21.80	(2.03)	
ATAD3310	2.51	(0.23)	
ATAD3320	5.35	(0.50)	
ATAD3324	6.30	(0.59)	
ATAD3328	7.25	(0.67)	
ATAD3330	8.19	(0.76)	
ATAD 3310G	2.54	(0.24)	
ATAD3320G	5.40	(0.50)	
ATAD3324G	6.35	(0.59)	
ATAD3328G	7.31	(0.68)	
ATAD3330G	8.26	(0.77)	
ATAD3410	2.64	(0.25)	
ATAD3420	5.58	(0.52)	
ATAD3424	6.56	(0.61)	
ATAD3428	7.54	(0.70)	
ATAD3430	8.51	(0.79)	
ATAD3434	9.49	(0.88)	
ATAD3438	10.47	(0.97)	
ATAD 3440	11.45	(1.06)	
ATAD3444	12.43	(1.15)	
ATAD 3448	13.41	(1.25)	
ATAD 3450	14.39	(1.34)	
ATAD3454	15.37	(1.43)	
ATAD3458	16.35	(1.52)	
ATAD 3460	17.33	(1.61)	
ATAD 3464	18.31	(1.70)	
ATAD3468	19.29	(1.79)	
ATAD3474	21.24	(1.97)	
ATAD3480	23.20	(2.16)	
ATAD3810	2.99	(0.28)	
ATAD3820	6.26	(0.58)	
ATAD3824	7.35	(0.68)	
ATAD3828	8.44	(0.78)	

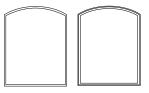
Window Number	Glass Area Sq. Ft./(m²)
ATAD3830	9.53 (0.89)
ATAD 3834	10.62 (0.99)
ATAD3838	11.71 (1.09)
ATAD3840	12.80 (1.19)
ATAD3844	13.89 (1.29)
ATAD3848	14.98 (1.39)
ATAD3850	16.07 (1.49)
ATAD 3854	17.16 (1.59)
ATAD3858	18.25 (1.70)
ATAD3860	19.34 (1.80)
ATAD 3864	20.43 (1.90)
ATAD3868	21.52 (2.00)
ATAD 3874	23.70 (2.20)
ATAD 3880	25.88 (2.40)
ATAD3910	3.13 (0.29)
ATAD3920	6.49 (0.60)
ATAD3924	7.62 (0.71)
ATAD3928	8.74 (0.81)
ATAD3930	9.86 (0.92)
ATAD 4010	3.52 (0.33)
ATAD4020	7.12 (0.66)
ATAD4024	8.32 (0.77)
ATAD4028	9.52 (0.88)
ATAD4030	10.73 (1.00)
ATAD4034	11.93 (1.11)
ATAD4038	13.13 (1.22)
ATAD4040	14.33 (1.33)
ATAD4044	15.53 (1.44)
ATAD4048	16.73 (1.55)
ATAD4050	17.93 (1.67)
ATAD4054	19.14 (1.78)
ATAD4058	20.34 (1.89)
ATAD 4060	21.54 (2.00)
ATAD4064	22.74 (2.11)
ATAD4068	23.94 (2.22)
ATAD 4074	26.34 (2.45)
ATAD4080	28.75 (2.67)

Window Number	Glass Area		
Trumber		t./(m²)	
ATAD 4310	3.61	(0.34)	
ATAD 4320	7.47	(0.69)	
ATAD4324	8.76	(0.81)	
ATAD4328	10.05	(0.93)	
ATAD 4330	11.34	(1.05)	
ATAD 4410	3.72	(0.35)	
ATAD 4420	7.66	(0.71)	
ATAD4424	8.97	(0.83)	
ATAD4428	10.29	(0.96)	
ATAD 4430	11.60	(1.08)	
ATAD4434	12.91	(1.20)	
ATAD 4438	14.22	(1.32)	
ATAD 4440	15.54	(1.44)	
ATAD4444	16.85	(1.57)	
ATAD 4448	18.16	(1.69)	
ATAD 4450	19.47	(1.81)	
ATAD 4454	20.79	(1.93)	
ATAD 4458	22.10	(2.05)	
ATAD 4460	23.41	(2.17)	
ATAD 4464	24.72	(2.30)	
ATAD 4468	26.04	(2.42)	
ATAD 4474	28.66	(2.66)	
ATAD 4480	31.29	(2.91)	
ATAD 4810	4.29	(0.40)	
ATAD 4820	8.56	(0.79)	
ATAD4824	9.98	(0.93)	
ATAD4828	11.40	(1.06)	
ATAD 4830	12.83	(1.19)	
ATAD 4834	14.25	(1.32)	
ATAD4838	15.67	(1.46)	
ATAD 4840	17.10	(1.59)	
ATAD 4844	18.52	(1.72)	
ATAD4848	19.95	(1.85)	
ATAD 4850	21.37	(1.99)	
ATAD4854	22.79	(2.12)	
Diii			

· Dimensions in parentheses are in square meters. continued on page 90



Custom-size windows are available in 1/8" (3) increments. Contact your Andersen supplier for more information.



Direct-Set Arch Sash-Set Arch

Direct-set arch (ATAD) window sizes shown. Use window dimensions and minimum rough opening formula shown for sash-set arch (ATA) window sizes. For sashset unobstructed glass dimensions, see pages 94-97. All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown on page 105. Details shown on page 111.

^{• &}quot;Window Dimension" always refers to outside

frame to frame dimension.

"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

• Dimensions in parentheses are in

millimeters.

^{**}Tempered glass required. Some visual distortion may occur.

Table of Direct-Set Arch Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on page 89 also apply to this page.

Scale 1/8	3" (3) = .	1'-0" (305) — 1	:96					
Window I	Dimension		4'-3 ¹ / ₄ " (1302)	4'-7 ¹ / ₄ " (1403)	4'-11 ¹ / ₄ " (1505)	5'-3 ¹ /4" (1607)	5'-7 ¹ / ₄ " (1708)	5'-11 ¹ / ₄ " (1810)
Minimun			4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"
Rough 0	pening		(1321)	(1422)	(1524)	(1626)	(1727)	(1829)
Unobstru	icted Glass		47 1/4"	51 1/4"	55 1/4"	59 1/4"	63 1/4"	67 1/4"
			CUSTOM SIZES	[(1302) [(1403)	(1505)	Ĭ (1607) Ĭ	(1708)
Window	height	Radius	60" (1524)	60"(1524)	60"(1524)	72"(1829)	72"(1829)	72"(1829)
shown in	table				" 9	=0	<u>.</u> 2	
		Chord #4 (941)		6 3/4"	(199)	· -	(212)	(240)
/4" (61)	7 4 L	eight 1 1/4" 286) 11-5" (432)		1'-6"	117 1/16" (484)	16 9/16 4 4 7 2 4 1 0 4 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	17 19/3/2 a	11-8 11/16" 0109 041
+ 3,	ht - (10	Height 11 1/4" (286) 1'-5"	ATAD4410	₩ ATAD 4810	ATAD5010	ATAD5410	ATAD5810	ATAD6010
ight	heig	Shoulder Height /4" 11 1/4" 1) (286) 5" 1-5" 11-5"	72	-			-	
» F	ass = window height - 4" (102)	Short 23 1/4" (591) 22-5"		2'-6"	789)	2'-6 9/16"	(802) (802) (802)	(830)
- indo	Ϋ́	23 (59			77.7	-7-PE 400	12-7-7-12-12-12-12-12-12-12-12-12-12-12-12-12-	8 S
≯	= SS		ATAD4420	ATAD4820	ATAD5020	ATAD5420	ATAD5820	ATAD6020
ning	Unobstructed Glass = window height - 4" (102)	-			1,116"	3)	1)	3'-0 11/16" (932)
0 be	uctec	27 1/4" (692) 2'-9" (838)		2'-10"	(891)	2'-10 9/16" [878]	2'-11 ^{19/32'} (904)	(932)
ugh H	bstri	, the	ATAD4424	ATAD4824	ATAD5024	ATAD5424	ATAD5824	ATAD6024
Minimum Rough Opening = window height + $3/4^n$	Uno	⊢			. T	. T	5 T	F ₁₀
. <u>=</u>		31 1/4" (794) 3'-1"		3'-2"	(992)	3'-2 9/16"	(1005)	3'-4 11/16" (1033)
돌		31						
			ATAD4428	ATAD4828	ATAD5028	ATAD5428	ATAD5828	ATAD6028
		t					32"	16"
		35 1/4" (895) 3'-5" (1041)		3'-6"	(1094)	3'-6 9/16"	3'-7 19/32" (1107)	3'-8 11/16" (1135)
		38 8						
			ATAD 4430	ATAD 4830	ATAD5030	ATAD 5430	ATAD5830	ATAD 6030 ←
					16"	16"	32"	16"
		39 1/4" (997) 3'-9" (1143)		3'-10"	3'-11 1/16" (1196)	31-10 9/16"	3-11 19/32" (1209)	(1237)
		E E						
			ATAD4434	ATAD4834	ATAD 5034	ATAD 5434	ATAD5834	ATAD6034
						,,,	"2	16"
		43 1/4" (1099) 4'-1"		4'-2"	(1297)	(1284)	(1310)	(1338)
		(4)			1.4	1.4	3,4	4.
			ATAD4438	ATAD4838	ATAD5038	ATAD5438	ATAD5838	ATAD6038
		 						
		(4" 0) 5" 46)		4'-6"	(1399)	(1386)	(1412)	(1440)
		47 1/4" (1200) 4'-5" (1346)		4'-6"	(13	(1386)	(14	(14
			ATAD 4440	ATAD4840	ATAD5040	ATAD5440	ATAD5840	ATAD6040
			711712		→	•	←	—
						9	32"	
		51 1/4" (1302) 4'-9" (1448)		4'-10"	(1500)	(1488)	(1513)	(1541)
		(13)		[1]	(1)	(1)	(1)	(1)
			ATAD4444	ATAD4844	ATAD5044	ATAD5444	ATAD5844	ATAD6044
				-	—	—		
					"9 G		32"	3)
		55 1/4" (1403) 5'-1" (1549)		5'-2"	(1602)	(1589)	(1615)	(1643)
		(1)			2.	21	9-	
		- ↓ ↓	ATAD 4448	ATAD4848	ATAD5048	ATAD5448	ATAD5848	ATAD6048

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.



Notes on page 89 also apply to this page.

6'-3 1/4" (1911) 6'-4" (1930) 71 1/4"	6'-7 1/4" (2013) 6'-8" (2032) 75 1/4"	6'-11 1/4" (2115) 7'-0" (2134) 79 1/4"	7'-3 1/4" (2216) 7'-4" (2235) 83 1/4"	7'-10 ⁷ / ₁₆ " (2399) 7'-11" (2413) 90 ⁷ / ₁₆ "	7'-11 1/4" (2419) 8'-0" (2438) 91 1/4"
(1810) 84"(2134) 888 888 888 888 888 888 888 888 888 88	(1911) 84" (2134) 85(2) (25(2)	(2013)	(2115) 96"(2438) \$\frac{z}{2} \frac{100}{20} \frac{z}{2} \frac{100}{20} \frac{z}{2} \frac{100}{20} \frac{z}{2} \frac{z}{2} \frac{100}{20} \frac{z}{2}	(2297) 96"(2438) 96"(2438) 100 ATAD71110	(2318) 96"(2438) 100 ATAD8010
25-8 8/32" ATAD6410 ATAD6420	1-9 3/16" 1-9 3/16" 0189 QYAYA	110 9/32" ATAD7010 ATAD7030	### ATAD7410	.11 21/32" (906)	(912)
ATAD6420 #728/9 0 - 10 ATAD6424	ATAD6820 ATAD6824 ATAD6824	ATAD7020 **EV/6 7.E ATAD7024	#76 17. 8 ATAD7424	ATAD71120 **********************************	ATAD8020 ATAD8020 ATAD8024
ATAD6428	47AD6828	3.6 9/32 ATAD7028	#₩£ 9-1: E	ATAD71128	3-7-29/32" ATAD8028
**E C C C C C C C C C C C C C C C C C C	3.5 3.6 3.6" (1148)	3-10 9/32 ATAD7030	1.8 € 6- E (1991) (2911) (ATAD7430	31-11 21/33, (1211) (2113) ATAD71130	3-11 29/32" (1217) 0808 QPATA
41-0 5/32/3 (1723) ATAD6434	4.1 3/16" (1249)	ATAD7034	#76 1-14 ATAD 7434		4.3 28/32 F.3 8
					1
ATAD6434 (1325) (1327)	41-5 3/16" ATAD6834	47.6 9/32" ATAD7034	ATAD7434		ATAD8034 (1450)
ATAD6434 ATAD6434 ATAD6438 ATAD6438	A1-9 3/16" 41-5 3/16" (1452) ATAD6838 ATAD6838	47-10 9/32" ATAD7034 ATAD7034 ATAD7038 ATAD7038	ATAD7434 ATAD7434 ATAD7438 ATAD7438		4.11 29/52" ATAD8034 ATAD8038 ATAD8038
ATAD6434 ATAD6434 ATAD6438 ATAD6438 ATAD6440 ATAD6440	ATAD6834 ATAD6834 (1921) ATAD6838 ATAD6840 ATAD6840 ATAD6840	ATAD7034 ATAD7034 ATAD7034 ATAD7034 ATAD7038 ATAD7040 ATAD7040	ATAD7434 ATAD7434 ATAD7438 ATAD7438 ATAD74400 ATAD74400		85.328/32" 4'-1729

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

Table of Direct-Set Arch Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on page 89 also apply to this page.

Scale 1/8	" (3) =	1'-0" (305) — 1	:96								
Window I	Dimension		4'-3 ¹ / ₄ " (1302)	4'-7 ¹ / ₄ ' (1403)	<u> </u>	4'-11 ¹ / ₄ " (1505)	•	5'-3 ¹ / ₄ " (1607)	5'-7 ¹ / ₄ " (1708)	5'-11 ¹ /4" (1810)	†
Minimun	n		4'-4"	4'-8"		5'-0"		5'-4"	5'-8"	6'-0"	
Rough 0	pening		(1321)	(1422)		(1524)		(1626)	(1727)	(1829)	
Unobstru	cted Glass	3	47 ¹ / ₄ " (1200)	51 ¹ / ₄ " (1302)	+ +	55 ¹ /4" (1403)		59 ¹ / ₄ " (1505)	63 ¹ / ₄ " (1607)	67 ¹ / ₄ " (1708)	†
\A/:	هما من ما	Dadius	CUSTOM SIZES		(F24)	COII/4504)		7011 (4.000)	7011/1020	7211 (1920)	
Window shown in	table	Radius Chord *** (941) Height £\$(241)	60"(1524	66.4	7 13/16"	60"(1524)	75/16"	72"(1829)	72"(1829)	72"(1829)	_
Minimum Rough Opening = window height + 3/4" (19)	Unobstructed Glass = window height - 4" (102) CUSTOM SIZES AVAILABLE	Shoulder Height 59 1/4" (1505) 5'-5" (1651)	ATAD4450	#9-19 (1040)	5'-7 1/16"	ATAD5050	5'-6 9/16" (1691)	"25'-13'35'50 AD 5450	ATAD5850	ATAD6050	
E	> 	STON	AIAD4450	#IAD400	· •	AIAD5050	AII	AD3450	AIAD3630	AIADOUSU	
ough Opening =	obstructed Glass	63 1/4" (1607) 5'-9" (1753)		5'-10" (1778)	5'-11 1/16" (1805)		5'-10 9/16" (1792)	5'-11 19/32"	(1818)	6-011/16" (1846)	
E	5	· •	ATAD 4454	ATAD485	54	ATAD 5054	AT	AD5454	ATAD5854	▲ ATAD 6054	J
Minim		67 1/4" (1708) 6'-1" (1854)		(1879)	6'-3 ¹ / ₁₆ " (1907)		6'-2 ⁹ / _{16"} (1894)	6'-3 19/32"	(1920)	6-411/1 ₆ " (1948)	
		_ · ·	ATAD4458	ATAD485	i8	ATAD5058	AT	AD5458	ATAD5858	ATAD6058	J
		71 ¼" (1810) 6-5" (1956)		(1981)	6'-7 1/16" (2008)		6'-6 ⁹ / ₁₆ " (1996)	6'-7 19/32"	(2021)	6-8 11/16" (2049)	
		↓ ↓	ATAD4460	ATAD486	60	ATAD 5060	AT	AD5460	ATAD5860	ATAD6060	J
		75 1/4" (1911) 6:9"		6-10" (2082)	6'-11 1/16" (2110)		6'-10 9/16" (2097)	-9	(2123)	7.011/16"	
			ATAD4464	ATAD486	§4 	ATAD 5064	AT.	AD5464	ATAD 5864	ATAD6064	
		79 1/4" (2013) 7-1" (2159)		(2184)	7'-3 1/16" (2212)		7'-2 9/16" (2199)	71-3 19/32"	(2225)	7-411/16" (2253)	
		↓ ↓	ATAD4468	ATAD486	<u> </u>	ATAD5068	AT	AD5468	ATAD5868	ATAD6068	J
		87 1.14" (2216) 7-9"		(2387)	7'-11 1/16" (2415)		7'-10 9/16" (2402)	7'-11 19/32"	(2428)	8-0 11/16" (2456)	
		- ↓ ↓	ATAD 4474	ATAD487	<u>'</u> 4	ATAD 5074	AT.	AD5474	ATAD 5874	ATAD6074	J

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

7'-11 1/4"

(2419)



6'-7 1/4"

(2013)

6'-11 1/4"

(2115)

7'-3 1/4"

(2216)

7'-10 7/16"

(2399)

6'-3 1/4"

(1911)

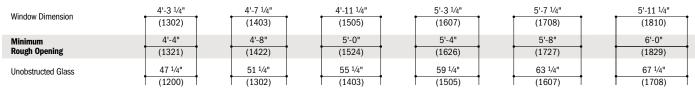
	(1311)	(2013)	(2113)	(2333)	(2413)
	6'-4"	6'-8"	7'-0"	7'-4" 7'-11"	8'-0"
	(1930)	(2032)	(2134)	(2235) (2413)	(2438)
-	71 1/4" (1810)	75 ½" (1911)	79 1/4" (2013)	83 ¹ / ₄ " 90 ⁷ / ₁₆ " (2115) (2297)	91 1/4" (2318)
'	(1010)	(1011)	(2010)	(2237)	(2010)
8 ²⁹ / ₃₂ "	84" (2134)	84"(2134)	84"(2134)	96"(2438) 96"(2 (24	438) #25/12 21 (2438)
5'-8 5/32" (1731)		5'-93/ _{6"} (1757)	5'-10 9/32" (1785)	5-9 34" (1771)	5-11 29/32" (1826)
•	ATAD6450	ATAD6850	ATAD7050	ATAD7450	ATAD8050**
T (6					
6'-0 5/32" (1833)		6-13/16" (1859)	6-2 %2" (1887)	(1873) (1873)	(1928)
•— L	ATAD6454	ATAD6854	ATAD 7054	ATAD7454	ATAD8054**
T .					
6'-4 5/32" (1934)		6-5 ³ / ₁₆ " (1960)	6'-6 9/32" (1989)	(1974) (1974)	6-7 29/32" (2029)
↓ [ATAD6458	ATAD6858	ATAD7058	ATAD7458**	ATAD8058**
•	AIAD0438	AIAD0036	AIAD1030	AIAD1430	AIADOUS
6'-8 5/32" (2036)		6'-9 3/16" (2062)	6-109/52"	6·9 3/4" (2076)	6·11 ²⁹ / ₃₂ " (2131)
↓ _ [ATAD6460	ATAD6860	ATAD7060**	ATAD7460**	ATAD8060**
—					continued on next page
7'-0 5/32" (2137)		7-1 3/16"	7-2 9/32" (2192)		
Ļ. Ľ	ATAD6464	ATAD6864	ATAD7064**	Custom-size windows are available in 1/8" (3)	increments.
T .				Contact your Andersen supplier for more inforr	nation.
7'-4 5/32" (2239)		7'-5 3/16" (2265)	7'-6 9/32" (2293)	Direct-set arch (ATAD) window sizes shown. Use window dimensions and minimum rough opening formula shown for sash-set arch (ATA	
↓ □	ATAD6468	ATAD6868**	ATAD7068**		′
.	20.50			window sizes. For sash-set unobstructed glass	
				dimensions, see pages 94-97. All sizes shown	Direct-Set Arch Sash-Set Arch
32"		11e" 8)	7)	along with custom sizes, are available with	
8'-0 5/32"		8'-13/16" (2468)	8-2 9/32" (2497)	PG upgrade.	
				Grille patterns shown on page 105.	1
↓ _ Ľ	ATAD6474**	ATAD6874**	ATAD7074**	Details shown on page 111.	

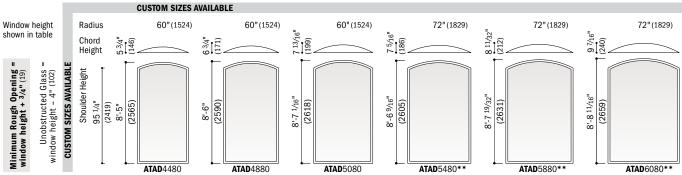
^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.
• *Tempered glass required. Some visual distortion may occur.

Table of Direct-Set Arch Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the next page also apply to this page.





^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

Direct-Set Arch Window Area Specifications (continued from page 85)

Window Number	Glass Area		Wind
Number	Sq. Ft./(m ²)		
ATAD4858	24.22 (2.25)		ATAI
ATAD 4860	25.64 (2.38)		ATAI
ATAD 4864	27.06 (2.51)		ATAI
ATAD4868	28.49 (2.65)		ATAI
ATAD 4874	31.33 (2.91)		ATAI
ATAD 4880	34.18 (3.18)		ATAI
ATAD5010	4.91 (0.46)		ATAI
ATAD5020	9.52 (0.88)		ATAI
ATAD5024	11.05 (1.03)		ATAI
ATAD5028	12.58 (1.17)		ATAI
ATAD5030	14.12 (1.31)		ATAI
ATAD5034	15.65 (1.45)		ATAI
ATAD5038	17.19 (1.60)		ATAI
ATAD5040	18.72 (1.74)		ATAI
ATAD 5044	20.26 (1.88)		ATAI
ATAD5048	21.79 (2.02)		ATAI
ATAD5050	23.33 (2.17)		ATAI
ATAD5054	24.86 (2.31)		ATAI
ATAD5058	26.40 (2.45)		ATAI
ATAD5060	27.93 (2.59)		ATAI
ATAD5064	29.47 (2.74)		ATAI
ATAD5068	31.00 (2.88)		ATAI
ATAD5074	34.07 (3.17)		ATAI
ATAD5080	37.14 (3.45)		ATAI
ATAD5410	5.11 (0.47)		ATAI
ATAD5420	10.05 (0.93)		ATAI
ATAD5424	11.69 (1.09)		ATAI
ATAD5428	13.34 (1.24)		ATAI
ATAD5430	14.98 (1.39)		ATAI
ATAD5434	16.63 (1.54)		ATAI
ATAD5438	18.28 (1.70)		ATAI
ATAD 5440	19.92 (1.85)		ATAI
		,	

Window Number	Glass Area Sq. Ft./(m²)
ATAD5444	21.57 (2.00)
ATAD5448	23.21 (2.16)
ATAD5450	24.86 (2.31)
ATAD5454	26.51 (2.46)
ATAD 5458	28.15 (2.62)
ATAD 5460	29.80 (2.77)
ATAD5464	31.44 (2.92)
ATAD5468	33.09 (3.07)
ATAD5474	36.38 (3.38)
ATAD5480	39.67 (3.69)
ATAD5810	5.76 (0.54)
ATAD5820	11.04 (1.03)
ATAD5824	12.79 (1.19)
ATAD5828	14.55 (1.35)
ATAD5830	16.31 (1.51)
ATAD5834	18.06 (1.68)
ATAD5838	19.82 (1.84)
ATAD 5840	21.58 (2.00)
ATAD 5844	23.33 (2.17)
ATAD 5848	25.09 (2.33)
ATAD5850	26.85 (2.49)
ATAD 5854	28.60 (2.66)
ATAD5858	30.36 (2.82)
ATAD5860	32.12 (2.98)
ATAD 5864	33.88 (3.15)
ATAD5868	35.63 (3.31)
ATAD 5874	39.15 (3.64)
ATAD5880	42.66 (3.96)
ATAD6010	6.49 (0.60)
ATAD6020	12.09 (1.12)
ATAD6024	13.96 (1.30)
ATAD6028	15.83 (1.47)

Window Number	Glass Area Sq. Ft./(m²)		
ATAD6030	17.69	(1.64)	
ATAD6034	19.56	(1.82)	
ATAD6038	21.43	(1.99)	
ATAD 6040	23.30	(2.16)	
ATAD6044	25.17	(2.34)	
ATAD6048	27.03	(2.51)	
ATAD 6050	28.90	(2.69)	
ATAD 6054	30.77	(2.86)	
ATAD6058	32.64	(3.03)	
ATAD6060	34.51	(3.21)	
ATAD6064	36.37	(3.38)	
ATAD6068	38.24	(3.55)	
ATAD6074	41.98	(3.90)	
ATAD6080	45.71	(4.25)	
ATAD6410	6.67	(0.62)	
ATAD6420	12.61	(1.17)	
ATAD6424	14.59	(1.36)	
ATAD6428	16.57	(1.54)	
ATAD6430	18.55	(1.72)	
ATAD6434	20.53	(1.91)	
ATAD6438	22.51	(2.09)	
ATAD 6440	24.49	(2.27)	
ATAD6444	26.47	(2.46)	
ATAD6448	28.45	(2.64)	
ATAD6450	30.42	(2.83)	
ATAD6454	32.40	(3.01)	
ATAD6458	34.38	(3.19)	
ATAD 6460	36.36	(3.38)	
ATAD 6464	38.34	(3.56)	
ATAD6468	40.32	(3.75)	
ATAD 6474	44.28	(4.11)	
ATAD 6480	48.24	(4.48)	

Window Number	Glass Area Sq. Ft./(m²)		
ATAD6810	7.42	(0.69)	
ATAD6820	13.70	(1.27)	
ATAD6824	15.79	(1.47)	
ATAD6828	17.88	(1.66)	
ATAD6830	19.97	(1.85)	
ATAD6834	22.06	(2.05)	
ATAD6838	24.15	(2.24)	
ATAD6840	26.24	(2.44)	
ATAD 6844	28.33	(2.63)	
ATAD6848	30.42	(2.83)	
ATAD 6850	32.51	(3.02)	
ATAD 6854	34.60	(3.21)	
ATAD6858	36.69	(3.41)	
ATAD6860	38.78	(3.60)	
ATAD 6864	40.87	(3.80)	
ATAD6868	42.96	(3.99)	
ATAD 6874	47.14	(4.38)	
ATAD 6880	51.32	(4.77)	
ATAD 7010	8.24	(0.77)	
ATAD 7020	14.85	(1.38)	
ATAD 7024	17.05	(1.58)	
ATAD 7028	19.25	(1.79)	
ATAD 7030	21.45	(1.99)	
ATAD 7034	23.65	(2.20)	
ATAD 7038	25.85	(2.40)	
ATAD 7040	28.05	(2.61)	
ATAD 7044	30.26	(2.81)	
ATAD 7048	32.46	(3.02)	
ATAD 7050	34.66	(3.22)	
ATAD 7054	36.86	(3.42)	
• Dimensions in parentheses are	in squar	e meters.	

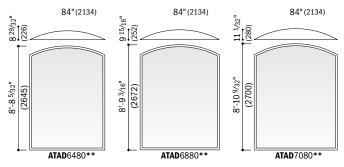
continued on next page

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

^{**}Tempered glass required. Some visual distortion may occur.



6'-3 1/4"		6'-7 1/4"		6'-11 ¹ /4"
(1911)		(2013)	Ţ	(2115)
6'-4"		6'-8"		7'-0"
(1930)	Ĭ	(2032)		(2134)
71 1/4"		75 ¹ /4"		79 1/4"
(1810)	Ī	(1911)	Ī '	(2013)



 $\hbox{\bf \bullet "Window Dimension" always refers to outside frame-to-frame dimension.}$

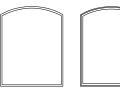
continued on next page

• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

Custom-size windows are available in $^{1}/8"$ (3) increments. Contact your Andersen supplier for more information.

Direct-set arch (ATAD) window sizes shown.

Use window dimensions and minimum rough opening formula shown for sash-set arch (ATA) window sizes. For sash-set unobstructed glass dimensions, see pages 94-97. All sizes shown, along with custom sizes, are available with PG upgrade.



Direct-Set Arch

Sash-Set Arch

Grille patterns shown on page 105. Details shown on page 111.

Direct-Set Arch Window Area Specifications (continued)

Window Number	Glass Area Sq. Ft./(m²)
ATAD7058	39.06 (3.63)
ATAD 7060	41.26 (3.83)
ATAD 7064	43.46 (4.04)
ATAD 7068	45.67 (4.24)
ATAD 7074	50.07 (4.65)
ATAD 7080	54.47 (5.06)
ATAD 7410	8.42 (0.78)
ATAD 7420	15.36 (1.43)
ATAD7424	17.67 (1.64)
ATAD 7428	19.98 (1.86)
ATAD 7430	22.30 (2.07)
ATAD 7434	24.61 (2.29)
ATAD 7438	26.92 (2.50)
ATAD 7440	29.23 (2.72)
ATAD7444	31.55 (2.93)
ATAD 7448	33.86 (3.15)
ATAD 7450	36.17 (3.36)
ATAD 7454	38.48 (3.58)
ATAD 7458	40.80 (3.76)
ATAD 7460	43.11 (4.00)
ATAD 71110	9.99 (0.93)
ATAD 71120	17.52 (1.63)
ATAD 71124	20.04 (1.86)
ATAD71128	22.55 (2.09)
ATAD71130	25.06 (2.33)
ATAD8010	10.18 (0.95)
ATAD 8020	17.78 (1.65)
ATAD 8024	20.32 (1.89)
ATAD8028	22.85 (2.12)
ATAD 8030	25.39 (2.36)
ATAD 8034	27.92 (2.59)
ATAD8038	30.46 (2.83)

Window Number	Glass Area Sq. Ft./(m²)		
ATAD8040	32.99	(3.06)	
ATAD8044	35.53	(3.30)	
ATAD8048	38.06	(3.54)	
ATAD8050	40.60	(3.77)	
ATAD8054	43.13	(4.01)	
ATAD8058	45.66	(4.24)	
ATAD8060	48.20	(4.48)	
ATAD8810	10.58	(0.98)	
ATAD8820	18.85	(1.75)	
ATAD8824	21.60	(2.01)	
ATAD8828	24.36	(2.26)	
ATAD8830	27.12	(2.52)	
ATAD8834	29.87	(2.78)	
ATAD8838	32.63	(3.03)	
ATAD8840	35.39	(3.29)	
ATAD8844	38.15	(3.54)	
ATAD8848	40.90	(3.80)	
ATAD8850	43.66	(4.06)	
ATAD8854	46.42	(4.31)	
ATAD8858	49.17	(4.57)	
ATAD8860	51.93	(4.82)	
ATAD81110	11.30	(1.05)	
ATAD81120	19.83	(1.84)	
ATAD81124	22.68	(2.11)	
ATAD81128	25.52	(2.37)	
ATAD81130	28.37	(2.64)	
ATAD 9410	12.46	(1.16)	
ATAD9420	21.39	(1.99)	
ATAD9424	24.37	(2.26)	
ATAD9428	27.35	(2.54)	
ATAD 9430	30.33	(2.82)	
ATAD 9434	33.31	(3.09)	

Nindow Number	Glass Area Sq. Ft./(m²)		
ATAD 9438	36.29	(3.37)	
ATAD 9440	39.27	(3.65)	
ATAD 9444	42.25	(3.92)	
ATAD 9448	45.23	(4.20)	
ATAD 9450	48.21	(4.48)	
ATAD 9454	51.18	(4.76)	
ATAD 9458	54.16	(5.03)	
ATAD10010	14.60	(1.36)	
ATAD10020	24.20	(2.25)	
ATAD10024	27.40	(2.55)	
ATAD10028	30.60	(2.84)	
ATAD10030	33.80	(3.14)	
ATAD10034	37.01	(3.44)	
ATAD10038	40.21	(3.74)	
ATAD 10040	43.41	(4.03)	
ATAD 10044	46.61	(4.33)	
ATAD10048	49.81	(4.63)	
ATAD10050	53.01	(4.92)	
ATAD 10054	56.21	(5.22)	
ATAD10058	59.42	(5.52)	
ATAD10810	15.88	(1.47)	
ATAD10820	26.15	(2.43)	
ATAD 10824	29.57	(2.75)	
ATAD10828	32.99	(3.07)	
ATAD 10830	36.42	(3.38)	
ATAD 10834	39.84	(3.70)	
ATAD10838	43.26	(4.02)	
ATAD 10840	46.69	(4.34)	
ATAD 10844	50.11	(4.66)	
ATAD 10848	53.54	(4.97)	
ATAD 10850	56.96	(5.29)	
ATAD 10854	60.38	(5.61)	

Window Number	Glass Area Sq. Ft./(m²)		
ATAD10858	63.81	(5.93)	
ATAD 11410	17.21	(1.60)	
ATAD11420	28.15	(2.62)	
ATAD11424	31.80	(2.95)	
ATAD11428	35.44	(3.29)	
ATAD11430	39.09	(3.63)	
ATAD11434	42.74	(3.97)	
ATAD11438	46.38	(4.31)	
ATAD 11440	50.03	(4.65)	
ATAD11444	53.67	(4.99)	
ATAD 11448	57.32	(5.32)	
ATAD 11450	60.96	(5.66)	
ATAD 11454	64.61	(6.00)	
ATAD12010	19.74	(1.83)	
ATAD12020	31.34	(2.91)	
ATAD12024	35.21	(3.27)	
ATAD12028	39.08	(3.63)	
ATAD12030	42.95	(3.99)	
ATAD12034	46.82	(4.35)	
ATAD12038	50.68	(4.71)	
ATAD 12040	54.55	(5.07)	
ATAD12044	58.42	(5.43)	
ATAD12048	62.29	(5.79)	
ATAD12050	66.16	(6.15)	
ATAD 12054	70.02	(6.51)	

[•] Dimensions in parentheses are in square meters.

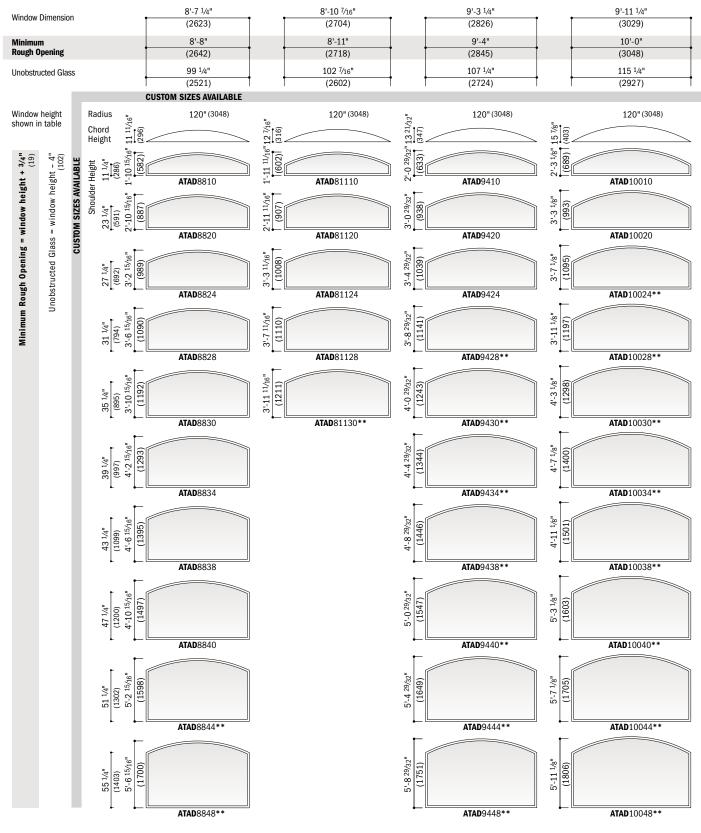
[•] Dimensions in parentheses are in millimeters.

**Tempered glass required. Some visual distortion may occur.

Table of Direct-Set Arch Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the next page also apply to this page.



^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{•&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

^{**}Tempered glass required. Some visual distortion may occur.



10'-6 1/8"

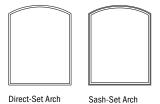
10-0 1/8"	11'-3 '-/4"	(2020)
(3203)	(3435)	(3639)
10'-8"	11'-4"	12'-0"
(3251)	(3454)	(3658)
123 1/4"	131 1/4"	139 1/4"
(3131)	(3334)	(3537)
1 (3131)	(3304)	(3331)
- S 132" (3353)	144" (3658)	144" (3658)
132"(3353)	2'-4 1/8" 16 7/8" f (714)	2'-6 5/16" 19 1/16" 1
914	914	21 4
11)	1,8	0)
(701)	4-1	(770)
ATAD10810	ATAD11410	ATAD 12010
	←	
3-3 19/32"	3-41/8" (1019)	36 5/16"
(10)	(10 (10 (10 (10 (10 (10 (10 (10 (10 (10	36
ATAD10820**	ATAD11420**	ATAD12020**
F	**************************************	
3'-7 19/32" (1107)	[8] [1] [8]	3'-10 5/16"
(1107)	31-8 1/8" (1121)	(1177)
(1)	3.	(1)
ATAD10824**	ATAD11424**	ATAD12024**
31-11 19/32" (1209)	18 2 8	4'-2 5/16" (1278)
(1209)	(1222) (1222)	(1278)
3,-1	4 3	1.4
ATAD10828**	▲ ATAD 11428**	ATAD12028**
(1311)	** 1	16.
(1311)	(1324)	(1380) (1380)
7.4 0	[7]	(1)
ATAD10830**	ATAD11//30**	ATAD12030**
ATAD10830**	ATAD11430**	ATAD12030**
	ATAD11430**	
4-7 19/32" (1412)	4'-8 1/8" (1425)	4*10 5/1e" (1481)
41.7 19/32" ATAD10834**	4'-8 1/8" (1425)	4*10 5/1e" (1481)
41.7 19/32" ATAD10834**	ATAD11434**	4-10 5/16" (1481) ATAD12034**
41.7 19/32" ATAD10834**	ATAD11434**	4-10 5/16" (1481) ATAD12034**
4-7 19/32" (1412)	4'-8 1/8" (1425)	4*10 5/1e" (1481)
4-7 19/32" 4-7 19/32" (1412) (1412) ATM 10/0834**	41-81/8" ATAD11434** ATAD11434**	4'-10 5/6" A1-10 5/6" (1481) (1583) ATAD12034**
41.7 19/32" ATAD10834**	ATAD11434**	4-10 5/16" (1481) ATAD12034**
ATAD10838** ATAD10838**	41-81/8" ATAD11434** ATAD11434**	ATAD12034** ATAD12038**
ATAD10838** ATAD10838**	ATAD11434** ATAD11438**	ATAD12034** ATAD12038**
ATAD10834** ATAD10838** ATAD10838**	ATAD11434** ATAD11438**	ATAD12034** ATAD12038**
ATAD10834** ATAD10838** ATAD10838**	41-81/8" ATAD11434** ATAD11434**	ATAD12034** ATAD12038**
41-719/32" ATAD10834** ATAD10838** ATAD10838**	ATAD11434** ATAD11438** ATAD11438**	ATAD12034** ATAD12034** (1685) ATAD12038**
ATAD10834** ATAD10838** ATAD10838**	ATAD11434** ATAD11438**	ATAD12034** ATAD12038**
41-719/32" ATAD10834** ATAD10838** ATAD10838**	ATAD11434** ATAD11438** ATAD11438**	ATAD12034** ATAD12034** (1685) ATAD12038**
ATAD10834** ATAD10838** ATAD10840**	ATAD11434** ATAD11438** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10834** ATAD10838** ATAD10840**	ATAD11434** ATAD11438** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10834** ATAD10838** ATAD10840**	ATAD11434** ATAD11438** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
41-719/32" ATAD10834** ATAD10838** ATAD10838**	ATAD11434** ATAD11438** ATAD11438**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10833** ATAD10838** ATAD10838** ATAD10838** ATAD10838**	ATAD11434** ATAD11438** ATAD11440** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10834** ATAD10838** ATAD10840**	ATAD11434** ATAD11438** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10838** ATAD10838** ATAD10840** ATAD10844**	ATAD11434** ATAD11438** ATAD11440** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10838** ATAD10838** ATAD10840** ATAD10844**	ATAD11434** ATAD11438** ATAD11440** ATAD11444**	ATAD12034** ATAD12034** ATAD12038** ATAD12040** ATAD12044**
ATAD10838** ATAD10838** ATAD10840** ATAD10844**	ATAD11434** ATAD11438** ATAD11440** ATAD11444**	ATAD12034** ATAD12034** ATAD12038** ATAD12040** ATAD12044**
ATAD10838** ATAD10838** ATAD10840** ATAD10844**	ATAD11434** ATAD11438** ATAD11440** ATAD11440**	ATAD12034** ATAD12034** ATAD12038** ATAD12040**
ATAD10838** ATAD10838** ATAD10840** ATAD10840**	ATAD11434** ATAD11438** ATAD11440** ATAD11444**	ATAD12034** ATAD12034** ATAD12038** ATAD12040** ATAD12044**
ATAD10838** ATAD10838** ATAD10840** ATAD10844**	ATAD11434** ATAD11438** ATAD11440** ATAD11444**	ATAD12034** ATAD12034** ATAD12038** ATAD12040** ATAD12044**

11'-3 1/4"



11'-11 1/4"

Custom-size windows are available in 1/8" (3) increments. Contact your Andersen supplier for more information.



Direct-set arch (ATAD) window sizes

shown. Use window dimensions and minimum rough opening formula shown for sash-set arch (ATA) window sizes. For sash-set unobstructed glass dimensions, see pages 94-97.

All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown on page 105. Details shown on page 111.

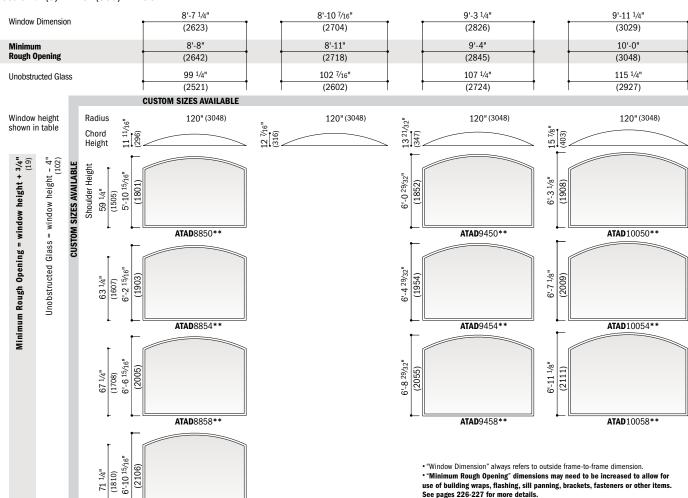
continued on next page

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.
• **Tempered glass required. Some visual distortion may occur.

Table of Direct-Set Arch Window Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on the next page also apply to this page.



^{. &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

Sash-Set Arch Window Unobstructed Glass **Dimensions and Area Specifications**

ATAD8860**

Window Number	Unobstructed Glass Width Inches/(mm)	Unobstructed Glass Height Inches/(mm)	Glass Area Sq. Ft./(m²)
ATA 2010	16 5/8" (421)	7 5/8" (193)	0.81 (0.08)
ATA 2020	16 5/8" (421)	19 5/8" (498)	2.19 (0.20)
ATA 2024	16 5/8" (421)	23 5/8" (599)	2.65 (0.25)
ATA2028	16 5/8" (421)	27 5/8" (701)	3.11 (0.29)
ATA2030	16 5/8" (421)	31 5/8" (803)	3.58 (0.33)
ATA 2034	16 5/8" (421)	35 5/8" (904)	4.04 (0.37)
ATA2038	16 5/8" (421)	39 5/8" (1006)	4.50 (0.42)
ATA 2040	16 5/8" (421)	43 5/8" (1107)	4.96 (0.46)
ATA 2044	16 5/8" (421)	47 5/8" (1209)	5.42 (0.50)
ATA 2048	16 5/8" (421)	51 5/8" (1311)	5.88 (0.55)
ATA2050	16 5/8" (421)	55 5/8" (1412)	6.34 (0.59)
ATA 2054	16 5/8" (421)	59 5/8" (1514)	6.80 (0.63)
ATA 2058	16 5/8" (421)	63 5/8" (1615)	7.26 (0.67)
ATA 2060	16 5/8" (421)	67 5/8" (1717)	7.72 (0.72)
ATA 2064	16 5/8" (421)	71 5/8" (1819)	8.18 (0.76)
ATA2068	16 5/8" (421)	75 5/8" (1920)	8.65 (0.80)
ATA 2074	16 5/8" (421)	83 5/8" (2123)	9.57 (0.89)
ATA 2080	16 5/8" (421)	91 5/8" (2327)	10.49 (0.97)
ATA 2110	17 1/2" (444)	7 1/8" (181)	0.81 (0.07)
ATA 2120	17 1/2" (444)	19 1/8" (486)	2.26 (0.21)

Window Number	Unobstructe Glass Width Inches/(mm	Glass Height	Glass Area Sq. Ft./(m²)	
ATA 2124	17 1/2" (444	23 1/8" (587)	2.75 (0.26)	
ATA 2128	17 1/2" (444	27 1/8" (689)	3.23 (0.30)	
ATA 2130	17 1/2" (444	31 1/8" (791)	3.72 (0.35)	
ATA 2410	20 5/8" (523	7 7/8" (200)	1.03 (0.10)	
ATA 2420	20 5/8" (523	19 7/8" (505)	2.74 (0.25)	
ATA2424	20 5/8" (523	23 7/8" (606)	3.32 (0.31)	
ATA2428	20 5/8" (523	27 7/8" (708)	3.89 (0.36)	
ATA 2430	20 5/8" (523	31 7/8" (809)	4.46 (0.41)	
ATA 2434	20 5/8" (523	35 7/8" (911)	5.03 (0.47)	
ATA 2438	20 5/8" (523	39 7/8" (1013)	5.60 (0.52)	
ATA 2440	20 5/8" (523	43 7/8" (1114)	6.18 (0.57)	
ATA 2444	20 5/8" (523	47 7/8" (1216)	6.75 (0.63)	
ATA 2448	20 5/8" (523	51 7/8" (1317)	7.32 (0.68)	
ATA 2450	20 5/8" (523	55 7/8" (1419)	7.89 (0.73)	
ATA 2454	20 5/8" (523	59 7/8" (1521)	8.46 (0.79)	
ATA 2458	20 5/8" (523	63 7/8" (1622)	9.04 (0.84)	
ATA 2460	20 5/8" (523	67 7/8" (1724)	9.61 (0.89)	
ATA 2464	20 5/8" (523	71 7/8" (1825)	10.18 (0.95)	
ATA 2468	20 5/8" (523	75 7/8" (1927)	10.75 (1.00)	
ATA 2474	20 5/8" (523	83 7/8" (2130)	11.90 (1.11)	

Window Number	Unobst Gla Wio Inches	ss Ith	Unobstructed Glass Height Inches/(mm)		Glass Area Sq. Ft./(m²)	
ATA 2480	20 5/8"	(523)	91 7/8"	(2333)	13.04	(1.21)
ATA 2610	22 5/8"	(574)	8 3/8"	(213)	1.19	(0.11)
ATA 2620	22 5/8"	(574)	20 3/8"	(518)	3.07	(0.29)
ATA 2624	22 5/8"	(574)	24 3/8"	(620)	3.70	(0.34)
ATA2628	22 5/8"	(574)	28 3/8"	(721)	4.33	(0.40)
ATA 2630	22 5/8"	(574)	32 3/8"	(823)	4.95	(0.46)
ATA 2634	22 5/8"	(574)	36 3/8"	(925)	5.58	(0.52)
ATA2638	22 5/8"	(574)	40 3/8"	(1026)	6.21	(0.58)
ATA 2640	22 5/8"	(574)	44 3/8"	(1128)	6.84	(0.64)
ATA 2644	22 5/8"	(574)	48 3/8"	(1229)	7.47	(0.69)
ATA 2648	22 5/8"	(574)	52 3/8"	(1331)	8.09	(0.75)
ATA 2650	22 5/8"	(574)	56 ³ / ₈ "	(1433)	8.72	(0.81)
ATA 2654	22 5/8"	(574)	60 3/8"	(1534)	9.35	(0.87)
ATA2658	22 5/8"	(574)	64 3/8"	(1636)	9.98	(0.93)
ATA 2660	22 5/8"	(574)	68 3/8"	(1737)	10.60	(0.99)
ATA 2664	22 5/8"	(574)	72 3/8"	(1839)	11.23	(1.04)
ATA2668	22 5/8"	(574)	76 ³ / ₈ "	(1941)	11.86	(1.10)
ATA 2674	22 5/8"	(574)	84 3/8"	(2144)	13.11	(1.22)
ATA 2680	22 5/8"	(574)	92 3/8"	(2347)	14.37	(1.33)

[•] Dimensions in parentheses are in millimeters or square meters.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.

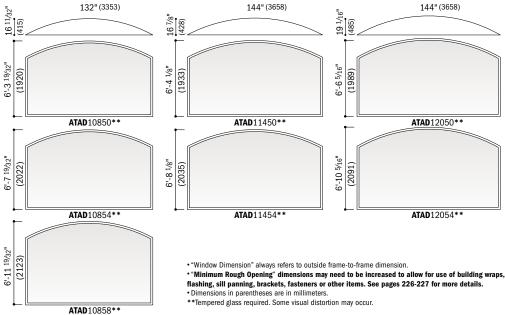
See pages 226-227 for more details.

• Dimensions in parentheses are in millimeters.

^{**}Tempered glass required. Some visual distortion may occur.



10'-6 1/8"	11'-3 1/4"	11'-11 1/4"
(3203)	(3435)	(3639)
10'-8"	11'-4"	12'-0"
(3251)	(3454)	(3658)
123 1/4"	131 1/4"	139 1/4"
(3131)	(3334)	(3537)





144" (3658)

Custom-size windows are available in 1/8" (3) increments. Contact your Andersen supplier for more information.

Direct-set arch (ATAD) window sizes

shown. Use window dimensions and minimum rough opening formula shown for sash-set arch (ATA) window sizes. For sash-set unobstructed glass dimensions, see pages 94-97.

All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown on page 105. Details shown on page 111.

Sash-Set Arch Window Unobstructed Glass Dimensions and Area Specifications (continued)

Window Number	Unobstructed Glass Width Inches/(mm)		Unobstructed Glass Height Inches/(mm)		Glass Area Sq. Ft./(m²)	
ATA 2710	23 1/2"	(596)	7 7/8"	(201)	1.17	(0.11)
ATA 2720	23 1/2"	(596)	19 7/8"	(505)	3.13	(0.29)
ATA2724	23 1/2"	(596)	23 7/8"	(607)	3.78	(0.35)
ATA2728	23 1/2"	(596)	27 7/8"	(709)	4.43	(0.41)
ATA 2730	23 1/2"	(596)	31 7/8"	(810)	5.08	(0.47)
ATA 2810	24 5/8"	(625)	8 3/16"	(207)	1.26	(0.12)
ATA 2820	24 5/8"	(625)	20 3/16"	(512)	3.31	(0.31)
ATA 2824	24 5/8"	(625)	24 3/16"	(614)	3.99	(0.37)
ATA2828	24 5/8"	(625)	28 3/16"	(715)	4.68	(0.43)
ATA 2830	24 5/8"	(625)	32 3/16"	(817)	5.36	(0.50)
ATA 2834	24 5/8"	(625)	36 3/16"	(919)	6.04	(0.56)
ATA2838	24 5/8"	(625)	40 3/16"	(1020)	6.72	(0.62)
ATA 2840	24 5/8"	(625)	44 3/16"	(1122)	7.41	(0.69)
ATA 2844	24 5/8"	(625)	48 3/16"	(1223)	8.09	(0.75)
ATA 2848	24 5/8"	(625)	52 3/16"	(1325)	8.77	(0.82)
ATA 2850	24 5/8"	(625)	56 3/16"	(1427)	9.46	(0.88)
ATA 2854	24 5/8"	(625)	60 3/16"	(1528)	10.14	(0.94)
ATA2858	24 5/8"	(625)	64 3/16"	(1630)	10.82	(1.01)
ATA 2860	24 5/8"	(625)	68 3/16"	(1731)	11.51	(1.07)
ATA 2864	24 5/8"	(625)	72 3/16"	(1833)	12.19	(1.13)
ATA 2868	24 5/8"	(625)	76 3/16"	(1935)	12.87	(1.20)
ATA 2874	24 5/8"	(625)	84 3/16"	(2138)	14.24	(1.32)
ATA 2880	24 5/8"	(625)	92 3/16"	(2341)	15.61	(1.45)
ATA 2910	25 1/2"	(647)	8 3/8"	(213)	1.33	(0.12)
ATA 2920	25 1/2"	(647)	20 3/8"	(518)	3.45	(0.32)
ATA2924	25 1/2"	(647)	24 3/8"	(619)	4.16	(0.39)
ATA2928	25 1/2"	(647)	28 3/8"	(721)	4.87	(0.45)

Window Number	Unobstructed Glass Width Inches/(mm)		Unobst Gla Hei Inches	iss ght	Glass Area Sq. Ft./(m²)		
ATA 2930	25 1/2"	(647)	32 3/8"	(822)	5.58	(0.52)	
ATA2910G	25 3/4"	(653)	8 7/16"	(214)	1.35	(0.13)	
ATA2920G	25 3/4"	(653)	20 7/16"	(519)	3.50	(0.32)	
ATA2924G	25 3/4"	(653)	24 7/16"	(621)	4.21	(0.39)	
ATA2928G	25 3/4"	(653)	28 7/16"	(722)	4.92	(0.46)	
ATA2930G	25 3/4"	(653)	32 7/16"	(824)	5.64	(0.52)	
ATA 21010	26 5/8"	(675)	8 11/16"	(220)	1.43	(0.13)	
ATA 21020	26 5/8"	(675)	20 11/16"	(525)	3.65	(0.34)	
ATA 21024	26 5/8"	(675)	24 11/16"	(626)	4.38	(0.41)	
ATA21028	26 5/8"	(675)	28 11/16"	(728)	5.12	(0.48)	
ATA 21030	26 5/8"	(675)	32 11/16"	(830)	5.86	(0.54)	
ATA 21034	26 5/8"	(675)	36 11/16"	(931)	6.60	(0.61)	
ATA21038	26 5/8"	(675)	40 11/16"	(1033)	7.34	(0.68)	
ATA 21040	26 5/8"	(675)	44 11/16"	(1134)	8.08	(0.75)	
ATA 21044	26 5/8"	(675)	48 11/16"	(1236)	8.82	(0.82)	
ATA 21048	26 5/8"	(675)	52 11/16"	(1338)	9.55	(0.89)	
ATA 21050	26 5/8"	(675)	56 11/16"	(1439)	10.29	(0.96)	
ATA 21054	26 5/8"	(675)	60 11/16"	(1541)	11.03	(1.02)	
ATA21058	26 5/8"	(675)	64 11/16"	(1642)	11.77	(1.09)	
ATA 21060	26 5/8"	(675)	68 11/16"	(1744)	12.51	(1.16)	
ATA 21064	26 5/8"	(675)	72 11/16"	(1846)	13.25	(1.23)	
ATA21068	26 5/8"	(675)	76 11/16"	(1947)	13.99	(1.30)	
ATA 21074	26 5/8"	(675)	84 11/16"	(2150)	15.46	(1.44)	
ATA 21080	26 5/8"	(675)	92 11/16"	(2354)	16.94	(1.57)	
ATA 3010	28 5/8"	(726)	9 3/16"	(234)	1.61	(0.15)	
ATA3020	28 5/8"	(726)	21 3/16"	(539)	4.00	(0.37)	
ATA 3024	28 5/8"	(726)	25 3/16"	(640)	4.79	(0.45)	

ATA3028
ATA3034 $28 {}^5/{}^8$ " $(726) 37 {}^3/{}_{16}$ " $(945) 7.17 (0.67)$ ATA3038 $28 {}^5/{}^8$ " $(726) 41 {}^3/{}_{16}$ " $(1047) 7.97 (0.74)$ ATA3040 $28 {}^5/{}^8$ " $(726) 45 {}^5/{}_{16}$ " $(1148) 8.76 (0.81)$ ATA3044 $28 {}^5/{}^8$ " $(726) 49 {}^3/{}_{16}$ " $(1250) 9.56 (0.89)$ ATA3048 $28 {}^5/{}^8$ " $(726) 53 {}^3/{}_{16}$ " $(1351) 10.35 (0.96)$ ATA3050 $28 {}^5/{}^8$ " $(726) 57 {}^3/{}_{16}$ " $(1453) 11.15 (1.04)$ ATA3054 $28 {}^5/{}^8$ " $(726) 61 {}^3/{}_{16}$ " $(1555) 11.94 (1.11)$ ATA3058 $28 {}^5/{}^8$ " $(726) 65 {}^3/{}_{16}$ " $(1656) 12.73 (1.18)$ ATA3060 $28 {}^5/{}^8$ " $(726) 69 {}^3/{}_{16}$ " $(1758) 13.53 (1.26)$ ATA3064 $28 {}^5/{}^8$ " $(726) 73 {}^3/{}_{16}$ " $(1859) 14.32 (1.33)$ ATA3068 $28 {}^5/{}^8$ " $(726) 85 {}^3/{}_{16}$ " $(1961) 15.12 (1.40)$ ATA3074 $28 {}^5/{}^8$ " $(726) 85 {}^3/{}_{16}$ " $(2164) 16.71 (1.55)$ ATA3080 $28 {}^5/{}^8$ " $(726) 93 {}^3/{}_{16}$ " $(2367) 18.29 (1.70)$ ATA3110 $29 {}^1/{}^2$ " $(749) 9 {}^7/{}_{16}$ " $(240) 1.70 (0.16)$
ATA3038
ATA3040 $28 {}^5/{}^8$ " $(726) 45 {}^3/{}_{16}$ " $(1148) 8.76 (0.81)$ ATA3044 $28 {}^5/{}^8$ " $(726) 49 {}^3/{}_{16}$ " $(1250) 9.56 (0.89)$ ATA3048 $28 {}^5/{}^8$ " $(726) 53 {}^3/{}_{16}$ " $(1351) 10.35 (0.96)$ ATA3050 $28 {}^5/{}^8$ " $(726) 57 {}^3/{}_{16}$ " $(1453) 11.15 (1.04)$ ATA3054 $28 {}^5/{}^8$ " $(726) 61 {}^3/{}_{16}$ " $(1555) 11.94 (1.11)$ ATA3058 $28 {}^5/{}^8$ " $(726) 65 {}^3/{}_{16}$ " $(1656) 12.73 (1.18)$ ATA3060 $28 {}^5/{}^8$ " $(726) 69 {}^3/{}_{16}$ " $(1758) 13.53 (1.26)$ ATA3064 $28 {}^5/{}^8$ " $(726) 73 {}^3/{}_{16}$ " $(1859) 14.32 (1.33)$ ATA3068 $28 {}^5/{}^8$ " $(726) 77 {}^3/{}_{16}$ " $(1961) 15.12 (1.40)$ ATA3074 $28 {}^5/{}^8$ " $(726) 85 {}^3/{}_{16}$ " $(2164) 16.71 (1.55)$ ATA3080 $28 {}^5/{}^8$ " $(726) 93 {}^3/{}_{16}$ " $(2367) 18.29 (1.70)$ ATA3110 $29 {}^1/{}^2$ " $(749) 9 {}^7/{}_{16}$ " $(240) 1.70 (0.16)$
ATA3044 28 3 /s" (726) 49 3 / ₁₅ " (1250) 9.56 (0.89) ATA3048 28 3 /s" (726) 53 3 / ₁₆ " (1351) 10.35 (0.96) ATA3050 28 5 /s" (726) 57 3 / ₁₆ " (1453) 11.15 (1.04) ATA3054 28 5 /s" (726) 61 3 / ₁₆ " (1555) 11.94 (1.11) ATA3058 28 5 /s" (726) 65 3 / ₁₆ " (1656) 12.73 (1.18) ATA3060 28 5 /s" (726) 69 3 / ₁₆ " (1758) 13.53 (1.26) ATA3064 28 5 /s" (726) 73 3 / ₁₆ " (1859) 14.32 (1.33) ATA3068 28 5 /s" (726) 77 3 / ₁₆ " (1961) 15.12 (1.40) ATA3074 28 5 /s" (726) 85 3 / ₁₆ " (2164) 16.71 (1.55) ATA3080 28 5 /s" (726) 93 3 / ₁₆ " (2367) 18.29 (1.70) ATA3110 29 1 / ₂ " (749) 9 7 / ₁₅ " (240) 1.70 (0.16)
ATA3048
ATA3050 28 $\frac{5}{8}$ " (726) 57 $\frac{3}{16}$ " (1453) 11.15 (1.04) ATA3054 28 $\frac{5}{8}$ " (726) 61 $\frac{3}{16}$ " (1555) 11.94 (1.11) ATA3058 28 $\frac{5}{8}$ " (726) 65 $\frac{3}{16}$ " (1656) 12.73 (1.18) ATA3060 28 $\frac{5}{8}$ " (726) 69 $\frac{3}{16}$ " (1758) 13.53 (1.26) ATA3064 28 $\frac{5}{8}$ " (726) 73 $\frac{3}{16}$ " (1859) 14.32 (1.33) ATA3068 28 $\frac{5}{8}$ " (726) 77 $\frac{3}{16}$ " (1961) 15.12 (1.40) ATA3074 28 $\frac{5}{8}$ " (726) 85 $\frac{3}{16}$ " (2164) 16.71 (1.55) ATA3080 28 $\frac{5}{8}$ " (726) 93 $\frac{3}{16}$ " (2367) 18.29 (1.70) ATA3110 29 $\frac{1}{2}$ " (749) 9 $\frac{7}{16}$ " (240) 1.70 (0.16)
ATA3054 $28 {}^5 / {}^8$ $(726) 61 {}^3 / {}_1 {}^8$ $(1555) 11.94 (1.11)$ ATA3058 $28 {}^5 / {}^8$ $(726) 65 {}^5 / {}_1 {}^8$ $(1656) 12.73 (1.18)$ ATA3060 $28 {}^5 / {}^8$ $(726) 69 {}^3 / {}_1 {}^8$ $(1758) 13.53 (1.26)$ ATA3064 $28 {}^5 / {}^8$ $(726) 73 {}^3 / {}_1 {}^8$ $(1859) 14.32 (1.33)$ ATA3068 $28 {}^5 / {}^8$ $(726) 77 {}^3 / {}_1 {}^8$ $(1961) 15.12 (1.40)$ ATA3074 $28 {}^5 / {}^8$ $(726) 85 {}^3 / {}_1 {}^8$ $(2164) 16.71 (1.55)$ ATA3080 $28 {}^5 / {}^8$ $(726) 93 {}^3 / {}_1 {}^8$ $(2367) 18.29 (1.70)$ ATA3110 $29 {}^1 / {}^2$ $(749) 9 {}^7 / {}_1 {}^8$ $(240) 1.70 (0.16)$
ATA3058 $28 {}^{5}/{}^{8}$ (726) $65 {}^{5}/{}_{16}$ " (1656) 12.73 (1.18) ATA3060 $28 {}^{5}/{}^{8}$ " (726) $69 {}^{5}/{}_{16}$ " (1758) 13.53 (1.26) ATA3064 $28 {}^{5}/{}^{8}$ " (726) $73 {}^{3}/{}_{16}$ " (1859) 14.32 (1.33) ATA3068 $28 {}^{5}/{}^{8}$ " (726) $77 {}^{3}/{}^{8}$ " (1961) 15.12 (1.40) ATA3074 $28 {}^{5}/{}^{8}$ " (726) $85 {}^{3}/{}^{8}$ " (2164) 16.71 (1.55) ATA3080 $28 {}^{5}/{}^{8}$ " (726) $93 {}^{3}/{}^{8}$ " (2367) 18.29 (1.70) ATA3110 $29 {}^{1}/{}^{2}$ " (749) $9 {}^{7}/{}^{8}$ " (240) 1.70 (0.16)
ATA3060 28 $\frac{5}{8}$ " (726) 69 $\frac{3}{16}$ " (1758) 13.53 (1.26) ATA3064 28 $\frac{5}{8}$ " (726) 73 $\frac{3}{16}$ " (1859) 14.32 (1.33) ATA3068 28 $\frac{5}{8}$ " (726) 77 $\frac{3}{16}$ " (1961) 15.12 (1.40) ATA3074 28 $\frac{5}{8}$ " (726) 85 $\frac{3}{16}$ " (2164) 16.71 (1.55) ATA3080 28 $\frac{5}{8}$ " (726) 93 $\frac{3}{16}$ " (2367) 18.29 (1.70) ATA3110 29 $\frac{1}{2}$ " (749) 9 $\frac{7}{16}$ " (240) 1.70 (0.16)
ATA3064 28 $\frac{3}{8}$ " (726) 73 $\frac{3}{16}$ " (1859) 14.32 (1.33) ATA3068 28 $\frac{5}{8}$ " (726) 77 $\frac{3}{16}$ " (1961) 15.12 (1.40) ATA3074 28 $\frac{5}{8}$ " (726) 85 $\frac{3}{16}$ " (2164) 16.71 (1.55) ATA3080 28 $\frac{5}{8}$ " (726) 93 $\frac{3}{16}$ " (2367) 18.29 (1.70) ATA3110 29 $\frac{1}{2}$ " (749) 9 $\frac{7}{16}$ " (240) 1.70 (0.16)
ATA3068 $28 {}^5/{}^8$ " (726) $77 {}^3/{}_{16}$ " (1961) 15.12 (1.40) ATA3074 $28 {}^5/{}_8$ " (726) $85 {}^3/{}_{16}$ " (2164) 16.71 (1.55) ATA3080 $28 {}^5/{}_8$ " (726) $93 {}^3/{}_{16}$ " (2367) 18.29 (1.70) ATA3110 $29 {}^1/{}_2$ " (749) $9 {}^7/{}_{16}$ " (240) 1.70 (0.16)
ATA3074 $28 \frac{5}{8}$ " (726) $85 \frac{7}{16}$ " (2164) 16.71 (1.55) ATA3080 $28 \frac{5}{8}$ " (726) $93 \frac{3}{16}$ " (2367) 18.29 (1.70) ATA3110 $29 \frac{1}{2}$ " (749) $9 \frac{7}{16}$ " (240) 1.70 (0.16)
ATA3080 28 5/8" (726) 93 3/16" (2367) 18.29 (1.70) ATA3110 29 1/2" (749) 9 7/16" (240) 1.70 (0.16)
ATA3110 29 1/2" (749) 9 7/16" (240) 1.70 (0.16)
ATA 3120 29 ½" (749) 21 ½" (545) 4.16 (0.39)
. (. , /10 ()
ATA 3124 29 1/2" (749) 25 7/16" (647) 4.97 (0.46)
ATA 3128 29 1/2" (749) 29 7/16" (748) 5.79 (0.54)
ATA 3130 29 1/2" (749) 33 7/16" (850) 6.61 (0.61)
ATA 3210 30 5/8" (777) 8 15/16" (227) 1.68 (0.16)
ATA3220 30 5/8" (777) 20 15/16" (532) 4.23 (0.39)
ATA 3224 30 5/8" (777) 24 15/16" (634) 5.08 (0.47)
ATA3228 30 5/8" (777) 28 15/16" (735) 5.93 (0.55)
ATA 3230 30 ⁵ / ₈ " (777) 32 ¹⁵ / ₁₆ " (837) 6.78 (0.63)

[·] Dimensions in parentheses are in millimeters or square meters.

flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details

Sash-Set Arch Window Unobstructed Glass Dimensions and Area Specifications (continued)

Window Number	Unobst Gla Wid Inches	iss dth	Unobst Gla Hei Inches	ss ght	Glass Area Sq. Ft./(m²)		
ATA 3234	30 5/8"	(777)	36 15/16"	(939)	7.63	(0.71)	
ATA3238	30 5/8"	(777)	40 15/16"	(1040)	8.48	(0.79)	
ATA 3240	30 5/8"	(777)	44 15/16"	(1142)	9.33	(0.87)	
ATA 3244	30 5/8"	(777)	48 15/16"	(1243)	10.18	(0.95)	
ATA3248	30 5/8"	(777)	52 15/16"	(1345)	11.03	(1.02)	
ATA3250	30 5/8"	(777)	56 15/16"	(1447)	11.88	(1.10)	
ATA3254	30 5/8"	(777)	60 15/16"	(1548)	12.73	(1.18)	
ATA3258	30 5/8"	(777)	64 15/16"	(1650)	13.58	(1.26)	
ATA3260	30 5/8"	(777)	68 15/16"	(1751)	14.43	(1.34)	
ATA3264	30 5/8"	(777)	72 15/16"	(1853)	15.28	(1.42)	
ATA3268	30 5/8"	(777)	76 15/16"	(1955)	16.13	(1.50)	
ATA3274	30 5/8	(777)	84 15/16"	(2158)	17.83	(1.66)	
ATA3280			-				
	30 5/8"	(777)	92 15/16"	(2361)	19.53	(1.81)	
ATA3310	31 1/2"	(799)	9 3/16"	(233)		(0.16)	
ATA3320	31 1/2"	(799)	21 3/16"	(538)	4.39	(0.41)	
ATA3324	31 1/2"	(799)	25 3/16"	(639)	5.26	(0.49)	
ATA3328	31 1/2"	(799)	29 3/16"	(741)	6.14	(0.57)	
ATA3330	31 1/2"	(799)	33 3/16"	(842)	7.01	(0.65)	
ATA3310G	31 3/4"	(806)	9 1/4"	(235)	1.79	(0.17)	
ATA3320G	31 3/4"	(806)	21 1/4"	(539)	4.43	(0.41)	
ATA3324G	31 3/4"	(806)	25 1/4"	(641)	5.31	(0.49)	
ATA3328G	31 3/4"	(806)	29 1/4"	(743)	6.19	(0.58)	
ATA3330G	31 3/4"	(806)	33 1/4"	(844)	7.08	(0.66)	
ATA 3410	32 5/8"	(828)	9 7/16"	(240)	1.88	(0.17)	
ATA 3420	32 5/8"	(828)	21 7/16"	(545)	4.59	(0.43)	
ATA 3424	32 5/8"	(828)	25 7/16"	(647)	5.50	(0.51)	
ATA3428	32 5/8"	(828)	29 7/16"	(748)	6.40	(0.59)	
ATA 3430	32 5/8"	(828)	33 7/16"	(850)	7.31	(0.68)	
ATA 3434	32 5/8"	(828)	37 7/16"	(952)	8.21	(0.76)	
ATA3438	32 5/8"	(828)	41 7/16"	(1053)	9.12	(0.85)	
ATA 3440	32 5/8"	(828)	45 7/16"	(1155)	10.02	(0.93)	
ATA3444	32 5/8"	(828)	49 7/16"	(1256)	10.93	(1.02)	
ATA 3448	32 5/8"	(828)	53 7/16"	(1358)	11.83	(1.10)	
ATA3450	32 5/8"	(828)	57 7/16"	(1460)	12.74	(1.18)	
ATA3454	32 5/8"	(828)	61 7/16"	(1561)	13.65	(1.27)	
ATA3458	32 5/8"	(828)	65 7/16"	(1663)	14.55	(1.35)	
ATA3460	32 5/8"	(828)	69 7/16"	(1764)	15.46	(1.44)	
ATA3464				, ,			
ATA3468	32 5/8"	(828)	73 7/16"	(1866)	16.36 17.27	(1.52)	
	32 5/8"	(828)	77 7/16"	(1968)		(1.60)	
ATA3474	32 5/8"	(828)	85 7/16"	(2131)	19.08	(1.77)	
ATA3480	32 5/8"	(828)	93 7/16"	(2374)	20.89	(1.94)	
ATA3810	36 5/8"	(929)	9 3/4"	(247)	2.15	(0.20)	
ATA3820	36 5/8"	(929)	21 3/4"	(552)	5.20	(0.48)	
ATA3824	36 5/8"	(929)	25 3/4"	(654)	6.22	(0.58)	
ATA3828	36 5/8"	(929)	29 3/4"	(755)	7.23	(0.67)	
ATA3830	36 5/8"	(929)	33 3/4"	(857)	8.25	(0.77)	
ATA 3834	36 5/8"	(929)	37 3/4"	(959)	9.27	(0.86)	
ATA3838	36 5/8"	(929)	41 3/4"	(1060)	10.28	(0.96)	
ATA 3840	36 5/8"	(929)	45 3/4"	(1162)	11.30	(1.05)	
ATA 3844	36 5/8"	(929)	49 3/4"	(1263)	12.31	(1.14)	
ATA 3848	36 5/8"	(929)	53 3/4"	(1365)	13.33	(1.24)	
ATA 3850	36 5/8"	(929)	57 ³ / ₄ "	(1467)	14.35	(1.33)	
ATA 3854	36 5/8"	(929)	61 3/4"	(1568)	15.36	(1.43)	
ATA3858	36 5/8"	(929)	65 3/4"	(1670)	16.38	(1.52)	
ATA 3860	36 5/8"	(929)	69 3/4"	(1771)	17.40	(1.62)	
ATA 3864	36 5/8"	(929)	73 3/4"	(1873)	18.41	(1.71)	
ATA3868	36 5/8"	(929)	77 3/4"	(1975)	19.43	(1.81)	
ATA 3874	36 5/8"	(929)	85 3/4"	(2138)	21.46	(1.99)	
ATA 3880	36 5/8"	(929)	93 3/4"	(2381)		(2.18)	
ATA3910	37 3/4"	(958)	10"	(255)	2.27	(0.21)	
ATA3920	37 3/4"	(958)	22"	(560)	5.41	(0.50)	
	/4	,550)		(200)	3.71	, 5.50)	

Window	Unobstru Glas	S	Unobst Gla	ISS	Gla	
Number	Widt Inches/(Hei Inches		Ar Sq. Ft	ea /(m²)
ATA3924		958)	26"	(661)	6.46	(0.60)
ATA3928	37 3/4"	958)	30"	(763)	7.51	(0.70)
ATA 3930	37 3/4" (958)	34"	(864)	8.56	(0.79)
ATA 4010	40 5/8" (1031)	10 13/16"	(275)	2.60	(0.24)
ATA 4020	40 5/8" (1031)	22 13/16"	(579)	5.98	(0.56)
ATA 4024	40 5/8" (1031)	26 13/16"	(681)	7.11	(0.66)
ATA 4028	40 5/8" (1031)	30 13/16"	(783)	8.24	(0.77)
ATA 4030	40 5/8" (1031)	34 13/16"	(884)	9.37	(0.87)
ATA 4034	40 5/8" (1031)	38 13/16"	(986)	10.49	(0.97)
ATA 4038	40 5/8" (1031)	42 13/16"	(1087)	11.62	(1.08)
ATA 4040	40 5/8" (1031)	46 13/16"	(1189)	12.75	(1.18)
ATA 4044	40 5/8" (1031)	50 13/16"	(1291)	13.88	(1.29)
ATA 4048	40 5/8" (1031)	54 13/16"	(1392)	15.00	(1.39)
ATA 4050	40 5/8" (1031)	58 13/16"	(1494)	16.13	(1.50)
ATA 4054	40 5/8" (1031)	62 13/16"	(1595)	17.26	(1.60)
ATA 4058	40 5/8" (1031)	66 13/16"	(1697)	18.39	(1.71)
ATA 4060	40 5/8" (1031)	70 13/16"	(1799)	19.51	(1.81)
ATA 4064	40 5/8" (1031)	74 13/16"	(1900)	20.64	(1.92)
ATA 4068	40 5/8" (1031)	78 13/16"	(2002)	21.77	(2.02)
ATA 4074	40 5/8" (1031)	86 13/16"	(2205)	24.02	(2.23)
ATA 4080	40 5/8" (1031)	94 13/16"	(2408)	26.28	(2.44)
ATA 4310	43 3/4" (1110)	10 1/8"	(257)	2.64	(0.25)
ATA 4320	43 3/4" (1110)	22 1/8"	(562)	6.28	(0.58)
ATA 4324	43 3/4" (1110)	26 1/8"	(664)	7.50	(0.70)
ATA4328	43 3/4" (1110)	30 1/8"	(765)	8.71	(0.81)
ATA 4330	43 3/4" (1110)	34 1/8"	(867)	9.93	(0.92)
ATA 4410	44 5/8" (1133)	10 5/16"	(263)	2.74	(0.25)
ATA 4420	44 5/8" (1133)	22 5/16"	(567)	6.45	(0.60)
ATA 4424	44 5/8" (1133)	26 5/16"	(669)	7.69	(0.71)
ATA 4428	44 5/8" (1133)	30 5/16"	(771)	8.93	(0.83)
ATA 4430	44 5/8" (1133)	34 5/16"	(872)	10.17	(0.94)
ATA 4434	44 5/8" (1133)	38 5/16"	(974)	11.41	(1.06)
ATA 4438	44 5/8" (1133)	42 5/16"	(1075)	12.65	(1.18)
ATA 4440	44 5/8" (1133)	46 5/16"	(1177)	13.89	(1.29)
ATA 4444	44 5/8" (1133)	50 5/16"	(1279)	15.13	(1.41)
ATA 4448	44 5/8" (1133)	54 5/16"	(1380)	16.36	(1.52)
ATA 4450	44 5/8" (1133)	58 5/16"	(1482)	17.60	(1.64)
ATA 4454	44 5/8" (1133)	62 5/16"	(1583)	18.84	(1.75)
ATA 4458	44 5/8" (1133)	66 5/16"	(1685)	20.08	(1.87)
ATA 4460		1133)	70 5/16"	(1787)	21.32	(1.98)
ATA 4464			74 5/16"		22.56	(2.10)
ATA 4468			78 5/16"			(2.21)
ATA 4474			86 5/16"			(2.44)
ATA 4480			94 5/16"		28.75	(2.67)
ATA 4810				(288)	3.22	(0.30)
ATA 4820			23 5/16"		7.27	(0.68)
ATA4824				(694)	8.62	(0.80)
ATA4828			31 5/16"	(796)	9.97	(0.93)
ATA 4830		1234)			11.32	(1.05)
ATA 4834			39 5/16"		12.67	(1.18)
ATA4838				(1101)	14.02	(1.30)
ATA4840		1234)		(1202)	15.37	(1.43)
ATA 4844		1234)	51 5/16"		16.72	(1.55)
ATA4848		1234)	55 5/16"		18.07	(1.68)
ATA4850		1234)	59 5/16"		19.42	(1.80)
ATA4854		1234)	63 5/16"		20.77	(1.93)
ATA4858		1234)	67 5/16"			(2.05)
ATA4860			71 5/16"		23.47	(2.18)
ATA4864		1234)	75 5/16"		24.82	(2.31)
ATA4868		1234)	79 5/16"		26.17	(2.43)
ATA4874		1234)	87 5/16"	(2218)	28.87	(2.68)
	- /0 (/	/ 10	,/		,,

Window Number	Wie	ass	Unobst Gla Hei Inches	iss ght	Ar	ass ea :./(m²)
ATA 4880	48 5/8"	(1234)	95 5/16"	(2421)	31.57	(2.93)
ATA 5010	52 ⁵ / ₈ "	(1336)	12 7/16"	(315)	3.77	(0.35)
ATA 5020	52 ⁵ / ₈ "	(1336)	24 7/16"	(620)	8.15	(0.76)
ATA 5024	52 5/8"	(1336)	28 7/16"	(722)	9.61	(0.89)
ATA5028	52 ⁵ / ₈ "	(1336)	32 7/16"	(823)	11.07	(1.03)
ATA 5030	52 ⁵ / ₈ "	(1336)	36 7/16"	(925)	12.53	(1.16)
ATA 5034	52 ⁵ / ₈ "	(1336)	40 7/16"	(1027)	13.99	(1.30)
ATA5038	52 ⁵ / ₈ "	(1336)	44 7/16"	(1128)	15.45	(1.44)
ATA 5040	52 5/8"	(1336)	48 7/16"	(1230)	16.92	(1.57)
ATA 5044	52 5/8"	(1336)	52 7/16"	(1331)	18.38	(1.71)
ATA5048	52 5/8"	(1336)	56 7/16"	(1433)	19.84	(1.84)
ATA5050	52 5/8"	(1336)	60 7/16"	(1535)	21.30	(1.98)
ATA5054	52 5/8"	(1336)	64 7/16"	(1636)	22.76	(2.11)
ATA5058	52 5/8"	(1336)	68 7/16"	(1738)	24.22	(2.25)
ATA5060	52 5/8"	(1336)	72 7/16"	(1839)	25.68	(2.39)
ATA5064	52 5/8"	(1336)			27.14	(2.52)
ATA5068		(1336)	76 7/16"	(1941)		
	52 5/8"		80 7/16"	(2043)	28.60	(2.66)
ATA5074	52 5/8"	(1336)	88 7/16"	(2246)	31.52	(2.93)
ATA5080	52 5/8"	(1336)	96 7/16"	(2449)	34.45	(3.20)
ATA 5410	56 5/8"	(1437)	11 15/16"	(303)	3.90	(0.36)
ATA 5420	56 5/8"	(1437)	23 15/16"	(607)	8.61	(0.80)
ATA 5424	56 5/8"	(1437)	27 15/16"	(709)	10.18	(0.95)
ATA5428	56 5/8"	(1437)	31 15/16"	(811)	11.76	(1.09)
ATA 5430	56 5/8"	(1437)	35 15/16"	(912)	13.33	(1.24)
ATA 5434	56 5/8"	(1437)	39 15/16"	(1014)	14.90	(1.38)
ATA 5438	56 5/8"	(1437)	43 15/16"	(1115)	16.47	(1.53)
ATA 5440	56 ⁵ / ₈ "	(1437)	47 15/16"	(1213)	18.05	(1.68)
ATA 5444	56 5/8"	(1437)	51 15/16"	(1319)	19.62	(1.82)
ATA 5448	56 5/8"	(1437)	55 15/16"	(1420)	21.19	(1.97)
ATA 5450	56 5/8"	(1437)	59 15/16"	(1522)	22.76	(2.11)
ATA 5454	56 5/8"	(1437)	63 15/16"	(1623)	24.33	(2.26)
ATA 5458	56 5/8"	(1437)	67 15/16"	(1725)	25.91	(2.41)
ATA 5460	56 5/8"	(1437)	71 15/16"	(1827)	27.48	(2.55)
ATA 5464	56 5/8"	(1437)	75 15/16"	(1928)	29.05	(2.70)
ATA 5468	56 ⁵ / ₈ "	(1437)	79 15/16"	(2030)	30.62	(2.84)
ATA 5474	56 ⁵ / ₈ "	(1437)	87 15/16"	(2233)	33.77	(3.14)
ATA 5480	56 ⁵ / ₈ "	(1437)	95 15/16"	(2436)	36.91	(3.43)
ATA 5810	60 ⁵ / ₈ "	(1539)	12 15/16"	(328)	4.47	(0.42)
ATA5820	60 5/8"	(1539)	24 15/16"	(633)	9.52	(0.88)
ATA5824	60 5/8"	(1539)	28 15/16"	(735)	11.21	(1.04)
ATA5828	60 5/8"	(1539)	32 15/16"	(836)	12.89	(1.20)
ATA5830	60 5/8"		36 15/16"		14.57	(1.35)
ATA5834	60 5/8"		40 15/16"		16.26	(1.51)
ATA5838	60 5/8"		44 15/16"		17.94	(1.67)
ATA5840	60 5/8"		48 15/16"		19.62	(1.82)
ATA5844			52 ¹⁵ / ₁₆ "		21.30	(1.98)
ATA5848	60 5/8"					
	60 5/8"		56 15/16"		22.99	(2.14)
ATA 5850	60 5/8"		60 15/16"		24.67	(2.29)
ATA5854	60 5/8"		64 15/16"		26.35	(2.45)
ATA5858	60 5/8"		68 15/16"		28.04	(2.60)
ATA5860	60 5/8"		72 15/16"		29.72	(2.76)
ATA 5864	60 5/8"		76 15/16"		31.40	(2.92)
ATA5868	60 5/8"		80 15/16"		33.09	(3.07)
ATA 5874	60 5/8"		88 15/16"		36.45	(3.39)
ATA 5880	60 5/8"		96 15/16"	(2462)	39.82	(3.70)
ATA 6010	64 5/8"	(1641)	14"	(356)	5.11	(0.48)
ATA 6020	64 5/8"	(1641)	26"	(661)	10.50	(0.98)
ATA 6024	64 5/8"	(1641)	30"	(763)	12.29	(1.14)
ATA6028	64 5/8"	(1641)	34"	(864)	14.09	(1.31)
ATA 6030	64 5/8"	(1641)	38"	(966)	15.88	(1.48)
Dimensions in pa	arenthese	s are in	millimete	rs or squa	are meter	s.

[•] Dimensions in parentheses are in millimeters or square meters.



Sash-Set Arch Window Unobstructed Glass Dimensions and Area Specifications (continued)

Dimension	s and	Area	Spec	ificat	ions	(continued	
Window Number	Gla	tructed ass dth	Unobstructed Glass Height		Glass Area		
Number		s/(mm)		s/(mm)		t./(m²)	
ATA 6034	64 5/8"	(1641)	42"	(1067)	17.67	(1.64)	
ATA 6038	64 5/8"	(1641)	46"	(1169)	19.47	(1.81)	
ATA 6040	64 5/8"	(1641)	50"	(1271)	21.26	(1.98)	
ATA 6044	64 5/8"	(1641)	54"	(1372)	23.06	(2.14)	
ATA6048	64 5/8"	(1641)	58"	(1474)	24.85	(2.31)	
ATA6050	64 5/8"	(1641)	62"	(1575)	26.65	(2.48)	
ATA6054		(1641)	66"	(1677)	28.44	(2.64)	
ATA6058	64 5/8"						
	64 5/8"	(1641)	70"	(1779)	30.23	(2.81)	
ATA6060	64 5/8"	(1641)	74"	(1880)	32.03	(2.98)	
ATA 6064	64 5/8"	(1641)	78"	(1982)	33.82	(3.14)	
ATA 6068	64 5/8"	(1641)	82"	(2083)	35.62	(3.31)	
ATA 6074	64 5/8"	(1641)	90"	(2287)	39.21	(3.64)	
ATA 6080	64 5/8"	(1641)	98"	(2490)	42.79	(3.98)	
ATA 6410	68 5/8"	(1742)	13 1/2"	(343)	5.24	(0.49)	
ATA 6420	68 5/8"	(1742)	25 1/2"	(647)	10.95	(1.02)	
ATA 6424	68 5/8"	(1742)	29 1/2"	(749)	12.86	(1.19)	
ATA 6428	68 5/8"	(1742)	33 1/2"	(851)	14.76	(1.37)	
ATA 6430	68 5/8"	(1742)	37 1/2"	(952)	16.67	(1.55)	
ATA 6434	68 5/8"	(1742)	41 1/2"	(1054)	18.57	(1.73)	
ATA 6438	68 5/8"	(1742)	45 1/2"	(1155)	20.48	(1.90)	
ATA 6440	68 5/8"	(1742)	49 1/2"	(1257)	22.38	(2.08)	
ATA6444	68 5/8"	(1742)	53 1/2"	(1359)	24.29	(2.26)	
ATA6448	68 5/8"	(1742)	57 1/2"	(1460)	26.19	(2.43)	
ATA6450				-	28.10		
	68 5/8"	(1742)	61 1/2"	(1562)		(2.61)	
ATA6454	68 5/8"	(1742)	65 1/2"	(1663)	30.01	(2.79)	
ATA6458	68 5/8"	(1742)	69 1/2"	(1765)	31.91	(2.96)	
ATA 6460	68 5/8"	(1742)	73 1/2"	(1867)	33.82	(3.14)	
ATA 6464	68 5/8"	(1742)	77 1/2"	(1968)	35.72	(3.32)	
ATA 6468	68 5/8"	(1742)	81 1/2"	(2070)	37.63	(3.50)	
ATA 6474	68 5/8"	(1742)	89 1/2"	(2273)	41.44	(3.85)	
ATA 6480	68 5/8"	(1742)	97 1/2"	(2476)	45.25	(4.20)	
ATA 6810	72 5/8"	(1844)	14 1/2"	(369)	5.91	(0.55)	
ATA 6820	72 5/8"	(1844)	26 1/2"	(674)	11.96	(1.11)	
ATA 6824	72 5/8"	(1844)	30 1/2"	(775)	13.97	(1.30)	
ATA 6828	72 5/8"	(1844)	34 1/2"	(877)	15.99	(1.49)	
ATA 6830	72 5/8"	(1844)	38 1/2"	(979)	18.01	(1.67)	
ATA 6834	72 5/8"	(1844)	42 1/2"	(1080)	20.02	(1.86)	
ATA6838	72 5/8"	(1844)	46 1/2"	(1182)	22.04	(2.05)	
ATA 6840	72 5/8"	(1844)	50 1/2"	(1283)	24.05	(2.23)	
ATA 6844	72 5/8"	(1844)	54 1/2"	(1385)	26.07	(2.42)	
ATA 6848	72 5/8"	(1844)		(1487)		(2.61)	
ATA6850	72 5/8"	(1844)		(1588)		(2.80)	
ATA6854		(1844)		(1690)		(2.98)	
ATA6858		(1844)		(1791)		(3.17)	
ATA 6860	72 5/8"	(1844)		(1893)		(3.36)	
ATA 6864	72 5/8"	(1844)		(1995)		(3.55)	
ATA6868		(1844)		(2096)		(3.73)	
ATA 6874	72 5/8"	(1844)		(2299)		(4.11)	
ATA 6880	72 5/8"	(1844)	98 1/2"	(2503)		(4.48)	
ATA 7010	76 5/8"	(1945)	15 5/8"	(397)	6.64	(0.62)	
ATA 7020	76 5/8"	(1945)	27 5/8"	(702)	13.03	(1.21)	
ATA 7024	76 5/8"	(1945)	31 5/8"	(803)	15.15	(1.41)	
ATA 7028	76 5/8"	(1945)	35 5/8"	(905)	17.28	(1.61)	
ATA 7030	76 5/8"	(1945)	39 5/8"	(1007)	19.41	(1.80)	
	76 ⁵ / ₈ "	(1945)	43 5/8"	(1108)	21.54	(2.00)	
ATA 7034				(4040)	00.00	(2.20)	
ATA7034 ATA7038	76 5/8"	(1945)	47 5/8"	(1210)	23.66	(2.20)	
	76 ⁵ / ₈ "	(1945) (1945)	47 ⁵ / ₈ " 51 ⁵ / ₈ "	(1210)		(2.40)	
ATA 7038	76 5/8"	(1945)	51 5/8"	(1311)	25.79	(2.40)	
ATA7038 ATA7040 ATA7044	76 ⁵ / ₈ "	(1945) (1945)	51 ⁵ / ₈ " 55 ⁵ / ₈ "	(1311) (1413)	25.79 27.92	(2.40) (2.59)	
ATA 7038 ATA 7040	76 ⁵ / ₈ "	(1945)	51 5/8"	(1311)	25.79 27.92 30.05	(2.40)	

Window Number	Unobst Gla Wid Inches	dth	Gla	tructed ass ght	Glass Area Sq. Ft./(m²)	
ATA7058	76 5/8"	(1945)	71 5/8"	(1819)	36.43	(3.38)
ATA 7060	76 5/8"	(1945)	75 5/8"	(1921)	38.56	(3.58)
ATA7064	76 5/8"	(1945)	79 5/8"	(2023)	40.69	(3.78)
ATA7068	76 5/8"	(1945)	83 5/8"	(2124)	42.81	(3.98)
ATA7074	76 5/8"	(1945)	91 5/8"	(2327)	47.07	(4.37)
ATA7080	76 5/8"	(1945)	99 5/8"	(2531)	51.32	(4.77)
ATA7410	80 5/8"	(2047)	15 1/16"	(383)	6.76	(0.63)
ATA7420	80 5/8"	(2047)	27 1/16"	(688)	13.47	(1.25)
ATA7424	80 5/8"	(2047)	31 1/16"	(789)	15.71	(1.46)
ATA7428	80 5/8"	(2047)	35 1/16"	(891)	17.95	(1.67)
ATA7430	80 5/8"	(2047)	39 1/16"	(993)	20.19	(1.88)
ATA7434	80 5/8"	(2047)	43 1/16"	(1094)	22.43	(2.08)
ATA7434	80 5/8"	(2047)	47 1/16"	(1196)	24.66	(2.29)
ATA7440		(2047)		(1297)	26.90	(2.50)
ATA7444	80 ⁵ / ₈ "		51 ¹ / ₁₆ " 55 ¹ / ₁₆ "			
ATA7448		(2047)		(1399)	29.14	(2.71)
	80 5/8"	(2047)	59 1/16"	(1501)	31.38	(2.92)
ATA 7454	80 5/8"	(2047)	63 1/16"	(1602)	33.62	(3.12)
ATA 7454	80 5/8"	(2047)	67 1/16"	(1704)	35.86	(3.33)
ATA 7458	80 5/8"	(2047)	71 1/16"	(1805)	38.10	(3.54)
ATA 7460	80 5/8"	(2047)	75 1/16"	(1907)	40.34	(3.75)
ATA71110	87 13/16"	(2230)	17"	(432)	8.18	(0.76)
ATA71120	87 13/16"	(2230)	29"	(737)	15.49	(1.44)
ATA71124	87 13/16"	(2230)	33"	(838)	17.93	(1.67)
ATA71128	87 13/16"	(2230)	37"	(940)	20.37	(1.89)
ATA71130	87 13/16"	(2230)	41"	(1042)	22.81	(2.12)
ATA8010	88 5/8"	(2250)	17 1/4"	(438)	8.35	(0.78)
ATA8020	88 5/8"	(2250)	29 1/4"	(743)	15.74	(1.46)
ATA8024	88 5/8"	(2250)	33 1/4"	(844)	18.20	(1.69)
ATA8028	88 5/8"	(2250)	37 1/4"	(946)	20.66	(1.92)
ATA8030	88 5/8"	(2250)	41 1/4"	(1047)	23.12	(2.15)
ATA8034	88 5/8"	(2250)	45 1/4"	(1149)	25.58	(2.38)
ATA8038	88 5/8"	(2250)	49 1/4"	(1251)	28.04	(2.61)
ATA8040	88 5/8"	(2250)	53 1/4"	(1352)	30.50	(2.83)
ATA8044	88 5/8"	(2250)	57 1/4"	(1454)	32.96	(3.06)
ATA8048	88 5/8"	(2250)	61 1/4"	(1555)	35.42	(3.29)
ATA 8050	88 5/8"	(2250)	65 1/4"	(1657)	37.89	(3.52)
ATA8054	88 5/8"	(2250)	69 1/4"	(1759)	40.35	(3.75)
ATA8058	88 5/8"	(2250)	73 1/4"	(1860)	43.81	(3.98)
ATA 8060	88 5/8"	(2250)	77 1/4"	(1962)	45.27	(4.21)
ATA8810	96 5/8"	(2453)	16 1/4"	(413)	8.61	(0.80)
ATA8820	96 5/8"	(2453)	28 1/4"		16.66	(1.55)
ATA 8824	96 5/8"	(2453)	32 1/4"	(820)	19.35	(1.80)
ATA8828	96 5/8"	(2453)	36 1/4"	(921)	22.03	(2.05)
ATA 8830		(2453)	40 1/4"			(2.30)
ATA 8834		(2453)	44 1/4"			(2.55)
ATA 8838	96 5/8"	(2453)	48 1/4"	(1226)	_	(2.79)
ATA 8840	96 5/8"	(2453)	52 1/4"	(1328)		(3.04)
ATA8844	96 5/8"	(2453)	56 1/4"			(3.29)
ATA 8848	96 5/8"	(2453)	60 1/4"			(3.54)
ATA 8850	96 5/8"	(2453)	64 1/4"	(1632)		(3.79)
ATA 8854	96 5/8"	(2453)	68 1/4"			(4.04)
ATA 8858	96 5/8"	(2453)	72 1/4"			(4.29)
ATA 8860	96 5/8"	(2453)	76 1/4"			(4.54)
ATA81110	99 13/16"		17 1/16"	(433)	9.27	(0.86)
ATA81120	99 13/16"		29 1/16"	(738)	17.59	(1.63)
ATA81124	99 13/16"		33 1/16"	(839)	20.36	(1.89)
ATA81128	99 13/16"		37 1/16"	(941)	23.13	(2.15)
ATA81130	99 13/16"		41 1/16"			(2.41)
ATA9410	104 5/8"		18 1/4"	(464)	10.34	(0.96)
ATA9420	104 5/8"		30 1/4"		19.05	(1.77)
ATA 9424	104 5/8"	(2657)	34 1/4"	(870)	21.96	(2.04)

Window Number	Unobstructed Glass Width Inches/(mm)	Unobstructed Glass Height Inches/(mm)	Glass Area Sg. Ft. //m²)		
ATA 9428	104 ⁵ / ₈ " (2657)	38 1/4" (972)	Sq. Ft./(m ²) 24.86 (2.31)		
ATA9430			, ,		
ATA9434	104 5/8" (2657)		` '		
	104 5/8" (2657)	46 1/4" (1175)	30.67 (2.85)		
ATA9438	104 5/8" (2657)	50 1/4" (1277)	33.58 (3.12)		
ATA 9440	104 5/8" (2657)	54 1/4" (1378)	36.49 (3.39)		
ATA 9444	104 5/8" (2657)	58 1/4" (1480)	39.39 (3.66)		
ATA 9448	104 5/8" (2657)	62 1/4" (1582)	42.30 (3.93)		
ATA 9450	104 5/8" (2657)	66 1/4" (1683)	45.20 (4.20)		
ATA 9454	104 5/8" (2657)	70 1/4" (1785)	48.11 (4.47)		
ATA 9458	104 5/8" (2657)	74 1/4" (1886)	51.01 (4.74)		
ATA 10010	112 5/8" (2860)	20 7/16" (520)	12.32 (1.14)		
ATA 10020	112 5/8" (2860)	32 7/16" (824)	21.70 (2.02)		
ATA 10024	112 5/8" (2860)	36 7/16" (926)	24.83 (2.31)		
ATA 10028	112 5/8" (2860)	40 7/16" (1028)	27.96 (2.60)		
ATA 10030	112 5/8" (2860)	44 7/16" (1129)	31.08 (2.89)		
ATA10034	112 5/8" (2860)	48 7/16" (1231)	34.21 (3.18)		
ATA10038	112 5/8" (2860)	52 7/16" (1332)	37.34 (3.47)		
ATA10030	112 ⁵ / ₈ " (2860)	56 7/16" (1434)	40.47 (3.76)		
ATA10040	112 5/8" (2860)	60 7/16" (1536)	43.59 (4.05)		
ATA10044		, ,			
	112 5/8" (2860)	64 7/16" (1637)	46.72 (4.34)		
ATA10050	112 5/8" (2860)	68 7/16" (1739)	49.85 (4.63)		
ATA 10054	112 5/8" (2860)	72 7/16" (1840)	52.98 (4.92)		
ATA 10058	112 5/8" (2860)	76 7/16" (1942)	56.11 (5.21)		
ATA 10810	120 5/8" (3063)	20 7/16" (532)	13.45 (1.25)		
ATA 10820	120 5/8" (3063)	32 7/16" (837)	23.50 (2.18)		
ATA 10824	120 5/8" (3063)	36 7/16" (938)	26.85 (2.49)		
ATA10828	120 5/8" (3063)	40 7/16" (1040)	30.20 (2.81)		
ATA 10830	120 5/8" (3063)	$44\ ^{7}\!/_{16}"\ \ (1141)$	33.55 (3.12)		
ATA 10834	120 5/8" (3063)	48 7/16" (1243)	36.90 (3.43)		
ATA10838	120 5/8" (3063)	52 7/16" (1345)	40.25 (3.74)		
ATA 10840	120 5/8" (3063)	56 7/16" (1446)	43.60 (4.05)		
ATA 10844	120 5/8" (3063)	60 7/16" (1548)	46.95 (4.36)		
ATA 10848	120 5/8" (3063)	64 7/16" (1649)	50.30 (4.67)		
ATA 10850	120 5/8" (3063)	68 7/16" (1751)	53.65 (4.98)		
ATA10854	120 5/8" (3063)	72 7/16" (1853)	57.00 (5.30)		
ATA10858	120 5/8" (3063)	76 7/16" (1954)	60.35 (5.61)		
ATA11410	128 5/8" (3266)	20 7/16" (545)	14.64 (1.36)		
ATA11420	128 5/8" (3266)	32 7/16" (850)	25.36 (2.36)		
ATA11424					
	128 5/8" (3266)	36 ⁷ / ₁₆ " (952)	28.93 (2.69)		
ATA11428	128 5/8" (3266)	40 7/16" (1053)	32.50 (3.02)		
ATA11430	128 5/8" (3266)	44 7/16" (1155)			
ATA11434	128 5/8" (3266)	48 7/16" (1256)			
ATA 11438	128 5/8" (3266)	52 ⁷ / ₁₆ " (1358)			
ATA 11440	128 5/8" (3266)	56 7/16" (1460)	46.79 (4.35)		
ATA 11444	128 5/8" (3266)	60 7/16" (1561)	50.36 (4.68)		
ATA 11448	128 5/8" (3266)	64 7/16" (1663)	53.94 (5.01)		
ATA 11450	128 5/8" (3266)	68 7/16" (1764)	57.51 (5.34)		
ATA 11454	128 5/8" (3266)	72 7/16" (1866)	61.08 (5.67)		
ATA 12010	136 5/8" (3469)	20 7/16" (601)	17.01 (1.58)		
ATA 12020	136 5/8" (3469)	32 7/16" (906)	28.39 (2.64)		
ATA 12024	136 5/8" (3469)	36 7/16" (1008)	32.19 (2.99)		
ATA12028	136 5/8" (3469)	40 7/16" (1109)			
ATA12030	136 5/8" (3469)	44 7/16" (1211)			
ATA12034	136 5/8" (3469)	48 7/16" (1312)			
ATA12034	136 5/8" (3469)	52 7/16" (1414)			
ATA12040	136 5/8" (3469)	56 7/16" (1516)			
ATA12040					
	136 5/8" (3469)				
ATA12048	136 5/8" (3469)	64 7/16" (1719)			
ATA12050	136 5/8" (3469)	68 7/16" (1820)	62.54 (5.81)		
ATA 12054	136 5/8" (3469)	72 7/16" (1922)	66.33 (6.16)		

Table of Direct-Set Springline Window Sizes Scale 1 /8" (3) = 1'-0" (305) − 1:96

Notes on page 106 also apply to this page.

Window			sion	1'-7 1/4"	1'-11 1/4"	2'-3 1/4"	2'-5 1/4"	2'-7 1/4"	2'-9 1/4"	2'-11 1/4"	3'-1 1/4"	3'-3 1/4"
Minimur				(489)	(591) 2'-0"	(692) 2'-4"	(743)	(794)	(845) 2'-10"	(895)	(946)	(997)
Rough 0		ISS		(508) 15 ½"	(610) 19 ¹ / ₄ "	(711) 23 ¹ / ₄ "	(762) 25 ¹ / ₄ "	(813) 27 ¹ / ₄ "	(864) 29 ¹ / ₄ "	(914) 31 ½"	(965) 33 ½"	(1016) 35 ½"
				CUSTOM	↑ (489) Sizes availabi	「(591)	Ī (641) Ī	Ĭ (692) Ĭ	Ĭ (743) Ĭ	Ī (794) Ī	[(845) [Ī (895) Ī
Window shown ir			Radius	9 5/8" (2	44) 11 ⁵ /8" (3	295) 13 ⁵ /8" (3	346) 14 ⁵ /8" (371) 15 ⁵ /8" (3	397) 16 ⁵ /8" (4	22) 17 5/8" (44	18 5/8" (4	73) 19 ⁵ /8" (498)
			Chord Height	(244) (244)	11 5/8" (295)	13 5/8"	14 5/8"	15 5/8" (397)	16 5/8" (422)	17 5/8" (448)	18 5/8 " (473)	19 5/8"
ow height + 3/4" (19)	ndow height – 4" (102)	CUSTOM SIZES AVAILABLE	Shoulder Height 6 1/4" (159)	**************************************	ATSD2007	ATSD2407	#8½ 8,1 ATSD2607	**************************************	ATSD21007	ATSD3007	**************************************	#8/L1-72 ATSD 3407
Minimum Rough Opening = window height + 3/4" (19)	Unobstructed Glass = window height - 4" (102)	CUSTOM	Sho 11 1/4" (286)	ATSD1810	ATSD2010	ATSD2410	ATSD2610	ATSD2810	ATSD21010	2.4 7/8 (7/3) (7/3	*** (S-Z) (S-Z) (ATSD3210	TSD3410
Minimum Rough	Unobstr		23 1/4" (591)	ATSD1820	7-10 ½8, as a state of the stat	#8/2 0-18 ATSD2420	3-1 ½" (362) ATSD2620	ATSD2820	87.5.78 (1013) ATSD21020		47.87 ATSD3220	6801 ATSD3420
			27 1/4" (692)	#8/LO-E	ATSD2024	3-4 ½8" (1038) ATSD2424	37-5-78" ATSD2622	3.9.29.1880 ATSD 2824	37.7/8 (1111) ATSD 21024		**************************************	#80 01-18 ATSD3424
			31 1/4"	3.4.7 7/8" (1038) ATSD1828	3.9.9 (1086) ATSD2028	3-8 78" 3-8 78" 3-8 78" 3-8 78"	3.6-3.8 ATSD2628	3:-10 1/8" ATSD2828	3-11 ½ (1510) ATSD21028		17.1 7/8 " (1267) (1267)	ATSD3428
			35 1/4"	38.7 ₆ " (1140)	3-10 ½8" (1191) ATSD2030	ATSD2430	41.1 7/8" (1267)	4-2 7/8" (1292) ATSD 2830	41-378" (1318) ATSD 21030	41.4 7/8" (1343)	(1368) (1368) ATSD3230	41.6.78" A1.03430
			39 1/4"	4.0 ½8" (1241) (1241) (1341)	ATSD2034	ATSD2434	ATSD2634	4 ATSD2834	ATSD 21034		ATSD3234	4-10 78" (1495) (1495) (1495)
			43 1/4"	4-4 7/8" (1343) (1343)	41-6 7/8" (1394) (1394)	#8 ⁷ 8 ⁷ 8 ⁸ 18 18 18 18 18 18 18 18 18 18 18 18 18	ATSD2638	41.10 7/8" (1495) ATSD2838	4117/8" ALSD21038		1.5 (1572) ATSD3238	ATSD3438

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.



Notes on page 106 also apply to this page.

3'-7 ¹ / ₄ " 3'-11 ¹ / ₄ (1099) (1200) 3'-8" 4'-0" (1118) (1219) 39 ¹ / ₄ " 43 ¹ / ₄ " (997) (1099)	(1302) 4'-4" (1321) 47 ½"	4'-7 1/4" (1403) 4'-8" (1422) 51 1/4" (1302)	4'-11 ¹ / ₄ " (1505) 5'-0" (1524) 55 ¹ / ₄ " (1403)	5'-3 1/4" (1607) 5'-4" (1626) 59 1/4" (1505)	5'-7 1/4" (1708) 5'-8" (1727) 63 1/4" (1607)	5'-11 1/4" (1810) 6'-0" (1829) 67 1/4" (1708)
21 5/8" (549) 23 5/8"	(600) 25 5/8" (651)	27 5/8" (702)	29 5/8" (752)	31 5/8" (803)	33 5/8" (854)	35 5/8" (905)
21 5/8" (549) (549) (600)	25 5/8" (651)	(702)	(752)	(803)	(854)	(905)
#\$\int \text{\text{\$\infty} \text{\$\infty} \text{\$\infty} \text{\text{\$\infty} \text{\$\infty} \text{\text{\$\infty} \text{\$\infty} \text{\$\infty \text{\$\infty} \text{\$\infty \text{\$\infty} \$\infty \text{\$\infty \	*8½ 00 00 00 00 00 00 00 00 00 00 00 00 00	ATSD4807	ATSD5007	**************************************	**************************************	#8/2 9-18 ATSD6007
*% S S S S S S S S S	10 ATSD4410	ATSD4810	80 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	#3/2 9-15 (10.00) ATSD5410	1.8 7.8 7.8 1.11 (11.140)	3-710 7/8-2 (1131) (1131) (1131) (1131)
3'-8 7/8" (1140) 3'-10 7/8" (1191)	00 4 0 7/8" 2 1/8" 4-0 0 1/8" 4-7 1/8"	ATSD4820	ATSD5020	**************************************	*8½8.78.4 (1441) ATSD5820	4'-10 7/8" (1495) (1495)
4-0 7/8" (12941) 4-2 7/8" 4-2 7/8" (1295)	ATSD4424	ATSD4824	(S) (G) (F) (F) (F) (F) (F) (F) (F) (F) (F) (F	ATSD5424	#8/2 Q-jcg ATSD5824	**8½ 7.5 (1263) ATSD6024
(1343) (1343) (1343) (1343) (1394) (1394)	8* 4+8 7/8" 4+10 7/8"	ATSD4828*	(9 f G1) ATSD5028	**************************************	**************************************	#3/2 9-15 (1,699) ATSD6028
41-87 7/8" (1445) 4-10 7/8" (1495)		ATSD4830	87 + 10 (889) ATSD 5030	#\$\left(\frac{1}{2}\)\(\frac{1}{2}\)	11449) (68" (17449) (1	#8206030
5'-0 7/8" (1546) (1547)	5.4 7%" (1648)		(1749)	5'.10 7/6" (1800)	6-0.7g" (1851)	(1902)
1648) 1647/8" 1699) 1699)	34 ATSD 4434	ATSD4834	ATSD5034	ATSD5434 (70061)	ATSD5834	ATSD6034 (5003) (5003)
ATSD3838 ATSD403	ATSD4438	ATSD4838	ATSD5038	ATSD5438	ATSD5838	ATSD6038 continued on next page

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

Table of Direct-Set Springline™ Window Sizes (continued) Notes on page 106 also apply to this page. Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96 2'-7 1/4" 1'-7 1/4" 1'-11 1/4" 2'-3 1/4" 2'-5 1/4" 2'-9 1/4" 2'-11 1/4" 3'-1 1/4" 3'-3 1/4" Window Width Dimension (489) (591) (692) (743) (794) (845) (895) (997) (946) 2'-0" 2'-4" 2'-6" 2'-8" 3'-4" 1'-8" 2'-10" 3'-0" 3'-2" Minimum **Rough Opening** (508)(610) (711) (762) (813) (864) (914) (965) (1016) 15 1/4" 19 1/4" 23 1/4" 25 1/4" 27 1/4" 29 1/4" 31 1/4" 33 1/4" 35 1/4" Unobstructed Glass (845) (895) (387) (489) (591) (641) (692) (743) (794) CUSTOM SIZES AVAILABLE 11 5/8" (295) Window height 9 5/8" (244) 13 5/8" (346) 14 5/8" (371) 15 5/8" (397) 16 5/8" (422) 17 5/8" (448) 18 5/8" (473) 19 5/8" (498) shown in table 16 5/8" (422) 17 5/8" (448) 18 5/8" (473) 19 5/8" (498) 14 5/8" (371) 15 5/8" Chord Minimum Rough Opening = window height + 3/4" Unobstructed Glass = window height – 4" (102) **CUSTOM SIZES AVAILABLE** Shoulder Height 2'-5 7/8" 2'-6 7/8" 5'-2 7/8" 5'-4 7/8" 4'-10 7/8" 5'-1 7/8" 5'-3 7/8" 2'-0 7/8" (1699)(1572)(1597)(1622)(1648)(1673)47 1/4" (1200) 4'-8 7/8" (1495)1546(1445)ATSD1840 ATSD2040 ATSD2440 ATSD2640 ATSD2840 ATSD21040 ATSD3040 ATSD3240 ATSD3440 5'-10 7/8" (1800) 18/2 6-,5 2'-6 7/8" 5'-2 7/8" 5'-4 7/8" -5 7/8" 18/2 1-19 (1724)5'-8 7/8" (1749)(1775)(1597) (1673)(1699)(1648)2'-0 7/8" 51 1/4" (1302) 1546) ī'n ATSD2644 ATSD2844 ATSD21044 ATSD3044 ATSD3244 ATSD1844 ATSD2044 ATSD2444 **ATSD**3444 5'-10 7/8" .8/2 0-.9 6'-1 7/8" 6'-2 7/8" (1902) 18/2 6-,9 2'-6 7/8" 5'-11 7/8" 1/8" (1851)(1876)(1775)(1800)(1826)5'-4 7/8" (1699) (1749)55 1/4" (1648)(1403) 2-8 ATSD2648 ATSD3048 ATSD3448 **ATSD**2448 ATSD2848 ATSD21048 ATSD3248 ATSD1848 ATSD2048 .8/2 9-19 6'-5 7/8" 5'-10 7/8" .8/2 0-.9 6'-1 7/8" 6'-2 7/8" 6'-3 7/8" 6'-4 7/8" (1953)(1978)(2003) (1505) 5'-8 7/8" (1876)59 1/4" (1800) (1851)(1927)(1902)(1749)ATSD2450 ATSD2650 ATSD2850 ATSD21050 ATSD3050 ATSD3250 ATSD3450 ATSD1850 ATSD2050 6'-10 7/8" ..8/2 6-.9 6'-2 7/8" 6'-5 7/8" .8/2 9-.9 .8/2 2-19 18/28-19 (2105)6'-4 7/8" (2080).8/2 0-.9 (1902) (1978)(2003)(2029)(2054)(1953)(1851)(1607) ATSD3454 ATSD1854 ATSD2054 ATSD2454 ATSD2654 ATSD2854 ATSD21054 ATSD3054 ATSD3254 6'-10 7/8" 7'-2 7/8" (2207) 6'-11 7/8" 7'-0 7/8" (2156) (2130)7'-1 7/8" (2181)..8/2 6-.9 (2105).8/2 9-,9 _8// (2054)(2080)6'-4 7/8" (1953)(2003) 67 1/4" (1708) 8-9 ATSD1858 ATSD2058 ATSD2458 ATSD2658 ATSD2858 ATSD21058 ATSD3058 ATSD3258 ATSD3458

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

[&]quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.



Notes on page 106 also apply to this page.

3'-7 1/4" (1099) 3'-8" (1118) 39 1/4" (997)	3'-11 1/4" (1200) 4'-0" (1219) 43 1/4" (1099)	4'-3 1/4" (1302) 4'-4" (1321) 47 1/4" (1200)	4'-7 1/4" (1403) 4'-8" (1422) 51 1/4" (1302)	4'-11 1/4" (1505) 5'-0" (1524) 55 1/4" (1403)	5'-3 1/4" (1607) 5'-4" (1626) 59 1/4" (1505)	5'-7 1/4" (1708) 5'-8" (1727) 63 1/4" (1607)	5'-11 1/4" (1810) 6'-0" (1829) 67 1/4" (1708)
21 5/8" (549)	23 5/8" (600						35 5/8" (905)
(549)	(600)	(651)	(702)	29 5/8"	31 5/8"	33 5/8"	(903)
	(1800)	6'-0'7/8" (1851)	6-2 7/8" (1902)	6'-4 7/g" (1953)	6-6 78" (2003)	6-8 7/8"	6'-10 7/8" (2105)
ATSD3840	ATSD4040	ATSD4440	ATSD4840	ATSD5040	ATSD5440	ATSD5840	ATSD6040
(1851)	(1902)	(1953)	(2003)	(2054)	(2105)	(2156)	(2207)
ATSD 3844	ATSD4044	ATSD4444	ATSD4844	ATSD5044	ATSD5444	ATSD5844	ATSD6044
(1953)	(2003)	6-8 7/8" (2054)	(2105)	7'-0 7/8" (2156)	(2207)	(2257)	7'-6 7g" (2308)
ATSD 3848	ATSD4048	ATSD4448	ATSD4848	ATSD5048	ATSD5448	ATSD5848	ATSD6048
(2054)	(2105)	7-0 7/8" (2156)	7-2 7/8" (2207)	7-4 78" (2257)	7-6 7/8"	(2359)	7-10 7/s" (2410)
ATSD3850	ATSD4050	ATSD4450	ATSD4850	ATSD5050	ATSD5450	ATSD5850	ATSD6050
7-078" (2156)	(2207)	7'-4 7'8" (2257)	7'-6 7/8" (2308)	7'-8 7/8" (2359)	710 78"	8-0 7g" (2461)	8-2 7g" (2511)
▲ TSD 3854	ATSD4054	ATSD4454	ATSD4854	ATSD5054	ATSD5454	ATSD5854	ATSD6054*
	(2308)	7.8 7%	(2410)	8'-0'7/g" (2461)	8-278"	8-4 78" (2562)	8-6 7g" (2613)
ATSD3858	ATSD4058	ATSD4458	ATSD4858	ATSD5058	ATSD5458	ATSD5858*	ATSD6058*

continued on next page

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.
• Tempered glass required. Some visual distortion may occur.

Table of Direct-Set Springline™ Window Sizes (continued) Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Notes on page 106 also apply to this page.

Window Width Dimension	1'-7 1/4" (489)	1'-11 1/4"	2'-3 1/4" (692)	2'-5 1/4" (743)	2'-7 1/4" (794)	2'-9 1/4" (845)	2'-11 ¹ / ₄ " (895)	3'-1 ¹ / ₄ " (946)	3'-3 1/4" (997)
Minimum Rough Opening	1'-8"	2'-0" (610)	2'-4" (711)	2'-6" (762)	2'-8" (813)	2'-10" (864)	3'-0" (914)	3'-2" (965)	3'-4" (1016)
Unobstructed Glass	15 ½" (387)	19 ¹ / ₄ " (489)	23 1/4" (591)	25 ¹ / ₄ " (641)	27 ¹ / ₄ " (692)	29 ¹ / ₄ " (743)	31 ¹ / ₄ " (794)	33 ¹ / ₄ " (845)	35 ½" (895)

Minimun Rough O	n pening			1'-8"	2'-0		2'-4"	2'-6"	2'-8"	2'-1			3'-2" (965)	3'-4" (1016)
Unobstru	icted Gla	ISS		15 ½" (387)		9) 1	(591)	25 ½" (641)	27 ¹ / ₄ ' (692)				33 ¹ / ₄ " (845)	35 ½" (895)
Window shown ir	height n table		Radius	9 ⁵ /8" (1 SIZES AVAIL 244) 11 ⁵ /		13 5/8" (346)	14 ⁵ /8" (3	371) 15 ⁵ /8'	"(397) 16 ⁵ /	/8" (422) 17	5/8" (448)	18 5/8" (473)	19 5/8" (498)
			Chord 5	2 2	11 5/8" (295)	13 5/8"	14 5/8"	37]	(397)	16 5/8"	17 5/8"	18 5/8"	19 5/8" (498)	
Minimum Rough Opening = window height + $3/4^n$ (19)	Unobstructed Glass = window height - 4" (102)	CUSTOM SIZES AVAILABLE	Shoulder Height 71 1/4" (1810) (1810)	(2024) (2024) (2024)	66-10 7/8" (2105)	090 (2156)	*8½ 1-½ \$D2460	ATSD2660	(2207) ATSD28	## (2532) ATSD2:	DOSTA 7/8" (2257)	7-5 7/8" (2283)	\$\overline{\pi_1\end{array}} \frac{1}{2308}\$	ATSD3460
Minimum Roug	Unobst		75 1/4" (1911)	(2156) ATSD186	ATSD2	7'-4 7/8" TY (2257)	"8/2 9-; L SD2464	(£827) ATSD2664	#8/29-1/2 (S2)08) ATSD28	(5334) ATSD2	(5359) ATSD	1.6 7.8 1 3064 AT	7:-10 7% (2410)	ATSD3464
			(2013)	(2257)	7'-6 7/8"	7'-8 7/8" (2359)	"8/2 6-1/2	(2384)	7'-10 7/8" (2410)	7-117/8" (2435)	8'-0 7/8" (2461)	8'-1 ⁷ / ₈ " (2486)	8'-2 7/8" (2511)	
			1	ATSD186	8 ATSD2	068 AT	SD 2468	ATSD2668	ATSD28	68 ATSD2	1068 ATSD	3068 AT	SD 3268	ATSD3468
			_											
			(2216)	(2461)	8'-2 7/8" (2511)	8'-4 7/8" (2562)	8'-5 7/8"	(2588)	8'-6 7/8" (2613)	8'-7 7/8" (2638)	8'-8 7/8" (2664)	8'-9 7/8" (2689)	8'-10 7/8" (2715)	
			ļ	ATSD187	4 ATSD2	074 AT	SD 2474	ATSD2674	ATSD28	74 ATSD 2:	1074 ATSD	3074 AT	SD 3274	ATSD3474
			95 14"	(2664)	8'-10 7/8" (2715)	9-0 7/8" (2765)	9'-1 7/8"	(2791)	9-2 7/8" (2816)	9'-37/8" (2842)	9'-47/8" (2867)	9'-5 7/8" (2892)	9-6 78"	
			Ţ	ATSD188	30 ATSD2	080 AT	SD 2480	ATSD2680	ATSD28	80 ATSD 2:	1080 ATSD	3080 AT	SD3280	ATSD3480

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

• Dimensions in parentheses are in millimeters.



Notes on page 106 also apply to this page.

21 %**(549) 23 %**(654) 25 %**(651) 27 %**(702) 29 5%**(752) 31 5%**(803) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%**(854) 33 5%**(854) 33 5%*(854) 33 5%*(854) 33 5%**(8	9-2 7/8" 8-10 7/8" 35 5/8" (2016) (20
T. S.	ATSD6060*
ATSD3864 ATSD4464 ATSD4464 ATSD5664*	(2816)
	ATSD6064*
AISDS000 AISD4000 AISD4000 AISD5000 AISDS000	ATSD6068*
ATSD5874* ATSD5874* ATSD5874* ATSD5874* ATSD5874*	ATSD6074*
AISD38/4 AISD4/4 AISD588/4 AISD5880* ATSD5880* ATSD5880* ATSD5880* ATSD5880*	(3324) (3324)

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.
• Tempered glass required. Some visual distortion may occur.

Notes on page 106 also apply to this page. **Table of Direct-Set Springline™ Window Sizes** (continued) Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96 6'-3 1/4" 6'-7 1/4" 6'-11 1/4" 7'-3 1/4" 7'-11 1/4" Window Width Dimension (1911)(2013)(2115) (2216) (2419) 6'-8" 8'-0" 6'-4" 7'-0" 7'-4" Minimum Rough Opening (1930) (2032) (2134)(2235) (2438) 71 1/4" 75 1/4" 79 1/4" 83 1/4" 91 1/4" **Unobstructed Glass** (1810)(1911) (2013)(2115) (2318) CUSTOM SIZES AVAILABLE Window height 37 5/8" (956) 39 5/8" (1006) 41 5/8" (1057) 43 5/8" (1108) 47 5/8" (1210) shown in table 47 5/8" 39 5/8" (1006) 41 5/8" (1057) (1210)43 5/8" 37 5/8" (1108)(926)Chord Minimum Rough Opening = window height + 3/4" (19) Unobstructed Glass = window height – 4" (102) **CUSTOM SIZES AVAILABLE** 3'-11 7/8" 4'-1 7/8" <u>"</u>% (1368)(1267)3'-7 7/8" (1216)(1114)3'-9 7/8" (1165)4'-5 6 1/4" (159) Shoulder Height ATSD6407 **ATSD**7007 **ATSD**8007 ATSD6807 ATSD7407 4'-10 7/8" 4'-4 7/8" 4'-6 7/8" (1495)4'-2 7/8" 4'-0 7/8" (1394)(1343)(1241)(1292) $\frac{11}{(286)}$ **ATSD**6410 ATSD6810 ATSD7010 ATSD7410 ATSD8010 5'-10 7/8" (1800)5'-4 7/8" 5'-6 7/8" 2'-0 7/8" (1648)(1699)(1546)5'-2 7/8' (1597)23 1/4" (591) ATSD6420 ATSD6820 ATSD7020 ATSD7420 ATSD8020* 6'-2 7/8" 1,8/ 5'-4 7/8" 2'-8 7/8" (1800)2'-6 7/8" (1699)(1749) 1902) (1648)5'-10 7 ATSD7024 ATSD6424 ATSD6824 ATSD7424 ATSD8024* .8/2 9-19 6'-2 7/8" (2003)5'-10 7/8" .8/2 0-,9 5'-8 7/8" (1800)(1749)(1851)(1902)31 1/4" (794) ATSD6428 ATSD6828 ATSD7028 ATSD7428 ATSD8028* .8/2 9-.9 6'-10 7/8' 6'-4 7/8" (2105)..8/2 0-.9 6'-2 7/8" (2003)(1953)(1902)(1851)35 1/4" (895) ATSD6430 ATSD6830 ATSD7030 ATSD7430* ATSD8030* continued on page 106 6'-10 7/8" 1,8/2 (2105)6'-4 7/8" .8/2 9-19 (2054)(1953)(2003)8-19 39 1/4" (997) ATSD6434 ATSD6834 ATSD7034 ATSD7434* • "Window Dimension" always refers to outside frame-to-frame 6'-10 7/8" 1.-0 7/8" .81/2 8-,9 (2156)dimension. (2054)(2105)"Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, 43 1/4" (1099) fasteners or other items. See pages 226-227 for more details. Dimensions in parentheses are in millimeters

*Tempered glass required. Some visual distortion may occur.

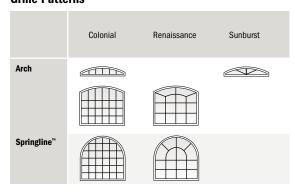
ATSD6438

ATSD6838

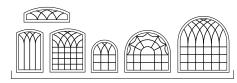
ATSD7038*



Grille Patterns



Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes. Specified equal light and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.



Custom Examples

Direct-Set Springline™ Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)		
ATSD1807	1.08	(0.10)	
ATSD1810	1.61	(0.15)	
ATSD1820	2.88	(0.27)	
ATSD1824	3.31	(0.31)	
ATSD1828	3.73	(0.35)	
ATSD1830	4.16	(0.39)	
ATSD1834	4.58	(0.43)	
ATSD1838	5.00	(0.46)	
ATSD1840	5.43	(0.50)	
ATSD1844	5.85	(0.54)	
ATSD1848	6.27	(0.58)	
ATSD1850	6.70	(0.62)	
ATSD1854	7.12	(0.66)	
ATSD1858	7.54	(0.70)	
ATSD1860	7.97	(0.74)	
ATSD1864	8.39	(0.78)	
ATSD1868	8.82	(0.82)	
ATSD1874	9.66	(0.90)	
ATSD1880	10.51	(0.98)	
ATSD2007	1.58	(0.15)	
ATSD2010	2.25	(0.21)	
ATSD2020	3.85	(0.36)	
ATSD2024	4.39	(0.41)	
ATSD2028	4.92	(0.46)	
ATSD2030	5.46	(0.51)	
ATSD2034	5.99	(0.56)	
ATSD2038	6.52	(0.61)	
ATSD2040	7.06	(0.66)	
ATSD2044	7.59	(0.71)	
ATSD2048	8.13	(0.76)	
ATSD2050	8.66	(0.80)	
ATSD2054	9.20	(0.85)	
ATSD2058	9.73	(0.90)	
ATSD2060	10.27	(0.95)	
ATSD2064	10.80	(1.00)	
ATSD2068	11.34	(1.05)	
ATSD2074	12.41	(1.15)	
ATSD2080	13.48	(1.25)	
ATSD2407	2.16	(0.20)	

ATSD2410 2.97 (0.28) ATSD2420 4.91 (0.46) ATSD2424 5.55 (0.52) ATSD2428 6.20 (0.58) ATSD2430 6.84 (0.64) ATSD2434 7.49 (0.70) ATSD2438 8.13 (0.76) ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2444 9.43 (0.88) ATSD2445 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2460 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2638 8.97 (0.83) ATSD2640 9.67 (0.90)
ATSD2424 5.55 (0.52) ATSD2428 6.20 (0.58) ATSD2430 6.84 (0.64) ATSD2434 7.49 (0.70) ATSD2438 8.13 (0.76) ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2444 9.43 (0.88) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2460 16.53 (1.54) ATSD2610 3.36 (0.31) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2428 6.20 (0.58) ATSD2430 6.84 (0.64) ATSD2434 7.49 (0.70) ATSD2438 8.13 (0.76) ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2444 9.43 (0.84) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2638 8.97 (0.83)
ATSD2430 6.84 (0.64) ATSD2434 7.49 (0.70) ATSD2438 8.13 (0.76) ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2448 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2434 7.49 (0.70) ATSD2438 8.13 (0.76) ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2448 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2634 8.27 (0.77) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2438 8.13 (0.76) ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2448 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2610 3.36 (0.31) ATSD2610 3.36 (0.31) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2440 8.78 (0.82) ATSD2444 9.43 (0.88) ATSD2448 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2610 3.36 (0.31) ATSD2610 3.36 (0.31) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2444 9.43 (0.88) ATSD2448 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2448 10.07 (0.94) ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2450 10.72 (1.00) ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2454 11.36 (1.06) ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2458 12.01 (1.12) ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2460 12.66 (1.18) ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2464 13.30 (1.24) ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2468 13.95 (1.30) ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2474 15.24 (1.42) ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2480 16.53 (1.54) ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2607 2.48 (0.23) ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2610 3.36 (0.31) ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2620 5.46 (0.51) ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2624 6.17 (0.57) ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2628 6.87 (0.64) ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2630 7.57 (0.70) ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2634 8.27 (0.77) ATSD2638 8.97 (0.83)
ATSD2638 8.97 (0.83)
()
ATSD2640 9.67 (0.90)
3.01 (0.30)
ATSD 2644 10.37 (0.96)
ATSD 2648 11.08 (1.03)
ATSD 2650 11.78 (1.09)
ATSD 2654 12.48 (1.16)
ATSD 2658 13.18 (1.22)
ATSD 2660 13.88 (1.29)
ATSD 2664 14.58 (1.35)
ATSD 2668 15.28 (1.42)
ATSD 2674 16.69 (1.55)
ATSD 2680 18.09 (1.68)
ATSD 2807 2.83 (0.26)
ATSD 2810 3.78 (0.35)

ATSD2820 6.05 (0.56) ATSD2824 6.80 (0.63) ATSD2828 7.56 (0.70) ATSD2830 8.32 (0.77) ATSD2834 9.07 (0.84) ATSD2838 9.83 (0.91) ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2858 14.37 (1.34) ATSD2858 14.37 (1.34) ATSD2868 16.64 (1.55) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21038 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21048 13.15 (1.22) ATSD21058 15.59 (1.45) ATSD21068 16.40 (1.52) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3000 7.27 (0.68)	Window Number	Glass Area		
ATSD2824 6.80 (0.63) ATSD2828 7.56 (0.70) ATSD2830 8.32 (0.77) ATSD2834 9.07 (0.84) ATSD2838 9.83 (0.91) ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2858 14.37 (1.34) ATSD2868 16.64 (1.55) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD2800 15.13 (1.41) ATSD2800 15.13 (1.41) ATSD2801 19.67 (1.83) ATSD2801 19.67 (1.83) ATSD2801 19.67 (1.83) ATSD21010 4.21 (0.39) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21040 11.52 (1.07) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	Nullibel			
ATSD2828 7.56 (0.70) ATSD2830 8.32 (0.77) ATSD2834 9.07 (0.84) ATSD2838 9.83 (0.91) ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2820	6.05 (0.56)		
ATSD2830 8.32 (0.77) ATSD2834 9.07 (0.84) ATSD2838 9.83 (0.91) ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21058 15.59 (1.45) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD21080 3.59 (0.33) ATSD21080 3.59 (0.33) ATSD21080 3.59 (0.33) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2824	6.80 (0.63)		
ATSD2834 9.07 (0.84) ATSD2838 9.83 (0.91) ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21040 11.52 (1.07) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2828	7.56 (0.70)		
ATSD2838 9.83 (0.91) ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2866 15.13 (1.41) ATSD2866 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2830	8.32 (0.77)		
ATSD2840 10.59 (0.98) ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2868 15.13 (1.41) ATSD2868 16.64 (1.55) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 3.20 (0.30) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2834	9.07 (0.84)		
ATSD2844 11.34 (1.05) ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2838	9.83 (0.91)		
ATSD2848 12.10 (1.12) ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 3.20 (0.30) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD 2840	10.59 (0.98)		
ATSD2850 12.86 (1.19) ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2844	11.34 (1.05)		
ATSD2854 13.62 (1.26) ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 3.20 (0.30) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21044 12.34 (1.15) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2848	12.10 (1.12)		
ATSD2858 14.37 (1.34) ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21044 12.34 (1.15) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2850	12.86 (1.19)		
ATSD2860 15.13 (1.41) ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2870 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2854	13.62 (1.26)		
ATSD2864 15.89 (1.48) ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2858	14.37 (1.34)		
ATSD2868 16.64 (1.55) ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21001 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 10.71 (1.00) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2860	15.13 (1.41)		
ATSD2874 18.16 (1.69) ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21034 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21040 12.34 (1.15) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2864	15.89 (1.48)		
ATSD2880 19.67 (1.83) ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21055 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2868	16.64 (1.55)		
ATSD21007 3.20 (0.30) ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21040 12.34 (1.15) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2874	18.16 (1.69)		
ATSD21010 4.21 (0.39) ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD2880	19.67 (1.83)		
ATSD21020 6.65 (0.62) ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21007	3.20 (0.30)		
ATSD21024 7.46 (0.69) ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21080 21.27 (1.98) ATSD21080 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21010	4.21 (0.39)		
ATSD21028 8.27 (0.77) ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21020	6.65 (0.62)		
ATSD21030 9.09 (0.84) ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21024	7.46 (0.69)		
ATSD21034 9.90 (0.92) ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21028	8.27 (0.77)		
ATSD21038 10.71 (1.00) ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21030	9.09 (0.84)		
ATSD21040 11.52 (1.07) ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21034	9.90 (0.92)		
ATSD21044 12.34 (1.15) ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21038	10.71 (1.00)		
ATSD21048 13.15 (1.22) ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21040	11.52 (1.07)		
ATSD21050 13.96 (1.30) ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21044	12.34 (1.15)		
ATSD21054 14.77 (1.37) ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21048	13.15 (1.22)		
ATSD21058 15.59 (1.45) ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21050	13.96 (1.30)		
ATSD21060 16.40 (1.52) ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21054	14.77 (1.37)		
ATSD21064 17.21 (1.60) ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21058	15.59 (1.45)		
ATSD21068 18.02 (1.67) ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21060			
ATSD21074 19.65 (1.83) ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21064	17.21 (1.60)		
ATSD21080 21.27 (1.98) ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)		18.02 (1.67)		
ATSD3007 3.59 (0.33) ATSD3010 4.67 (0.43)	ATSD21074	19.65 (1.83)		
ATSD 3010 4.67 (0.43)	ATSD21080	· , ,		
	ATSD3007	3.59 (0.33)		
ATSD 3020 7.27 (0.68)	ATSD3010	4.67 (0.43)		
	ATSD3020	7.27 (0.68)		

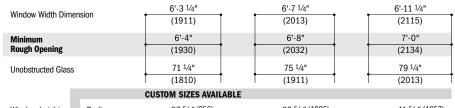
Window Number	Glass Area Sq. Ft./(m²)			
ATSD3024	8.14	(0.76)		
ATSD3028	9.01	(0.84)		
ATSD3030	9.88	(0.92)		
ATSD3034	10.75	(1.00)		
ATSD3038	11.61	(1.08)		
ATSD3040	12.48	(1.16)		
ATSD3044	13.35	(1.24)		
ATSD3048	14.22	(1.32)		
ATSD3050	15.09	(1.40)		
ATSD3054	15.96	(1.48)		
ATSD3058	16.82	(1.56)		
ATSD3060	17.69	(1.64)		
ATSD3064	18.56	(1.72)		
ATSD3068	19.43	(1.80)		
ATSD3074	21.16	(1.97)		
ATSD3080	22.90	(2.13)		
ATSD3207	4.00	(0.37)		
ATSD3210	5.15	(0.48)		
ATSD3220	7.92	(0.74)		
ATSD3224	8.85	(0.82)		
ATSD3228	9.77	(0.91)		
ATSD3230	10.69	(0.99)		
ATSD3234	11.62	(1.08)		
ATSD3238	12.54	(1.16)		
ATSD3240	13.46	(1.25)		
ATSD3244	14.39	(1.34)		
ATSD3248	15.31	(1.42)		
ATSD3250	16.23	(1.51)		
ATSD3254	17.16	(1.59)		
ATSD3258	18.08	(1.68)		
ATSD3260	19.00	(1.77)		
ATSD3264	19.93	(1.85)		
ATSD3268	20.85	(1.94)		
ATSD3274	22.70	(2.11)		
ATSD3280	24.55	(2.28)		
ATSD3407	4.43	(0.41)		
ATSD3410	5.65	(0.53)		
ATSD3420	8.59	(0.80)		
Diii				

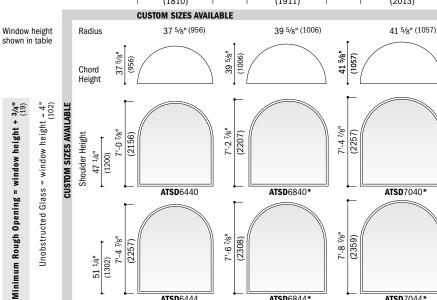
[•] Dimensions in parentheses are in square meters.

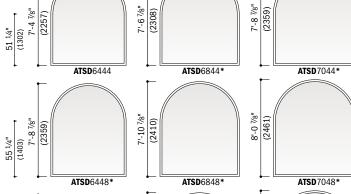
SPECIALTY WINDOWS

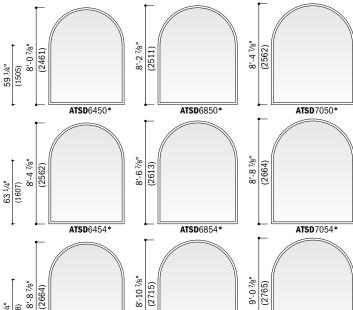
Table of Direct-Set Springline™ Window Sizes (continued from page 104)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96



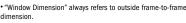






ATSD6858*

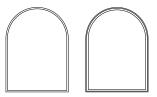
ATSD7058*
continued on page 108



^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.



Custom-size windows are available in 1/8" (3) increments. Contact your Andersen supplier for more information.



Direct-Set Springline Sash-Set Springline

Direct-set Springline (ATSD) window sizes shown. Use window dimensions and minimum rough opening formula shown for sash-set Springline (**ATS**) window sizes. For sash-set unobstructed glass dimensions, see pages 108-110.

All sizes shown, along with custom sizes, are available with PG upgrade.

Grille patterns shown on page 105.

Details shown on page 111.

67 1/4" (1708)

ATSD6458*

[•] Dimensions in parentheses are in millimeters.

^{*}Tempered glass required. Some visual distortion may occur.



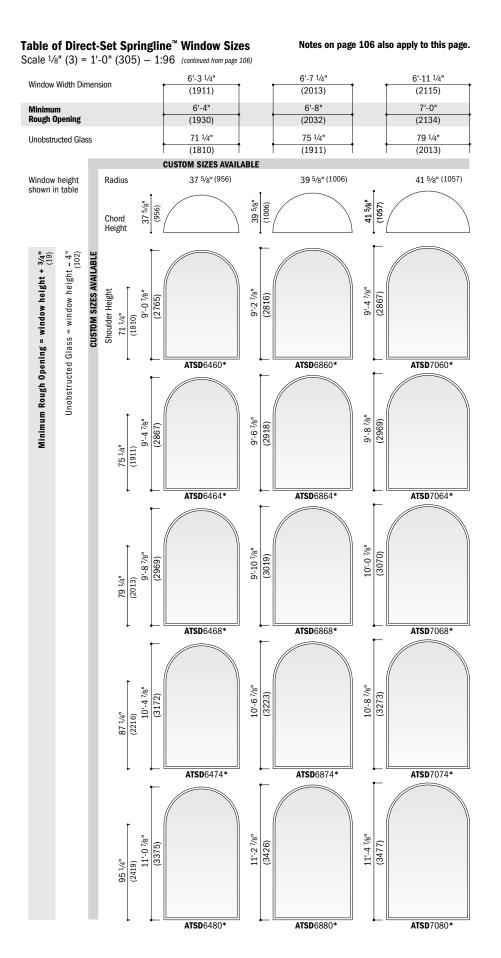
Direct-Set Springline™ Window Area Specifications (continued from page 105)

Window Number	Glass Area Sq. Ft./(m²)	Window Number	Glass Area Sq. Ft./(m²)
ATSD3424	9.57 (0.89)	ATSD4434	18.31 (1.70)
ATSD3428	10.55 (0.98)	ATSD4438	19.62 (1.82)
ATSD3430	11.53 (1.07)	ATSD4440	20.94 (1.94)
ATSD3434	12.51 (1.16)	ATSD4444	22.25 (2.07)
ATSD3438	13.49 (1.25)	ATSD4448	23.56 (2.19)
ATSD3440	14.47 (1.34)	ATSD4450	24.87 (2.31)
ATSD3444	15.44 (1.43)	ATSD4454	26.19 (2.43)
ATSD3448	16.42 (1.53)	ATSD4458	27.50 (2.55)
ATSD3450	17.40 (1.62)	ATSD4460	28.81 (2.68)
ATSD3454	18.38 (1.71)	ATSD4464	30.12 (2.80)
ATSD3458	19.36 (1.80)	ATSD4468	31.44 (2.92)
ATSD3460		ATSD4474	
ATSD3464		ATSD4474	
	21.32 (1.98)		
ATSD3468	22.30 (2.07)	ATSD4807	8.68 (0.81)
ATSD3474	24.26 (2.25)	ATSD4810	10.45 (0.97)
ATSD3480	26.22 (2.44)	ATSD4820	14.73 (1.37)
ATSD3807	5.36 (0.50)	ATSD4824	16.15 (1.50)
ATSD3810	6.72 (0.62)	ATSD4828	17.57 (1.63)
ATSD3820	9.99 (0.93)	ATSD4830	19.00 (1.76)
ATSD3824	11.08 (1.03)	ATSD4834	20.42 (1.90)
ATSD3828	12.17 (1.13)	ATSD4838	21.84 (2.03)
ATSD3830	13.26 (1.23)	ATSD4840	23.27 (2.16)
ATSD3834	14.35 (1.33)	ATSD4844	24.69 (2.29)
ATSD3838	15.44 (1.43)	ATSD4848	26.11 (2.43)
ATSD3840	16.53 (1.54)	ATSD 4850	27.54 (2.56)
ATSD3844	17.63 (1.64)	ATSD 4854	28.96 (2.69)
ATSD 3848	18.72 (1.74)	ATSD 4858	30.39 (2.82)
ATSD3850	19.81 (1.84)	ATSD 4860	31.81 (2.96)
ATSD 3854	20.90 (1.94)	ATSD 4864	33.23 (3.09)
ATSD3858	21.99 (2.04)	ATSD4868	34.66 (3.22)
ATSD3860	23.08 (2.14)	ATSD4874	37.50 (3.48)
ATSD3864	24.17 (2.25)	ATSD4880	40.35 (3.75)
ATSD3868	25.26 (2.35)	ATSD5007	9.96 (0.92)
ATSD3874	27.44 (2.55)	ATSD5010	11.87 (1.10)
ATSD3880	29.62 (2.75)	ATSD5020	16.48 (1.53)
ATSD4007	6.38 (0.59)	ATSD5024	18.01 (1.67)
ATSD4010	7.88 (0.73)	ATSD5028	19.55 (1.82)
ATSD4020	11.48 (1.07)	ATSD5030	21.08 (1.96)
ATSD4024	12.68 (1.18)	ATSD5034	22.62 (2.10)
ATSD4028	13.89 (1.29)	ATSD5038	24.15 (2.24)
ATSD4030	15.09 (1.40)	ATSD5040	25.69 (2.39)
ATSD4034	16.29 (1.51)	ATSD5044	27.22 (2.53)
ATSD4038	17.49 (1.62)	ATSD5048	28.76 (2.67)
ATSD4040	18.69 (1.74)	ATSD5050	30.29 (2.81)
ATSD4044	19.89 (1.85)	ATSD5054	31.83 (2.96)
ATSD4048	21.09 (1.96)	ATSD5058	33.36 (3.10)
ATSD4050	22.30 (2.07)	ATSD5060	34.89 (3.24)
ATSD4054	23.50 (2.18)	ATSD5064	36.43 (3.38)
ATSD4058	24.70 (2.29)	ATSD5068	37.96 (3.53)
ATSD4060	25.90 (2.41)	ATSD5074	41.03 (3.81)
ATSD4064	27.10 (2.52)	ATSD5080	44.10 (4.10)
	28.30 (2.63)	ATSD5407	11.32 (1.05)
	30.71 (2.85)	ATSD5410	13.38 (1.24)
ATSD4068 ATSD4074			10.00 (1.24)
ATSD 4074			18 22 /1 70
ATSD4074 ATSD4080	33.11 (3.08)	ATSD5420	18.32 (1.70)
ATSD4074 ATSD4080 ATSD4407	33.11 (3.08) 7.48 (0.70)	ATSD5424	19.96 (1.85)
ATSD4074 ATSD4080 ATSD4407 ATSD4410	33.11 (3.08) 7.48 (0.70) 9.12 (0.85)	ATSD5424 ATSD5428	19.96 (1.85) 21.61 (2.01)
ATSD4074 ATSD4080 ATSD4407 ATSD4410 ATSD4420	33.11 (3.08) 7.48 (0.70) 9.12 (0.85) 13.06 (1.21)	ATSD5424 ATSD5428 ATSD5430	19.96 (1.85) 21.61 (2.01) 23.25 (2.16)
ATSD4074 ATSD4080 ATSD4407 ATSD4410 ATSD4420 ATSD4424	33.11 (3.08) 7.48 (0.70) 9.12 (0.85) 13.06 (1.21) 14.37 (1.34)	ATSD5424 ATSD5428 ATSD5430 ATSD5434	19.96 (1.85) 21.61 (2.01) 23.25 (2.16) 24.90 (2.31)
ATSD4074 ATSD4080 ATSD4407 ATSD4410 ATSD4420	33.11 (3.08) 7.48 (0.70) 9.12 (0.85) 13.06 (1.21)	ATSD5424 ATSD5428 ATSD5430	19.96 (1.85) 21.61 (2.01) 23.25 (2.16)

Window	Class	
Window Number	Glass Area Sq. Ft./(m²)
ATSD5444	29.84 (2.77	
ATSD5448	31.48 (2.92	
ATSD5450	33.13 (3.08	_
ATSD5454	,	_
	34.78 (3.23	_
ATSD5458	36.42 (3.38	_
ATSD5460	38.07 (3.54	
ATSD5464	39.71 (3.69	
ATSD5468	41.36 (3.84	.)
ATSD5474	44.65 (4.15)
ATSD5480	47.94 (4.45)
ATSD5807	12.78 (1.19)
ATSD5810	14.97 (1.39)
ATSD5820	20.24 (1.88)
ATSD5824	22.00 (2.04	.)
ATSD5828	23.76 (2.21)
ATSD5830	25.51 (2.37	
ATSD5834	27.27 (2.53	
ATSD5838	29.03 (2.70	_
ATSD5840	30.79 (2.86	
ATSD5844		_
	32.54 (3.02	_
ATSD5848	34.30 (3.19	_
ATSD5850	36.06 (3.35	
ATSD5854	37.81 (3.51	
ATSD5858	39.57 (3.68	_
ATSD5860	41.33 (3.84	_
ATSD5864	43.08 (4.00)
ATSD5868	44.84 (4.17)
ATSD5874	48.35 (4.49)
ATSD5880	51.87 (4.82)
ATSD6007	14.32 (1.33)
ATSD6010	16.65 (1.55)
ATSD6020	22.26 (2.07)
ATSD6024	24.13 (2.24)
ATSD6028	25.99 (2.41)
ATSD6030	27.86 (2.59)
ATSD6034	29.73 (2.76)
ATSD6038	31.60 (2.94	.)
ATSD6040	33.47 (3.11)
ATSD6044	35.33 (3.28)
ATSD6048	37.20 (3.46	i)
ATSD6050	39.07 (3.63)
ATSD6054	40.94 (3.80)
ATSD6058	42.81 (3.98	()
ATSD6060	44.67 (4.15)
ATSD6064	46.54 (4.32)
ATSD6068	48.41 (4.50	
ATSD6074	52.15 (4.84	
ATSD6080	55.88 (5.19	_
ATSD6407	15.95 (1.48	
ATSD6410	18.42 (1.71	
ATSD6420	24.36 (2.26	
ATSD6424	26.34 (2.45	
ATSD6428	28.32 (2.63	
ATSD6430		
	30.30 (2.81	
ATSD6434	32.28 (3.00	_
ATSD6438	34.25 (3.18	
ATSD6440	36.23 (3.37	
ATSD6444	38.21 (3.55	
ATSD6448	40.19 (3.73	
ATSD6450	42.17 (3.92)

Window Number	Glass Area
Number	Sq. Ft./(m²)
ATSD6454	44.15 (4.10)
ATSD6458	46.13 (4.29)
ATSD6460	48.11 (4.47)
ATSD6464	50.09 (4.65)
ATSD6468	52.07 (4.84)
ATSD6474	56.03 (5.20)
ATSD6480	59.98 (5.57)
ATSD6807	17.66 (1.64)
ATSD6810	20.28 (1.88)
ATSD6820	26.55 (2.47)
ATSD6824	28.64 (2.66)
ATSD6828	30.73 (2.85)
ATSD6830	· · ·
ATSD6834	
	34.91 (3.24)
ATSD6838	37.00 (3.44)
ATSD6840	39.09 (3.63)
ATSD6844	41.18 (3.83)
ATSD6848	43.27 (4.02)
ATSD6850	45.36 (4.21)
ATSD6854	47.45 (4.41)
ATSD6858	49.54 (4.60)
ATSD6860	51.63 (4.80)
ATSD6864	53.72 (4.99)
ATSD6868	55.81 (5.18)
ATSD6874	59.99 (5.57)
ATSD6880	64.17 (5.96)
ATSD 7007	19.47 (1.81)
ATSD7010	22.22 (2.06)
ATSD7020	28.82 (2.68)
ATSD7024	31.02 (2.88)
ATSD7028	33.23 (3.09)
ATSD7030	35.43 (3.29)
ATSD7034	37.63 (3.50)
ATSD7038	39.83 (3.70)
ATSD7040	42.03 (3.90)
ATSD7044	44.23 (4.11)
ATSD7048	46.43 (4.31)
ATSD7050	48.63 (4.52)
ATSD7054	50.84 (4.72)
ATSD7058	53.04 (4.93)
ATSD7060	55.24 (5.13)
ATSD7064	57.44 (5.34)
ATSD7068	59.64 (5.54)
ATSD7074	64.04 (5.95)
ATSD7080	68.45 (6.36)
ATSD7407	21.36 (1.98)
ATSD7410	24.25 (2.25)
ATSD7410	
ATSD7424	
ATSD7424	33.50 (3.11)
	35.81 (3.33)
ATSD7430	38.12 (3.54)
ATSD7434	40.44 (3.76)
ATSD8007	25.40 (2.36)
ATSD8010	28.57 (2.65)
ATSD8020	36.17 (3.36)
ATSD8024	38.71 (3.60)
ATSD8028	41.24 (3.83)
ATSD8030	43.78 (4.07)

[•] Dimensions in parentheses are in square meters.



Sash-Set Springline™ Window Unobstructed Glass Dimensions and Area Specifications

Number	Glass Di	mensi	ons a	nd Are	ea Spe	cifica	itions
ATS1807 12 ½"s (320) 9 ¼"s (234) 0.69 (0.06) ATS1810 12 ½"s (320) 14 ¼"s (361) 1.13 (0.10) ATS1820 12 ½"s (320) 30 ¼"s (666) 2.17 (0.20) ATS1828 12 ½"s (320) 34 ¼"s (869) 2.52 (0.23) ATS1838 12 ½"s (320) 34 ¼"s (869) 2.57 (0.27) ATS1830 12 ½"s (320) 34 ¼"s (971) 3.22 (0.30) ATS1834 12 ½"s (320) 34 ¼"s (1174) 3.92 (0.36) ATS1838 12 ½"s (320) 50 ¼"s (1276) 4.27 (0.40) ATS1840 12 ½"s (320) 50 ¼"s (1276) 4.27 (0.40) ATS1841 12 ½"s (320) 50 ¼"s (1377) 4.62 (0.43) ATS1848 12 ½"s (320) 56 ¼"s (1580) 5.32 (0.49) ATS1850 12 ½"s (320) 56 ¼"s (1580) 5.32 (0.49) ATS1864 12 ½"s (320) 66 ¼"s (1580) 5.32 (0.49) ATS1865 12 ½"s (320) 66 ¼"s (1885) 6.37 (0.59) ATS1860 12 ½"s (320) 86 ½"s (1885) 6.37 (0.59) ATS1861 12 ½"s (320) 80 ½"s (1987) 6.72 (0.62) ATS1862 12 ½"s (320) 89 ¼"s (1987) 6.72 (0.62) ATS1868 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1868 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1868 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1869 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS1860 12 ½"s (320) 89 ½"s (1987) 6.72 (0.62) ATS2001 16 ½"s (421) 16 ½"s (112) 1.66 (0.15) ATS2020 16 ½"s (421) 16 ½"s (112) 1.66 (0.15) ATS2030 16 ½"s (421) 36 ½"s (112) 1.66 (0.15) ATS2040 16 ½"s (421) 80 ½"s (112) (1.63) (0.63) ATS2041 16 ½"s (421) 80 ½"s (1326) 5.81 (0.63) ATS2042 16 ½"s (421) 64 ½"s (1326) 5.8		Gla Wio	ss Ith	Gla Hei	iss ght	Ar	ea
ATS1810 12 ½ % ° (320) 14 ½ ° (366) 1.13 (0.10) ATS1820 12 ½ ° (320) 26 ¼ ° (666) 2.17 (0.20) ATS1828 12 ½ ° (320) 30 ¼ ° (768) 2.52 (0.23) ATS1830 12 ½ ° (320) 34 ½ ° (971) 3.22 (0.33) ATS1834 12 ½ ° (320) 42 ½ ° (1072) 3.57 (0.33) ATS18480 12 ½ ° (320) 50 ¼ ° (1174) 3.92 (0.40) ATS18481 12 ½ ° (320) 50 ¼ ° (1377) 4.62 (0.43) ATS18481 12 ½ ° (320) 50 ¼ ° (1470) 4.97 (0.46) ATS18481 12 ½ ° (320) 56 ¼ ° (1470) 4.97 (0.46) ATS1850 12 ½ ° (320) 65 ¼ ° (1480) 5.32 (0.49) ATS1864 12 ½ ° (320) 70 ¼ ° (1580) 5.32 (0.49) ATS1865 12 ½ ° (320) 70 ¼ ° (1682) 5.67 (0.53) ATS1864 12 ½ ° (320) 8 ½ ° (1987) 6.72 (0.62) ATS1868 12 ½ ° (320) 8	ATC1907					•	
ATS1820 12 ½/s" (320) 26 ½/s" (666) 2.17 (0.20) ATS1824 12 ½/s" (320) 30 ¼/s" (768) 2.52 (0.23) ATS1828 12 ½/s" (320) 34 ¼/s" (869) 2.87 (0.27) ATS1830 12 ½/s" (320) 38 ½/s" (971) 3.22 (0.30) ATS1834 12 ½/s" (320) 46 ¼/s" (1072) 3.57 (0.33) ATS1838 12 ½/s" (320) 50 ¼/s" (1276) 4.27 (0.40) ATS1840 12 ½/s" (320) 50 ¼/s" (1377) 4.62 (0.43) ATS1840 12 ½/s" (320) 54 ¼/s" (1377) 4.62 (0.43) ATS1840 12 ½/s" (320) 56 ¼/s" (1479) 4.97 (0.46) ATS1850 12 ½/s" (320) 56 ¼/s" (1580) 5.32 (0.49) ATS1864 12 ½/s" (320) 66 ¼/s" (1682) 5.67 (0.53) ATS1868 12 ½/s" (320) 70 ¼/s" (1885) 6.37 (0.59) ATS1868 12 ½/s" (320) 70 ¼/s" (1885) 6.37 (0.59) ATS1868 12 ½/s" (320) 82 ¼/s" (1987) 6.72 (0.62) ATS1868 12 ½/s" (320) 90 ¼/s" (2292) 7.77 (0.66) ATS1868 12 ½/s" (320) 82 ¼/s" (2088) 7.07 (0.66) ATS1868 12 ½/s" (320) 89 ¼/s" (2495) 8.47 (0.79) ATS2007 16 ¼/s" (421) 11 ¼/s" (285) 1.09 (0.10) ATS2010 16 ½/s" (421) 11 ¼/s" (285) 1.09 (0.10) ATS2020 16 ½/s" (421) 12 8¼/s" (1123) 4.89 (0.45) ATS2038 16 ¼/s" (421) 36 ¼/s" (1123) 4.89 (0.45) ATS2038 16 ½/s" (421) 40 ¼/s" (1123) 4.89 (0.45) ATS2044 16 ½/s" (421) 40 ¼/s" (1123) 4.89 (0.45) ATS2045 16 ½/s" (421) 56 ¼/s" (1320) 5.81 (0.54) ATS2040 16 ½/s" (421) 46 ¼/s" (1123) 4.89 (0.45) ATS2041 16 ½/s" (421) 56 ¼/s" (1326) 5.81 (0.54) ATS2042 16 ½/s" (421) 60 ¼/s" (1326) 5.81 (0.54) ATS2058 16 ½/s" (421) 60 ¼/s" (1326) 5.81 (0.54) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 6.73 (0.63) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 8.88 (0.80) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 5.81 (0.54) ATS2068 16 ½/s" (421) 60 ¼/s" (1336) 5.81 (0.54) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 6.73 (0.63) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 5.81 (0.63) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 6.73 (0.63) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 5.81 (0.63) ATS2064 16 ½/s" (421) 60 ¼/s" (1336) 5.81 (0.63) ATS2064 16 ½/s" (421) 60 ¼/s" (1384) 8.12 (0.75) ATS2068 16 ½/s" (421) 60 ¼/s" (1384) 8.12 (0.75) ATS2442 20 ½/s" (523) 30 ¼/s" (1885) 0.30 (0.66) ATS2448 20 ½/s" (523) 30 ¼/s" (1885) 0.30 (0.66) ATS2448 20 ½/s" (523) 86 ¼/s" (1488) 3.10							
ATS1824 12 ½*,* (320) 30 ¼*,* (768) 2.52 (0.23) ATS1828 12 ½*,* (320) 30 ¼*,* (869) 2.87 (0.27) ATS1830 12 ½*,* (320) 38 ¼*,* (971) 3.22 (0.30) ATS1834 12 ½*,* (320) 46 ¼*,* (1072) 3.57 (0.33) ATS1838 12 ½*,* (320) 46 ¼*,* (1174) 3.92 (0.36) ATS1840 12 ½*,* (320) 50 ¼*,* (1276) 4.27 (0.40) ATS1844 12 ½*,* (320) 50 ¼*,* (1276) 4.27 (0.40) ATS1848 12 ½*,* (320) 58 ¼*,* (1479) 4.97 (0.43) ATS1858 12 ½*,* (320) 56 ¼*,* (1580) 5.32 (0.49) ATS1858 12 ½*,* (320) 66 ¼*,* (1682) 5.67 (0.53) ATS1858 12 ½*,* (320) 70 ¼*,* (1784) 6.02 (0.56) ATS1860 12 ½*,* (320) 70 ¼*,* (1784) 6.02 (0.56) ATS1861 12 ½*,* (320) 70 ¼*,* (1987) 6.72 (0.62) ATS1868 12 ½*,* (320) 78 ¼*,* (1987) 6.72 (0.62) ATS1868 12 ½*,* (320) 82 ¼*,* (2088) 7.07 (0.66) ATS1874 12 ½*,* (320) 88 ¼*,* (1987) 6.72 (0.62) ATS1880 12 ½*,* (320) 98 ¼*,* (2995) 8.47 (0.79) ATS2007 16 ¼*,* (421) 11 ¼*,* (285) 1.09 (0.10) ATS2010 16 ½*,* (421) 11 ¼*,* (285) 1.09 (0.10) ATS2020 16 ¼*,* (421) 12 ¼*,* (112) 1.66 (0.15) ATS2020 16 ¼*,* (421) 36 ¼*,* (112) 4.33 (0.33) ATS2028 16 ¼*,* (421) 36 ¼*,* (112) 4.43 (0.41) ATS2034 16 ½*,* (421) 44 ¼*,* (1122) 4.43 (0.41) ATS2035 16 ¼*,* (421) 49 ¼*,* (1122) 4.43 (0.41) ATS2030 16 ¼*,* (421) 49 ¼*,* (1123) 4.89 (0.45) ATS2040 16 ¼*,* (421) 52 ¼*,* (1326) 5.35 (0.59) ATS2040 16 ¼*,* (421) 52 ¼*,* (1326) 5.35 (0.59) ATS2050 16 ¼*,* (421) 64 ¼*,* (122) 5.35 (0.50) ATS2050 16 ¼*,* (421) 80 ¼*,* (1239) 5.35 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1239) 5.35 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1330) 6.73 (0.63) ATS2050 16 ¼*,* (421) 80 ¼*,* (1388) 9.04 (0.84) ATS2044 16 ¼*,* (421) 80 ¼*,* (1388) 9.04 (0.84) ATS2045 16 ½*,* (523) 30 ¼*,* (1488) 9.04 (0.84) ATS2440 20 ½*,* (523) 38 ¼*,* (171) 9.517 (0.58) ATS2440 20 ½*,* (523) 86 ¼*,* (1470) 8.01 (0.		_					
ATS1828 12 ½% (320) 34 ¼% (869) 2.87 (0.27) ATS1830 12 ⅓% (320) 34 ¼% (971) 3.22 (0.30) ATS1834 12 ⅓% (320) 46 ¼% (1072) 3.57 (0.33) ATS1838 12 ½% (320) 46 ¼% (1174) 3.92 (0.36) ATS1840 12 ½% (320) 50 ¼% (1276) 4.27 (0.40) ATS1844 12 ½% (320) 50 ¼% (1479) 4.97 (0.46) ATS1848 12 ½% (320) 58 ¼% (1479) 4.97 (0.46) ATS1854 12 ½% (320) 66 ¼% (1682) 5.67 (0.53) ATS1858 12 ½% (320) 66 ¼% (1682) 5.67 (0.53) ATS1860 12 ½% (320) 70 ¼% (1682) 5.67 (0.53) ATS1860 12 ½% (320) 70 ¼% (1682) 5.67 (0.53) ATS1868 12 ½% (320) 70 ¼% (1682) 5.67 (0.53) ATS1868 12 ½% (320) 70 ¼% (1885) 6.37 (0.59) ATS1868 12 ½% (320) 82 ¼% (2088) 7.07 (0.66) ATS1868 12 ½% (320) 82 ¼% (2088) 7.07 (0.66) ATS1874 12 ½% (320) 89 ¼% (2495) 8.47 (0.79) ATS2001 16 ½% (421) 16 ¼% (412) 1.66 (0.15) ATS2010 16 ½% (421) 16 ¼% (412) 1.66 (0.15) ATS2020 16 ½% (421) 16 ¼% (412) 1.66 (0.15) ATS2030 16 ½% (421) 36 ¼% (920) 3.97 (0.37) ATS2032 16 ½% (421) 40 ¼% (1022) 4.43 (0.41) ATS2034 16 ½% (421) 40 ¼% (1022) 4.43 (0.41) ATS2035 16 ½% (421) 56 ¼% (1225) 5.35 (0.50) ATS2044 16 ½% (421) 56 ¼% (1225) 5.35 (0.50) ATS2044 16 ½% (421) 56 ¼% (1323) 5.81 (0.54) ATS2034 16 ½% (421) 56 ¼% (1323) 5.81 (0.54) ATS2044 16 ½% (421) 60 ¼% (1323) 5.81 (0.54) ATS2044 16 ½% (421) 80 ¼% (1233) 5.81 (0.63) ATS2045 16 ½% (421) 80 ¼% (1233) 7.66 (0.71) ATS2046 16 ½% (421) 80 ¼% (1330) 6.73 (0.63) ATS2050 16 ½% (421) 80 ¼% (1330) 6.73 (0.63) ATS2064 16 ½% (421) 80 ¼% (1330) 5.53 (0.50) ATS2054 16 ½% (421) 80 ¼% (1330) 5.53 (0.50) ATS2054 16 ½% (421) 80 ¼% (1330) 5.53 (0.50) ATS2054 16 ½% (421) 80 ¼% (1330) 5.53 (0.50) ATS2054 16 ½% (421) 80 ¼% (1330) 5.53 (0.50) ATS2054 16 ½% (421) 80 ¼% (1330) 5.53 (0.63) ATS2054 16 ½% (421) 80 ¼% (1330) 7.66 (0.71) ATS2054 16 ½% (421) 80 ¼% (1330) 5.53 (0.63) ATS2054 16 ½% (421) 80 ¼% (1330) 5.76 (0.71) ATS2054 16 ½% (421) 80 ¼% (1330) 5.76 (0.71) ATS2064 16 ½% (421) 80 ¼% (1330) 5.76 (0.71) ATS2074 20 ½% (523) 38 ¼% (177) 5.15 (0.88) ATS2440 20 ½% (523) 38 ¼% (177) 5.17 (0.50) ATS2448 20 ½% (523) 88 ¼% (14							
ATS1830 12 ½/s" (320) 38 ⅓/s" (971) 3.22 (0.30) ATS1834 12 ⅓/s" (320) 42 ⅓/s" (1072) 3.57 (0.33) ATS1838 12 ⅓/s" (320) 46 ⅓/s" (1174) 3.92 (0.36) ATS1840 12 ⅓/s" (320) 50 ⅓/s" (1276) 4.27 (0.40) ATS1844 12 ⅓/s" (320) 58 ⅓/s" (1479) 4.97 (0.46) ATS1850 12 ⅓/s" (320) 62 ⅓/s" (1479) 4.97 (0.49) ATS1854 12 ⅓/s" (320) 66 ⅓/s" (1682) 5.32 (0.49) ATS1854 12 ⅓/s" (320) 70 ⅓/s" (1682) 5.67 (0.53) ATS1860 12 ⅓/s" (320) 70 ⅓/s" (1682) 5.67 (0.53) ATS1864 12 ⅓/s" (320) 70 ⅓/s" (1885) 6.37 (0.59) ATS1865 12 ⅓/s" (320) 70 ⅓/s" (1987) 6.72 (0.62) ATS1868 12 ⅓/s" (320) 78 ⅓/s" (1987) 6.72 (0.62) ATS1868 12 ⅓/s" (320) 82 ⅓/s" (2088) 7.07 (0.66) ATS1874 12 ⅓/s" (320) 90 ⅓/s" (2292) 7.77 (0.72) ATS1880 12 ⅓/s" (320) 88 ⅓/s" (2495) 8.47 (0.79) ATS2007 16 ⅓/s" (421) 11 ⅓/s" (285) 1.09 (0.10) ATS2010 16 ⅓/s" (421) 11 ⅓/s" (412) 1.66 (0.15) ATS2020 16 ⅓/s" (421) 36 ⅓/s" (412) 1.66 (0.15) ATS2032 16 ⅙/s" (421) 36 ⅓/s" (1122) 4.43 (0.41) ATS2034 16 ⅓/s" (421) 36 ⅓/s" (1122) 4.43 (0.41) ATS2034 16 ⅙/s" (421) 36 ⅓/s" (1122) 4.43 (0.41) ATS2034 16 ⅙/s" (421) 40 ⅓/s" (1122) 4.43 (0.41) ATS2034 16 ⅙/s" (421) 40 ⅙/s" (1123) 4.89 (0.45) ATS2040 16 ⅙/s" (421) 56 ⅙/s" (1123) 5.53 (0.50) ATS2040 16 ⅙/s" (421) 56 ⅙/s" (1123) 6.73 (0.63) ATS2041 16 ⅙/s" (421) 56 ⅙/s" (1123) 6.73 (0.63) ATS2042 16 ⅙/s" (421) 56 ⅙/s" (1123) 6.73 (0.63) ATS2050 16 ⅙/s" (421) 60 ⅙/s" (1139) 6.73 (0.63) ATS2064 16 ⅙/s" (421) 72 ⅙/s" (1326) 5.81 (0.54) ATS2068 16 ⅙/s" (421) 68 ⅙/s" (1336) 6.73 (0.63) ATS2069 16 ⅙/s" (421) 69 ⅙/s" (1438) 9.04 (0.84) ATS2068 16 ⅙/s" (421) 72 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 80 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 72 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 80 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 80 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 80 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 80 ⅙/s" (1386) 8.58 (0.80) ATS2064 16 ⅙/s" (421) 80 ⅙/s" (1386) 9.50 (0.63) ATS2065 16 ⅙/s" (421) 80 ⅙/s" (1386) 9.50 (0.63) ATS2068 16 ⅙/s" (421) 80 ⅙/s" (1386) 9.50 (0.63) ATS2460 20 ⅙/s" (523) 80 ⅙/s" (1380) 9.5	ATS1824		(320)	30 1/4"	(768)	2.52	(0.23)
ATS1834 12 ½ % % (320) 42 ½ % (1072) 3.57 (0.33) ATS1838 12 ½ % % (320) 46 ½ (1174) 3.92 (0.36) ATS18440 12 ½ % % (320) 50 ½ % (1276) 4.27 (0.40) ATS18441 12 ½ % (320) 56 ½ ¼ (1479) 4.97 (0.46) ATS18481 12 ½ % (320) 58 ½ (1479) 4.97 (0.46) ATS1850 12 ½ % (320) 66 ½ (1682) 5.67 (0.53) ATS18641 12 ½ % (320) 66 ½ (1682) 5.67 (0.53) ATS18642 12 ½ % (320) 74 ½ (1880) 6.37 (0.59) ATS1864 12 ½ % (320) 74 ½ (1881) 6.02 (0.56) ATS1864 12 ½ % (320) 74 ½ (1888) 6.37 (0.59) ATS1868 12 ½ % (320) 92 ½ (2088) 7.07 (0.66) ATS1874 12 ½ % (320) 98 ½ (2495) 8.47 (0.79) ATS2007 16 ½ % (421) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11) 16 ¼ (11)	ATS1828	12 5/8"	(320)	34 1/4"	(869)	2.87	(0.27)
ATS1838 12 ½ % % (320) 46 ¼ % (1174) 3.92 (0.36) ATS1840 12 ½ % % (320) 50 ¼ % (1276) 4.27 (0.40) ATS1844 12 ½ % % (320) 50 ¼ % (1479) 4.97 (0.46) ATS1848 12 ½ % (320) 58 ¼ (1479) 4.97 (0.46) ATS1850 12 ½ % (320) 66 ¼ (1682) 5.67 (0.53) ATS1858 12 ½ % (320) 70 ¼ (1682) 5.67 (0.53) ATS1860 12 ½ % (320) 74 ¼ (1885) 6.37 (0.59) ATS1868 12 ½ % (320) 74 ¼ (1885) 6.37 (0.59) ATS1868 12 ½ % (320) 90 ¼ (2292) 7.77 (0.72) ATS1868 12 ½ % (320) 90 ¼ (2292) 7.77 (0.72) ATS187 12 ½ % (320) 90 ¼ (2495) 8.47 (0.79) ATS2007 16 ½ % (421) 16 ¼ (412) 16 ½ (0.72) 1.09 (0.10) ATS2010 16 ½ % (421) 16 ¼ (412) 1.6 ¼ (17) 3.05 (0.28) ATS2021 16 ½ % (421) 32 ¼ (1888) 3.51 (0.53) ATS2030 16 ½ % (421) 34 ¼ (1123) 4.8 ¼ (1717)	ATS 1830	12 5/8"	(320)	38 1/4"	(971)	3.22	(0.30)
ATS1840	ATS 1834	12 5/8"	(320)	42 1/4"	(1072)	3.57	(0.33)
ATS1844 12 5/s" (320) 54 1/s" (1377) 4.62 (0.43) ATS1848 12 5/s" (320) 58 1/s" (1479) 4.97 (0.46) ATS1850 12 5/s" (320) 62 1/s" (1580) 5.32 (0.49) ATS1854 12 5/s" (320) 66 1/s" (1682) 5.67 (0.53) ATS1858 12 5/s" (320) 70 1/s" (1784) 6.02 (0.56) ATS1860 12 5/s" (320) 78 1/s" (1987) 6.72 (0.62) ATS1868 12 5/s" (320) 78 1/s" (1987) 6.72 (0.62) ATS1868 12 5/s" (320) 82 1/s" (2088) 7.07 (0.66) ATS1874 12 5/s" (320) 90 1/s" (2292) 7.77 (0.72) ATS1874 12 5/s" (320) 90 1/s" (2292) 7.77 (0.72) ATS1880 12 5/s" (320) 98 1/s" (2495) 8.47 (0.79) ATS2010 16 5/s" (421) 16 1/s" (412) 1.66 (0.15) ATS2024 16 5/s" (421) 28 1/s" (717) 3.05 (0.28) ATS2028 16 5/s" (421) 36 1/s" (920) 3.97 (0.37) ATS2030 16 5/s" (421) 36 1/s" (1022) 4.43 (0.41) ATS2034 16 5/s" (421) 40 1/s" (1022) 4.43 (0.41) ATS2034 16 5/s" (421) 48 1/s" (1225) 5.35 (0.50) ATS2040 16 5/s" (421) 48 1/s" (1225) 5.35 (0.50) ATS2041 16 5/s" (421) 56 1/s" (1326) 5.81 (0.54) ATS2038 16 5/s" (421) 56 1/s" (1326) 5.81 (0.54) ATS2044 16 5/s" (421) 56 1/s" (1336) 5.73 (0.63) ATS2050 16 5/s" (421) 68 1/s" (1336) 6.73 (0.63) ATS2054 16 5/s" (421) 72 1/s" (1336) 5.81 (0.54) ATS2058 16 5/s" (421) 68 1/s" (1336) 5.81 (0.54) ATS2058 16 5/s" (421) 72 1/s" (1336) 5.81 (0.57) ATS2058 16 5/s" (421) 80 1/s" (1336) 8.58 (0.80) ATS2050 16 5/s" (421) 72 1/s" (1336) 8.58 (0.80) ATS2054 16 5/s" (421) 81 1/s" (1336) 8.58 (0.80) ATS2054 16 5/s" (421) 82 1/s" (1336) 8.58 (0.80) ATS2054 16 5/s" (421) 82 1/s" (1336) 8.58 (0.80) ATS2054 16 5/s" (421) 82 1/s" (1336) 8.58 (0.80) ATS2054 16 5/s" (421) 82 1/s" (1336) 8.58 (0.80) ATS2054 16 5/s" (421) 82 1/s" (1368) 8.58 (0.80) ATS2054 16 5/s" (421) 82 1/s" (1386) 8.58 (0.80) ATS2054 16 5/s" (523) 30 1/s" (768) 4.01 (0.37) ATS2440 20 5/s" (523) 30 1/s" (1386) 9.04 (0.84) ATS2442 20 5/s" (523) 30 1/s" (1386) 9.04 (0.84) ATS2448 20 5/s" (523) 30 1/s" (1386) 9.50 (0.88) ATS2440 20 5/s" (523) 30 1/s" (1389) 9.50 (0.88) ATS2444 20 5/s" (523) 30 1/s" (1489) 9.51 (0.85) ATS2448 20 5/s" (523) 50 1/s" (1377) 7.44 (0.69) ATS2448 20 5/s" (523) 50 1/s" (1377) 7.4	ATS 1838	12 5/8"	(320)	46 1/4"	(1174)	3.92	(0.36)
ATS1848 12 % " (320) 58 ⅓ " (1479) 4.97 (0.46) ATS1850 12 ⅓ " (320) 62 ¼ " (1580) 5.32 (0.49) ATS1854 12 ⅓ " (320) 66 ¼ " (1682) 5.67 (0.53) ATS1858 12 ⅓ " (320) 70 ¼ " (1784) 6.02 (0.56) ATS1860 12 ⅓ " (320) 78 ¼ " (1987) 6.72 (0.62) ATS1868 12 ⅓ " (320) 82 ¼ " (2988) 7.07 (0.66) ATS1874 12 ⅓ " (320) 98 ¼ " (2495) 8.47 (0.79) ATS2007 16 ⅙ " (421) 11 ¼ " (285) 1.09 (0.10 ATS2010 16 ⅙ " (421) 36 ¼ " (289) 3.51 (0.33) ATS2020 16 ⅙ " (421) 36 ¼ " (920) 3.97 (0.37) ATS2030 16 ⅙ " (421) 36 ¼ " (920) 3.97 (0.37)	ATS 1840		(320)	50 1/4"	(1276)	4.27	(0.40)
ATS1850 12 5/8" (320) 62 1/4" (1580) 5.32 (0.49) ATS1854 12 5/8" (320) 66 1/4" (1682) 5.67 (0.53) ATS1858 12 5/8" (320) 70 1/4" (1784) 6.02 (0.56) ATS1860 12 5/8" (320) 74 1/4" (1885) 6.37 (0.59) ATS1864 12 5/8" (320) 78 1/4" (1987) 6.72 (0.62) ATS1868 12 5/8" (320) 82 1/4" (2088) 7.07 (0.66) ATS1874 12 5/8" (320) 90 1/4" (2292) 7.77 (0.72) ATS1880 12 5/8" (320) 98 1/4" (2495) 8.47 (0.79) ATS2007 16 5/8" (421) 11 1/4" (285) 1.09 (0.10) ATS2010 16 5/8" (421) 16 1/4" (412) 1.66 (0.15) ATS2020 16 5/8" (421) 32 1/4" (818) 3.51 (0.33) ATS2024 16 5/8" (421) 40 1/4" (1022) 4.43 (0.41) ATS2030 16 5/8" (421) 44 1/4" (1022) 4.43 (0.41) ATS2031 16 5/8" (421) 44 1/4" (1225) 5.35 (0.50) ATS2040 16 5/8" (421) 44 1/4" (128) 6.27 (0.58) ATS2040 16 5/8" (421) 48 1/4" (1286) 5.81 (0.54) ATS2040 16 5/8" (421) 52 1/4" (1428) 6.27 (0.58) ATS2044 16 5/8" (421) 52 1/4" (1428) 6.27 (0.58) ATS2044 16 5/8" (421) 52 1/4" (1428) 6.27 (0.58) ATS2048 16 5/8" (421) 56 1/4" (1428) 6.27 (0.58) ATS2048 16 5/8" (421) 60 1/4" (1530) 6.73 (0.63) ATS2050 16 5/8" (421) 60 1/4" (1530) 6.73 (0.63) ATS2054 16 5/8" (421) 60 1/4" (1530) 6.73 (0.63) ATS2058 16 5/8" (421) 72 1/4" (1834) 8.12 (0.75) ATS2060 16 5/8" (421) 80 1/4" (238) 9.04 (0.84) ATS2064 16 5/8" (421) 80 1/4" (238) 9.04 (0.84) ATS2074 16 5/8" (421) 80 1/4" (238) 9.04 (0.84) ATS2080 16 5/8" (421) 80 1/4" (238) 9.04 (0.84) ATS2084 16 5/8" (421) 80 1/4" (1936) 8.58 (0.80) ATS2074 16 5/8" (523) 31 1/4" (336) 1.57 (0.15) ATS2440 20 5/8" (523) 31 1/4" (369) 4.58 (0.3) ATS2440 20 5/8" (523) 31 1/4" (168) 9.50 (0.88) ATS2444 20 5/8" (523) 31 1/4" (168) 9.50 (0.88) ATS2454 20 5/8" (523) 31 1/4" (1869) 4.58 (0.3) ATS2448 20 5/8" (523) 38 1/4" (177) 5.74 (0.69) ATS2448 20 5/8" (523) 38 1/4" (178) 9.50 (0.88) ATS2444 20 5/8" (523) 38 1/4" (1885) 10.30 (0.96) ATS2458 20 5/8" (523) 38 1/4" (1885) 10.30 (0.96) ATS2468 20 5/8" (523) 38 1/4" (1885) 10.30 (0.96) ATS2474 20 5/8" (523) 38 1/4" (1885) 10.30 (0.96) ATS2480 20 5/8" (523) 39 1/4" (1885) 10.30 (0.96) ATS247	ATS 1844	12 5/8"	(320)	54 1/4"	(1377)	4.62	(0.43)
ATS:1854 12 5/s" (320) 66 1/s" (1682) 5.67 (0.53) ATS:1858 12 5/s" (320) 70 1/s" (1784) 6.02 (0.56) ATS:1860 12 5/s" (320) 74 1/s" (1885) 6.37 (0.59) ATS:1864 12 5/s" (320) 78 1/s" (1987) 6.72 (0.62) ATS:1868 12 5/s" (320) 82 1/s" (2088) 7.07 (0.66) ATS:1874 12 5/s" (320) 90 1/s" (2292) 7.77 (0.72) ATS:1880 12 5/s" (320) 98 1/s" (2495) 8.47 (0.79) ATS:2007 16 5/s" (421) 11 1/s" (285) 1.09 (0.10) ATS:2010 16 5/s" (421) 16 1/s" (412) 1.66 (0.15) ATS:2020 16 5/s" (421) 28 1/s" (717) 3.05 (0.28) ATS:2024 16 5/s" (421) 32 1/s" (818) 3.51 (0.33) ATS:2028 16 5/s" (421) 40 1/s" (1022) 4.43 (0.41) ATS:2034 16 5/s" (421) 44 1/s" (1123) 4.89 (0.45) ATS:2040 16 5/s" (421) 48 1/s" (1225) 5.35 (0.50) ATS:2041 16 5/s" (421) 56 1/s" (1326) 5.81 (0.54) ATS:2044 16 5/s" (421) 56 1/s" (1326) 5.81 (0.54) ATS:2044 16 5/s" (421) 56 1/s" (1428) 6.27 (0.58) ATS:2045 16 5/s" (421) 60 1/s" (1530) 6.73 (0.63) ATS:2046 16 5/s" (421) 68 1/s" (1334) 8.12 (0.75) ATS:2050 16 5/s" (421) 80 1/s" (1334) 8.12 (0.75) ATS:2058 16 5/s" (421) 80 1/s" (1334) 8.12 (0.75) ATS:2058 16 5/s" (421) 80 1/s" (1334) 8.12 (0.75) ATS:2064 16 5/s" (421) 80 1/s" (1334) 8.12 (0.75) ATS:2086 16 5/s" (421) 80 1/s" (1334) 8.12 (0.75) ATS:2080 16 5/s" (421) 80 1/s" (1334) 9.04 (0.84) ATS:2084 16 5/s" (523) 13 1/s" (336) 1.57 (0.15) ATS:2080 16 5/s" (523) 13 1/s" (336) 1.57 (0.15) ATS:2080 16 5/s" (523) 30 1/s" (768) 4.01 (0.37) ATS:2440 20 5/s" (523) 30 1/s" (768) 4.01 (0.37) ATS:2440 20 5/s" (523) 38 1/s" (1479) 8.01 (0.74) ATS:2440 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2444 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2440 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2440 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2440 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2440 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2440 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2448 20 5/s" (523) 39 1/s" (188) 1.03 (0.96) ATS:2440 20 5/s" (523) 39 1/s" (198) 1.04 (0.97) ATS:2448 20 5/s" (523) 39 1/s" (198) 1.04 (0.97) ATS:2448 20 5/s" (523)	ATS 1848	12 5/8"	(320)	58 1/4"	(1479)	4.97	(0.46)
ATS:1858	ATS 1850	12 5/8"	(320)	62 1/4"	(1580)	5.32	(0.49)
ATS 1860	ATS 1854	12 5/8"	(320)	66 1/4"	(1682)	5.67	(0.53)
ATS 1864	ATS 1858	12 5/8"	(320)	70 1/4"	(1784)	6.02	(0.56)
ATS1868 12 ½s's (320) 82 ½s' (292) 7.07 (0.66) ATS1874 12 ½s's (320) 90 ½s' (2292) 7.77 (0.72) ATS1880 12 ½s's (320) 98 ½s' (2495) 8.47 (0.79) ATS2007 16 ½s' (421) 11 ½s' (285) 1.09 (0.10) ATS2010 16 ½s' (421) 16 ½s' (411) 16 ½s' (0.15) ATS2020 16 ½s' (421) 28 ½s' (717) 3.05 (0.28) ATS2024 16 ½s' (421) 36 ½s' (920) 3.97 (0.37) ATS2030 16 ½s' (421) 40 ½s' (1022) 4.43 (0.41) ATS2034 16 ½s' (421) 45 ½s' (1225) 5.35 (0.50) ATS2040 16 ½s' (421) 45 ½s' (1225) 5.35 (0.50) ATS2044 16 ½s' (421) 5½s' (1225) 5.35 (0.50) ATS2048 16 ½s' (421) 6½s' (1225) 5.35 (0.50) ATS2044 16 ½s' (421) 5½s' (1225) 5.35 (0.50) ATS2050 16 ½s' (421) 6½s' (123) 6½s' (123) 6½s' (123) 62 ½s' (133) 7.66 (0.71) ATS2054 16 ½s' (421) 6½s' (133) <td>ATS1860</td> <td>12 5/8"</td> <td>(320)</td> <td>74 1/4"</td> <td>(1885)</td> <td>6.37</td> <td>(0.59)</td>	ATS 1860	12 5/8"	(320)	74 1/4"	(1885)	6.37	(0.59)
ATS1874 12 9/8" (320) 90 1/4" (2292) 7.77 (0.72) ATS1880 12 9/8" (320) 98 1/4" (2495) 8.47 (0.79) ATS2007 16 9/8" (421) 11 1/4" (285) 1.09 (0.10) ATS2010 16 9/8" (421) 16 1/4" (412) 1.66 (0.15) ATS2020 16 9/8" (421) 28 1/4" (717) 3.05 (0.28) ATS2024 16 9/8" (421) 32 1/4" (818) 3.51 (0.33) ATS2028 16 9/8" (421) 36 1/4" (920) 3.97 (0.37) ATS2030 16 9/8" (421) 40 1/4" (1022) 4.43 (0.41) ATS2030 16 9/8" (421) 44 1/4" (1022) 4.43 (0.41) ATS2034 16 9/8" (421) 44 1/4" (1022) 5.35 (0.50) ATS2040 16 9/8" (421) 48 1/4" (1225) 5.35 (0.50) ATS2044 16 9/8" (421) 52 1/4" (1326) 5.81 (0.54) ATS2048 16 9/8" (421) 56 1/4" (1428) 6.27 (0.58) ATS2048 16 9/8" (421) 56 1/4" (1428) 6.27 (0.58) ATS2050 16 9/8" (421) 64 1/4" (1631) 7.20 (0.67) ATS2054 16 9/8" (421) 68 1/4" (1733) 7.66 (0.71) ATS2058 16 9/8" (421) 76 1/4" (1336) 8.58 (0.80) ATS2060 16 9/8" (421) 76 1/4" (1336) 8.58 (0.80) ATS2064 16 9/8" (421) 80 1/4" (2038) 9.04 (0.84) ATS2068 16 9/8" (421) 80 1/4" (2038) 9.04 (0.84) ATS2068 16 9/8" (421) 80 1/4" (2038) 9.04 (0.84) ATS2068 16 9/8" (421) 80 1/4" (2038) 9.05 (0.88) ATS2074 16 9/8" (421) 80 1/4" (2038) 9.50 (0.88) ATS2074 16 9/8" (523) 13 1/4" (366) 1.57 (0.15) ATS2420 20 9/8" (523) 30 1/4" (768) 4.01 (0.37) ATS2424 20 9/8" (523) 30 1/4" (1668) 4.01 (0.37) ATS2424 20 9/8" (523) 30 1/4" (1768) 4.01 (0.37) ATS2424 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2444 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2444 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2444 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 38 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 58 1/4" (1770) 5.72 (0.53) ATS2448 20 9/8" (523) 58 1/4" (1770) 5.72 (0.53) ATS2458 20 9/8" (523) 86 1/4" (1798) 8.01 (0.74) ATS2468 20 9/8" (523) 86 1/4" (1798) 10.07 (1.11) ATS2474 20 9/8" (523) 70 1/4" (1784) 9.73 (0.99)	ATS 1864	12 5/8"	(320)	78 1/4"	(1987)	6.72	(0.62)
ATS1880 12 \(\frac{1}{9} \) (320) 98 \(\frac{1}{4} \) (2495) 8.47 \(0.79) \) ATS2007 16 \(\frac{1}{9} \) (421) 11 \(\frac{1}{4} \) (285) 1.09 \(0.10) \) ATS2010 16 \(\frac{1}{9} \) (421) 16 \(\frac{1}{4} \) (412) 1.66 \(0.15) \) ATS2020 16 \(\frac{1}{9} \) (421) 28 \(\frac{1}{4} \) (818) 3.51 \(0.33) \) ATS2024 16 \(\frac{1}{9} \) (421) 36 \(\frac{1}{4} \) (920) 3.97 \(0.37) \) ATS2030 16 \(\frac{1}{9} \) (421) 40 \(\frac{1}{4} \) (1022) 4.43 \(0.41) \) ATS2034 16 \(\frac{1}{9} \) (421) 48 \(\frac{1}{4} \) (1123) 4.89 \(0.45) \) ATS2040 16 \(\frac{1}{9} \) (421) 56 \(\frac{1}{4} \) (1225) 5.35 \(0.50) \) ATS2040 16 \(\frac{1}{9} \) (421) 56 \(\frac{1}{4} \) (1428) 6.27 \(0.58) \) ATS2044 16 \(\frac{1}{9} \) (421) 56 \(\frac{1}{4} \) (1428) 6.27 \(0.58) \) ATS2050 16 \(\frac{1}{9} \) (421) 64 \(\frac{1}{4} \) (1631) 7.20 \(0.67) \) ATS2054 16 \(\frac{1}{9} \) (421) 68 \(\frac{1}{4} \) (1631) 7.20 \(0.67) \) ATS2058 16 \(\frac{1}{9} \) (421) 68 \(\frac{1}{4} \) (1631) 7.20 \(0.67) \) ATS2058 16 \(\frac{1}{9} \) (421) 76 \(\frac{1}{4} \) (1834) 8.12 \(0.75) \) ATS2060 16 \(\frac{1}{9} \) (421) 84 \(\frac{1}{4} \) (1936) 8.58 \(0.80) \) ATS2074 16 \(\frac{1}{9} \) (421) 84 \(\frac{1}{4} \) (238) 9.04 \(0.84) \) ATS2068 16 \(\frac{1}{9} \) (421) 84 \(\frac{1}{4} \) (238) 9.04 \(0.84) \) ATS2068 16 \(\frac{1}{9} \) (421) 84 \(\frac{1}{4} \) (238) 9.05 \(0.88) \) ATS2074 16 \(\frac{1}{9} \) (523) 31 \(\frac{1}{4} \) (366) 1.34 \(1.05) \) ATS2407 20 \(\frac{1}{9} \) (523) 31 \(\frac{1}{4} \) (366) 1.57 \(0.15) \) ATS2410 20 \(\frac{1}{9} \) (523) 30 \(\frac{1}{4} \) (170) 5.15 \(0.48) \) ATS2442 20 \(0.9 \gamma \) (523) 30 \(\frac{1}{4} \) (170) 5.15 \(0.48) \) ATS2443 20 \(0.9 \gamma \) (523) 523 \(0.9 \gamma \) (523) 523 \(0.9 \gamma \) (523) 523 \(0.9 \gamma \) (5	ATS 1868	12 5/8"	(320)	82 1/4"	(2088)	7.07	(0.66)
ATS2007	ATS 1874	12 5/8"	(320)	90 1/4"	(2292)	7.77	(0.72)
ATS2010 16 ¹ / ₈ ," (421) 16 ¹ / ₈ ," (412) 1.66 (0.15) ATS2020 16 ¹ / ₈ ," (421) 28 ¹ / ₈ ," (717) 3.05 (0.28) ATS2024 16 ¹ / ₈ ," (421) 32 ¹ / ₈ ," (818) 3.51 (0.33) ATS2028 16 ¹ / ₈ ," (421) 36 ¹ / ₈ ," (920) 3.97 (0.37) ATS2030 16 ¹ / ₈ ," (421) 40 ¹ / ₈ ," (1022) 4.43 (0.41) ATS2034 16 ¹ / ₈ ," (421) 44 ¹ / ₈ ," (1123) 4.89 (0.45) ATS2038 16 ¹ / ₈ ," (421) 48 ¹ / ₈ ," (1225) 5.35 (0.50) ATS2040 16 ¹ / ₈ ," (421) 56 ¹ / ₈ ," (1225) 5.35 (0.50) ATS2041 16 ¹ / ₈ ," (421) 56 ¹ / ₈ ," (1236) 5.81 (0.54) ATS2042 16 ¹ / ₈ ," (421) 56 ¹ / ₈ ," (1236) 6.73 (0.63) ATS2050 16 ¹ / ₈ ," (421) 60 ¹ / ₈ ," (1330) 6.73 (0.63) ATS2050 16 ¹ / ₈ ," (421) 68 ¹ / ₈ ," (1733) 7.66 (0.71) ATS2054 16 ¹ / ₈ ," (421) 72 ¹ / ₈ ," (1334) 8.12 (0.75) ATS2060 16 ¹ / ₈ ," (421) 72 ¹ / ₈ ," (1336) 8.58 (0.80) ATS2064 16 ¹ / ₈ ," (421) 80 ¹ / ₈ ," (2338) 9.04 (0.84) ATS2068 16 ¹ / ₈ ," (421) 80 ¹ / ₈ ," (2332) 10.42 (0.97) ATS2080 16 ¹ / ₈ ," (421) 100 ¹ / ₈ ," (2342) 10.42 (0.97) ATS2080 16 ¹ / ₈ ," (421) 100 ¹ / ₈ ," (2546) 11.34 (1.05) ATS2410 20 ¹ / ₈ ," (523) 31 ¹ / ₈ ," (336) 1.57 (0.15) ATS2424 20 ¹ / ₈ ," (523) 31 ¹ / ₈ ," (463) 2.29 (0.21) ATS2428 20 ¹ / ₈ ," (523) 31 ¹ / ₈ ," (1772) 5.72 (0.53) ATS2438 20 ¹ / ₈ ," (523) 38 ¹ / ₈ ," (1774) 6.29 (0.58) ATS2444 20 ¹ / ₈ ," (523) 31 ¹ / ₈ ," (1776) 6.87 (0.64) ATS2448 20 ¹ / ₈ ," (523) 51 ¹ / ₈ ," (1777) 7.44 (0.69) ATS2449 20 ¹ / ₈ ," (523) 51 ¹ / ₈ ," (1778) 8.58 (0.80) ATS2448 20 ¹ / ₈ ," (523) 51 ¹ / ₈ ," (1778) 9.73 (0.90) ATS2448 20 ¹ / ₈ ," (523) 51 ¹ / ₈ ," (1788) 9.73 (0.90) ATS2458 20 ¹ / ₈ ," (523) 52 ¹ / ₈ ," (1788) 9.73 (0.90) ATS2468 20 ¹ / ₈ ," (523) 70 ¹ / ₈ ," (1788) 9.73 (0.90) ATS2474 20 ¹ / ₈ ," (523) 52 ¹ / ₈ ," (1788) 9.73 (0.90) ATS2488 20 ¹ / ₈ ," (523) 70 ¹ / ₈ ," (1788) 9.73 (0.90) ATS2488 20 ¹ / ₈ ," (523) 70 ¹ / ₈ ," (1788) 9.73 (0.90) ATS2488 20 ¹ / ₈ ," (523) 86 ¹ / ₈ ," (1789) 10.87 (1.01) ATS2460 20 ¹ / ₈ ," (523) 86 ¹ / ₈ ," (1789) 10.87 (1.01) ATS2	ATS 1880	12 5/8"	(320)	98 1/4"	(2495)	8.47	(0.79)
ATS2020	ATS 2007	16 5/8"	(421)	11 1/4"	(285)	1.09	(0.10)
ATS2020	ATS2010	16 5/8"	(421)	16 1/4"	(412)	1.66	(0.15)
ATS2024	ATS2020	_				3.05	
ATS2028 16 ¹ / ₈ " (421) 36 ¹ / ₈ " (920) 3.97 (0.37) ATS2030 16 ¹ / ₈ " (421) 40 ¹ / ₈ " (1022) 4.43 (0.41) ATS2034 16 ¹ / ₈ " (421) 44 ¹ / ₈ " (1123) 4.89 (0.45) ATS2038 16 ¹ / ₈ " (421) 44 ¹ / ₈ " (1225) 5.35 (0.50) ATS2040 16 ¹ / ₈ " (421) 50 ¹ / ₈ " (1326) 5.81 (0.54) ATS2044 16 ¹ / ₈ " (421) 50 ¹ / ₈ " (1428) 6.27 (0.58) ATS2048 16 ¹ / ₈ " (421) 50 ¹ / ₈ " (1631) 7.20 (0.67) ATS2050 16 ¹ / ₈ " (421) 50 ¹ / ₈ " (1733) 7.66 (0.71) ATS2054 16 ¹ / ₈ " (421) 72 ¹ / ₈ " (1834) 8.12 (0.75) ATS2060 16 ¹ / ₈ " (421) 70 ¹ / ₈ " (1936) 8.58 (0.80) ATS2064 16 ¹ / ₈ " (421) 80 ¹ / ₈ " (2038) 9.04 (0.84) ATS2068 16 ¹ / ₈ " (421) 80 ¹ / ₈ " (2342) 10.42 (0.97) ATS2080 16 ¹ / ₈ " (421) 90 ¹ / ₈ " (2342) 10.42 (0.97) ATS2080 16 ¹ / ₈ " (421) 100 ¹ / ₈ " (2546) 11.34 (1.05) ATS2410 20 ¹ / ₈ " (523) 13 ¹ / ₈ " (336) 1.57 (0.15) ATS2424 20 ¹ / ₈ " (523) 30 ¹ / ₈ " (768) 4.01 (0.37) ATS2428 20 ¹ / ₈ " (523) 38 ¹ / ₈ " (971) 5.15 (0.48) ATS2434 20 ¹ / ₈ " (523) 34 ¹ / ₈ " (1772) 5.72 (0.53) ATS2444 20 ¹ / ₈ " (523) 34 ¹ / ₈ " (1772) 5.72 (0.53) ATS2444 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1776) 6.87 (0.64) ATS2448 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1776) 6.87 (0.64) ATS2448 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1776) 6.87 (0.64) ATS2448 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1788) 9.15 (0.85) ATS2458 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1788) 9.15 (0.85) ATS2458 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1788) 9.15 (0.85) ATS2458 20 ¹ / ₈ " (523) 50 ¹ / ₈ " (1788) 9.15 (0.85) ATS2458 20 ¹ / ₈ " (523) 70 ¹ / ₈ " (1788) 9.15 (0.85) ATS2468 20 ¹ / ₈ " (523) 80 ¹ / ₈ " (1789) 10.87 (1.01) ATS2468 20 ¹ / ₈ " (523) 80 ¹ / ₈ " (1789) 1		_	(421)	32 1/4"		3.51	(0.33)
ATS2030					<u> </u>		
ATS2034 16 ½" (421) 44 ½" (1123) 4.89 (0.45) ATS2038 16 ½" (421) 48 ½" (1225) 5.35 (0.50) ATS2040 16 ½" (421) 52 ½" (1326) 5.81 (0.54) ATS2044 16 ½" (421) 56 ½" (1428) 6.27 (0.58) ATS2048 16 ½" (421) 56 ½" (1530) 6.73 (0.63) ATS2050 16 ½" (421) 64 ½" (1631) 7.20 (0.67) ATS2054 16 ½" (421) 64 ½" (1631) 7.20 (0.67) ATS2058 16 ½" (421) 72 ½" (1834) 8.12 (0.75) ATS2060 16 ½" (421) 76 ½" (1936) 8.58 (0.80) ATS2064 16 ½" (421) 80 ½" (2038) 9.04 (0.84) ATS2068 16 ½" (421) 80 ½" (2342) 10.42 (0.97) ATS2080 16 ½" (421) 100 ½" (2342) 10.42 (0.97) ATS2080 16 ½" (421) 100 ½" (2546) 11.34 (1.05) ATS2410 20 ½" (523) 31 ½" (336) 1.57 (0.15) ATS2424 20 ½" (523) 31 ½" (463) 2.29 (0.21) ATS2424 20 ½" (523) 31 ½" (463) 2.29 (0.21) ATS2438 20 ½" (523) 34 ½" (1702) 5.72 (0.53) ATS2444 20 ½" (523) 34 ½" (1707) 5.72 (0.53) ATS2444 20 ½" (523) 54 ½" (1072) 5.72 (0.53) ATS2444 20 ½" (523) 54 ½" (1776) 6.87 (0.64) ATS2448 20 ½" (523) 54 ½" (1776) 6.87 (0.64) ATS2449 20 ½" (523) 54 ½" (1776) 6.87 (0.64) ATS2440 20 ½" (523) 58 ½" (1776) 6.87 (0.64) ATS2444 20 ½" (523) 58 ½" (1776) 6.87 (0.64) ATS2448 20 ½" (523) 58 ½" (1788) 8.58 (0.80) ATS2458 20 ½" (523) 58 ½" (1788) 9.15 (0.85) ATS2458 20 ½" (523) 58 ½" (1788) 9.15 (0.85) ATS2458 20 ½" (523) 74 ½" (1885) 10.30 (0.96) ATS2458 20 ½" (523) 74 ½" (1885) 10.30 (0.96) ATS2458 20 ½" (523) 74 ½" (1885) 10.30 (0.96) ATS2458 20 ½" (523) 86 ½" (1989) 11.44 (1.06) ATS2468 20 ½" (523) 86 ½" (1990) 12.01 (1.12) ATS2468 20 ½" (523) 86 ½" (1990) 12.01 (1.12) ATS2468 20 ½" (523) 80 ½" (2996) 14.30 (1.33) ATS2677 22 ½" (574) 14 ½			. ,				
ATS2038 16 ⁵ /s" (421) 48 ¹ /s" (1225) 5.35 (0.50) ATS2040 16 ¹ /s" (421) 52 ¹ /s" (1326) 5.81 (0.54) ATS2044 16 ¹ /s" (421) 56 ¹ /s" (1428) 6.27 (0.58) ATS2048 16 ¹ /s" (421) 60 ¹ /s" (1530) 6.73 (0.63) ATS2050 16 ¹ /s" (421) 64 ¹ /s" (1631) 7.20 (0.67) ATS2054 16 ¹ /s" (421) 68 ¹ /s" (1733) 7.66 (0.71) ATS2058 16 ¹ /s" (421) 71/s" (1936) 8.58 (0.80) ATS2060 16 ¹ /s" (421) 81 ¹ /s" (1936) 8.58 (0.80) ATS2064 16 ¹ /s" (421) 81 ¹ /s" (2038) 9.04 (0.84) ATS2068 16 ¹ /s" (421) 81 ¹ /s" (2342) 10.42 (0.97) ATS2068 16 ¹ /s" (421) 10 ¹ /s" (2342) 10.42 (0.97) ATS2074 16 ¹ /s" (421) 10 ¹ /s" (2342) 10.42 (0.97) ATS2407 20 ¹ /s" (523) 13 ¹ /s" (336) 1.57 (0.15) ATS2410 20 ¹ /s" (523) 13 ¹ /s" (366) 1.57 (0.15) ATS24242 20 ¹ /s" (523) 30 ¹							
ATS2040 16 ⁵ / ₈ " (421) 52 ¹ / ₄ " (1326) 5.81 (0.54) ATS2044 16 ⁵ / ₈ " (421) 56 ¹ / ₄ " (1428) 6.27 (0.58) ATS2048 16 ⁵ / ₈ " (421) 60 ¹ / ₄ " (1530) 6.73 (0.63) ATS2050 16 ¹ / ₈ " (421) 64 ¹ / ₄ " (1631) 7.20 (0.67) ATS2054 16 ¹ / ₈ " (421) 68 ¹ / ₄ " (1733) 7.66 (0.71) ATS2058 16 ¹ / ₈ " (421) 72 ¹ / ₄ " (1834) 8.12 (0.75) ATS2060 16 ¹ / ₈ " (421) 70 ¹ / ₄ " (1936) 8.58 (0.80) ATS2068 16 ¹ / ₈ " (421) 81 ¹ / ₄ " (2139) 9.50 (0.84) ATS2068 16 ¹ / ₈ " (421) 91 ¹ / ₄ " (2342) 10.42 (0.97) ATS2407 16 ¹ / ₈ " (421) 100 ¹ / ₄ " (2346) 11.34 (1.05) ATS2410 20 ¹ / ₈ " (523)		_					
ATS2044 16 $\frac{1}{9}$," (421) 56 $\frac{1}{4}$," (1428) 6.27 (0.58) ATS2048 16 $\frac{1}{9}$," (421) 60 $\frac{1}{4}$," (1530) 6.73 (0.63) ATS2050 16 $\frac{1}{9}$," (421) 64 $\frac{1}{4}$," (1631) 7.20 (0.67) ATS2054 16 $\frac{1}{9}$," (421) 68 $\frac{1}{4}$," (1733) 7.66 (0.71) ATS2058 16 $\frac{1}{9}$," (421) 72 $\frac{1}{4}$," (1834) 8.12 (0.75) ATS2060 16 $\frac{1}{9}$," (421) 76 $\frac{1}{4}$," (1936) 8.58 (0.80) ATS2064 16 $\frac{1}{9}$," (421) 80 $\frac{1}{4}$," (2038) 9.04 (0.84) ATS2068 16 $\frac{1}{9}$," (421) 80 $\frac{1}{4}$," (2038) 9.04 (0.84) ATS2068 16 $\frac{1}{9}$," (421) 80 $\frac{1}{4}$," (2139) 9.50 (0.88) ATS2074 16 $\frac{1}{9}$," (421) 92 $\frac{1}{4}$," (2342) 10.42 (0.97) ATS2080 16 $\frac{1}{9}$," (421) 100 $\frac{1}{4}$," (2342) 10.42 (0.97) ATS2080 16 $\frac{1}{9}$," (421) 100 $\frac{1}{4}$," (2342) 10.42 (0.97) ATS2407 20 $\frac{1}{9}$," (523) 13 $\frac{1}{4}$," (336) 1.57 (0.15) ATS2410 20 $\frac{1}{9}$," (523) 31 $\frac{1}{4}$," (463) 2.29 (0.21) ATS2424 20 $\frac{1}{9}$," (523) 31 $\frac{1}{4}$," (463) 2.29 (0.21) ATS2424 20 $\frac{1}{9}$," (523) 38 $\frac{1}{4}$," (971) 5.15 (0.48) ATS2424 20 $\frac{1}{9}$," (523) 38 $\frac{1}{4}$," (1072) 5.72 (0.53) ATS2434 20 $\frac{1}{9}$," (523) 36 $\frac{1}{4}$," (1174) 6.29 (0.58) ATS2438 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 6.29 (0.58) ATS2444 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 6.99 (0.58) ATS2448 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 6.99 (0.58) ATS2448 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 6.99 (0.58) ATS2448 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 6.99 (0.58) ATS2450 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 6.99 (0.58) ATS2458 20 $\frac{1}{9}$," (523) 50 $\frac{1}{4}$," (1174) 9.73 (0.90) ATS2458 20 $\frac{1}{9}$," (523) 70 $\frac{1}{4}$," (1188) 10.30 (0.96) ATS2458 20 $\frac{1}{9}$," (523) 70 $\frac{1}{4}$," (1188) 10.30 (0.96) ATS2458 20 $\frac{1}{9}$," (523) 70 $\frac{1}{4}$," (1188) 10.30 (0.96) ATS2458 20 $\frac{1}{9}$," (523) 86 $\frac{1}{4}$," (1188) 10.30 (0.96) ATS2468 20 $\frac{1}{9}$," (523) 86 $\frac{1}{4}$," (1290) 12.01 (1.12) ATS2468 20 $\frac{1}{9}$," (523) 86 $\frac{1}{4}$," (1290) 12.01 (1.12) ATS2468 20 $\frac{1}{9}$," (523) 86 $\frac{1}{4}$," (2190) 12.01 (1.12) ATS2460 22 $\frac{1}{9}$,							
ATS2048 16 ⁵ / ₈ " (421) 60 ¹ / ₈ " (1530) 6.73 (0.63) ATS2050 16 ⁵ / ₈ " (421) 64 ¹ / ₈ " (1631) 7.20 (0.67) ATS2054 16 ⁵ / ₈ " (421) 72 ¹ / ₈ " (1733) 7.66 (0.71) ATS2058 16 ⁵ / ₈ " (421) 72 ¹ / ₈ " (1834) 8.12 (0.75) ATS2060 16 ⁵ / ₈ " (421) 76 ¹ / ₈ " (1936) 8.58 (0.80) ATS2064 16 ⁵ / ₈ " (421) 80 ¹ / ₈ " (2038) 9.04 (0.84) ATS2068 16 ⁵ / ₈ " (421) 80 ¹ / ₈ " (2139) 9.50 (0.88) ATS2074 16 ⁵ / ₈ " (421) 92 ¹ / ₈ " (2342) 10.42 (0.97) ATS2080 16 ⁵ / ₈ " (421) 100 ¹ / ₈ " (2546) 11.34 (1.05) ATS2410 20 ⁵ / ₈ " (523) 13 ¹ / ₈ " (336) 1.57 (0.15) ATS2420 20 ⁵ / ₈ " (523) 30 ¹ / ₈ " (768) 4.01 (0.37) ATS2424 20 ⁵ / ₈ " (523) 38 ¹ / ₈ " (971) 5.15 (0.48) ATS2430 20 ⁵ / ₈ " (523) 38 ¹ / ₈ " (1072) 5.72 (0.53) ATS2444 20 ⁵ / ₈ " (523) 36 ¹ / ₈ " (1174) 6.29 (0.58) ATS2444 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1174) 6.29 (0.58) ATS2444 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1174) 6.29 (0.58) ATS2444 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1174) 6.29 (0.58) ATS2445 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1174) 6.29 (0.58) ATS2448 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1176) 6.87 (0.64) ATS2449 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1176) 6.87 (0.64) ATS2440 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1176) 6.87 (0.69) ATS2444 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1176) 8.58 (0.80) ATS2445 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1178) 8.01 (0.74) ATS2448 20 ⁵ / ₈ " (523) 50 ¹ / ₈ " (1178) 9.73 (0.90) ATS2458 20 ⁵ / ₈ " (523) 70 ¹ / ₈ " (1188) 10.30 (0.96) ATS2458 20 ⁵ / ₈ " (523) 70 ¹ / ₈ " (1188) 10.30 (0.96) ATS2458 20 ⁵ / ₈ " (523) 86 ¹ / ₈ " (1188) 10.30 (0.96) ATS2468 20 ⁵ / ₈ " (523) 86 ¹ / ₈ " (1198) 10.87 (1.01) ATS2468 20 ⁵ / ₈ " (523) 80 ¹ / ₈ " (1290) 12.01 (1.12) ATS2468 20 ⁵ / ₈ " (523) 80 ¹ / ₈ " (1290) 12.01 (1.12) ATS2460 20 ⁵ / ₈ " (523) 80 ¹ / ₈ " (1290) 12.01 (1.12) ATS2474 20 ⁵ / ₈ " (523) 80 ¹ / ₈ " (1290) 12.01 (1.12) ATS2480 20 ⁵ / ₈ " (523) 102 ¹ / ₈ " (2596) 14.30 (1.33) ATS2607 22 ⁵ / ₈ " (574) 19 ¹ / ₈ " (488) 2.64 (0.24)							
ATS2050							
ATS2054 $16 ^{5}/_{8}" (421) 68 ^{1}/_{4}" (1733) 7.66 (0.71)$ ATS2058 $16 ^{5}/_{8}" (421) 72 ^{1}/_{4}" (1834) 8.12 (0.75)$ ATS2060 $16 ^{5}/_{8}" (421) 76 ^{1}/_{4}" (1936) 8.58 (0.80)$ ATS2064 $16 ^{5}/_{8}" (421) 80 ^{1}/_{4}" (2038) 9.04 (0.84)$ ATS2068 $16 ^{5}/_{8}" (421) 84 ^{1}/_{4}" (2139) 9.50 (0.88)$ ATS2074 $16 ^{5}/_{8}" (421) 92 ^{1}/_{4}" (2342) 10.42 (0.97)$ ATS2080 $16 ^{5}/_{8}" (421) 100 ^{1}/_{4}" (2342) 10.42 (0.97)$ ATS2410 $20 ^{5}/_{8}" (523) 13 ^{1}/_{4}" (336) 1.57 (0.15)$ ATS2420 $20 ^{5}/_{8}" (523) 13 ^{1}/_{4}" (463) 2.29 (0.21)$ ATS2424 $20 ^{5}/_{8}" (523) 30 ^{1}/_{4}" (463) 2.29 (0.21)$ ATS2424 $20 ^{5}/_{8}" (523) 34 ^{1}/_{4}" (869) 4.58 (0.43)$ ATS2428 $20 ^{5}/_{8}" (523) 34 ^{1}/_{4}" (1072) 5.72 (0.53)$ ATS2438 $20 ^{5}/_{8}" (523) 34 ^{1}/_{4}" (1072) 5.72 (0.53)$ ATS2444 $20 ^{5}/_{8}" (523) 54 ^{1}/_{4}" (1174) 6.29 (0.58)$ ATS2448 $20 ^{5}/_{8}" (523) 54 ^{1}/_{4}" (1377) 7.44 (0.69)$ ATS2448 $20 ^{5}/_{8}" (523) 58 ^{1}/_{4}" (1377) 7.44 (0.69)$ ATS2448 $20 ^{5}/_{8}" (523) 58 ^{1}/_{4}" (1379) 8.01 (0.74)$ ATS2458 $20 ^{5}/_{8}" (523) 56 ^{1}/_{4}" (1388) 10.30 (0.96)$ ATS2458 $20 ^{5}/_{8}" (523) 74 ^{1}/_{4}" (1885) 10.30 (0.96)$ ATS2464 $20 ^{5}/_{8}" (523) 74 ^{1}/_{4}" (1885) 10.30 (0.96)$ ATS2468 $20 ^{5}/_{8}" (523) 86 ^{1}/_{4}" (199) 12.01 (1.12)$ ATS2474 $20 ^{5}/_{8}" (523) 86 ^{1}/_{4}" (199) 12.01 (1.12)$ ATS2474 $20 ^{5}/_{8}" (523) 84 ^{1}/_{4}" (2393) 13.16 (1.22)$ ATS2474 $20 ^{5}/_{8}" (523) 84 ^{1}/_{4}" (2396) 14.30 (1.33)$ ATS2670 $22 ^{5}/_{8}" (523) 94 ^{1}/_{4}" (2396) 14.30 (1.33)$							
ATS2058 $16 ^{5} ^{6} ^{6} ^{6} ^{1} ^{4} ^{2} ^{1} ^{2} ^{1} ^{4} ^{1} ^{1} ^{1} ^{1} ^{3} ^{4} ^{4} ^{1} ^{1} ^{2} ^{4} ^{4} ^{1} ^{1} ^{1} ^{3} ^{4} ^{4} ^{4} ^{1} ^{1} ^{3} ^{4} ^$							
ATS2060 $16 \circ l_s$ " (421) $76 \circ l_s$ " (1936) 8.58 (0.80) ATS2064 $16 \circ l_s$ " (421) 80 l_s " (2038) 9.04 (0.84) ATS2068 $16 \circ l_s$ " (421) 80 l_s " (2038) 9.04 (0.84) ATS2074 $16 \circ l_s$ " (421) 84 l_s " (2139) 9.50 (0.88) ATS2074 $16 \circ l_s$ " (421) 92 l_s " (2342) 10.42 (0.97) ATS2080 $16 \circ l_s$ " (421) 100 l_s " (2546) 11.34 (1.05) ATS2407 $20 \circ l_s$ " (523) 13 l_s " (336) 1.57 (0.15) ATS2410 $20 \circ l_s$ " (523) 18 l_s " (463) 2.29 (0.21) ATS2420 $20 \circ l_s$ " (523) 30 l_s " (768) 4.01 (0.37) ATS2424 $20 \circ l_s$ " (523) 38 l_s " (971) 5.15 (0.48) ATS2428 $20 \circ l_s$ " (523) 38 l_s " (1072) 5.72 (0.53) ATS2430 $20 \circ l_s$ " (523) 36 l_s " (1174) 6.29 (0.58) ATS2434 $20 \circ l_s$ " (523) 36 l_s " (1174) 6.87 (0.64) ATS2448 $20 \circ l_s$ " (523) 50 l_s " (1174) 6.87 (0.64) ATS2448 $20 \circ l_s$ " (523) 58 l_s " (1174) 8.01 (0.74) ATS2448 $20 \circ l_s$ " (523) 58 l_s " (1174) 8.01 (0.74) ATS2458 $20 \circ l_s$ " (523) 56 l_s " (1174) 8.58 (0.80) ATS2458 $20 \circ l_s$ " (523) 56 l_s " (1174) 8.58 (0.80) ATS2458 $20 \circ l_s$ " (523) 56 l_s " (1174) (1174) 6.99 (0.58) ATS2460 $20 \circ l_s$ " (523) 56 l_s " (1174) (1174) 6.90 (0.58) ATS2458 $20 \circ l_s$ " (523) 56 l_s " (1174) (1174) 6.90 (0.58) ATS2459 $20 \circ l_s$ " (523) 57 l_s " (1174) $(117$		_					
ATS2064 $16 \frac{1}{9}$, (421) $80 \frac{1}{4}$, (2038) 9.04 (0.84) ATS2068 $16 \frac{1}{9}$, (421) $84 \frac{1}{4}$, (2139) 9.50 (0.88) ATS2074 $16 \frac{1}{9}$, (421) $92 \frac{1}{4}$, (2342) 10.42 (0.97) ATS2080 $16 \frac{1}{9}$, (421) $100 \frac{1}{4}$, (2546) 11.34 (1.05) ATS2407 $20 \frac{1}{9}$, (523) $13 \frac{1}{4}$, (336) 1.57 (0.15) ATS2410 $20 \frac{1}{9}$, (523) $13 \frac{1}{4}$, (463) 2.29 (0.21) ATS2420 $20 \frac{1}{9}$, (523) $30 \frac{1}{4}$, (463) 2.29 (0.21) ATS2424 $20 \frac{1}{9}$, (523) $30 \frac{1}{4}$, (669) 4.58 (0.43) ATS2424 $20 \frac{1}{9}$, (523) $38 \frac{1}{4}$, (971) 5.15 (0.48) ATS2430 $20 \frac{1}{9}$, (523) $38 \frac{1}{4}$, (1072) 5.72 (0.53) ATS2434 $20 \frac{1}{9}$, (523) $40 \frac{1}{4}$, (1174) 6.29 (0.58) ATS2438 $20 \frac{1}{9}$, (523) $40 \frac{1}{4}$, (1174) 6.29 (0.58) ATS2440 $20 \frac{1}{9}$, (523) $50 \frac{1}{4}$, (1174) 6.29 (0.58) ATS2444 $20 \frac{1}{9}$, (523) $50 \frac{1}{4}$, (1174) 6.90 (0.58) ATS2445 $20 \frac{1}{9}$, (523) $50 \frac{1}{4}$, (1174) 8.01 (0.74) ATS2448 $20 \frac{1}{9}$, (523) $50 \frac{1}{4}$, (1174) 8.01 (0.74) ATS2448 $20 \frac{1}{9}$, (523) $50 \frac{1}{4}$, (1188) 9.15 (0.85) ATS2450 $20 \frac{1}{9}$, (523) $60 \frac{1}{4}$, (1188) 9.15 (0.85) ATS2458 $20 \frac{1}{9}$, (523) $60 \frac{1}{4}$, (1188) 9.73 (0.90) ATS2458 $20 \frac{1}{9}$, (523) $70 \frac{1}{4}$, (1188) 9.73 (0.90) ATS2460 $20 \frac{1}{9}$, (523) $70 \frac{1}{4}$, (1987) 10.87 (1.01) ATS2468 $20 \frac{1}{9}$, (523) $80 \frac{1}{4}$, (1987) 10.87 (1.01) ATS2468 $20 \frac{1}{9}$, (523) $80 \frac{1}{4}$, (1987) 10.87 (1.01) ATS2468 $20 \frac{1}{9}$, (523) $80 \frac{1}{4}$, (2190) 12.01 (1.12) ATS2474 $20 \frac{1}{9}$, (523) $80 \frac{1}{4}$, (2190) 12.01 (1.12) ATS2480 $20 \frac{1}{9}$, (523) $80 \frac{1}{4}$, (2190) 12.01 (1.12) ATS2607 $22 \frac{1}{9}$, (574) $14 \frac{1}{4}$, (488) 2.64 (0.24)							
AT\$2068 16 ⅓, (421) 84 ⅓, (2139) 9.50 (0.88) AT\$2074 16 ⅓, (421) 92 ⅓, (2342) 10.42 (0.97) AT\$2080 16 ⅓, (421) 100 ⅓, (2546) 11.34 (1.05) AT\$2407 20 ⅓, (523) 13 ⅓, (336) 1.57 (0.15) AT\$2410 20 ⅓, (523) 18 ⅓, (463) 2.29 (0.21) AT\$2420 20 ⅓, (523) 30 ⅓, (768) 4.01 (0.37) AT\$2424 20 ⅓, (523) 34 ⅓, (869) 4.58 (0.43) AT\$2428 20 ⅓, (523) 38 ⅓, (971) 5.15 (0.48) AT\$2430 20 ⅓, (523) 38 ⅓, (1072) 5.72 (0.53) AT\$2434 20 ⅓, (523) 34 ⅓, (1072) 5.72 (0.53) AT\$2438 20 ⅓, (523) 50 ⅓, (1276) 6.87 (0.64) AT\$2440 20 ⅓, (523) 54 ⅓, (1479) 8.01 (0.74) AT\$2444 20 ⅓, (523) 58 ⅓, (1479) 8.01 (0.74) AT\$2444 20 ⅓, (523) 56 ⅓, (1580) 8.58 (0.80) AT\$2450 20 ⅓, (523) 56 ⅓, (1882) 9.15 (0.85) AT\$2454 20 ⅓, (523) 70 ⅙, (1882) 9.15 (0.85) AT\$2458 20 ⅓, (523) 70 ⅙, (1882) 9.15 (0.85) AT\$2458 20 ⅙, (523) 70 ⅙, (1885) 10.30 (0.96) AT\$2458 20 ⅙, (523) 70 ⅙, (1987) 10.87 (1.01) AT\$2468 20 ⅙, (523) 86 ⅙, (1988) 11.44 (1.06) AT\$2468 20 ⅙, (523) 86 ⅙, (1990) 12.01 (1.12) AT\$2474 20 ⅙, (523) 80 ⅙, (2990) 12.01 (1.12) AT\$2480 20 ⅙, (523) 80 ⅙, (2990) 12.01 (1.12) AT\$2470 20 ⅙, (523) 80 ⅙, (2990) 12.01 (1.12) AT\$2480 20 ⅙, (523) 80 ⅙, (2996) 14.30 (1.33) AT\$2607 22 ⅙, (574) 14 ⅙, (488) 2.64 (0.24)			. ,				
ATS2074 $16 \frac{1}{9}$ /s" (421) $92 \frac{1}{4}$ " (2342) 10.42 (0.97) ATS2080 $16 \frac{1}{9}$ /s" (421) $100 \frac{1}{4}$ " (2546) 11.34 (1.05) ATS2407 $20 \frac{1}{9}$ /s" (523) $13 \frac{1}{4}$ " (336) 1.57 (0.15) ATS2410 $20 \frac{1}{9}$ /s" (523) $18 \frac{1}{4}$ " (463) 2.29 (0.21) ATS2420 $20 \frac{1}{9}$ /s" (523) $30 \frac{1}{4}$ " (768) 4.01 (0.37) ATS2424 $20 \frac{1}{9}$ /s" (523) $34 \frac{1}{4}$ " (869) 4.58 (0.43) ATS2428 $20 \frac{1}{9}$ /s" (523) $38 \frac{1}{4}$ " (971) 5.15 (0.48) ATS2430 $20 \frac{1}{9}$ /s" (523) $46 \frac{1}{4}$ " (1072) 5.72 (0.53) ATS2434 $20 \frac{1}{9}$ /s" (523) $46 \frac{1}{4}$ " (1174) 6.29 (0.58) ATS2438 $20 \frac{1}{9}$ /s" (523) $50 \frac{1}{4}$ " (1174) 6.29 (0.58) ATS2444 $20 \frac{1}{9}$ /s" (523) $50 \frac{1}{4}$ " (1479) 8.01 (0.74) ATS2448 $20 \frac{1}{9}$ /s" (523) $58 \frac{1}{4}$ " (1479) 8.01 (0.74) ATS2450 $20 \frac{1}{9}$ /s" (523) $50 \frac{1}{4}$ " (1580) 8.58 (0.80) ATS2450 $20 \frac{1}{9}$ /s" (523) $66 \frac{1}{4}$ " (1580) 8.58 (0.80) ATS2450 $20 \frac{1}{9}$ /s" (523) $70 \frac{1}{4}$ " (1580) 8.59 (0.96) ATS2464 $20 \frac{1}{9}$ /s" (523) $70 \frac{1}{4}$ " (1987) 10.30 (0.96) ATS2468 $20 \frac{1}{9}$ /s" (523) $38 \frac{1}{4}$ " (1987) 10.30 (0.96) ATS2468 $20 \frac{1}{9}$ /s" (523) $39 \frac{1}{4}$ /4" (2088) 11.44 (1.06) ATS2468 $20 \frac{1}{9}$ /s" (523) $86 \frac{1}{4}$ " (2190) 12.01 (1.12) ATS2474 $20 \frac{1}{9}$ /s" (523) $39 \frac{1}{4}$ /" (2988) 11.44 (1.06) ATS2474 $20 \frac{1}{9}$ /s" (523) $39 \frac{1}{4}$ /" (2988) 11.44 (1.06) ATS2480 $20 \frac{1}{9}$ /s" (523) $102 \frac{1}{4}$ " (2988) 11.44 (1.06) ATS2607 $22 \frac{1}{9}$ /s" (574) $14 \frac{1}{4}$ " (3661) 1.85 (0.17)					(,		
ATS2080 $16 ^9/_8$ " (421) $100 ^1/_4$ " (2546) 11.34 (1.05) ATS2407 $20 ^9/_8$ " (523) $13 ^1/_4$ " (336) 1.57 (0.15) ATS2410 $20 ^9/_8$ " (523) $18 ^1/_4$ " (463) 2.29 (0.21) ATS2420 $20 ^9/_8$ " (523) $30 ^1/_4$ " (768) 4.01 (0.37) ATS2424 $20 ^9/_8$ " (523) $30 ^1/_4$ " (869) 4.58 (0.43) ATS2428 $20 ^9/_8$ " (523) $38 ^1/_4$ " (971) 5.15 (0.48) ATS2430 $20 ^9/_8$ " (523) $34 ^1/_4$ " (971) 5.15 (0.48) ATS2434 $20 ^9/_8$ " (523) $46 ^1/_4$ " (1072) 5.72 (0.53) ATS2438 $20 ^9/_8$ " (523) $46 ^1/_4$ " (1174) 6.29 (0.58) ATS2438 $20 ^9/_8$ " (523) $50 ^1/_4$ " (1174) 6.29 (0.58) ATS2444 $20 ^9/_8$ " (523) $50 ^1/_4$ " (1377) 7.44 (0.69) ATS2448 $20 ^9/_8$ " (523) $58 ^1/_4$ " (1479) 8.01 (0.74) ATS2448 $20 ^9/_8$ " (523) $56 ^1/_4$ " (1580) 8.58 (0.80) ATS2458 $20 ^9/_8$ " (523) $66 ^1/_4$ " (1682) 9.15 (0.85) ATS2458 $20 ^9/_8$ " (523) $70 ^1/_4$ " (1784) 9.73 (0.90) ATS2458 $20 ^9/_8$ " (523) $70 ^1/_4$ " (1987) 10.30 (0.96) ATS2464 $20 ^9/_8$ " (523) $70 ^1/_4$ " (1988) 10.30 (0.96) ATS2468 $20 ^9/_8$ " (523) $86 ^1/_4$ " (1989) 10.31 (1.12) ATS2468 $20 ^9/_8$ " (523) $86 ^1/_4$ " (2190) 12.01 (1.12) ATS2474 $20 ^9/_8$ " (523) $86 ^1/_4$ " (2190) 12.01 (1.12) ATS2474 $20 ^9/_8$ " (523) $94 ^1/_4$ " (2393) 13.16 (1.22) ATS2480 $20 ^9/_8$ " (523) $102 ^1/_4$ " (2396) 14.30 (1.33) ATS2607 $22 ^9/_8$ " (574) $14 ^1/_4$ " (361) 1.85 (0.17)							
ATS2407 $20 \ ^{\circ}/_{8}"$ (523) $13 \ ^{\circ}/_{4}"$ (336) 1.57 (0.15) ATS2410 $20 \ ^{\circ}/_{8}"$ (523) $18 \ ^{\circ}/_{4}"$ (463) 2.29 (0.21) ATS2420 $20 \ ^{\circ}/_{8}"$ (523) $30 \ ^{\circ}/_{4}"$ (768) 4.01 (0.37) ATS2424 $20 \ ^{\circ}/_{8}"$ (523) $30 \ ^{\circ}/_{4}"$ (869) 4.58 (0.43) ATS2428 $20 \ ^{\circ}/_{8}"$ (523) $38 \ ^{\circ}/_{4}"$ (971) 5.15 (0.48) ATS2430 $20 \ ^{\circ}/_{8}"$ (523) $42 \ ^{\circ}/_{4}"$ (1072) 5.72 (0.53) ATS2434 $20 \ ^{\circ}/_{8}"$ (523) $46 \ ^{\circ}/_{4}"$ (1174) 6.29 (0.58) ATS2438 $20 \ ^{\circ}/_{8}"$ (523) $50 \ ^{\circ}/_{4}"$ (1276) 6.87 (0.64) ATS2440 $20 \ ^{\circ}/_{8}"$ (523) $50 \ ^{\circ}/_{4}"$ (1377) 7.44 (0.69) ATS2448 $20 \ ^{\circ}/_{8}"$ (523) $58 \ ^{\circ}/_{4}"$ (1479) 8.01 (0.74) ATS2448 $20 \ ^{\circ}/_{8}"$ (523) $50 \ ^{\circ}/_{4}"$ (1482) 9.15 (0.85) ATS2458 $20 \ ^{\circ}/_{8}"$ (523) $60 \ ^{\circ}/_{4}"$ (1580) 8.58 (0.80) ATS2458 $20 \ ^{\circ}/_{8}"$ (523) $70 \ ^{\circ}/_{4}"$ (1784) 9.73 (0.90) ATS2460 $20 \ ^{\circ}/_{8}"$ (523) $70 \ ^{\circ}/_{4}"$ (1885) 10.30 (0.96) ATS2468 $20 \ ^{\circ}/_{8}"$ (523) $80 \ ^{\circ}/_{4}"$ (1987) 10.87 (1.01) ATS2468 $20 \ ^{\circ}/_{8}"$ (523) $80 \ ^{\circ}/_{4}"$ (2088) 11.44 (1.06) ATS2468 $20 \ ^{\circ}/_{8}"$ (523) $80 \ ^{\circ}/_{4}"$ (2988) 11.44 (1.06) ATS2468 $20 \ ^{\circ}/_{8}"$ (523) $80 \ ^{\circ}/_{4}"$ (2998) 11.40 (1.33) ATS2607 $22 \ ^{\circ}/_{8}"$ (523) $102 \ ^{\circ}/_{4}"$ (2996) 14.30 (1.33) ATS2607 $22 \ ^{\circ}/_{8}"$ (574) $14 \ ^{\circ}/_{4}"$ (488) 2.64 (0.24)							
ATS2410 $20 ^{1}/_{8}"$ (523) $18 ^{1}/_{8}"$ (463) 2.29 (0.21) ATS2420 $20 ^{1}/_{8}"$ (523) $30 ^{1}/_{8}"$ (768) 4.01 (0.37) ATS2424 $20 ^{1}/_{8}"$ (523) $30 ^{1}/_{8}"$ (869) 4.58 (0.43) ATS2428 $20 ^{1}/_{8}"$ (523) $34 ^{1}/_{8}"$ (971) 5.15 (0.48) ATS2430 $20 ^{1}/_{8}"$ (523) $42 ^{1}/_{8}"$ (1072) 5.72 (0.53) ATS2434 $20 ^{1}/_{8}"$ (523) $46 ^{1}/_{8}"$ (1174) 6.29 (0.58) ATS2438 $20 ^{1}/_{8}"$ (523) $50 ^{1}/_{8}"$ (1174) 6.29 (0.58) ATS2440 $20 ^{1}/_{8}"$ (523) $50 ^{1}/_{8}"$ (1276) 6.87 (0.64) ATS2444 $20 ^{1}/_{8}"$ (523) $58 ^{1}/_{8}"$ (1479) 8.01 (0.74) ATS2448 $20 ^{1}/_{8}"$ (523) $58 ^{1}/_{8}"$ (1580) 8.58 (0.80) ATS2450 $20 ^{1}/_{8}"$ (523) $66 ^{1}/_{8}"$ (1580) 8.58 (0.80) ATS2454 $20 ^{1}/_{8}"$ (523) $66 ^{1}/_{8}"$ (1784) 9.73 (0.90) ATS2458 $20 ^{1}/_{8}"$ (523) $70 ^{1}/_{8}"$ (1987) 10.30 (0.96) ATS2464 $20 ^{1}/_{8}"$ (523) $74 ^{1}/_{8}"$ (1987) 10.87 (1.01) ATS2468 $20 ^{1}/_{8}"$ (523) $82 ^{1}/_{8}"$ (2088) 11.44 (1.06) ATS2468 $20 ^{1}/_{8}"$ (523) $86 ^{1}/_{8}"$ (2190) 12.01 (1.12) ATS2474 $20 ^{1}/_{8}"$ (523) $30 ^{1}/_{8}"$ (2190) 12.01 (1.12) ATS2480 $20 ^{1}/_{8}"$ (523) $102 ^{1}/_{8}"$ (2190) 13.16 (1.22) ATS2607 $22 ^{1}/_{8}"$ (574) $14 ^{1}/_{8}"$ (2393) 13.16 (1.22) ATS2610 $22 ^{1}/_{8}"$ (574) $19 ^{1}/_{8}"$ (488) 2.64 (0.24)			. ,		,		
ATS2420 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 30 \ \frac{1}{4}" \ (768) \ 4.01 \ (0.37)$ ATS2424 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 34 \ \frac{1}{4}" \ (869) \ 4.58 \ (0.43)$ ATS2428 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 38 \ \frac{1}{4}" \ (971) \ 5.15 \ (0.48)$ ATS2430 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 42 \ \frac{1}{4}" \ (1072) \ 5.72 \ (0.53)$ ATS2434 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 46 \ \frac{1}{4}" \ (1174) \ 6.29 \ (0.58)$ ATS2438 $20 \ \frac{1}{8} \ (523) \ 50 \ \frac{1}{4}" \ (1176) \ 6.87 \ (0.64)$ ATS2440 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 50 \ \frac{1}{4}" \ (1377) \ 7.44 \ (0.69)$ ATS2448 $20 \ \frac{1}{9} \ \frac{1}{8}'' \ (523) \ 50 \ \frac{1}{4}" \ (1479) \ 8.01 \ (0.74)$ ATS2450 $20 \ \frac{1}{8} \ (523) \ 50 \ \frac{1}{4}" \ (1479) \ 8.01 \ (0.74)$ ATS2450 $20 \ \frac{1}{8} \ (523) \ 50 \ \frac{1}{4}" \ (1580) \ 8.58 \ (0.80)$ ATS2454 $20 \ \frac{1}{9} \ \frac{1}{8}' \ (523) \ 50 \ \frac{1}{4}" \ (1885) \ 10.30 \ (0.96)$ ATS2468 $20 \ \frac{1}{8} \ (523) \ 70 \ \frac{1}{4}" \ (1987) \ 10.87 \ (1.01)$ ATS2468 $20 \ \frac{1}{8} \ (523) \ 80 \ \frac{1}{4} \ (2190) \ 12.01 \ (1.12)$ ATS2474 $20 \ \frac{1}{8} \ (523) \ 94 \ \frac{1}{4}" \ (2190) \ 12.01 \ (1.12)$ ATS2480 $20 \ \frac{1}{8} \ (523) \ 102 \ \frac{1}{4}" \ (2396) \ 14.30 \ (1.33)$ ATS2607 $22 \ \frac{1}{8} \ (574) \ 14 \ \frac{1}{4} \ \frac{1}{4} \ (488) \ 2.64 \ (0.24)$	ATS 2407	20 5/8"	(523)	13 1/4"	(336)	1.57	(0.15)
ATS2424 $20 {}^5/8"$ (523) $34 {}^1/4"$ (869) 4.58 (0.43) ATS2428 $20 {}^5/8"$ (523) $38 {}^1/4"$ (971) 5.15 (0.48) ATS2430 $20 {}^5/8"$ (523) $42 {}^1/4"$ (1072) 5.72 (0.53) ATS2434 $20 {}^5/8"$ (523) $42 {}^1/4"$ (1072) 6.87 (0.64) ATS2440 $20 {}^5/8"$ (523) $50 {}^1/4"$ (1276) 6.87 (0.64) ATS2440 $20 {}^5/8"$ (523) $54 {}^1/4"$ (1377) 7.44 (0.69) ATS2444 $20 {}^5/8"$ (523) $58 {}^1/4"$ (1377) 7.44 (0.69) ATS2448 $20 {}^5/8"$ (523) $58 {}^1/4"$ (1479) 8.01 (0.74) ATS2448 $20 {}^5/8"$ (523) $66 {}^1/4"$ (1580) 8.58 (0.80) ATS2450 $20 {}^5/8"$ (523) $66 {}^1/4"$ (1682) 9.15 (0.85) ATS2454 $20 {}^5/8"$ (523) $70 {}^1/4"$ (1784) 9.73 (0.90) ATS2458 $20 {}^5/8"$ (523) $70 {}^1/4"$ (1885) 10.30 (0.96) ATS2464 $20 {}^5/8"$ (523) $74 {}^1/4"$ (1987) 10.87 (1.01) ATS2468 $20 {}^5/8"$ (523) $86 {}^1/4"$ (2088) 11.44 (1.06) ATS2468 $20 {}^5/8"$ (523) $86 {}^1/4"$ (2088) 11.44 (1.06) ATS2468 $20 {}^5/8"$ (523) $94 {}^1/4"$ (2393) 13.16 (1.22) ATS2474 $20 {}^5/8"$ (523) $94 {}^1/4"$ (2396) 14.30 (1.33) ATS2607 $22 {}^5/8"$ (574) $14 {}^1/4"$ (3661) 1.85 (0.17) ATS2610 $22 {}^5/8"$ (574) $19 {}^1/4"$ (488) 2.64 (0.24)	ATS 2410	20 5/8"	(523)		(463)	2.29	
ATS2428 20 ${}^{\circ}/_{8}$ " (523) 38 ${}^{\circ}/_{4}$ " (971) 5.15 (0.48) ATS2430 20 ${}^{\circ}/_{8}$ " (523) 42 ${}^{\circ}/_{4}$ " (1072) 5.72 (0.53) ATS2434 20 ${}^{\circ}/_{8}$ " (523) 46 ${}^{\circ}/_{4}$ " (1174) 6.29 (0.58) ATS2438 20 ${}^{\circ}/_{8}$ " (523) 50 ${}^{\circ}/_{4}$ " (1276) 6.87 (0.64) ATS2440 20 ${}^{\circ}/_{8}$ " (523) 50 ${}^{\circ}/_{4}$ " (1377) 7.44 (0.69) ATS2444 20 ${}^{\circ}/_{8}$ " (523) 58 ${}^{\circ}/_{4}$ " (1479) 8.01 (0.74) ATS2448 20 ${}^{\circ}/_{8}$ " (523) 58 ${}^{\circ}/_{4}$ " (1580) 8.58 (0.80) ATS2450 20 ${}^{\circ}/_{8}$ " (523) 66 ${}^{\circ}/_{4}$ " (1682) 9.15 (0.85) ATS2454 20 ${}^{\circ}/_{8}$ " (523) 70 ${}^{\circ}/_{4}$ " (1784) 9.73 (0.90) ATS2458 20 ${}^{\circ}/_{8}$ " (523) 70 ${}^{\circ}/_{4}$ " (1885) 10.30 (0.96) ATS2460 20 ${}^{\circ}/_{8}$ " (523) 74 ${}^{\circ}/_{4}$ " (1987) 10.87 (1.01) ATS2464 20 ${}^{\circ}/_{8}$ " (523) 82 ${}^{\circ}/_{4}$ " (2198) 11.44 (1.06) ATS2468 20 ${}^{\circ}/_{8}$ " (523) 86 ${}^{\circ}/_{4}$ " (2190) 12.01 (1.12) ATS2474 20 ${}^{\circ}/_{8}$ " (523) 86 ${}^{\circ}/_{4}$ " (2196) 14.30 (1.33) ATS2607 22 ${}^{\circ}/_{8}$ " (574) 14 ${}^{\circ}/_{4}$ " (488) 2.64 (0.24)	ATS 2420	20 5/8"	(523)	30 1/4"	(768)	4.01	
ATS2430 $20 \ ^{\circ}/_{8}" \ (523)$ $42 \ ^{\circ}/_{4}" \ (1072)$ $5.72 \ (0.53)$ ATS2434 $20 \ ^{\circ}/_{8}" \ (523)$ $46 \ ^{\circ}/_{4}" \ (1174)$ $6.29 \ (0.58)$ ATS2438 $20 \ ^{\circ}/_{8}" \ (523)$ $50 \ ^{\circ}/_{4}" \ (1276)$ $6.87 \ (0.64)$ ATS2440 $20 \ ^{\circ}/_{8}" \ (523)$ $50 \ ^{\circ}/_{4}" \ (1377)$ $7.44 \ (0.69)$ ATS2444 $20 \ ^{\circ}/_{8}" \ (523)$ $58 \ ^{\circ}/_{4}" \ (1479)$ $8.01 \ (0.74)$ ATS2448 $20 \ ^{\circ}/_{8}" \ (523)$ $62 \ ^{\circ}/_{4}" \ (1580)$ $8.58 \ (0.80)$ ATS2450 $20 \ ^{\circ}/_{8}" \ (523)$ $66 \ ^{\circ}/_{4}" \ (1682)$ $9.15 \ (0.85)$ ATS2458 $20 \ ^{\circ}/_{8}" \ (523)$ $70 \ ^{\circ}/_{4}" \ (1784)$ $9.73 \ (0.90)$ ATS2460 $20 \ ^{\circ}/_{8}" \ (523)$ $70 \ ^{\circ}/_{4}" \ (1885)$ $10.30 \ (0.96)$ ATS2464 $20 \ ^{\circ}/_{8}" \ (523)$ $70 \ ^{\circ}/_{4}" \ (1987)$ $10.87 \ (1.01)$ ATS2468 $20 \ ^{\circ}/_{8}" \ (523)$ $8^{\circ}/_{4}" \ (2190)$ $12.01 \ (1.12)$ ATS2474 $20 \ ^{\circ}/_{8}" \ (523)$ $94 \ ^{\circ}/_{4}" \ (2190)$ $12.01 \ (1.12)$ ATS2480 $20 \ ^{\circ}/_{8}" \ (523)$ $102 \ ^{\circ}/_{4}" \ (2596)$ $14.30 \ (1.33)$ ATS2607 $22 \ ^{\circ}/_{8}" \ (574)$ $14 \ ^{\circ}/_{4}" \ (488)$ $2.64 \ (0.24)$			(523)	34 1/4"	(869)	4.58	(0.43)
ATS2434 $20 \frac{1}{9}$ /s" (523) $46 \frac{1}{4}$ " (1174) 6.29 (0.58) ATS2438 $20 \frac{1}{9}$ /s" (523) $50 \frac{1}{4}$ " (1276) 6.87 (0.64) ATS2440 $20 \frac{1}{9}$ /s" (523) $50 \frac{1}{4}$ " (1377) 7.44 (0.69) ATS2444 $20 \frac{1}{9}$ /s" (523) $58 \frac{1}{4}$ " (1479) 8.01 (0.74) ATS2448 $20 \frac{1}{9}$ /s" (523) $58 \frac{1}{4}$ " (1580) 8.58 (0.80) ATS2450 $20 \frac{1}{9}$ /s" (523) $66 \frac{1}{4}$ " (1682) 9.15 (0.85) ATS2454 $20 \frac{1}{9}$ /s" (523) $70 \frac{1}{4}$ " (1784) 9.73 (0.90) ATS2458 $20 \frac{1}{9}$ /s" (523) $70 \frac{1}{4}$ " (1885) 10.30 (0.96) ATS2460 $20 \frac{1}{9}$ /s" (523) $78 \frac{1}{4}$ " (1987) 10.87 (1.01) ATS2468 $20 \frac{1}{9}$ /s" (523) $86 \frac{1}{4}$ " (2198) 11.44 (1.06) ATS2468 $20 \frac{1}{9}$ /s" (523) $86 \frac{1}{4}$ " (2190) 12.01 (1.12) ATS2474 $20 \frac{1}{9}$ /s" (523) $94 \frac{1}{4}$ " (2393) 13.16 (1.22) ATS2607 $22 \frac{1}{9}$ /s" (574) $14 \frac{1}{4}$ " (361) 1.85 (0.17) ATS2610 $22 \frac{1}{9}$ /s" (574) $19 \frac{1}{4}$ " (488) 2.64 (0.24)		20 5/8"	(523)		(971)	5.15	(0.48)
ATS 2438 $20 \ \frac{1}{9}$ (523) $50 \ \frac{1}{4}$ (1276) 6.87 (0.64) ATS 2440 $20 \ \frac{1}{9}$ (523) $54 \ \frac{1}{4}$ (1377) 7.44 (0.69) ATS 2444 $20 \ \frac{1}{9}$ (523) $58 \ \frac{1}{4}$ (1479) 8.01 (0.74) ATS 2448 $20 \ \frac{1}{9}$ (523) $68 \ \frac{1}{4}$ (1580) 8.58 (0.80) ATS 2450 $20 \ \frac{1}{9}$ (523) $60 \ \frac{1}{4}$ (1580) 9.15 (0.85) ATS 2454 $9.0 \ \frac{1}{9}$ (523) $9.0 \ \frac{1}{4}$ (1682) 9.15 (0.85) ATS 2454 $9.0 \ \frac{1}{9}$ (523) $9.0 \ \frac{1}{4}$ (1784) 9.73 (0.90) ATS 2458 $9.0 \ \frac{1}{9}$ (523) $9.0 \ \frac{1}{4}$ (1885) $9.0 \ \frac{1}{4}$ (1987) $9.0 \ \frac{1}{4}$ (1987) $9.0 \ \frac{1}{4}$ (1987) $9.0 \ \frac{1}{4}$ (1987) ATS 2464 $9.0 \ \frac{1}{9}$ (523) $9.0 \ \frac{1}{4}$ (1988) $9.0 \ \frac{1}{4}$ (106) ATS 2468 $9.0 \ \frac{1}{9}$ (523) $9.0 \ \frac{1}{4}$ (2190) $9.0 \ \frac{1}{4}$ (112) ATS 2474 $9.0 \ \frac{1}{9}$ (523) $9.0 \ \frac{1}{4}$ (2190) $9.0 \ \frac{1}{4}$ (133) ATS 2607 $9.0 \ \frac{1}{8}$ (574) $9.0 \ \frac{1}{4}$ (2596) $9.0 \ \frac{1}{4}$ (133) ATS 2607 $9.0 \ \frac{1}{4}$ (574) $9.0 \ \frac{1}{4}$ (488) $9.0 \ \frac{1}{4}$ (0.24)	ATS 2430	20 5/8"	(523)	42 1/4"	(1072)	5.72	(0.53)
ATS 2440 $20 \frac{1}{9}$ /s" (523) $54 \frac{1}{4}$ /s" (1377) 7.44 (0.69) ATS 2444 $20 \frac{1}{9}$ /s" (523) $58 \frac{1}{4}$ /s" (1479) 8.01 (0.74) ATS 2448 $20 \frac{1}{9}$ /s" (523) $62 \frac{1}{4}$ /s" (1580) 8.58 (0.80) ATS 2450 $20 \frac{1}{9}$ /s" (523) $60 \frac{1}{4}$ /s" (1682) 9.15 (0.85) ATS 2454 $20 \frac{1}{9}$ /s" (523) $70 \frac{1}{4}$ /s" (1682) 9.15 (0.96) ATS 2458 $20 \frac{1}{9}$ /s" (523) $70 \frac{1}{4}$ /s" (1885) 10.30 (0.96) ATS 2460 $20 \frac{1}{9}$ /s" (523) $74 \frac{1}{4}$ /s" (1987) 10.87 (1.01) ATS 2464 $20 \frac{1}{9}$ /s" (523) $82 \frac{1}{4}$ /s" (2088) 11.44 (1.06) ATS 2468 $20 \frac{1}{9}$ /s" (523) $86 \frac{1}{4}$ /s" (2190) 12.01 (1.12) ATS 2474 $20 \frac{1}{9}$ /s" (523) $94 \frac{1}{4}$ /s" (2393) 13.16 (1.22) ATS 2480 $20 \frac{1}{9}$ /s" (523) $102 \frac{1}{4}$ /s" (2596) 14.30 (1.33) ATS 2607 $22 \frac{1}{9}$ /s" (574) $14 \frac{1}{4}$ /s" (361) 1.85 (0.17) ATS 2610 $22 \frac{1}{9}$ /s" (574) $19 \frac{1}{4}$ /s" (488) 2.64 (0.24)	ATS 2434	20 5/8"	(523)	46 1/4"	(1174)	6.29	(0.58)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATS 2438	20 5/8"	(523)	50 1/4"	(1276)	6.87	(0.64)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATS 2440	20 5/8"	(523)	54 1/4"	(1377)	7.44	(0.69)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ATS 2444	20 5/8"	(523)	58 1/4"	(1479)	8.01	(0.74)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATS 2448	20 5/8"	(523)	62 1/4"	(1580)	8.58	(0.80)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATS 2450	20 5/8"	(523)	66 1/4"	(1682)	9.15	(0.85)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ATS 2454	20 5/8"	(523)	70 1/4"	(1784)	9.73	(0.90)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATS 2458	20 5/8"	(523)	74 1/4"	(1885)	10.30	(0.96)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ATS 2460	20 5/8"	(523)	78 1/4"	(1987)	10.87	(1.01)
ATS2468 20 $\frac{9}{8}$ " (523) 86 $\frac{1}{4}$ " (2190) 12.01 (1.12) ATS2474 20 $\frac{9}{8}$ " (523) 94 $\frac{1}{4}$ " (2393) 13.16 (1.22) ATS2480 20 $\frac{9}{8}$ " (523) 102 $\frac{1}{4}$ " (2596) 14.30 (1.33) ATS2607 22 $\frac{9}{8}$ " (574) 14 $\frac{1}{4}$ " (361) 1.85 (0.17) ATS2610 22 $\frac{9}{8}$ " (574) 19 $\frac{1}{4}$ " (488) 2.64 (0.24)	ATS 2464	20 5/8"			(2088)	11.44	
ATS2474 20 $\frac{9}{8}$ " (523) 94 $\frac{1}{4}$ " (2393) 13.16 (1.22) ATS2480 20 $\frac{9}{8}$ " (523) 102 $\frac{1}{4}$ " (2596) 14.30 (1.33) ATS2607 22 $\frac{9}{8}$ " (574) 14 $\frac{1}{4}$ " (361) 1.85 (0.17) ATS2610 22 $\frac{9}{8}$ " (574) 19 $\frac{1}{4}$ " (488) 2.64 (0.24)	ATS 2468				(2190)	12.01	
ATS2480 20 $\frac{9}{8}$ " (523) 102 $\frac{1}{4}$ " (2596) 14.30 (1.33) ATS2607 22 $\frac{9}{8}$ " (574) 14 $\frac{1}{4}$ " (361) 1.85 (0.17) ATS2610 22 $\frac{9}{8}$ " (574) 19 $\frac{1}{4}$ " (488) 2.64 (0.24)	ATS 2474						
ATS2607 22 %" (574) 14 ¼" (361) 1.85 (0.17) ATS2610 22 %" (574) 19 ¼" (488) 2.64 (0.24)	ATS 2480						
ATS 2610 22 ⁵ / ₈ " (574) 19 ¹ / ₄ " (488) 2.64 (0.24)	ATS 2607						
	ATS 2610						
	• Dimonsion - !					ara mat-	

[•] Dimensions in parentheses are in millimeters or square meters.



Sash-Set Springline™ Window Unobstructed Glass Dimensions and Area Specifications (continued)

Glass DI	IIICIISI	uiis a	iiu Aic	a Spe	CIIIC	เนบแร
Window Number	Unobst Gla Wid	iss ith	Gla Hei	ght	Ar	
ATCOCOO	Inches		Inches			:./(m²)
ATS2620	22 5/8"	(574)	31 1/4"	(793)	4.52	(0.42)
ATS 2624	22 5/8"	(574)	35 1/4"	(895)	5.15	(0.48)
ATS2628	22 5/8"	(574)	39 1/4"	(996)	5.77	(0.54)
ATS 2630	22 5/8"	(574)	43 1/4"	(1098)	6.40	(0.59)
ATS 2634	22 5/8"	(574)	47 1/4"	(1199)	7.03	(0.65)
ATS 2638	22 5/8"	(574)	51 1/4"	(1301)	7.66	(0.71)
ATS 2640	22 5/8"	(574)	55 1/4"	(1403)	8.28	(0.77)
ATS 2644	22 5/8"	(574)	59 1/4"	(1504)	8.91	(0.83)
ATS 2648	22 5/8"	(574)	63 1/4"	(1606)	9.54	(0.89)
ATS 2650	22 5/8"	(574)	67 1/4"	(1707)	10.17	(0.94)
ATS 2654	22 5/8"	(574)	71 1/4"	(1809)	10.79	(1.00)
ATS2658	22 5/8"	(574)	75 1/4"	(1911)	11.42	(1.06)
ATS2660	22 5/8"	(574)	79 1/4"	(2012)	12.05	(1.12)
ATS 2664	22 5/8"	(574)	83 1/4"	(2114)	12.68	(1.18)
ATS2668	22 5/8"	(574)	87 1/4"	(2215)	13.30	(1.24)
ATS2674	22 5/8"	(574)	95 1/4"	(2419)	14.56	(1.35)
ATS2680	22 5/8"	(574)	103 1/4"	(2622)	15.81	(1.47)
ATS2807	24 5/8"	(625)	15 1/4"	(387)	2.15	(0.20)
ATS2810	24 5/8"	(625)	20 1/4"	(514)	3.00	(0.28)
ATS2820	24 5/8"	(625)	32 1/4"	(818)	5.05	(0.47)
ATS2824	24 5/8	(625)	36 1/4"	(920)	5.74	(0.47)
ATS2828	24 5/8	(625)	40 1/4"	(1022)	6.42	(0.60)
ATS2830	24 5/8"		40 1/4			
		(625)		(1123)	7.10	(0.66)
ATS2834	24 5/8"	(625)	48 1/4"	(1225)	7.78	(0.72)
ATS2838	24 5/8"	(625)	52 1/4"	(1326)	8.47	(0.79)
ATS2840	24 5/8"	(625)	56 1/4"	(1428)	9.15	(0.85)
ATS2844	24 5/8"	(625)	60 1/4"	(1530)	9.83	(0.91)
ATS2848	24 5/8"	(625)	64 1/4"	(1631)	10.52	(0.98)
ATS 2850	24 5/8"	(625)	68 1/4"	(1733)	11.20	(1.04)
ATS 2854	24 5/8"	(625)	72 1/4"	(1834)	11.88	(1.10)
ATS2858	24 5/8"	(625)	76 1/4"	(1936)	12.57	(1.17)
ATS 2860	24 5/8"	(625)	80 1/4"	(2038)	13.25	(1.23)
ATS 2864	24 5/8"	(625)	84 1/4"	(2139)	13.93	(1.29)
ATS 2868	24 5/8"	(625)	88 1/4"	(2241)	14.62	(1.36)
ATS 2874	24 5/8"	(625)	96 1/4"	(2444)	15.98	(1.48)
ATS 2880	24 5/8"	(625)	104 1/4"	(2647)	17.35	(1.61)
ATS 21007	26 5/8"	(675)	16 1/4"	(412)	2.47	(0.23)
ATS 21010	26 5/8"	(675)	21 1/4"	(539)	3.39	(0.32)
ATS 21020	26 5/8"	(675)	33 1/4"	(844)	5.61	(0.52)
ATS 21024	26 5/8"	(675)	37 1/4"	(945)	6.35	(0.59)
ATS 21028	26 5/8"	(675)	41 1/4"	(1047)	7.09	(0.66)
ATS 21030	26 5/8"	(675)	45 1/4"	(1149)	7.82	(0.73)
ATS 21034	26 5/8"	(675)	49 1/4"	(1250)	8.56	(0.80)
ATS 21038	26 5/8"	(675)	53 1/4"	(1352)	9.30	(0.86)
ATS 21040	26 5/8"	(675)	57 1/4"	(1453)	10.04	(0.93)
ATS 21044	26 5/8"	(675)	61 1/4"	(1555)	10.78	(1.00)
ATS 21048	26 5/8"	(675)	65 1/4"	(1657)	11.52	(1.07)
ATS 21050	26 5/8"	(675)	69 1/4"	(1758)	12.26	(1.14)
ATS 21054	26 5/8"	(675)	73 1/4"	(1860)	13.00	(1.21)
ATS21058	26 5/8"	(675)	77 1/4"	(1961)	13.73	(1.28)
ATS21060	26 5/8"	(675)	81 1/4"	(2063)	14.47	(1.34)
ATS21064	26 5/8"	(675)	85 1/4"	(2165)	15.21	(1.41)
ATS21068	26 5/8"	(675)	89 1/4"	(2266)	15.95	(1.48)
ATS21000	26 5/8"	(675)	97 1/4"	(2469)	17.43	(1.62)
ATS21074	26 5/8"	(675)	105 1/4"	(2673)	18.90	(1.76)
ATS3007	28 5/8"	(726)	17 1/4"	(437)	2.81	(0.26)
AT\$3010	28 5/8"	(726)	22 1/4"	(564)	3.80	(0.35)
AT\$3020	28 5/8"	(726)	34 1/4"	(869)	6.19	(0.57)
AT\$3024	28 5/8"	(726)	38 1/4"	(971)	6.98	(0.65)
ATS 3028	28 5/8"	(726)	42 1/4"	(1072)	7.77	(0.72)

inued)						
Window Number	Unobstr Glas Widt Inches/	ss th	Unobst Gla Hei Inches	iss ght	Gla An So Et	
ATS 3030	28 5/8"	(726)	46 1/4"	(1174)	8.57	(0.80)
				-		
ATS 3034	28 5/8"	(726)	50 1/4"	(1276)	9.36	(0.87)
ATS 3038	28 5/8"	(726)	54 1/4"	(1377)	10.16	(0.94)
ATS 3040	28 5/8"	(726)	58 1/4"	(1479)	10.95	(1.02)
ATS 3044	28 5/8"	(726)	62 1/4"	(1580)	11.75	(1.09)
ATS 3048	28 5/8"	(726)	66 1/4"	(1682)	12.54	(1.16)
ATS3050	28 5/8"	(726)	70 1/4"	(1784)	13.33	(1.24)
ATS 3054	28 5/8"	(726)	74 1/4"	(1885)	14.13	(1.31)
AT\$3058	28 5/8"	(726)	78 1/4"	(1987)	14.92	(1.39)
ATS3060		-			15.72	
ATS3064	28 5/8"	(726)	82 1/4"	(2088)	16.51	(1.46)
	28 5/8"	(726)	86 1/4"	(2190)		(1.53)
ATS3068	28 5/8"	(726)	90 1/4"	(2292)	17.31	(1.61)
ATS 3074	28 5/8"	(726)	98 1/4"	(2495)	18.89	(1.76)
ATS 3080	28 5/8"	(726)	106 1/4"	(2698)	20.48	(1.90)
ATS 3207	30 5/8"	(777)	18 1/4"	(463)	3.17	(0.29)
ATS 3210	30 5/8"	(777)	23 1/4"	(590)	4.24	(0.39)
ATS 3220	30 5/8"	(777)	35 1/4"	(895)	6.79	(0.63)
ATS 3224	30 5/8"	(777)	39 1/4"	(996)	7.63	(0.71)
ATS 3228	30 5/8"	(777)	43 1/4"	(1098)	8.48	(0.79)
ATS3230	30 5/8"	(777)	47 1/4"	(1199)	9.33	(0.87)
ATS3234	30 5/8"	(777)	51 1/4"	(1301)	10.18	(0.95)
ATS3234	30 5/8"	(777)	55 1/4"	(1403)	11.03	(1.03)
		-				<u> </u>
ATS3240	30 5/8"	(777)	59 1/4"	(1504)	11.88	(1.10)
ATS 3244	30 5/8"	(777)	63 1/4"	(1606)	12.73	(1.18)
ATS 3248	30 5/8"	(777)	67 1/4"	(1707)	13.58	(1.26)
ATS 3250	30 5/8"	(777)	71 1/4"	(1809)	14.43	(1.34)
ATS 3254	30 5/8"	(777)	75 1/4"	(1911)	15.28	(1.42)
ATS 3258	30 5/8"	(777)	79 1/4"	(2012)	16.13	(1.50)
ATS 3260	30 5/8"	(777)	83 1/4"	(2114)	16.98	(1.58)
ATS 3264	30 5/8"	(777)	87 1/4"	(2215)	17.83	(1.66)
ATS 3268	30 5/8"	(777)	91 1/4"	(2317)	18.68	(1.74)
ATS 3274	30 5/8"	(777)	99 1/4"	(2520)	20.38	(1.89)
ATS3280	30 5/8"	(777)	107 1/4"	(2723)	22.08	(2.05)
ATS 3407	32 5/8"	(828)	19 1/4"	(488)	3.56	(0.33)
ATS3410	32 5/8"	(828)	24 1/4"	(615)	4.69	(0.44)
ATS3420		(828)	36 1/4"	(920)	7.41	(0.69)
ATS3424	32 5/8"	(828)	40 1/4"		8.31	
	32 5/8"	. ,		(1022)		(0.77)
ATS3428	32 5/8"	(828)	44 1/4"	(1123)	9.22	(0.86)
ATS 3430	32 5/8"	(828)	48 1/4"	(1225)	10.12	(0.94)
ATS 3434	32 5/8"	(828)	52 1/4"	(1326)	11.03	(1.02)
ATS 3438	32 5/8"	(828)	56 1/4"	(1428)	11.93	(1.11)
ATS 3440	32 5/8"	(828)	60 1/4"	(1530)	12.84	(1.19)
ATS 3444	32 5/8"	(828)	64 1/4"	(1631)	13.74	(1.28)
ATS 3448	32 5/8"	(828)	68 1/4"	(1733)	14.65	(1.36)
ATS 3450	32 5/8"	(828)	72 1/4"	(1834)	15.55	(1.45)
ATS 3454	32 5/8"	(828)	76 1/4"	(1936)	16.46	(1.53)
ATS 3458	32 5/8"	(828)	80 1/4"	(2038)	17.37	(1.61)
ATS 3460	32 5/8"	(828)	84 1/4"	(2139)	18.27	(1.70)
ATS3464	32 5/8"	(828)	88 1/4"	(2241)	19.18	(1.78)
ATS3468	32 5/8"	(828)	92 1/4"	(2342)	20.08	(1.87)
ATS3474		(828)	100 1/4"	(2546)	21.89	(2.03)
ATS3474	32 5/8"					(2.20)
		(828)	108 1/4"	(2749)	23.70	
ATS3807	36 5/8"	(929)	21 1/4"	(539)	4.39	(0.41)
ATS3810	36 5/8"	(929)	26 1/4"	(666)	5.67	(0.53)
ATS 3820	36 5/8"	(929)	38 1/4"	(971)	8.71	(0.81)
ATS 3824	36 5/8"	(929)	42 1/4"	(1072)	9.73	(0.90)
ATS 3828	36 5/8"	(929)	46 1/4"	(1174)	10.75	(1.00)
ATS 3830	36 5/8"	(929)	50 1/4"	(1276)	11.76	(1.09)
ATS 3834	36 5/8"	(929)	54 1/4"	(1377)	12.78	(1.19)
ATS 3838	36 5/8"	(929)	58 1/4"	(1479)	13.80	(1.28)

Window		tructed	Unobst		01.		
Window Number	Glass Width		Gla Hei		Glass Area		
		s/(mm)	Inches	/(mm)		t./(m²)	
ATS 3840	36 5/8"	(929)	62 1/4"	(1580)	14.81	(1.38)	
ATS3844	36 5/8"	(929)	66 1/4"	(1682)	15.83	(1.47)	
ATS3848	36 5/8"	(929)	70 1/4"	(1784)	16.85	(1.57)	
ATS3850	36 5/8"	(929)	74 1/4"	(1885)	17.86	(1.66)	
ATS3854	36 5/8"	(929)	78 1/4"	(1987)	18.88	(1.75)	
AT\$3858	36 5/8"	(929)	82 1/4"	(2088)	19.90	(1.85)	
ATS3860	36 5/8"	(929)	86 1/4"	(2190)	20.91	(1.94)	
ATS3864	36 5/8"	(929)	90 1/4"	(2292)	21.93	(2.04)	
ATS3868	36 5/8"	(929)	94 1/4"	(2393)	22.95	(2.13)	
ATS3874	36 5/8"	(929)	102 1/4"	(2596)	24.98	(2.32)	
ATS3880	36 5/8"	(929)	110 1/4"	(2800)	27.01	(2.51)	
ATS4007 ATS4010	40 5/8"	(1031)	23 1/4"	(590)	5.32	(0.49)	
ATS4010	40 5/8"	(1031)	28 1/4"	(717)	6.73	(0.62)	
	40 5/8"	(1031)	40 1/4"	(1022)	10.11	(0.94)	
ATS4024 ATS4028	40 5/8"	(1031)	44 1/4"	(1123)	11.24	(1.04)	
ATS4030	40 5/8"	(1031)	48 1/4"	(1225)	12.37	(1.15)	
ATS4030	40 5/8"	(1031)	52 1/4"	(1326)	13.49	(1.25)	
	40 5/8"	(1031)	56 1/4"	(1428)		(1.36)	
ATS4038	40 5/8"	(1031)	60 1/4"	(1530)	15.75	(1.46)	
ATS4040	40 5/8"	(1031)	64 1/4"	(1631)	16.88	(1.57)	
ATS4044	40 5/8"	(1031)	68 1/4"	(1733)	18.00	(1.67)	
ATS4048	40 5/8"	(1031)	72 1/4"	(1834)	19.13	(1.78)	
ATS4050	40 5/8"	(1031)	76 1/4"	(1936)	20.26	(1.88)	
ATS4054	40 5/8"	(1031)	80 1/4"	(2038)	21.39	(1.99)	
ATS4058	40 5/8"	(1031)	84 1/4"	(2139)	22.51	(2.09)	
ATS4060	40 5/8"	(1031)	88 1/4"	(2241)	23.64	(2.20)	
ATS4064 ATS4068	40 5/8"	(1031)	92 1/4"	(2342)	24.77	(2.30)	
ATS4074	40 5/8"	(1031)	96 1/4"	(2444)	25.90	(2.41)	
ATS4074	40 5/8	(1031)	112 1/4"	(2647)	30.41	(2.62)	
ATS4407	44 5/8"	(1031)	25 1/4"	(2850)	6.33	(2.82)	
ATS4410	44 5/8	(1133)	30 1/4"	(768)	7.88	(0.73)	
ATS4420	44 5/8"	(1133)	42 1/4"	(1072)	11.59	(1.08)	
ATS4424	44 5/8"	(1133)	46 1/4"	(1174)	12.83	(1.19)	
ATS4428	44 5/8"	(1133)	50 1/4"	(1276)	14.07	(1.31)	
ATS4430	44 5/8"	(1133)	54 1/4"	(1377)	15.31	(1.42)	
ATS4434	44 5/8"	(1133)	58 1/4"	(1479)	16.55	(1.54)	
ATS4438	44 5/8"	(1133)	62 1/4"	(1580)	17.79	(1.65)	
ATS4440	44 5/8"	(1133)	66 1/4"	(1682)	19.02	(1.77)	
ATS4444	44 5/8"	(1133)	70 1/4"	(1784)	20.26	(1.88)	
ATS4448	44 5/8"	(1133)	74 1/4"	(1885)	21.50	(2.00)	
ATS4450	44 5/8"	(1133)	78 1/4"	(1987)	22.74	(2.11)	
ATS4454	44 5/8"	(1133)	82 1/4"	(2088)	23.98	(2.23)	
ATS4458	44 5/8"	(1133)	86 1/4"	(2190)	25.22	(2.34)	
ATS4460	44 5/8"	(1133)	90 1/4"	(2292)	26.46	(2.46)	
ATS4464	44 5/8"	(1133)	94 1/4"	(2393)	27.70	(2.57)	
ATS4468	44 5/8"	(1133)	98 1/4"	(2495)	28.93	(2.69)	
ATS4474	44 5/8"	(1133)	106 1/4"	(2698)	31.41	(2.92)	
ATS4480	44 5/8"	(1133)	114 1/4"	(2901)	33.89	(3.15)	
ATS4807	48 5/8"	(1234)	27 1/4"	(691)	7.43	(0.69)	
ATS4810	48 5/8"	(1234)	32 1/4"	(818)	9.11	(0.85)	
ATS4820	48 5/8"	(1234)	44 1/4"	(1123)	13.16	(1.22)	
ATS4824	48 5/8"	(1234)	48 1/4"	(1225)	14.51	(1.35)	
ATS4828	48 5/8"	(1234)	52 1/4"	(1326)	15.86	(1.47)	
ATS4830	48 5/8"	(1234)	56 1/4"	(1428)	17.21	(1.60)	
ATS4834	48 5/8"	(1234)	60 1/4"	(1530)	18.56	(1.72)	
ATS4838	48 5/8"	(1234)	64.219	(1631)	19.91	(1.85)	
ATS4840	48 5/8"	(1234)	68 1/4"	(1733)	21.26	(1.98)	
ATS4844	48 5/8"	(1234)	72 1/4"	(1834)	22.61	(2.10)	
	/0	()	- /4	,0.)		(=:=0)	

Sash-Set Springline™ Window Unobstructed Glass Dimensions and Area Specifications (continued)

นเสรร มเ				a Spe			
Window Number	Gla Wi	tructed ass dth s/(mm)	Unobst Gla Hei Inches	ass ght	Glass Area Sq. Ft./(m²)		
ATS 4848	48 5/8"	(1234)	76 1/4"	(1936)	23.96	(2.23)	
					25.31		
ATS 4850	48 5/8"	(1234)	80 1/4"	(2038)		(2.35)	
ATS 4854	48 5/8"	(1234)	84 1/4"	(2139)	26.66	(2.48)	
ATS 4858	48 5/8"	(1234)	88 1/4"	(2241)	28.01	(2.60)	
ATS 4860	48 5/8"	(1234)	92 1/4"	(2342)	29.36	(2.73)	
ATS 4864	48 5/8"	(1234)	96 1/4"	(2444)	30.71	(2.85)	
ATS4868	48 5/8"	(1234)	100 1/4"		32.06		
				(2546)		(2.98)	
ATS 4874	48 5/8"	(1234)	108 1/4"	(2749)	34.76	(3.23)	
ATS 4880	48 5/8"	(1234)	116 1/4"	(2952)	37.46	(3.48)	
ATS 5007	52 5/8"	(1336)	29 1/4"	(742)	8.61	(0.80)	
ATS5010	52 5/8"	(1336)	34 1/4"	(869)	10.44	(0.97)	
ATS5020	52 ⁵ / ₈ "	(1336)	46 1/4"	(1174)	14.82	(1.38)	
ATS5024	_	(1336)		(1276)	16.28		
	52 5/8"		50 1/4"			(1.51)	
ATS5028	52 5/8"	(1336)	54 1/4"	(1377)	17.74	(1.65)	
ATS 5030	52 5/8"	(1336)	58 1/4"	(1479)	19.20	(1.78)	
ATS 5034	52 5/8"	(1336)	62 1/4"	(1580)	20.66	(1.92)	
ATS5038	52 5/8"	(1336)	66 1/4"	(1682)	22.12	(2.06)	
ATS5040	52 5/8"	(1336)	70 1/4"	(1784)	23.59	(2.19)	
ATS5040		(1336)			25.05		
	52 5/8"		74 1/4"	(1885)		(2.33)	
ATS 5048	52 5/8"	(1336)	78 1/4"	(1987)	26.51	(2.46)	
ATS 5050	52 5/8"	(1336)	82 1/4"	(2088)	27.97	(2.60)	
ATS5054	52 5/8"	(1336)	86 1/4"	(2190)	29.43	(2.73)	
ATS5058	52 5/8"	(1336)	90 1/4"	(2292)	30.89	(2.87)	
ATS5060	52 5/8"	(1336)	94 1/4"	(2393)	32.35	(3.01)	
ATS5064	52 5/8"	(1336)	98 1/4"	(2495)	33.81	(3.14)	
ATS 5068	52 5/8"	(1336)	102 1/4"	(2596)	35.27	(3.28)	
ATS 5074	52 5/8"	(1336)	110 1/4"	(2800)	38.19	(3.55)	
ATS 5080	52 5/8"	(1336)	118 1/4"	(3003)	41.12	(3.82)	
ATS 5407	56 5/8"	(1437)	31 1/4"	(793)	9.88	(0.92)	
ATS 5410	56 ⁵ / ₈ "	(1437)	36 1/4"	(920)	11.85	(1.10)	
ATS5420	56 5/8"	(1437)	48 1/4"	(1225)	16.56	(1.54)	
ATS 5424	56 5/8"	(1437)	52 1/4"	(1326)	18.14	(1.68)	
ATS 5428	56 5/8"	(1437)	56 1/4"	(1428)	19.71	(1.83)	
ATS 5430	56 5/8"	(1437)	60 1/4"	(1530)	21.28	(1.98)	
ATS 5434	56 5/8"	(1437)	64 1/4"	(1631)	22.85	(2.12)	
ATS 5438	56 5/8"	(1437)	68 1/4"	(1733)	24.42	(2.27)	
ATS 5440	56 5/8"	(1437)	72 1/4"	(1834)	26.00	(2.42)	
	_				27.57	. ,	
ATS 5444	56 5/8"	(1437)	76 1/4"	(1936)		(2.56)	
ATS 5448	56 5/8"	(1437)	80 1/4"	(2038)	29.14	(2.71)	
ATS 5450	56 5/8"	(1437)	84 1/4"	(2139)	30.71	(2.85)	
ATS 5454	56 5/8"	(1437)	88 1/4"	(2241)	32.28	(3.00)	
ATS 5458	56 ⁵ / ₈ "	(1437)		(2342)	33.86	(3.15)	
ATS5460	56 5/8"	(1437)	96 1/4"	(2444)	35.43	(3.29)	
ATS5464	56 5/8"	(1437)	100 1/4"		37.00	(3.44)	
ATS 5468	56 5/8"	(1437)	104 1/4"		38.57	(3.58)	
ATS 5474	56 5/8"	(1437)	112 1/4"	(2850)	41.72	(3.88)	
ATS 5480	56 5/8"	(1437)	120 1/4"	(3054)	44.86	(4.17)	
ATS 5807	60 5/8"	(1539)	33 1/4"	(844)	11.24	(1.04)	
ATS 5810	60 ⁵ / ₈ "	(1539)	38 1/4"		13.35	(1.24)	
ATS5820	60 5/8"						
	_	(1539)		(1276)	18.40	(1.71)	
ATS5824	60 5/8"	(1539)	54 1/4"	(1377)	20.08	(1.87)	
ATS 5828	60 5/8"	(1539)	58 1/4"	(1479)	21.76	(2.02)	
ATS 5830	60 5/8"	(1539)	62 1/4"	(1580)	23.45	(2.18)	
ATS 5834	60 ⁵ / ₈ "	(1539)	66 1/4"	(1682)	25.13	(2.33)	
ATS5838	60 5/8"	(1539)	70 1/4"	(1784)	26.81	(2.49)	
ATS5840	60 5/8"	(1539)			28.49	(2.65)	
ATS 5844	60 5/8"	(1539)	78 1/4"	(1987)	30.18	(2.80)	
ATS 5848	60 5/8"	(1539)	82 1/4"	(2088)	31.86	(2.96)	
ATS 5850	60 5/8"	(1539)	86 1/4"	(2190)	33.54	(3.12)	
ATS 5854	60 ⁵ / ₈ "	(1539)	90 1/4"	(2292)	35.23	(3.27)	
	-5 /8	(2000)	/4	(- 5.20	(3.21)	

d)						
Window Number	Unobst Gla Wid	iss dth	Unobst Gla Hei	iss ght	Ar	
ATOSOSO	Inches		Inches			./(m²)
ATS5858	60 5/8"	(1539)	94 1/4"	(2393)	36.91	(3.43)
ATS5860	60 5/8"	(1539)	98 1/4"	(2495)	38.59	(3.59)
ATS5864	60 5/8"	(1539)	102 1/4"	(2596)	40.28	(3.74)
ATS5868	60 5/8"	(1539)	106 1/4"	(2698)	41.96	(3.90)
ATS 5874	60 5/8"	(1539)	114 1/4"	(2901)	45.33	(4.21)
ATS 5880	60 5/8"	(1539)	122 1/4"	(3104)	48.69	(4.52)
ATS 6007	64 5/8"	(1641)	35 1/4"	(895)	12.69	(1.18)
ATS 6010	64 5/8"	(1641)	40 1/4"	(1022)	14.93	(1.39)
ATS 6020	64 5/8"	(1641)	52 1/4"	(1326)	20.31	(1.89)
ATS 6024	64 5/8"	(1641)	56 1/4"	(1428)	22.11	(2.05)
ATS 6028	64 5/8"	(1641)	60 1/4"	(1530)	23.90	(2.22)
ATS 6030	64 5/8"	(1641)	64 1/4"	(1631)	25.70	(2.39)
ATS 6034	64 5/8"	(1641)	68 1/4"	(1733)	27.49	(2.55)
ATS6038	64 5/8"	(1641)	72 1/4"	(1834)	29.29	(2.72)
ATS6040	64 5/8"	(1641)	76 1/4"	(1936)	31.08	(2.89)
ATS6044	64 5/8"	(1641)	80 1/4"	(2038)	32.87	(3.05)
ATS6048	64 5/8"	(1641)	84 1/4"	(2139)	34.67	(3.22)
ATS6050		(1641)	88 1/4"	(2241)	36.46	(3.39)
ATS6050	64 5/8"	. ,		-		
	64 5/8"	(1641)	92 1/4"	(2342)	38.26	(3.55)
ATS6058	64 5/8"	(1641)	96 1/4"	(2444)	40.05	(3.72)
ATS6060	64 5/8"	(1641)	100 1/4"	(2546)	41.85	(3.89)
ATS6064	64 5/8"	(1641)	104 1/4"	(2647)	43.64	(4.05)
ATS 6068	64 5/8"	(1641)	108 1/4"	(2749)	45.43	(4.22)
ATS 6074	64 5/8"	(1641)	116 1/4"	(2952)	49.02	(4.55)
ATS 6080	64 5/8"	(1641)	124 1/4"	(3155)	52.61	(4.89)
ATS 6407	68 5/8"	(1742)	37 1/4"	(945)	14.22	(1.32)
ATS 6410	68 5/8"	(1742)	42 1/4"	(1072)	16.60	(1.54)
ATS 6420	68 5/8"	(1742)	54 1/4"	(1377)	22.32	(2.07)
ATS 6424	68 5/8"	(1742)	58 1/4"	(1479)	24.23	(2.25)
ATS 6428	68 5/8"	(1742)	62 1/4"	(1580)	26.13	(2.43)
ATS 6430	68 5/8"	(1742)	66 1/4"	(1682)	28.04	(2.60)
ATS6434	68 5/8"	(1742)	70 1/4"	(1784)	29.94	(2.78)
ATS6438	68 5/8"	(1742)	74 1/4"	(1885)	31.85	(2.96)
ATS6440	68 5/8"	(1742)	78 1/4"	(1987)	33.75	(3.14)
ATS6444	68 5/8"	(1742)	82 1/4"	(2088)	35.66	(3.31)
ATS6448	68 5/8"	(1742)	86 1/4"	(2190)	37.56	(3.49)
ATS6450	68 5/8"	(1742)		(2292)	39.47	(3.49)
ATS6450			90 1/4"		41.37	
	68 5/8"	(1742)	94 1/4"	(2393)		(3.84)
ATS 6458	68 5/8"	(1742)	98 1/4"	(2495)	43.28	(4.02)
ATS6460	68 5/8"		102 1/4"	(2596)	45.19	(4.20)
ATS6464	68 5/8"	(1742)	106 1/4"	(2698)	47.09	(4.37)
ATS6468	68 5/8"	(1742)	110 1/4"		49.00	(4.55)
ATS6474	68 5/8"	(1742)	118 1/4"	(3003)	52.81	(4.91)
ATS 6480	68 5/8"	(1742)	126 1/4"	(3206)	56.62	(5.26)
ATS 6807	72 5/8"	(1844)	39 1/4"	(996)	15.84	(1.47)
ATS 6810	72 5/8"	(1844)	44 1/4"	(1123)	18.37	(1.71)
ATS 6820	72 5/8"	(1844)	56 1/4"	(1428)	24.41	(2.27)
ATS 6824	72 5/8"	(1844)	60 1/4"	(1530)	26.43	(2.46)
ATS 6828	72 5/8"	(1844)	64 1/4"	(1631)	28.45	(2.64)
ATS 6830	72 5/8"	(1844)	68 1/4"	(1733)	30.46	(2.83)
ATS 6834	72 5/8"	(1844)	72 1/4"	(1834)	32.48	(3.02)
ATS6838	72 5/8"	(1844)	76 1/4"	(1936)	34.50	(3.20)
ATS 6840	72 5/8"	(1844)	80 1/4"	(2038)	36.51	(3.39)
ATS6844	72 5/8"	(1844)	84 1/4"	(2139)	38.53	(3.58)
ATS6848	72 5/8"	(1844)	88 1/4"	(2241)	40.55	(3.77)
ATS6850	72 5/8"	(1844)	92 1/4"	(2342)	42.56	(3.95)
ATS6854				(2444)	44.58	
	72 5/8"	(1844)	96 1/4"			(4.14)
AT\$6858	72 5/8"	(1844)	100 1/4"	(2546)	46.60	(4.33)
ATS6860	72 5/8"	(1844)	104 1/4"	(2647)	48.61	(4.52)
ATS6864	72 5/8"	(1844)	108 1/4"	(2749)	50.63	(4.70)

Window Number	Unobstructed Glass Width Inches/(mm)		Unobst Gla Hei Inches	iss ght	Gla Ar Sq. Ft	
ATS 6868	72 5/8"	(1844)	112 1/4"	(2850)	52.65	(4.89)
ATS 6874	72 5/8"	(1844)	120 1/4"	(3054)	56.68	(5.27)
ATS 6880	72 5/8"	(1844)	128 1/4"	(3257)	60.71	(5.64)
ATS 7007	76 5/8"	(1945)	41 1/4"	(1047)	17.55	(1.63)
ATS 7010	76 5/8"	(1945)	46 1/4"	(1174)	20.21	(1.88)
ATS 7020	76 5/8"	(1945)	58 1/4"	(1479)	26.60	(2.47)
ATS 7024	76 5/8"	(1945)	62 1/4"	(1580)	28.72	(2.67)
ATS 7028	76 5/8"	(1945)	66 1/4"	(1682)	30.85	(2.87)
ATS 7030	76 5/8"	(1945)	70 1/4"	(1784)	32.98	(3.06)
ATS 7034	76 5/8"	(1945)	74 1/4"	(1885)	35.11	(3.26)
ATS 7038	76 5/8"	(1945)	78 1/4"	(1987)	37.23	(3.46)
ATS 7040	76 5/8"	(1945)	82 1/4"	(2088)	39.36	(3.66)
ATS 7044	76 ⁵ / ₈ "	(1945)	86 1/4"	(2190)	41.49	(3.85)
ATS 7048	76 ⁵ / ₈ "	(1945)	90 1/4"	(2292)	43.62	(4.05)
ATS 7050	76 5/8"	(1945)	94 1/4"	(2393)	45.74	(4.25)
ATS 7054	76 5/8"	(1945)	98 1/4"	(2495)	47.87	(4.45)
ATS 7058	76 ⁵ / ₈ "	(1945)	102 1/4"	(2596)	50.00	(4.64)
ATS 7060	76 ⁵ / ₈ "	(1945)	106 1/4"	(2698)	52.13	(4.84)
ATS 7064	76 ⁵ / ₈ "	(1945)	110 1/4"	(2800)	54.25	(5.04)
ATS 7068	76 5/8"	(1945)	114 1/4"	(2901)	56.38	(5.24)
ATS 7074	76 5/8"	(1945)	122 1/4"	(3104)	60.64	(5.63)
ATS 7080	76 5/8"	(1945)	130 1/4"	(3308)	64.89	(6.03)
ATS 7407	80 5/8"	(2047)	43 1/4"	(1098)	19.35	(1.80)
ATS 7410	80 5/8"	(2047)	48 1/4"	(1225)	22.15	(2.06)
ATS 7420	80 5/8"	(2047)	60 1/4"	(1530)	28.86	(2.68)
ATS 7424	80 5/8"	(2047)	64 1/4"	(1631)	31.10	(2.89)
ATS 7428	80 5/8"	(2047)	68 1/4"	(1733)	33.34	(3.10)
ATS 7430	80 5/8"	(2047)	72 1/4"	(1834)	35.58	(3.31)
ATS 7434	80 5/8"	(2047)	76 1/4"	(1936)	37.82	(3.51)
ATS 8007	88 5/8"	(2250)	47 1/4"	(1199)	23.20	(2.16)
ATS 8010	88 5/8"	(2250)	52 1/4"	(1326)	26.28	(2.44)
ATS 8020	88 5/8"	(2250)	64 1/4"	(1631)	33.66	(3.13)
ATS 8024	88 5/8"	(2250)	68 1/4"	(1733)	36.12	(3.36)
ATS 8028	88 5/8"	(2250)	72 1/4"	(1834)	38.58	(3.58)
ATS 8030	88 5/8"	(2250)	76 1/4"	(1936)	41.04	(3.81)

 $[\]mbox{\ensuremath{\bullet}}$ Dimensions in parentheses are in millimeters or square meters.



Direct-Set Specialty Window Details

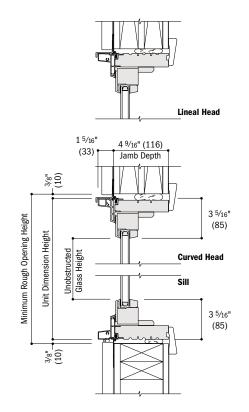
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Lineal Head 1 5/16" 4 9/16" (116) (33)Jamb Depth Curved 3/8" (10) Head Jamb 2" (51)Minimum Rough Opening Height Unit Dimension Height Unobstructed Glass **Curved Head** Height Sill 2" (51)

Vertical Section

Sash-Set Specialty Window Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

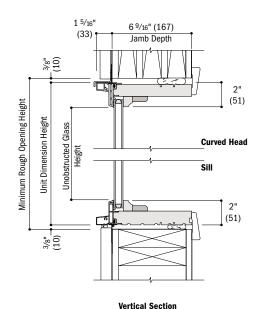


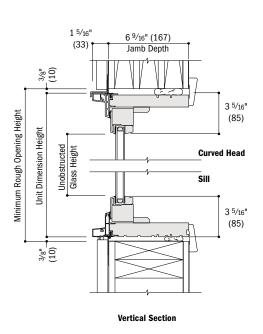
Vertical Section

Both lineal and curved head jambs are shown. Choose detail based on your specialty window shape.

Direct-set specialty and sash-set specialty windows are available in both $4\ ^9$ /16" (116) and $6\ ^9$ /16" (167) base jamb depths.

Oval windows are only available direct-set.





See page 112 for joining details.

3/8" (10)

- \bullet 4 $^{9}/_{16}$ " (116) and 6 $^{9}/_{16}$ " (167) base jamb depth measurements are from back side of installation flange.
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

SPECIALTY WINDOWS

Horizontal (stack) Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Windows can be joined to other windows using clip or 4 9/16" (116) fiberglass joining materials. Specialty windows can be joined over patio doors using fiberglass joining material for 4 9/16" (116) and 6 %16" (167) base jamb depths. For factoryjoined specialty-to-specialty window combinations, 4 9/16" (116) or 6 9/16" (167) Laminated veneer Lumber (LVL) joining material will be used. For additional window combinations, see pages 60-62.

Overall "Specialty Window/Window" or "Specialty Window/Door" Dimension Height -

Sum of individual "specialty window/window" or "specialty window/door" heights plus 3/4" (19) per join.

Overall Minimum Rough Opening Height -

Overall dimension height plus 3/4" (19).

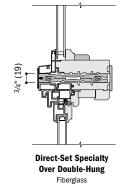
For more information on joining, refer to the combination designs section starting on page 196.



Sash-Set Specialty

Over Casement/Awning

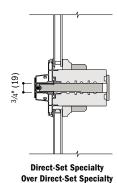
Fiberglass

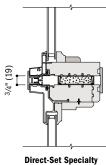


Sash-Set Specialty

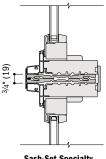
Over Double-Hung

Fiberglass

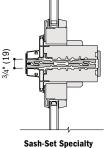




Over Picture Clip



LVL (Factory-Joined)

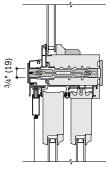


Over Sash-Set Specialty

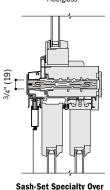
Fiberglass

Sash-Set Specialty

Over Picture Fiberglass

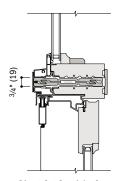


Direct-Set Specialty Over Gliding Patio Door Fiberglass

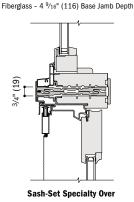


Gliding Patio Door

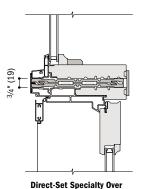
Fiberglass



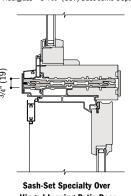
Direct-Set Specialty Over Hinged Inswing Patio Door



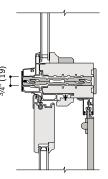
Hinged Inswing Patio Door Fiberglass - 4 9/16" (116) Base Jamb Depth



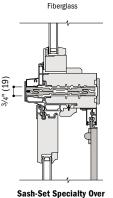
Hinged Inswing Patio Door Fiberglass - 6 9/16" (167) Base Jamb Depth



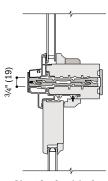
Hinged Inswing Patio Door Fiberglass - 6 9/16" (167) Base Jamb Depth



Direct-Set Specialty Over Hinged Outswing Patio Door



Sash-Set Specialty Over **Hinged Outswing Patio Door** Fiberglass



Direct-Set Specialty Over Patio Door Sidelight Fiberglass

Sash-Set Specialty Over **Patio Door Sidelight** Fiberglass

- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
- · Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.





COMPLEMENTARY CASEMENT WINDOWS

FEATURES

FRAME

- ♠ Heavy-duty extruded aluminum cladding protects the frame exterior, providing low-maintenance durability. Standard cladding finish meets AAMA 2604. An optional finish that meets the AAMA 2605 standard is also available.
- (3) Wood frame members are treated with a water-repellent preservative for long-lasting* protection and performance.

Installation flange extends 1 ½" (38) around the perimeter of the unit for positioning and locating. Installation clips are standard for increased structural anchoring to building members.

Mounted around the frame perimeter, the clips rotate into position and can be bent into place against the framing members to suit all jamb conditions.



• Interior stops are unfinished. Low-maintenance prefinished white, dark bronze and black interiors are also available.

SASH

- **O** Wood core members provide excellent structural stability and energy efficiency.
- (a) Heavy-duty extruded aluminum cladding protects the sash exterior, providing low-maintenance durability.
- Weatherstrip throughout the unit provides a long-lasting, energyefficient seal. Rain skirt is factory installed on the perimeter of the sash.

GLASS

- **G** In addition to stainless steel glass spacers, black or white glass spacers are available to allow the spacer to blend in with the unit color.
- ① Silicone glazing bead combined with two-sided silicone tape provide superior weathertightness.

- High-Performance options include:
- Low-E4® glass
- Low-E4 HeatLock® glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass
- Low-E4 Sun glass

Tempered and other glass options are available; contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 15 for more details.

EXTERIORS & INTERIORS

EXTERIOR COLORS



INTERIOR WOOD SPECIES





For mixed grain Douglas fir, hickory, white oak and walnut, contact your Andersen supplier. All wood interiors are unfinished unless a paint color is specified. Naturally occurring variations in grain, color and texture of wood make each window one of a kind.

INTERIOR PAINT COLORS



Also available in 11 exterior colors shown above. Painted colors on pine. For custom colors and painted colors on maple, contact your Andersen supplier.

HARDWARE Sold Separately



CONTEMPORARY FOLDING

Black | Bright Brass
Oil Rubbed Bronze | **Satin Nickel**Stone | White



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass

Distressed Bronze | Distressed Nickel
Oil Rubbed Bronze | Satin Nickel
Stone | White

Folding handles avoid interference with window treatments.



Stone | White

Bold name denotes finish shown.



ESTATE"

Antique Brass | Bright Brass
Distressed Bronze | Distressed Nickel
Oil Rubbed Bronze | Satin Nickel

HARDWARE FINISHES



^{*}Visit andersenwindows.com/warranty for details.

^{**}Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahaganies.



HARDWARE Smooth Control Hardware System



The smooth control hardware system employs a worm gear drive for easy operation. Units with a wash mode have hinges that move the sash away from the frame to provide easier glass cleaning on rectangular units. Arch and Springline™ casement units use the same smooth control hardware system with stainless steel butt hinges for smooth operation. Hardware option and finish must be specified. Operator handle and cover sold separately.

Single-Actuation Casement Lock



A single-actuation lock easily releases all locking points on the casement sash while the reach-out action eliminates binding when closing. The lock handle is offered in finishes that coordinate with your specified hardware option.

FRENCH CASEMENT



Andersen® complementary French casements allow both sash to swing outward from the center, eliminating a center mullion post. They offer smooth operating multi-point locking mechanisms and hinges. The multi-point lock is activated with a single turn of a handle that simultaneously secures both sash. French casement windows have a unique locking handle that's available in antique brass, black, bright brass, oil rubbed bronze, satin nickel, stone and white finishes.

ACCESSORIES Sold Separately

FRAME

Extension Jambs





Complementary casement jamb depth is 3% (86). Extension base jambs are available in $1/1_0$ (1.5) increments between 4% (110) and 7% (181). Additional dimensions are available. Contact your Andersen supplier for more information. Extension jambs are available in all wood species and interior colors. Available for job site application or can be factory applied.

HARDWARE

Corrosion-Resistant Components



Corrosion-resistant hinge and operator arm hardware is designed for applications in harsh and corrosive environments such as heavy industrial or coastal areas.* Shown above on a 400 Series casement window.

Window Opening Control Device



A window opening control device is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in black, stone and white. Not available for French casement windows.

SPECIAL USE OPERATOR HANDLES

Available in Classic Series[™] design only.

Compact Operator Handle



Specially designed for use in situations where blinds or other window treatments interfere with standard operator handle. Available in white or stone finish.

Easy-Grip Handle

Larger knob makes it easier to grip and operate. Available in white or stone finish.

Operator Spline Cover



An operator spline cover is an attractive cap that covers the roto operator stud when the handle has been removed to control access or operation of the window. The operator spline cover should not be used on any window designated or intended for emergency escape or rescue. Please consult your local building code official for local egress code requirements.

Metal T-Handle





Our smallest operator handle, the metal T-handle, may make it more difficult for young children (5 and under) to open the window. For more information on child safety, write:

Andersen Corporation LookOut For Kids® Program 100 Fourth Avenue North Bayport, MN 55003 Call 800-313-8889 or email lofk@andersencorp.com.

INSECT SCREENS

TruScene® Insect Screens



Our TruScene insect screens let in over 25% more fresh air** and provide 50% greater clarity than Andersen conventional insect screens, all while keeping out unwanted small insects. For complementary casement windows, TruScene frames are available in white, stone, dark bronze and black as well as pine, maple and oak wood veneers.

Conventional Insect Screens

Conventional insect screens have black fiberglass screen mesh. Optional charcoal powder-coated aluminum screen mesh is available. Frames are available in white, stone, dark bronze and black.

CAUTION:

- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

^{*}Visit andersenwindows.com/warranty for details.

^{**}TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens.

Dimensions in parentheses are in millimeters.

COMPLEMENTARY CASEMENT WINDOWS

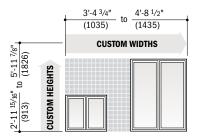
Shapes and Sizes

Choose left, right or stationary as viewed from the exterior. Standard sizes are available for casement windows along with the custom sizing shown below. Picture and transom windows are also available. For standard sizes, minimum rough opening dimensions and opening specifications, contact your Andersen supplier. Complementary casement windows are designed to be standalone feature windows and cannot be directly joined to A-Series windows or doors.

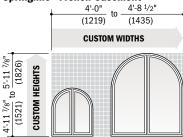


Custom-size windows are available in 1/8" (3) increments between minimum and maximum widths and heights. Some restrictions apply. Standard sizes are also available.

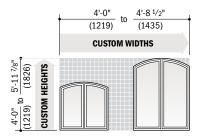
French Casement



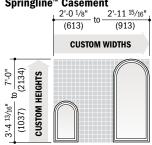
Springline™ French Casement



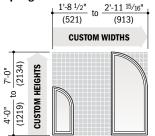
Arch French Casement



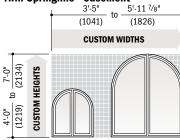
Springline™ Casement*



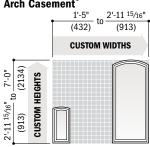
Springline™ Flanker Casement*



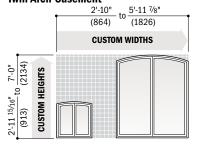
Twin Springline™ Casement*



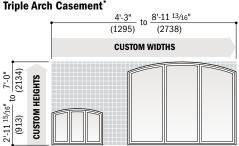
Arch Casement



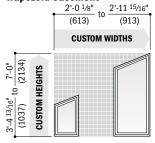
Twin Arch Casement'



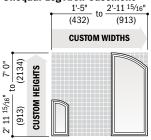
Triple Arch Casement



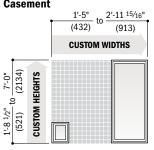
Trapezoid Casement*



Unequal Leg Arch Casement



Casement



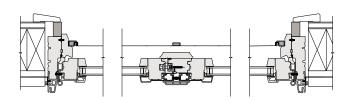
[•] Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

^{*}For exterior wall cladding that extends beyond the face of the window, there may be a reduction in the amount of opening "swing" when the top of the sash touches the wall cladding.



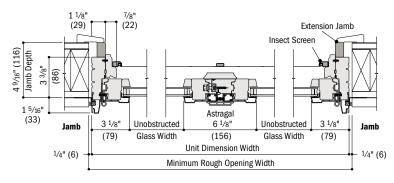
Clad Complementary French Casement Window Details - Venting

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



Horizontal Section

French Springline™ Casement

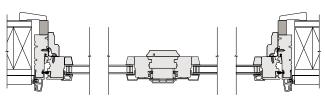


Horizontal Section

French Casement and French Arch Casement

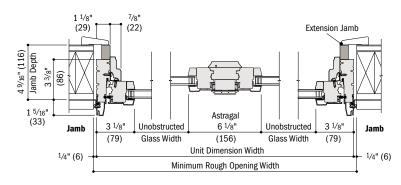
Clad Complementary French Casement Window Details - Stationary

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



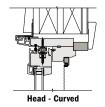
Horizontal Section

French Springline™ Casement

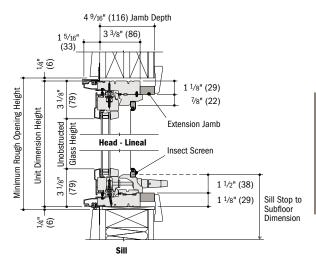


Horizontal Section

French Casement and French Arch Casement

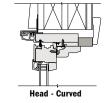


French Springline™ Casement and French Arch Casement

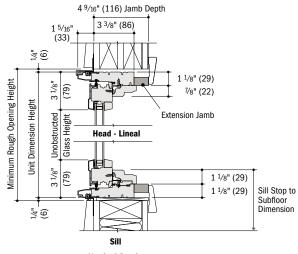


Vertical Section

French Casement and French Arch Casement



French Springline™ and French Arch Casement



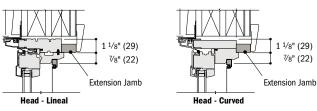
Vertical Section French Casement and French Arch Casement

- 4 9/16" (116) overall jamb depth and 3 3/8" (86) base jamb depth measurements are from back side of installation flange.
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.
 Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

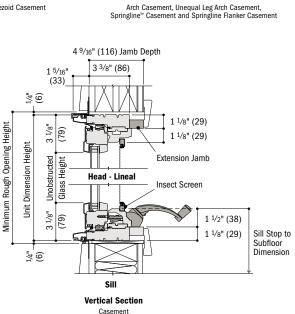
COMPLEMENTARY CASEMENT WINDOWS

Clad Complementary Casement Window Details - Venting

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



Trapezoid Casement



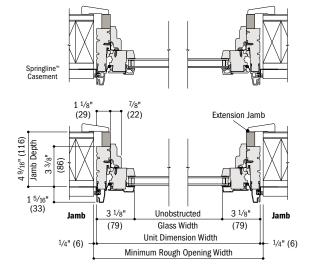
Springline™ Flanker Springline Casement Trapezoid Casement, Arch Casement and Unequal Leg Arch Casement 7/8" 1 1/8 (29) (22) Extension Jamb Insect Screen 4 9/16" (116) Jamb Depth 3 3/8" 1 5/16" (33)3 1/8 Unobstructed 3 1/8" Jamb Jamb (79) Glass Width (79) Unit Dimension Width 1/4" (6) 1/4" (6)

Horizontal Section Casement

Minimum Rough Opening Width

Clad Complementary Casement Window Details - Stationary

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

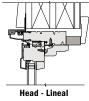


Horizontal Section

Casement, Trapezoid Casement, Arch Casement and Unequal Leg Arch Casement

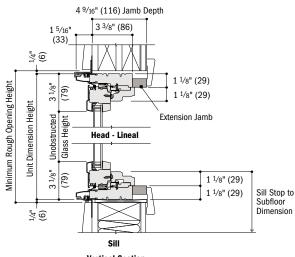
- 4 9/16" (116) overall jamb depth and 3 3/8" (86) base jamb depth measurements are from back side of installation flange.
- · Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Dimensions in parentheses are in millimeters.
- · Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

 Details are for illustration only and are not intended to represent product installation methods or materials Refer to product installation instructions at andersenwindows.com.



Trapezoid Casement

Arch Casement, Unequal Leg Arch Casement, Springline™ Casement and Springline Flanker Casements



Vertical Section





GLIDING PATIO DOORS

FRAME

The frame is constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

(3) Wood members are treated with a water-repellent preservative for longlasting protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs to match the wall depth.

© The weather seal is made from a flexible polyethylene leaf with a urethane foam core on the sill and stationary side jambs, and a polypropylene fin weatherstrip on the head and operating side jambs, creating a positive seal between the frame and panels. This system provides a long-lasting, energy-efficient barrier against wind, water and dust.

SILL

• The one-piece fiberglass design provides superior water management. The nonconductive fiberglass construction enhances energy performance, and its superior strength eliminates the need for a sill support.

The slip- and wear-resistant poly bead finish is available in either a neutral gray or dark bronze color.

The roller track has a stainless steel cap that resists denting for smooth, reliable operation.



Contemporary Panel

PANEL

(3) Panel stiles and rails are constructed of an engineered Laminated Veneer Lumber (LVL) core. This LVL core provides strength and helps prevent warping for consistent, smooth operation.

Now available with contemporary panels in addition to traditional panels. Contemporary panels feature $5\,^5/8$ " (143) stiles and top rail with a $6\,^1/4$ " (159) bottom rail and contemporary glass stops. Traditional panels feature $5\,^5/8$ " (143) stiles and top rail with a $10\,^1/2$ " (267) bottom rail and traditional glass stops.

• Interior panel surfaces are constructed from premium wood veneer available in pine, maple, vertical grain Douglas fir, oak, mahogany** and cherry. All prefinished interiors use water-based paints and stains.

G The exterior of the wood panel is protected with a Flexacron[®] paint system; this stabilized polyester paint is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous, low-maintenance finish.

Dual corrosion-resistant* ball-bearing rollers on the door panels provide smooth gliding operation with self-contained leveling adjusters.

Dual ball-bearing rollers have deep grooves to increase engagement with the roller track and resist lateral movement.

A parting stop bracket adds strength to the door by reinforcing the top of the panels.



Traditional Panel

Flexible Seal



A full-length combination weatherstrip/interlock system provides a flexible seal at the meeting stile. Shown above on a 400 Series Frenchwood® gliding patio door.

CONFIGURATIONS





Two-Panel



Three-Panel



Four-Panel

(GLASS

See Common Features on page 123 for details.

Blinds-Between-the-Glass



Blinds-between-the-glass are available for select door sizes when ordered with Low-E4® tempered glass and any exterior or interior color. White or slate gray ½" (13) aluminum slat blinds come mounted between the glass. Available in 3368, 33611, 6068, 60611, 111068-4, 1110611-4, 2968, 5068 and 91068-4 door sizes.

HARDWARE

Multi-Point Locking System for Standard Hardware



The multi-point locking system for standard hardware features a unique reachout design that pulls the door panel tightly closed for a weathertight seal and enhanced security.

Two-Point Locking System for Flush Hardware

The two-point locking system for flush hardware provides intuitive adjustment. Equipped with laminated stainless steel hooks and an anti-slam device to prevent damage to the side jamb.

PERFORMANCE

See Common Features on page 123 for details.

^{*}Visit andersenwindows.com/warranty for details.

**Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.

"Flexacron" is a registered trademark of PPG Industries, Inc.

Andersen patio doors are not intended for use as entrance doors.

Dimensions in parentheses are in millimeters.



HINGED INSWING PATIO DOORS

FRAME

- The frame is constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.
- (3) Wood members are treated with a water-repellent preservative for longlasting* protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs to match the wall depth.

Hinged inswing patio doors are available in 4%16" (116) and 6%16" (167) base jamb depths.

SILL

This one-piece fiberglass design provides superior water management. The nonconductive fiberglass construction enhances energy performance, and its superior strength eliminates the need for a sill support.

The slip- and wear-resistant poly bead finish is available in either a neutral gray or dark bronze color.

PANEL

• Panel stiles and rails are constructed of an engineered Laminated Veneer Lumber (LVL) core. This LVL core provides strength and helps prevent warping for consistent, smooth operation.

Now available with contemporary panels in addition to traditional panels. Contemporary panels feature $5\,^5/\!\!/_8$ " (143) stiles and top rail with a $6\,^1/\!\!/_4$ " (159) bottom rail and contemporary glass stops. Traditional panels feature $5\,^5/\!\!/_8$ " (143) stiles and top rail with a $10\,^1/\!\!/_2$ " (267) bottom rail and traditional glass stops.

(3) Interior panel surfaces are constructed from premium wood veneer available in pine, maple, vertical grain Douglas fir, oak, mahogany** and cherry. All prefinished interiors use water-based paints and stains.



Contemporary Panel

- The exterior of the wood panel is protected with a Flexacron® paint system; this stabilized polyester paint is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous, low-maintenance finish.
- ♠ Factory-applied, one-piece (welded corners), compression-type weatherstrip made from a durable thermoplastic material is attached directly to the panel, not the frame, creating a continuous seal around the panel to provide maximum effectiveness against air and water infiltration. This system provides a long-lasting*, energy-efficient barrier against wind, water and dust.

Two-panel doors are available with one or two active panels. For doors with one active panel, hinges can be located along either the jamb or astragal.

Adjustable Hinges

Adjustable hinges have ball-bearing pivots for smooth, frictionless movement and feature easy



horizontal and vertical adjustments, plus release tabs for easy panel removal. Available in finishes that coordinate with most trim set hardware finishes.



Traditional Panel

Removable Panels

Panels can be easily removed with the unique panel-release tab on the hinge. Release tabs are covered with a cap for a clean appearance. This release feature is ideal for transporting large units up stairs or to other hard-to-reach areas.

(GLASS

See Common Features on page 123 for details.

Blinds-Between-the-Glass



Blinds-between-the-glass are available for select door sizes when ordered with Low-E4® tempered glass and any exterior or interior color. White or slate gray ½" (13) aluminum slat blinds come mounted between the glass. Available in 2768, 27611, 5068, 50611, 2968, 5468, 71168, 3168, 31611, 6068, 60611, 81168 and 811611 door sizes.

HARDWARE

Multi-Point Locking System



Hinged doors have a multi-point locking system that combines hook bolts with a center deadbolt. This system provides added weathertightness and enhanced security.

Optional Corrosion-Resistant Hardware

An optional corrosion-resistant locking mechanism is available and recommended for applications within two miles of the coast and other harsh environments.*

PERFORMANCE

See Common Features on page 123 for details.

^{*}Visit andersenwindows.com/warranty for details.

^{**}Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahaganies.

[&]quot;Flexacron" is a registered trademark of PPG Industries, Inc.

HINGED OUTSWING PATIO DOORS

FRAME

 The frame is constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

 Wood members are treated with a water-repellent preservative for longlasting* protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs to match the wall depth.

SILL

• One-piece non-conductive fiberglass construction enhances energy performance, and its superior strength eliminates the need for a sill support. An innovative sill design provides superior water management.

The slip- and wear-resistant poly bead finish is available in either a neutral gray or dark bronze color.

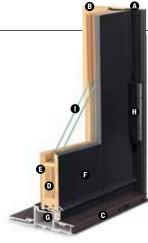
PANEL

• Panel stiles and rails are constructed of an engineered Laminated Veneer Lumber (LVL) core. This LVL core provides strength and helps prevent warping for consistent, smooth operation.

Now available with contemporary panels in addition to traditional panels. Contemporary panels feature 5.% (143) stiles and top rail with a 6.1/ (159) bottom rail and contemporary glass stops. Traditional panels feature 5.5/ (143) stiles and top rail with a 10.1/ (267) bottom rail and traditional glass stops.

(a) Interior panel surfaces are constructed from premium wood veneer available in pine, maple, vertical grain Douglas fir, oak, mahogany and cherry. All prefinished interiors use water-based paints and stains.

The exterior of the wood panel is protected with a Flexacron[®] paint system; this stabilized polyester paint is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous, low-maintenance finish.



Contemporary Panel

♠ Factory-applied, one-piece (welded corners), compression-type weatherstrip made from a durable thermoplastic material is attached directly to the panel, not the frame, creating a continuous seal around the panel to provide maximum effectiveness against air and water infiltration. This system creates a strong, long-lasting' seal that stands up to harsh weather.

Hinged outswing operating panels are available in either single left- or right-hand active or two-panel active-passive or passive-active jamb hinged.

Adjustable Hinges

The ball-bearing hinges are covered with a corrosion-resistant powder-coated finish. Adjustable hinges have ball-bearing pivots for smooth, frictionless movement and feature easy horizontal and vertical adjustments, plus release tabs for easy panel removal. Hinges are colormatched to the exterior.

Removable Panels



Panels can be easily removed with the unique panel-release tab on the hinge. Release tabs are covered with a cap for a clean appearance. This release feature is ideal for transporting large units up stairs or to other hard-to-reach areas.



Traditional Panel

• GLASS

See Common Features on page 123 for details.

Blinds-Between-the-Glass



Blinds-between-the-glass are available for select door sizes when ordered with Low-E4® tempered glass and any exterior or interior color. White or slate gray ½1" (13) aluminum slat blinds come mounted between the glass. Available in 2768, 27611, 5068, 50611, 2968, 5468, 3168, 31611, 6068 and 60611 door sizes.

HARDWARE Multi-Point Locking System



Hinged doors have a multi-point locking system that combines hook bolts with a center deadbolt. This system provides added weathertightness and enhanced security

Optional Corrosion-Resistant

An optional corrosion-resistant locking mechanism and hinges are available and recommended for applications within two miles of the coast and other harsh environments.

PERFORMANCE

See Common Features on page 123 for details

"Flexacron" is a registered trademark of PPG Industries, Inc.

Andersen patio doors are not intended for use as entrance doors.

Dimensions in parentheses are in millimeters.

^{*}Visit andersenwindows.com/warranty for details.

**Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahaganies.



PATIO DOOR SIDELIGHTS

FRAME

The frame is constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

Wood members are treated with a water-repellent preservative for longlasting* protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs to match the wall depth.

SILL

The one-piece fiberglass design provides superior water management. The nonconductive fiberglass construction enhances energy performance, and its superior strength eliminates the need for a sill support.

The slip- and wear-resistant poly bead finish is available in either a neutral gray or dark bronze color.

PANEL

Panel stiles and rails are constructed of an engineered Laminated Veneer Lumber (LVL) core. This LVL core provides strength and helps prevent warping.

Now available with contemporary panels in addition to traditional panels. Contemporary panels feature 5^{5} /8" (143) stiles and top rail with a 6^{1} /4" (159) bottom rail and contemporary glass stops. Traditional panels feature 5^{5} /8" (143) stiles and top rail with a 10^{1} /2" (267) bottom rail and traditional glass stops.

Interior panel surfaces are constructed from premium wood veneer available in pine, maple, vertical grain Douglas fir, oak, mahogany** and cherry. All prefinished interior options use waterbased paints and stains.

The exterior of the wood panel is protected with a Flexacron® paint system; this stabilized polyester paint is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous, low-maintenance finish.

GLASS

See Common Features below.

PERFORMANCE OPTIONS

See Common Features below.



Sidelights and sash-set transoms shown with traditional option; contemporary option also available.

PATIO DOOR TRANSOMS

FRAME

The frame is constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

Wood members are treated with a water-repellent preservative for long-lasting* protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs to match the wall depth.

SASH

Direct-set transoms have glass glazed directly into the frame and maximize the glass area.

Sash-set transoms feature a fixed sash and provide common sight lines with A-Series patio doors. Available with contemporary or traditional glass stops to match your door panel option. Available in pine, maple, vertical grain Douglas fir, oak, mahogany** and cherry. All prefinished interior options use water-based paints and stains.

GLASS

See Common Features below.

PERFORMANCE

See Common Features below.

VENTING TRANSOMS

Venting transom windows are also available in sizes to fit over doors. See pages 52-53.

COMMON FEATURES

GLASS

In addition to stainless steel glass spacers, black or white glass spacers are available to allow the spacer to blend in with the unit color.

3/4" (19) dual-pane glass construction provides exceptional energy performance. High-Performance dual-pane glass options include:

- Low-E4® tempered glass
- Low-E4 HeatLock® tempered glass
- Low-E4 SmartSun™ tempered glass
- Low-E4 SmartSun HeatLock tempered glass
- Low-E4 Sun tempered glass

For even greater energy performance, 1" (25) triple-pane glass is available in these options:

- · Low-E4 tempered glass
- Low-E4 Enhanced tempered glass
- Low-E4 Enhanced HeatLock tempered glass
- Low-E4 SmartSun tempered glass

- Low-E4 SmartSun Enhanced tempered glass
- Low-E4 SmartSun Enhanced HeatLock tempered glass

Additional glass options are available; see your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

Patterned Glass

Patterned glass options are available. See page 15 for more details.

Between-the-Glass Art Glass

Available in a variety of original patterns. For details see page 16 or visit andersenwindows.com/artglass.

PERFORMANCE

Performance Grade (PG) Upgrade Drop-Nose Channel



A factory-applied, patented dropnose channel attachment is available for doors to enhance water performance without increasing the interior sill height. PG upgrades allow standard non-impact products to achieve higher performance ratings. Performance Grade (PG) ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. For up-to-date performance information of individual products, visit andersenwindows.com. Shown on a hinged inswing door.

Stormwatch

A-Series patio doors available with Stormwatch® Protection include impact-resistant glass in addition to structural upgrades. For a copy of the A-Series Coastal Product Guide, visit andersenwindows.com/coastal.

EXTERIORS & INTERIORS

EXTERIOR COLORS



INTERIOR WOOD SPECIES



FACTORY-FINISHED INTERIORS



All wood interiors are unfinished unless a finish is specified. Factory finishes on pine, maple and oak. Shown above on pine. Naturally occurring variations in grain, color and texture of wood make each window one of a kind.

INTERIOR PAINT COLORS

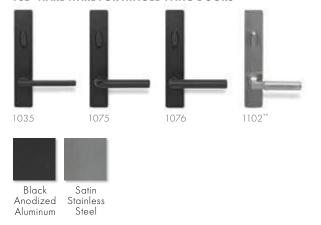


HARDWARE Sold Separately



Bold name denotes finish shown

FSB® HARDWARE FOR HINGED PATIO DOORS



^{*}Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.

FLUSH HARDWARE FOR GLIDING PATIO DOORS



inswing patio doors; excludes FSB hardware. Mix-and-match interior and exterior style and finish options are available; excludes FSB and flush hardware. Bright brass and satin nickel finishes feature a 10-year limited warranty. Albany and Tribeca hardware are zinc die-cast with powder-coated durable finish; Yuma, Encino, Newbury and Anvers are solid forged brass... Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use. $Printing \ limitations \ prevent \ exact \ replication \ of \ colors \ and \ finishes.$ See your Andersen supplier for actual color and finish samples.

^{**}FSB style 1102 is not available in black anodized aluminum.



ACCESSORIES Sold Separately

FRAME

Extension Jambs

Extension jambs are available in pine, maple, vertical grain Douglas fir, oak, mahogany* and cherry precut to fit the unit. Available in 1/16" (1.5) increments up to 71/8" (181) and can be prefinished in six stain colors as well as all interior paint options to match the interior finish of the unit. This option is also available factory applied.

Interior extension jambs on inswing units will restrict the full opening of the door.

Threshold for Gliding and Hinged Inswing Patio Doors



A maple or oak threshold is available for finishing the interior of the sill on gliding and hinged inswing doors.

Sill Step for Hinged Outswing Patio Doors

The hinged outswing door offers an optional maple or oak sill step. Detail is shown on page 129.

Remodeler Sill Bracket for Gliding and Hinged Inswing Patio Doors



in replacement applications with a finished interior floor. It fastens to the subfloor, and the sill snaps into the bracket, providing a secure structural installation. Detail is shown on page 129 for gliding, 141 for inswing and 153 for outswing doors.

HARDWARE

Exterior Keyed Lock



A six-pin exterior key cylinder lock is available for all doors in styles and finishes that coordinate with the hardware. This lock allows the door to be locked and unlocked from the exterior. Gliding door lock shown.

Auxiliary Foot Lock for Gliding Patio Doors



Provides an extra measure of security when the door is in a locked position. Lock can be set so the door is fully closed or partially open to provide a secure venting position. Available in all hardware finishes.

Handle Extension for Hinged Inswing and Outswing Patio Doors



Extends interior door handle an additional 1" (25) from the door panel to accommodate interior blinds or shades. The kit includes one handle extender and spindle. A second extender may be added to the spindle to increase the length an additional 1" (25) to a 2" (51) total extension. Extenders are available in finishes that coordinate with the hardware.

Strike Plate Extension for **Hinged Inswing Patio Doors**

Antique brass, bright brass, oil rubbed bronze and satin nickel strike plate extensions are available for: 5 1/4" (133), 6 %₁₆" (167) and 7 ½" (181) wall depths.

Construction Hardware for Hinged Inswing and Outswing Patio Doors



This hardware can be used to help secure the job site during the construction phase of the project. It features an undersized escutcheon plate, which makes on-site finishing easier.

Yale® Assure Lock® Keyless Lock for Hinged Patio Doors



Monitor, lock and unlock from anywhere with the Yale Assure Lock. The sleek key-free lock includes Bluetooth® technology for key-free unlocking and is compatible with Z-Wave® for integration with a wide range of smart home platforms. See page 13 for additional details.

INSECT SCREENS

All insect screens have a long-lasting** fiberglass mesh with a charcoal finish. Insect screen frames are color matched to the exterior of the door unless otherwise noted.

Top-Hung Gliding and Gliding Insect Screens for Gliding or Hinged Inswing Patio Doors



corner joints add considerable strength to the frame members. Available in premium top-hung and conventional gliding designs. The premium top-hung insect screen has silicone-embedded glide hooks that hang from the top of the screen track, allowing it to glide smoothly and effortlessly without the interference of dust and debris. Alignment rollers on the bottom keep it in place on the track, while the perimeter bug seal helps ensure insects stay out. The conventional insect screen has bottom rollers with self-contained leveling adjusters.

Hinged Insect Screen for Hinged Inswing Patio Doors

Available for singlepanel doors.



Double-Hinged Insect Screen for Hinged Inswing Patio Doors

Available for twopanel jamb-hinged doors.



Retractable Insect Screen for Gliding Patio Doors

The retractable insect screen is installed on the exterior of the door and opens



side to side across the width of the opening. When the insect screen is not in use, it neatly retracts into a small canister mounted on the exterior of the door. Available for two-panel doors. Please note, the retractable screen track reduces the clear opening height by 1" (25).

Retractable Insect Screen for Hinged Outswing Patio Doors



The retractable insect screen is installed on the

interior of the door across the width of the opening. When the insect screen is not in use, it neatly retracts into a small canister mounted on each side of the door. Retractable insect screens are available for single-panel and two-panel doors, and in white, gold dust, pine, maple and oak finishes and six stain options to match the interior of the door. Please note, the retractable screen track reduces the clear opening height by 1" (25).

GRILLES

Grilles are available in both traditional and contemporary profiles in a variety of configurations and widths. See page 19 for details.

EXTERIOR TRIM

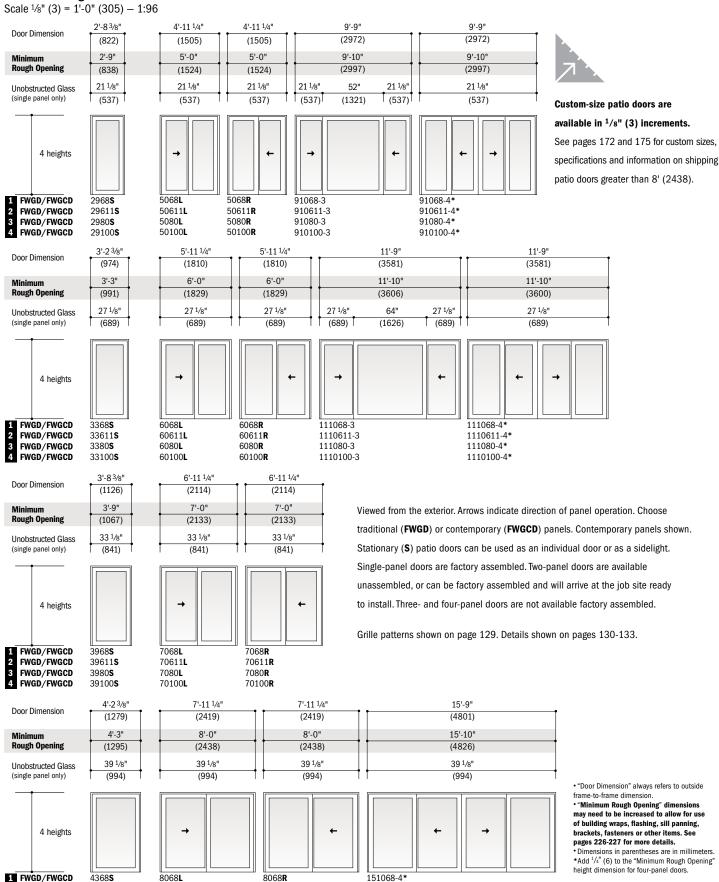
Available with Andersen exterior trim. See the exterior trim section starting on page 189.

^{*}Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies.

^{**}Visit andersenwindows.com/warranty for details.

GLIDING PATIO DOORS

Table of Gliding Patio Door Sizes



FWGD/FWGCD

FWGD/FWGCD

FWGD/FWGCD

43611**S**

4380S

43100**S**

80611**L**

8080L

80100L

80611**R**

80100R

8080R

1510611-4*

151080-4* 1510100-4*



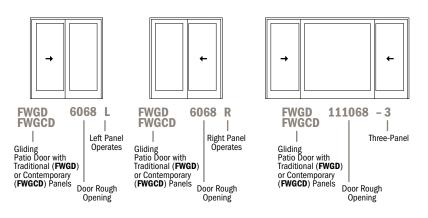
Four Patio Door Heights

For all four-panel gliding patio doors, add $^{1}/_{4}$ " (6) to the "Minimum Rough Opening" height dimension.

Traditional Panels 103 5/16" (2624) 9'-11 1/2" (3048) (3032)Jnobstructed Glass 10-0" Minimum Rough Opening (2426) (2438) 79 7/16" (2018)**Door Dimension** 10-18 66 5/16" 6'-10 3/8" (2092) (2019) (2032) 63 7/16" (2108) (1611)6'-11" (1684)..8-.9 1 FWGDxx68 **2 FWGD**xx611 3 FWGDxx80 4 FWGDxx100 **Contemporary Panels** 107 9/16" (3048) 9'-11 1/2" (3032)10'-0" Unobstructed Glass Minimum Rough Opening (2426) (2438) 83 9/16" Door Dimension 8'-0" 6'-10 3/8" 70 7/16" (2019) 67 9/16" (2108) (2032) (2092) 6'-11" (1716)(1789)..8-.9 2 FWGCDxx611 1 FWGCDxx68 3 FWGCDxx80 4 FWGCDxx100

Order Designation Description

Viewed from the exterior. Traditional panels shown.



 $[\]ensuremath{^{\circ}}$ "Door Dimension" always refers to outside frame-to-frame dimension.

^{*} Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.

GLIDING PATIO DOORS

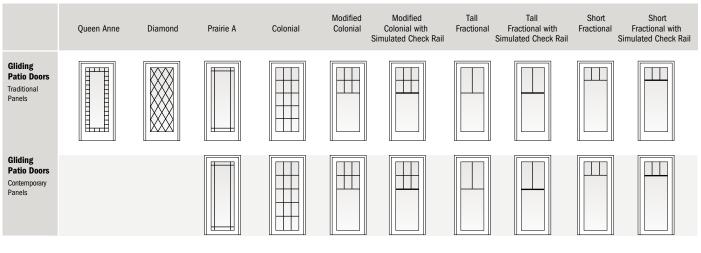
Gliding Patio Door Opening and Area Specifications

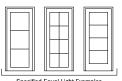
Door Number	Number of Panels in Open Position	Clear C Ar Sq. Ft		Wi	pening in dth (mm)	Full Open Hei Inches	ight	Traditional Panel Glass Area Sq. Ft./(m²)		Contemporary Panel Glass Area Sq. Ft./(m²)		An	nt ea :./(m²)	A	all Door area Ft./(m²)
FWGD/FWGCD2968S	1	-	-	-	-	-	-	9.31	(0.86)	9.91	(0.92)	-	-	17.86	(1.66)
FWGD/FWGCD3368S	1	-	-	-	-	-	-	11.95	(1.11)	12.73	(1.18)	-	-	21.17	(1.97)
FWGD/FWGCD3968S	1	-	-	-	-	-	-	14.59	(1.35)	15.54	(1.44)	-	-	24.48	(2.27)
FWGD/FWGCD4368S	1	-	-	-	-	-	-	17.24	(1.60)	18.36	(1.70)	-	-	27.79	(2.58)
FWGD/FWGCD29611S	1	-	-	-	-	-	-	9.73	(0.90)	10.33	(0.96)	-	-	18.50	(1.72)
FWGD/FWGCD33611S	1	-	-	-	-	-	-	12.49	(1.16)	13.27	(1.23)	-	-	21.93	(2.04)
FWGD/FWGCD39611S	1	-	-	-	-	-	-	15.25	(1.41)	16.20	(1.50)	-	-	25.37	(2.36)
FWGD/FWGCD43611S	1	-	-	-	-	-	-	18.02	(1.67)	19.14	(1.77)	-	-	28.80	(2.68)
FWGD/FWGCD2980S	1	-	-	-	-	-	-	11.65	(1.08)	12.26	(1.13)	-	-	21.45	(1.99)
FWGD/FWGCD3380S	1	-	-	-	-	-	-	14.96	(1.38)	15.74	(1.46)	-	-	21.94	(2.04)
FWGD/FWGCD3980S	1	-	-	-	-	-	-	18.27	(1.69)	19.22	(1.78)	-	-	29.41	(2.73)
FWGD/FWGCD4380S	1	-	-	-	-	-	-	21.58	(2.00)	22.71	(2.10)	-	-	33.39	(3.10)
FWGD/FWGCD29100S	1	-	-	-	-	-	-	15.17	(1.40)	15.78	(1.46)	-	-	26.84	(2.49)
FWGD/FWGCD33100S	1	-	-	-	-	-	-	19.48	(1.80)	20.26	(1.88)	-	-	31.82	(2.96)
FWGD/FWGCD39100S	1	-	-	-	-	-	-	23.79	(2.21)	24.74	(2.29)	-	-	36.80	(3.42)
FWGD/FWGCD43100S	1	-	-		-	-	-	28.10	(2.61)	29.23	(2.71)	-	-	41.78	(3.88)
FWGD/FWGCD5068	1	11.16	(1.04)	21 1/4"	(540)	75 1/2"	(1918)	18.61	(1.72)	19.83	(1.84)	11.16	(1.04)	32.71	(3.04)
FWGD/FWGCD6068	1	14.31	(1.33)	27 1/4"	(692)	75 1/2"	(1918)	23.90	(2.22)	25.46	(2.36)	14.31	(1.33)	39.34	(3.65)
FWGD/FWGCD7068	1	17.45	(1.62)	33 1/4"	(845)	75 1/2"	(1918)	29.19	(2.71)	31.09	(2.88)	17.45	(1.62)	45.96	(4.27)
FWGD/FWGCD8068	1	20.60	(1.91)	39 1/4"	(997)	75 1/2"	(1918)	34.47	(3.20)	36.72	(3.41)	20.60	(1.91)	52.59	(4.89)
FWGD/FWGCD91068-4	2	22.60	(2.10)	43 1/16"	(1094)	75 1/2"	(1918)	37.22	(3.45)	39.66	(3.68)	22.60	(2.10)	64.59	(6.00)
FWGD/FWGCD91068-3	1	11.16	(1.04)	21 1/4"	(540)	75 1/2"	(1918)	41.51	(3.85)	44.22	(4.10)	11.16	(1.04)	64.59	(6.00)
FWGD/FWGCD111068-4	2	28.89	(2.68)	55 ¹ / ₁₆ "	(1399)	75 1/2"	(1918)	47.80	(4.44)	50.92	(4.73)	28.89	(2.68)	77.84	(7.23)
FWGD/FWGCD111068-3	1	14.31	(1.33)	27 1/4"	(692)	75 1/2"	(1918)	52.08	(4.83)	55.49	(5.15)	14.31	(1.33)	77.84	(7.23)
FWGD/FWGCD151068-4	2	41.49	(3.86)	79 1/16"	(2008)	75 1/2"	(1918)	68.94	(6.40)	73.45	(6.82)	41.49	(3.85)	104.34	(9.69)
FWGD/FWGCD50611	1	11.58	(1.08)	21 1/4"	(540)	78 7/16"	(1992)	19.46	(1.80)	20.67	(1.92)	11.58	(1.08)	33.89	(3.15)
FWGD/FWGCD60611	1	14.85	(1.38)	27 1/4"	(692)	78 7/16"	(1992)	24.98	(2.32)	26.54	(2.46)	14.85	(1.38)	40.76	(3.79)
FWGD/FWGCD70611	1	18.12	(1.68)	33 1/4"	(845)	78 7/16"	(1992)	30.51	(2.83)	32.41	(3.01)	18.12	(1.68)	47.62	(4.42)
FWGD/FWGCD80611	1	21.39	(1.99)	39 1/4"	(997)	78 7/16"	(1992)	36.03	(3.34)	38.29	(3.55)	21.39	(1.99)	54.49	(5.06)
FWGD/FWGCD910611-4	2	23.46	(2.18)	43 1/16"	(1094)	78 7/16"	(1992)	38.91	(3.61)	41.34	(3.84)	23.46	(2.18)	66.93	(6.22)
FWGD/FWGCD910611-3	1	11.58	(1.08)	21 1/4"	(540)	78 7/16"	(1992)	43.39	(4.03)	46.10	(4.28)	11.58	(1.08)	66.93	(6.22)
FWGD/FWGCD1110611-4	2	29.99	(2.79)	55 1/16"	(1399)	78 7/16"	(1992)	49.96	(4.64)	53.09	(4.93)	29.99	(2.79)	80.66	(7.49)
FWGD/FWGCD1110611-3	1	14.85	(1.38)	27 1/4"	(692)	78 7/16"	(1992)	54.44	(5.05)	57.85	(5.37)	14.85	(1.38)	80.66	(7.49)
FWGD/FWGCD1510611-4	2	43.07	(4.00)	79 1/16"	(2008)	78 7/16"	(1992)	72.07	(6.69)	76.58	(7.11)	43.07	(4.00)	108.12	(10.04)
FWGD/FWGCD5080	1	13.52	(1.26)	21 1/4"	(540)	91 1/2"	(2324)	23.31	(2.16)	24.52 31.49	(2.27)	13.52	(1.26)	39.29	(3.65)
FWGD/FWGCD6080 FWGD/FWGCD7080	1	17.33 21.15	(1.61)	27 1/4"	(692)	91 1/2"	(2324)	29.93 36.55	(2.78)	31.49	(2.92)	17.33 21.15	(1.61)	47.25 55.21	(4.39)
FWGD/FWGCD8080	1	24.96	(2.32)	33 1/4"	(997)	91 1/2"	(2324)	43.17	(4.01)	45.42	(4.21)	24.96	(2.32)	63.17	(5.13)
FWGD/FWGCD91080-4	2	27.38	(2.52)	43 1/16"	(1094)	91 1/2"	(2324)	46.61	(4.01)	49.04	(4.55)	27.38	(2.52)	77.59	(7.21)
FWGD/FWGCD91080-4	1	13.52	(1.26)	21 1/4"	(540)	91 1/2"	(2324)	51.97	(4.82)	54.69	(5.08)	13.52	(1.26)	77.59	(7.21)
FWGD/FWGCD111080-4	2	35.01	(3.25)	55 1/16"	(1399)	91 1/2"	(2324)	59.85	(5.56)	62.98	(5.85)	35.01	(3.25)	93.51	(8.69)
FWGD/FWGCD111080-3	1	17.33	(1.61)	27 1/4"	(692)	91 1/2"	(2324)	65.21	(6.05)	68.62	(6.37)	17.33	(1.61)	93.51	(8.69)
FWGD/FWGCD151080-4	2	50.27	(4.67)	79 1/16"	(2008)	91 1/2"	(2324)	86.33	(8.02)	90.84	(8.43)	50.27	(4.67)	125.34	(11.64)
FWGD/FWGCD50100	1	17.04	(1.58)	21 1/4"	(540)	115 1/2"	(2934)	30.35	(2.81)	31.56	(2.93)	17.04	(1.58)	49.17	(4.57)
FWGD/FWGCD60100	1	21.86	(2.03)	27 1/4"	(692)	115 1/2"	(2934)	38.97	(3.62)	40.53	(3.76)	21.86	(2.03)	59.13	(5.49)
FWGD/FWGCD70100	1	26.67	(2.48)	33 1/4"	(845)	115 1/2"	(2934)	47.59	(4.42)	49.49	(4.59)	26.67	(2.48)	69.09	(6.42)
FWGD/FWGCD80100	1	31.48	(2.93)	39 1/4"	(997)	115 1/2"	(2934)	56.21	(5.22)	58.46	(5.43)	31.48	(2.93)	79.04	(7.34)
FWGD/FWGCD910100-4	2	34.54	(3.21)	43 1/16"	(1094)	115 1/2"	(2934)	60.69	(5.63)	63.13	(5.43)	34.54	(3.21)	97.09	(9.02)
FWGD/FWGCD910100-3	1	17.04	(1.58)	21 1/4"	(540)	115 1/2"	(2934)	67.68	(6.28)	70.39	(6.53)	17.04	(1.58)	97.09	(9.02)
FWGD/FWGCD1110100-4	2	44.16	(4.10)	55 ¹ / ₁₆ "	(1399)	115 1/2"	(2934)	77.93	(7.23)	81.06	(7.53)	44.16	(4.10)	117.01	(10.87)
FWGD/FWGCD1110100-4	1	21.86	(2.03)	27 1/4"	(692)	115 1/2"	(2934)	84.92	(7.88)	88.32	(8.20)	21.86	(2.03)	117.01	(10.87)
/ 1114051110100-0		21.00	(2.00)	∠· /4	(002)	110 /2	(2004)	04.32	(1.00)	00.02	(0.20)	21.00	(2.00)	117.01	(10.07)

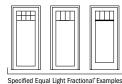
 $[\]bullet\,\mbox{Dimensions}$ in parentheses are in millimeters or square meters.

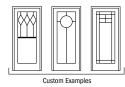


Grille Patterns





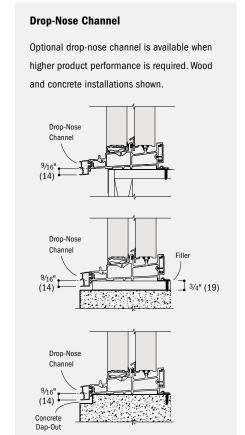




*Bottom horizontal bar located at center or at custom dimensions.

Number of lights and overall pattern varies with patio door size. Patterns may not be available in all configuration or sizes.

Specified equal light, specified equal light fractional and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.



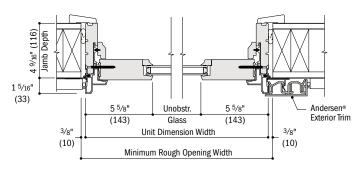
Optional remodeler sill bracket is available for installation with an existing finished interior floor. Finished Floor Remodeler Sill Bracket

[•] Dimensions in parentheses are in millimeters.

GLIDING PATIO DOORS

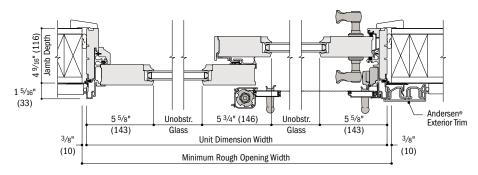
Gliding Patio Door Details - Traditional Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



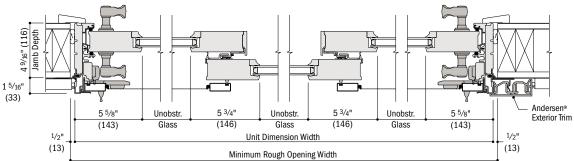
Horizontal Section

Stationary, Traditional Panel



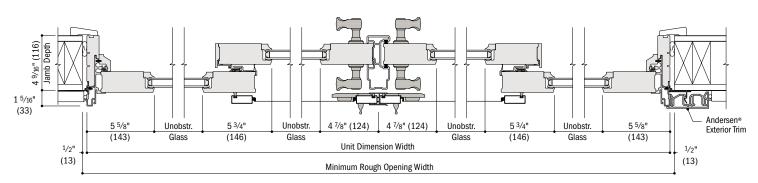
Horizontal Section

Two-Panel, Traditional Panels, Retractable Insect Screen



Horizontal Section

Three-Panel, Traditional Panels, Top-Hung Gliding or Gliding Insect Screen



Horizontal Section

Four-Panel, Traditional Panels, Top-Hung Gliding or Gliding Insect Screen

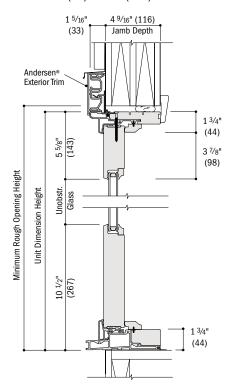
continued on next page

- 4 $^{9}/_{18}$ " (116) base jamb depth measurement is from back side of installation flange.
 Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
 Dimensions in parentheses are in millimeters.
- Additional hardware options are available, including flush mount hardware.

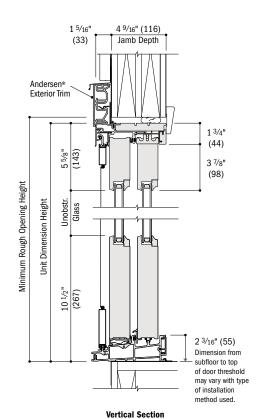


Gliding Patio Door Details - Traditional Panels (continued)

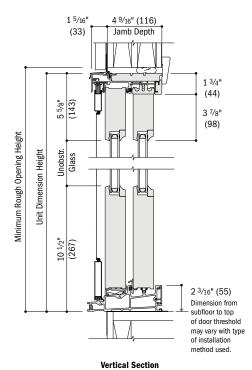
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

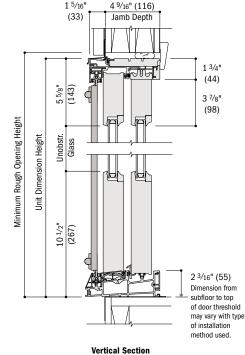






Operating, Traditional Panels, Top-Hung Gliding Insect Screen





Operating, Traditional Panels, Retractable Insect Screen

For optional drop-nose channel and remodeler sill bracket details, see page 129. See pages 168-171 for joining details.

• 4 9/16" (116) base jamb depth measurement is from back side of installation flange.

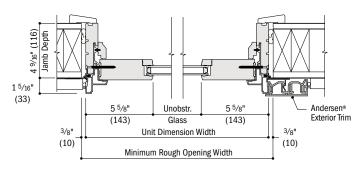
Operating, Traditional Panels, Gliding Insect Screen

- · Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

GLIDING PATIO DOORS

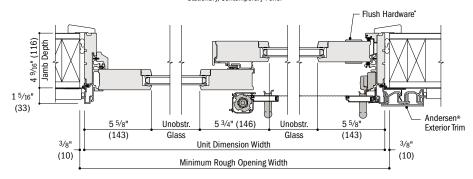
Gliding Patio Door Details - Contemporary Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

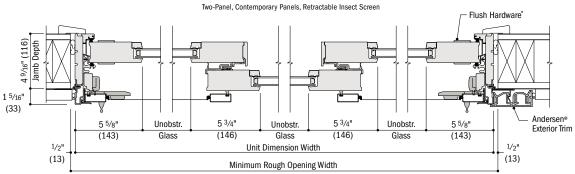


Horizontal Section

Stationary, Contemporary Panel

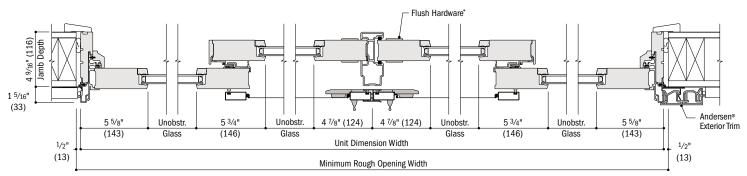


Horizontal Section



Horizontal Section

Three-Panel, Contemporary Panels, Top-Hung Gliding or Gliding Insect Screen



Horizontal Section

Four-Panel, Contemporary Panels, Top-Hung Gliding or Gliding Insect Screen

continued on next page

- 4 $^{9}/_{18}$ " (116) base jamb depth measurement is from back side of installation flange.
 Light-colored areas are parts included with door. Dark-colored areas are additional Andersen" parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

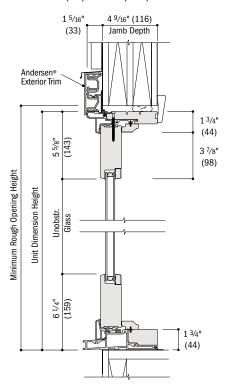
 Dimensions in parentheses are in millimeters.

- *Flush hardware shown. Additional hardware options are available.

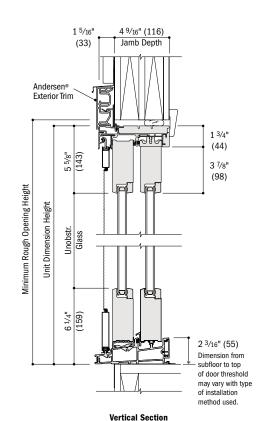


Gliding Patio Door Details - Contemporary Panels (continued)

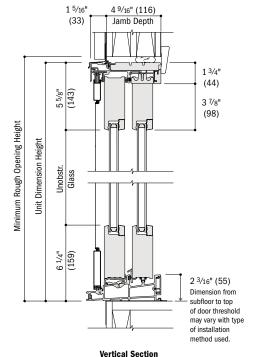
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



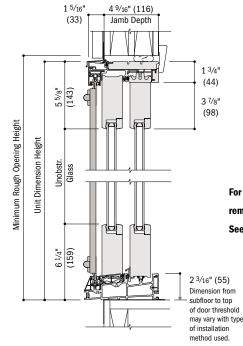
Vertical Section Stationary, Contemporary Panel



Operating, Contemporary Panels, Top-Hung Gliding Insect Screen



Operating, Contemporary Panels, Gliding Insect Screen



For optional drop-nose channel and remodeler sill bracket details, see page 129. See pages 168-171 for joining details.

Vertical Section

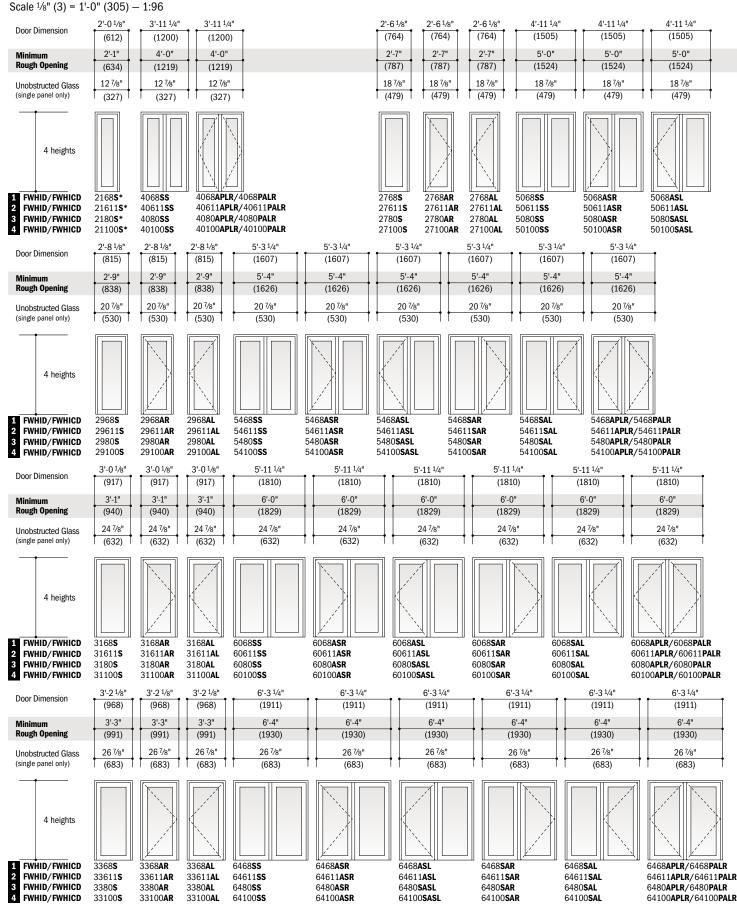
Operating, Contemporary Panels, Retractable Insect Screen

- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- *Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.

Table of Hinged Inswing Patio Door Sizes

able of filliged illowing ratio bool of

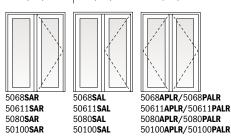
Notes on the next page also apply to this page.



4 FWHICDxx100



4'-11 ½"	4'-11 1/4"	4'-11 1/4"
(1505)	(1505)	(1505)
5'-0"	5'-0"	5'-0"
(1524)	(1524)	(1524)
18 7/8"	18 7/8"	18 7/8"
(479)	(479)	(479)



continued on the next page



Custom-size doors are available in 1/8" (3) increments. See pages 173 and 175 for custom sizes, specifications and information on shipping patio doors greater than 8' (2438).

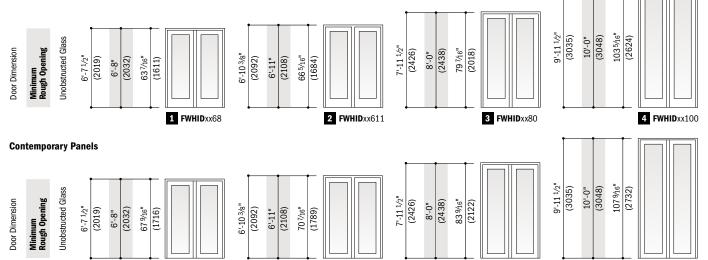
Choose traditional (**FWHID**) or contemporary (**FWHICD**) panels. Contemporary panels shown. Stationary (**S**) patio doors can be used as an individual door or a sidelight. Inswing doors are available in both $4^{9}/16^{\circ}$ (116) and $6^{9}/16^{\circ}$ (167) base jamb depths.

3 FWHICDxx80

Grille patterns shown on page 140. Details shown on pages 141-149.

Four Patio Door Heights

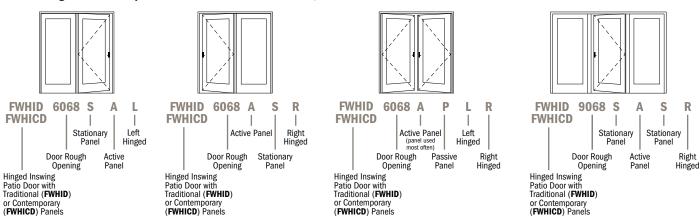




2 FWHICDxx611

Order Designation Description Viewed from the exterior. Traditional panels shown.

1 FWHICDxx68



^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[·] Dimensions in parentheses are in millimeters.

^{*}Single-panel active left- and right-hinged patio doors, shown on page 134, also available. Contact your Andersen supplier for more information.

HINGED INSWING PATIO DOORS

Table of Hinged Inswing Patio Door Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Door Dimension	7'-10 7/16"	7'-10 ⁷ / ₁₆ " (2398)	7'-10 7/16" (2398)	7'-10 7/16" (2398)	7'-10 7/16" (2398)	7'-10 7/1	
Minimum Rough Opening	7'-11" (2413)	7'-11" (2413)	7'-11" (2413)	7'-11" (2413)	7'-11" (2413)	7'-11"	1
Unobstructed Glass (single panel only)	20 7/8" (530)	20 7/8" (530)	20 7/8" (530)	20 7/8"	20 7/8" (530)	20 7/8" (530)	
4 heights 1 FWHID/FWHICD 2 FWHID/FWHICD 3 FWHID/FWHICD	71168 \$\$S -3 711611 \$\$S -3 71180 \$\$S -3	71168ASSR-3 711611ASSR-3 71180ASSR-3	71168ASSL-3 711611ASSL-3 71180SASSL-3	71168 SASR -3 711611 SASR -3 71180 SASR -3	71168 SASL -3 711611 SASL -3 71180 SASL -3	71168 SSAR -3 71161 1SSAR -3 71180 SSAR -3	
4 FWHID/FWHICD	711100 SSS -3	711100 ASSR -3	711100 SASSL -3	711100 SASR -3	711100 SASL -3	711100 SSAR -3	
Door Dimension	8'-10 ⁷ / ₁₆ " (2703)	8'-10 ⁷ / ₁₆ " (2703)	8'-10 ⁷ / ₁₆ " (2703)		10 ⁷ / ₁₆ " 2703)	8'-10 ⁷ / ₁₆ " (2703)	
Minimum Rough Opening	8'-11"	8'-11"	8'-11"	8	8'-11"	8'-11"	
Unobstructed Glass	(2717) 24 ⁷ /8"	(2717)	(2717)		2717) 4 ⁷ /8"	(2717) 24 ⁷ /8"	
(single panel only)	(632)	(632)	(632)	(632)	(632)	
4 heights							
1 FWHID/FWHICD 2 FWHID/FWHICD 3 FWHID/FWHICD 4 FWHID/FWHICD	81168 \$\$\$. 3 811611 \$\$\$. 3 81180 \$\$\$. 3 811100 \$\$\$. 3	81168 ASSR -3 811611 ASSR -3 81180 ASSR -3 811100 ASSR -3	81168 ASSL -3 811611 ASSL -3 81180 SASSL -3 811100 SASSL -3	81168SASR-3 811611SASR 81180SASR-3 811100SASR	9-3 81161 3 81180	8SASL-3 .1SASL-3)SASL-3)OSASL-3	
Door Dimension	9'-4 7/16" (2856)	9'-4 7/ ₁₆ " (2856)	9'-47/		9'-4 ⁷ / ₁₆ " (2856)	9'-4 7/16" (2856)	
Minimum Rough Opening	9'-5"	9'-5" (2870)	9'-5	"	9'-5" (2870)	9'-5"	
Unobstructed Glass	26 7/8"	26 7/8"	267/		26 7/8"	26 7/8"	
(single panel only)	(683)	(683)	(683	3)	(683)	(683)	Ī
4 heights							
1 FWHID/FWHICD 2 FWHID/FWHICD 3 FWHID/FWHICD 4 FWHID/FWHICD	9668 \$\$\$. 3 96611 \$\$\$. 3 9680 \$\$\$. 3 96100 \$\$\$. 3	9668 ASSR -3 96611 ASSR -3 9680 ASSR -3 96100 ASSR -3	9668 ASSL -3 96611 ASSL -3 9680 ASSL -3 96100 ASSL -3	9668 SA : 96611 S ; 9680 SA : 96100 S ;	ASR-3 Sr-3	9668 SASL -3 96611 SASL -3 9680 SASL -3 96100 SASL -3	



Custom-size doors are available in $^{1}/8"$ (3) increments.

See pages 173 and 175 for custom sizes, specifications and information on shipping patio doors greater than 8' (2438).

Choose traditional (FWHID) or contemporary (FWHICD) panels. Contemporary panels shown.Stationary (S) patio doors can be used as an individual door or as a sidelight. Inswing doors are available in both 4 $^9/_{16}$ " (116) and 6 $^9/_{16}$ " (167) base jamb depths. Grille patterns shown on page 140. Details shown on pages 141-149.

^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.



Notes on the previous page also apply to this page.

7'-10 ⁷ / ₁₆ " (2398)	7'-10 7/16" (2398)	7'-10 ⁷ / ₁₆ " (2398)		398)	
7'-11"	7'-11"	7'-11"		'-11"	
(2413)	(2413)	(2413)		413)	
20 7/8"	20 7/8"	20 7/8"		0 7/8"	
(530)	(530)	(530)		530)	
711611 SSAL -3 71 71180 SSAL -3 71	1611 ASARR -3 7116 180 ASARR -3 7118	0 ASALL -3 71180 A	ASALR-3 711611ASA	RL-3 LL-3	
8'-10 7/16"	8'-10 7/16"	8'-10 7/16"	8'-10 7/16"	8'-10 7/16"	8'-10 7/16"
(2703)	(2703)	(2703)	(2703)	(2703)	(2703)
8'-11" (2717)	8'-11" (2717)	8'-11" (2717)	8'-11" (2717)	8'-11" (2717)	8'-11" (2717)
24 7/8"	24 7/8"	24 7/8"	24 7/8"	24 7/8"	24 7/8"
(632)	(632)	(632)	(632)	(632)	(632)
811611 SSAR -3 81180 SSAR -3	81168 SSAL -3 811611 SSAL -3 81180 SSAL -3 811100 SSAL -3	81168ASARR-3 811611ASARR-3 81180ASARR-3 811100ASARR-3	81168ASALL-3 811611ASALL-3 81180ASALL-3 811100ASALL-3	81168ASALR-3 81161ASALR-3 81180ASALR-3 811100ASALR-3	81168ASARL-3 811611ASARL-3 81180ASARL-3 811100ASARL-3
9'-4 7/16"	9'-47/16"	9'-47/16"	9'-47/16"	9'-47/16"	9'-47/16"
(2856)	(2856)	(2856)	(2856)	(2856)	(2856)
9'-5"	9'-5"	9'-5"	9'-5"	9'-5"	9'-5"
(2870)	(2870)	(2870)	(2870)	(2870)	(2870)
26 ⁷ /8" (683)	26 ⁷ /8" (683)	26 7/8" (683)	(683)	(683)	26 ⁷ /8" (683)
9668SSAR-3 96611SSAR-3 9680SSAR-3 96100SSAR-3	9668SSAL-3 96611SSAL-3 9680SSAL-3 96100SSAL-3	9668ASARR-3 96611ASARR-3 9680ASARR-3 96100ASARR-3	9668ASALL-3 96611ASALL-3 9680ASALL-3 96100ASALL-3	9668ASALR-3 96611ASALR-3 9680ASALR-3 96100ASALR-3	9668ASARL-3 96611ASARL-3 9680ASARL-3 96100ASARL-3

^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.

• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

• Dimensions in parentheses are in millimeters.

HINGED INSWING PATIO DOORS

Hinged Inswing Patio Door Opening and Area Specifications

Door Number	Number of Panels in Open Position*	Area		90° Width Inches/(mm)		Full Width Inches/(mm)		Не	ight s/(mm)	Pa Glass	tional nel s Area :./(m²)	Pa Glass		Vent Area Sq. Ft./(m²)		Ar	II Door rea
FWHID/FWHICD2168S**	1					20"	(508)	75 1/2"	(1918)	5.66	(0.53)	Sq. Ft./(m ²) 6.04 (0.56)		10.43	(0.97)	Sq. Ft./(m ²) 13.30 (1.24)	
FWHID/FWHICD2768	1	13.57	(1.26)	24 5/16"	(618)	26"	(660)	75 1/2"	(1918)	8.30	(0.77)	8.85	(0.82)	13.57	(1.26)	16.61	(1.54)
FWHID/FWHICD2968	1	14.62	(1.36)	26 5/16"	(668)	28"	(711)	75 1/2"	(1918)	9.18	(0.85)	9.79	(0.91)	14.62	(1.36)	17.72	(1.65)
FWHID/FWHICD3168	1	16.71	(1.55)	30 5/16"	(770)	32"	(813)	75 1/2"	(1918)	10.94	(1.02)	11.66	(1.08)	16.71	(1.55)	19.93	(1.85)
FWHID/FWHICD3368	1	17.75	(1.65)	32 5/16"	(821)	34"	(864)	75 1/2"	(1918)	11.82	(1.10)	12.60	(1.17)	17.75	(1.65)	21.03	(1.95)
•	2			_				_									
FWHID/FWHICD4068	1	22.54 10.43	(2.09)	18 5/16"	(465)	43 ¹ / ₈ " 20"	(1095)	75 1/2"	(1918)	11.34	(1.05)	12.08 12.08	(1.12)	22.54 10.43	(2.09)	26.09 26.09	(2.42
FWHID/FWHICD4068			(0.97)	18 5/16"	(465)		(508)	75 1/2"	(1918)		(1.05)		(1.12)		(0.97)	_	(2.42
FWHID/FWHICD5068	1 AS/SA	13.57	(1.26)	24 5/16"	(618)	26"	(660)	75 1/2"	(1918)	16.63	(1.54)	17.71	(1.65)	13.57	(1.26)	32.71	(3.04
FWHID/FWHICD5068	2 AP/PA	28.81	(2.68)	24 5/16"	(618)	55 ¹ / ₈ "	(1400)	75 1/2"	(1918)	16.63	(1.54)	17.71	(1.65)	28.81	(2.68)	32.71	(3.04
FWHID/FWHICD5068	1 AP/PA	13.57	(1.26)	24 5/16"	(618)	26"	(660)	75 1/2"	(1918)	16.63	(1.54)	17.71	(1.65)	13.57	(1.26)	32.71	(3.04
FWHID/FWHICD5468	1 AS/SA	14.62	(1.36)	26 5/16"	(668)	28"	(711)	75 1/2"	(1918)	18.39	(1.71)	19.59	(1.82)	14.62	(1.36)	34.92	(3.24
FWHID/FWHICD5468	2 AP/PA	30.90	(2.87)	26 5/16"	(668)	59 1/8"	(1502)	75 1/2"	(1918)	18.39	(1.71)	19.59	(1.82)	30.90	(2.87)	34.92	(3.24
FWHID/FWHICD5468	1 AP/PA	14.61	(1.36)	26 5/16"	(668)	28"	(711)	75 1/2"	(1918)	18.39	(1.71)	19.59	(1.82)	14.61	(1.36)	34.92	(3.24
FWHID/FWHICD6068	1 AS/SA	16.71	(1.55)	30 5/16"	(770)	32"	(813)	75 1/2"	(1918)	21.92	(2.04)	23.34	(2.17)	16.71	(1.55)	39.34	(3.65
FWHID/FWHICD6068	2 AP/PA	35.08	(3.26)	30 5/16"	(770)	67 1/8"	(1705)	75 1/2"	(1918)	21.92	(2.04)	23.34	(2.17)	35.08	(3.26)	39.34	(3.65
FWHID/FWHICD6068	1 AP/PA	16.71	(1.55)	30 5/16"	(770)	32"	(813)	75 1/2"	(1918)	21.92	(2.04)	23.34	(2.17)	16.71	(1.55)	39.34	(3.65
FWHID/FWHICD6468	1 AS/SA	17.75	(1.65)	32 5/16"	(821)	34"	(864)	75 1/2"	(1918)	23.68	(2.20)	25.22	(2.34)	17.75	(1.65)	41.54	(3.86
FWHID/FWHICD6468	2 AP/PA	37.17	(3.45)	32 5/16"	(821)	71 1/8"	(1806)	75 1/2"	(1918)	23.68	(2.20)	25.22	(2.34)	37.17	(3.45)	41.54	(3.86
FWHID/FWHICD6468	1 AP/PA	17.75	(1.65)	32 5/16"	(821)	34"	(864)	75 1/2"	(1918)	23.68	(2.20)	25.22	(2.34)	17.75	(1.65)	41.54	(3.86
FWHID/FWHICD71168-3	1 ASS/SAS/SSA/ASA	14.62	(1.36)	26 5/16"	(668)	28"	(711)	75 1/2"	(1918)	27.59	(2.56)	29.40	(2.73)	14.62	(1.36)	52.12	(4.84
FWHID/FWHICD71168-3	2 ASA	14.62	(1.36)	26 5/16"	(668)	28"	(711)	75 1/2"	(1918)	27.59	(2.56)	29.40	(2.73)	29.24	(2.72)	52.12	(4.84
FWHID/FWHICD81168-3	1 ASS/SAS/SSA/ASA	16.71	(1.55)	30 5/16"	(770)	32"	(813)	75 1/2"	(1918)	32.87	(3.05)	35.03	(3.25)	16.71	(1.55)	58.74	(5.46
FWHID/FWHICD81168-3	2 ASA	16.71	(1.55)	30 5/16"	(770)	32"	(813)	75 1/2"	(1918)	32.87	(3.05)	35.03	(3.25)	33.42	(3.10)	58.74	(5.46
FWHID/FWHICD9668-3	1 ASS/SAS/SSA/ASA	17.75	(1.65)	32 5/16"	(821)	34"	(864)	75 1/2"	(1918)	35.52	(3.30)	37.84	(3.52)	17.75	(1.65)	62.06	(5.77
FWHID/FWHICD9668-3	2 ASA	17.75	(1.65)	32 5/16"	(821)	34"	(864)	75 1/2"	(1918)	35.52	(3.30)	37.84	(3.52)	35.50	(3.30)	62.06	(5.77
FWHID/FWHICD21611S**	1	10.83	(1.01)	18 5/16"	(465)	20"	(508)	78 ¹/ ₈ "	(1984)	5.92	(0.55)	6.29	(0.58)	10.83	(1.01)	13.78	(1.28
FWHID/FWHICD27611	1	14.09	(1.31)	24 5/16"	(618)	26"	(660)	78 1/8"	(1984)	8.68	(0.81)	9.23	(0.86)	14.09	(1.31)	17.22	(1.60)
FWHID/FWHICD29611	1	15.17	(1.41)	26 5/16"	(668)	28"	(711)	78 ¹/ ₈ "	(1984)	9.60	(0.89)	10.20	(0.95)	15.17	(1.41)	18.36	(1.71
FWHID/FWHICD31611	1	17.34	(1.61)	30 5/16"	(770)	32"	(813)	78 ¹/ ₈ "	(1984)	11.44	(1.06)	12.16	(1.13)	17.34	(1.61)	20.65	(1.92
FWHID/FWHICD33611	1	18.43	(1.71)	32 5/16"	(821)	34"	(864)	78 ¹/ ₈ "	(1984)	12.36	(1.15)	13.14	(1.22)	18.43	(1.71)	21.79	(2.02
FWHID/FWHICD40611	2	23.40	(2.17)	18 5/16"	(465)	43 1/8"	(1095)	78 1/8"	(1984)	11.86	(1.10)	12.60	(1.17)	23.40	(2.17)	27.03	(2.51
FWHID/FWHICD40611	1	10.83	(1.01)	18 5/16"	(465)	20"	(508)	78 1/8"	(1984)	11.86	(1.10)	12.60	(1.17)	10.83	(1.01)	27.03	(2.51
FWHID/FWHICD50611	1 AS/SA	14.09	(1.31)	24 5/16"	(618)	26"	(660)	78 1/8"	(1984)	17.38	(1.61)	18.46	(1.71)	14.09	(1.31)	33.89	(3.15
FWHID/FWHICD50611	2 AP/PA	29.91	(2.78)	24 5/16"	(618)	55 ½"	(1400)	78 1/8"	(1984)	17.38	(1.61)	18.46	(1.71)	29.91	(2.78)	33.89	(3.15
FWHID/FWHICD50611	1 AP/PA	14.09	(1.31)	24 5/16"	(618)	26"	(660)	78 1/8"	(1984)	17.38	(1.61)	18.46	(1.71)	14.09	(1.31)	33.89	(3.15
FWHID/FWHICD54611	1 AS/SA	15.17	(1.41)	26 5/16"	(668)	28"	(711)	78 1/8"	(1984)	19.23	(1.79)	20.42	(1.90)	15.17	(1.41)	36.18	(3.36
FWHID/FWHICD54611	2 AP/PA	32.08	(2.98)	26 5/16"	(668)	59 1/8"	(1502)	78 1/8"	(1984)	19.23	(1.79)	20.42	(1.90)	32.08	(2.98)	36.18	(3.36
FWHID/FWHICD54611	1 AP/PA	15.17	(1.41)		(668)	28"	(711)	78 1/8"	(1984)	19.23	(1.79)	20.42	(1.90)	15.17	(1.41)	36.18	(3.36
		17.34		26 ⁵ / ₁₆ " 30 ⁵ / ₁₆ "	(770)	32"	(813)	_	(1984)	22.91			(2.26)	17.34		40.76	
FWHID/FWHICD60611	1 AS/SA		(1.61)					78 1/8"			(2.13)	24.33	. ,		(1.61)		(3.79)
FWHID/FWHICD60611	2 AP/PA	36.42	(3.38)	30 5/16"	(770)	67 1/8"	(1705)	78 1/8"	(1984)	22.91	(2.13)	24.33	(2.26)	36.42	(3.38)	40.76	(3.79)
FWHID/FWHICD60611	1 AP/PA	17.34	(1.61)	30 5/16"	(770)	32"	(813)	78 1/8"	(1984)	22.91	(2.13)	24.33	(2.26)	17.34	(1.61)	40.76	(3.79)
FWHID/FWHICD64611	1 AS/SA	18.43	(1.71)	32 5/16"	(821)	34"	(864)	78 1/8"	(1984)	24.75	(2.30)	26.29	(2.44)	18.43	(1.71)	43.05	(4.00
FWHID/FWHICD64611	2 AP/PA	38.59	(3.59)	32 5/16"	(821)	71 1/8"	(1806)	78 1/8"	(1984)	24.75	(2.30)	26.29	(2.44)	38.59	(3.59)	43.05	(4.00
FWHID/FWHICD64611	1 AP/PA	18.43	(1.71)	32 5/16"	(821)	34"	(864)	78 1/8"	(1984)	24.75	(2.30)	26.29	(2.44)	18.43	(1.71)	43.05	(4.00)
FWHID/FWHICD711611-3	1 ASS/SAS/SSA/ASA	15.17	(1.41)	26 5/16"	(668)	28"	(711)	78 1/8"	(1984)	28.84	(2.68)	30.65	(2.85)	15.17	(1.41)	54.00	(5.02)
FWHID/FWHICD711611-3	2 ASA	15.17	(1.41)	26 5/16"	(668)	28"	(711)	78 1/8"	(1984)	28.84	(2.68)	30.65	(2.85)	30.34	(2.82)	54.00	(5.02
FWHID/FWHICD811611-3	1 ASS/SAS/SSA/ASA	17.34	(1.61)	30 5/16"	(770)	32"	(813)	78 1/8"	(1984)	34.36	(3.19)	36.52	(3.39)	17.34	(1.61)	60.87	(5.65
FWHID/FWHICD811611-3	2 ASA	17.34	(1.61)	30 5/16"	(770)	32"	(813)	78 1/8"	(1984)	34.36	(3.19)	36.52	(3.39)	34.68	(3.22)	60.87	(5.65
FWHID/FWHICD96611-3	1 ASS/SAS/SSA/ASA	18.43	(1.71)	32 5/16"	(821)	34"	(864)	78 ¹ / ₈ "	(1984)	37.13	(3.45)	39.45	(3.67)	18.43	(1.71)	64.30	(5.97
FWHID/FWHICD96611-3	2 ASA	18.43	(1.71)	32 5/16"	(821)	34"	(864)	78 1/8"	(1984)	37.13	(3.45)	39.45	(3.67)	36.86	(3.42)	64.30	(5.97
FWHID/FWHICD2180S**	1	12.65	(1.18)	18 5/16"	(465)	20"	(508)	91 1/2"	(2324)	7.09	(0.66)	7.47	(0.69)	12.65	(1.18)	15.98	(1.48
FWHID/FWHICD2780	1	16.46	(1.53)	24 5/16"	(618)	26"	(660)	91 1/2"	(2324)	10.40	(0.97)	10.95	(1.02)	16.46	(1.53)	19.96	(1.85
FWHID/FWHICD2980	1	17.72	(1.65)	26 5/16"	(668)	28"	(711)	91 1/2"	(2324)	11.50	(1.07)	12.11	(1.13)	17.72	(1.65)	21.28	(1.98
FWHID/FWHICD3180	1	20.26	(1.88)	30 5/16"	(770)	32"	(813)	91 1/2"	(2324)	13.71	(1.27)	14.43	(1.34)	20.26	(1.88)	23.94	(2.22
FWHID/FWHICD3380	1	21.53	(2.00)	32 5/16"	(821)	34"	(864)	91 1/2"	(2324)	14.81	(1.38)	15.59	(1.45)	21.53	(2.00)	25.26	(2.35
FWHID/FWHICD4080	2	27.33	(2.54)	18 5/16"	(465)	43 1/8"	(1095)	91 1/2"	(2324)	14.20	(1.32)	14.94	(1.39)	27.33	(2.54)	31.34	(2.91
FWHID/FWHICD4080	1	12.65	(1.18)	18 5/16"	(465)	20"	(508)	91 1/2"	(2324)	14.20	(1.32)	14.94	(1.39)	12.65	(1.18)	31.34	(2.91
FWHID/FWHICD5080	1 AS/SA	16.46	(1.53)	24 5/16"	(618)	26"	(660)	91 1/2"	(1984)	20.82	(1.93)	21.91	(2.04)	16.46	(1.53)	39.29	(3.65

continued on next page

[•] Dimensions in parentheses are in millimeters or square meters.
•For two-panel AP/PA doors with only one panel open, clear opening is based on the active panel open and the passive panel closed.
•*Active left- and right-hinged patio doors also available. Contact your Andersen supplier for more information.



Hinged Inswing Patio Door Opening and Area Specifications (continued)

Door	Number of		pening	Clear Opening Maximums							Traditional Panel		nporary nel	Vent		Overall Door	
Number	Panels in Open Position*	Area Sq. Ft./(m²)		90° Width Inches/(mm)		Full Width Inches/(mm)		Height Inches/(mm)		Glass Area Sq. Ft./(m²)		Glass Area Sq. Ft./(m²)		Area Sq. Ft./(m²)		Area Sq. Ft./(m²)	
FWHID/FWHICD5080	2 AP/PA	34.93	(3.25)	24 5/16"	(618)	55 1/8"	(1400)	91 1/2"	(2324)	20.82	(1.93)	21.91	(2.04)	34.93	(3.24)	39.29	(3.6
WHID/FWHICD5080	1 AP/PA	16.45	(1.53)	24 5/16"	(618)	26"	(660)	91 1/2"	(2324)	20.82	(1.93)	21.91	(2.04)	16.45	(1.53)	39.29	(3.
FWHID/FWHICD5480	1 AS/SA	17.72	(1.65)	26 5/16"	(668)	28"	(711)	91 1/2"	(2324)	23.03	(2.14)	24.23	(2.25)	17.72	(1.65)	41.95	(3.
FWHID/FWHICD5480	2 AP/PA	37.47	(3.48)	26 5/16"	(668)	59 1/8"	(1502)	91 1/2"	(2324)	23.03	(2.14)	24.23	(2.25)	37.47	(3.48)	41.95	(3.
FWHID/FWHICD5480	1 AP/PA	17.72	(1.65)	26 5/16"	(668)	28"	(711)	91 1/2"	(2324)	23.03	(2.14)	24.23	(2.25)	17.72	(1.65)	41.95	(3.
FWHID/FWHICD6080	1 AS/SA	20.26	(1.88)	30 5/16"	(770)	32"	(813)	91 1/2"	(2324)	27.44	(2.55)	28.88	(2.68)	20.26	(1.88)	47.25	(4.
FWHID/FWHICD6080	2 AP/PA	42.54	(3.95)	30 5/16"	(770)	67 1/8"	(1705)	91 1/2"	(2324)	27.44	(2.55)	28.88	(2.68)	42.54	(3.95)	47.25	(4.
FWHID/FWHICD6080	1 AP/PA	20.26	(1.88)	30 5/16"	(770)	32"	(813)	91 1/2"	(2324)	27.44	(2.55)	28.88	(2.68)	20.26	(1.88)	47.25	(4.
FWHID/FWHICD6480	1 AS/SA	21.53	(2.00)	32 5/16"	(821)	34"	(864)	91 1/2"	(2324)	29.65	(275)	31.30	(2.90)	21.53	(2.00)	49.91	(4.
FWHID/FWHICD6480	2 AP/PA	45.07	(4.19)	32 5/16"	(821)	71 1/8"	(1806)	91 1/2"	(2324)	29.65	(275)	31.30	(2.90)	45.07	(4.19)	49.91	(4.
FWHID/FWHICD6480	1 AP/PA	21.52	(2.00)	32 5/16"	(821)	34"	(864)	91 1/2"	(2324)	29.65	(275)	31.30	(2.90)	21.52	(2.00)	49.91	(4.
FWHID/FWHICD71180-3	1 ASS/SAS/SSA/ASA	17.72	(1.65)	26 5/16"	(668)	28"	(711)	91 1/2"	(2324)	34.55	(3.21)	36.35	(3.38)	17.72	(1.65)	62.61	(5.
FWHID/FWHICD71180-3	2 ASA	17.72	(1.65)	26 5/16"	(668)	28"	(711)	91 1/2"	(2324)	34.55	(3.21)	36.35	(3.38)	35.44	(3.30)	62.61	(5.
FWHID/FWHICD81180-3	1 ASS/SAS/SSA/ASA	20.26	(1.88)	30 5/16"	(770)	32"	(813)	91 1/2"	(2324)	41.17	(3.82)	43.32	(4.02)	20.26	(1.88)	70.57	(6.
FWHID/FWHICD81180-3	2 ASA	20.26	(1.88)	30 5/16"	(770)	32"	(813)	91 1/2"	(2324)	41.17	(3.82)	43.32	(4.02)	40.52	(3.76)	70.57	(6.
FWHID/FWHICD9680-3	1 ASS/SAS/SSA/ASA	21.53	(2.00)	32 5/16"	(821)	34"	(864)	91 1/2"	(2324)	44.48	(4.13)	46.80	(4.35)	21.53	(2.00)	74.55	(6.
FWHID/FWHICD9680-3	2 ASA	21.53	(2.00)	32 5/16"	(821)	34"	(864)	91 1/2"	(2324)	44.48	(4.13)	46.80	(4.35)	43.06	(4.00)	74.55	(6.
FWHID/FWHICD21100S**	1	16.04	(1.49)	18 5/16"	(465)	20"	(508)	115 1/2"	(2934)	9.24	(0.86)	9.61	(0.89)	16.04	(1.49)	20.00	(1.
FWHID/FWHICD27100	1	20.85	(1.94)	24 5/16"	(618)	26"	(660)	115 1/2"	(2934)	13.56	(1.26)	14.10	(1.31)	20.85	(1.94)	24.97	(2.
FWHID/FWHICD29100	1	22.46	(2.09)	26 5/16"	(668)	28"	(711)	115 1/2"	(2934)	15.00	(1.39)	15.60	(1.45)	22.46	(2.09)	26.63	(2.
FWHID/FWHICD31100	1	25.67	(2.39)	30 5/16"	(770)	32"	(813)	115 1/2"	(2934)	17.87	(1.66)	18.59	(1.73)	25.67	(2.39)	29.95	(2.
FWHID/FWHICD33100	1	27.27	(2.53)	32 5/16"	(821)	34"	(864)	115 1/2"	(2934)	19.31	(1.72)	20.08	(1.87)	27.27	(2.53)	31.61	(2.
FWHID/FWHICD40100	2	34.59	(3.21)	18 5/16"	(465)	43 1/8"	(1095)	115 1/2"	(2934)	18.50	(1.72)	19.23	(1.79)	34.59	(3.21)	39.21	(3.
FWHID/FWHICD40100	1	16.04	(1.49)	18 5/16"	(465)	20"	(508)	115 1/2"	(2934)	18.50	(1.72)	19.23	(1.79)	16.04	(1.49)	39.21	(3.
FWHID/FWHICD50100	1 AS/SA	20.85	(1.94)	24 5/16"	(618)	26"	(660)	115 1/2"	(2934)	27.11	(2.52)	28.20	(2.62)	20.85	(1.94)	49.17	(4.
FWHID/FWHICD50100	2 AP/PA	44.21	(4.11)	24 5/16"	(618)	55 1/8"	(1400)	115 1/2"	(2934)	27.11	(2.52)	28.20	(2.62)	44.21	(4.11)	49.17	(4.
FWHID/FWHICD50100	1 AP/PA	20.85	(1.94)	24 5/16"	(618)	26"	(660)	115 1/2"	(2934)	27.11	(2.52)	28.20	(2.62)	20.85	(1.94)	49.17	(4.
FWHID/FWHICD54100	1 AS/SA	22.46	(2.09)	26 5/16"	(668)	28"	(711)	115 1/2"	(2934)	29.99	(2.79)	31.19	(2.90)	22.46	(2.09)	52.49	(4.
FWHID/FWHICD54100	2 AP/PA	47.42	(4.41)	26 5/16"	(668)	59 ¹ / ₈ "	(1502)	115 1/2"	(2934)	29.99	(2.79)	31.19	(2.90)	47.42	(4.41)	52.49	(4.
FWHID/FWHICD54100	1 AP/PA	22.46	(2.09)	26 5/16"	(668)	28"	(711)	115 1/2"	(2934)	29.99	(2.79)	31.19	(2.90)	22.46	(2.09)	52.49	(4.
FWHID/FWHICD60100	1 AS/SA	25.67	(2.39)	30 5/16"	(770)	32"	(813)	115 1/2"	(2934)	35.73	(3.32)	37.17	(3.45)	25.67	(2.39)	59.13	(5.
FWHID/FWHICD60100	2 AP/PA	53.84	(5.00)	30 5/16"	(770)	67 1/8"	(1705)	115 1/2"	(2934)	35.73	(3.32)	37.17	(3.45)	53.84	(5.00)	59.13	(5.
FWHID/FWHICD60100	1 AP/PA	25.67	(2.39)	30 5/16"	(770)	32"	(813)	115 1/2"	(2934)	35.73	(3.32)	37.17	(3.45)	25.67	(2.39)	59.13	(5.
FWHID/FWHICD64100	1 AS/SA	27.27	(2.53)	32 5/16"	(821)	34"	(864)	115 1/2"	(2934)	38.61	(3.59)	40.16	(3.73)	27.27	(2.53)	62.45	(5
FWHID/FWHICD64100	2 AP/PA	57.05	(5.30)	32 5/16"	(821)	71 1/8"	(1806)	115 1/2"	(2934)	38.61	(3.59)	40.16	(3.73)	57.05	(5.30)	62.45	(5.
FWHID/FWHICD64100	1 AP/PA	27.27	(2.53)	32 5/16"	(821)	34"	(864)	115 1/2"	(2934)	38.61	(3.59)	40.16	(3.73)	27.27	(2.53)	62.45	(5.
FWHID/FWHICD711100-3	1 ASS/SAS/SSA/ASA	22.46	(2.09)	26 5/16"	(668)	28"	(711)	115 1/2"	(2934)	44.98	(4.18)	46.79	(4.35)	22.46	(2.09)	78.34	(7.
FWHID/FWHICD711100-3	2 ASA	22.46	(2.09)	26 5/16"	(668)	28"	(711)	115 1/2"	(2934)	44.98	(4.18)	46.79	(4.35)	44.92	(4.17)	78.34	(7.
FWHID/FWHICD811100-3	1 ASS/SAS/SSA/ASA	25.67	(2.39)	30 5/16"	(770)	32"	(813)	115 1/2"	(2934)	53.60	(4.98)	55.76	(5.18)	25.67	(2.39)	88.30	(8
FWHID/FWHICD811100-3	2 ASA	25.67	(2.39)	30 5/16"	(770)	32"	(813)	115 1/2"	(2934)	53.60	(4.98)	55.76	(5.18)	51.33	(4.77)	88.30	(8
FWHID/FWHICD96100-3	1 ASS/SAS/SSA/ASA	27.27	(2.53)	32 5/16"	(821)	34"	(864)	115 1/2"	(2934)	57.91	(5.38)	60.24	(5.60)	27.27	(2.53)	93.28	(8
FWHID/FWHICD96100-3	2 ASA	27.27	(2.53)	32 5/16"	(821)	34"	(864)	115 1/2"	(2934)	57.91	(5.38)	60.24	(5.60)	54.54	(5.07)	93.28	(8.

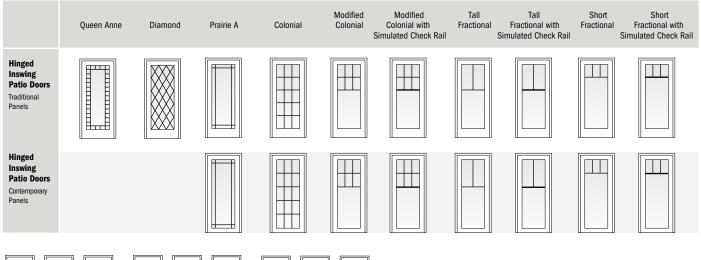
[•] Dimensions in parentheses are in millimeters or square meters.

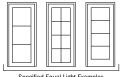
•For two-panel AP/PA doors with only one panel open, clear opening is based on the active panel open and the passive panel closed.

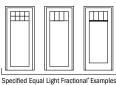
•*Active left- and right-hinged patio doors also available. Contact your Andersen supplier for more information.

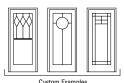
HINGED INSWING PATIO DOORS

Grille Patterns









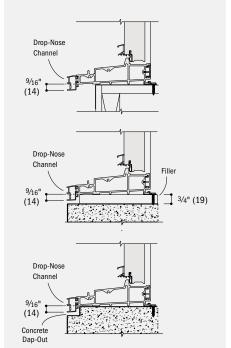
^{*}Bottom horizontal bar located at center or at custom dimensions.

Number of lights and overall pattern varies with patio door size. Patterns may not be available in all configuration or sizes.

Specified equal light, specified equal light fractional and custom patterns are also available. For more grille options, see page 19 or visit andersenwindows.com/grilles.

Drop-Nose Channel Optional drop-nose channel is available when

higher product performance is required. Wood and concrete installations shown.

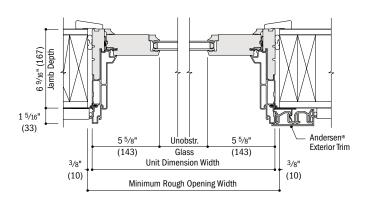


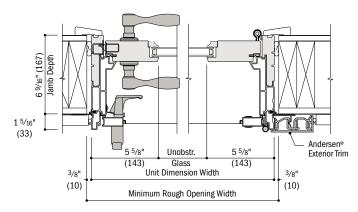
Remodeler Sill Bracket Optional remodeler sill bracket is available for installation with an existing finished interior floor. Finished Floor Remodeler Sill Bracket



Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth with Traditional Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



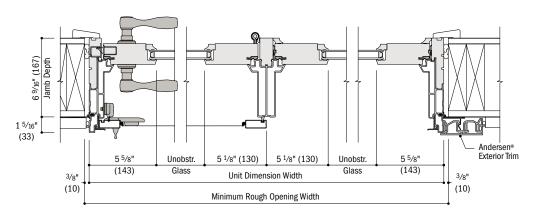


Horizontal Section

Stationary (S), Traditional Panel

Horizontal Section

Active (AR/AL), Traditional Panel, Hinged Insect Screen



Horizontal Section

Two-Panel Active-Stationary (ASR/ASL/SAL/SAR), Traditional Panels, Top-Hung Gliding or Gliding Insect Screen

continued on next page

^{• 6 9/16&}quot; (167) base jamb depth measurement is from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.

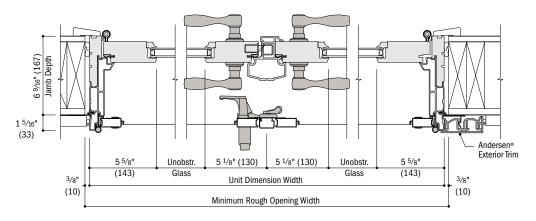
^{*}Dimensions in parentheses are in millimeters.

Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com

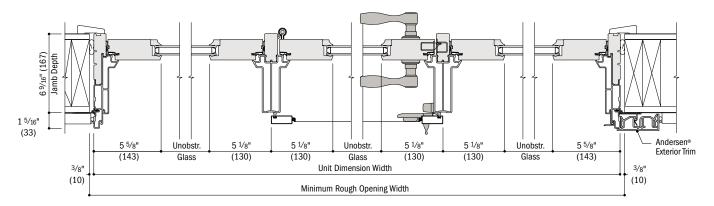
Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth with Traditional Panels (continued)

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



Horizontal Section

Two-Panel Active-Passive (ARLR/PALR), Taditional Panels, Hinged Insect Screen with Astragal



Horizontal Section

Three-Panel Stationary-Active-Stationary (SASL/SASR/ASSL/ASSR/SSAL/SSAR), Traditional Panels, Top-Hung Gliding or Gliding Insect Screen

continued on next page

^{• 6 9/16&}quot; (167) base jamb depth measurement is from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.

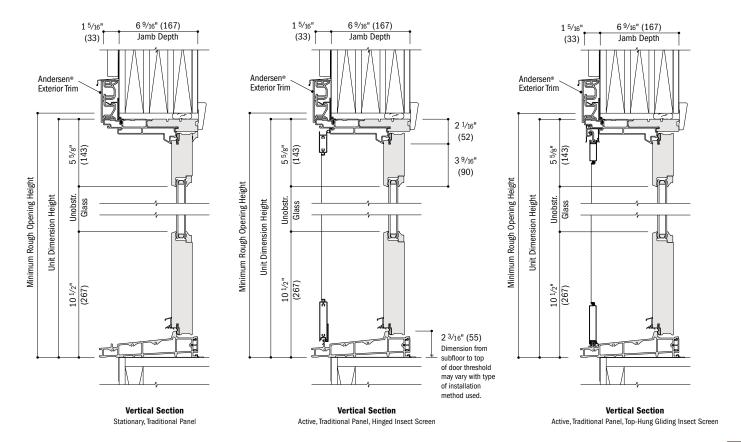
[•] Dimensions in parentheses are in millimeters.
• Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.



Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth with Traditional Panels (continued)

Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8



For optional drop-nose channel and remodeler sill bracket details, see page 140.

See pages 168-171 for joining details.

^{• 6 9/16&}quot; (167) base jamb depth measurement is from back side of installation flange.

[•] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

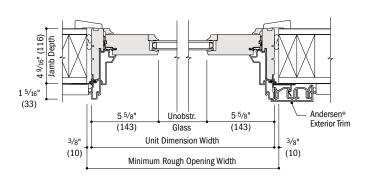
[•] Dimensions in parentheses are in millimeters.

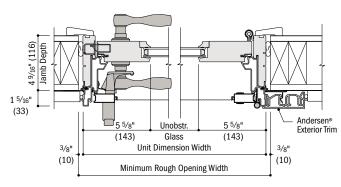
^{*}Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com

Hinged Inswing Patio Door Details - 4 9/16" (116) Base Jamb Depth with Traditional Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



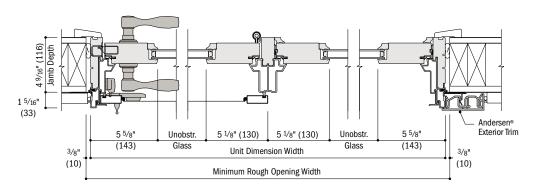


Horizontal Section

Stationary (S), Traditional Panel

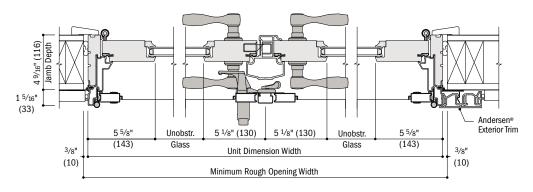
Horizontal Section

Active (AR/AL), Traditional Panel, Hinged Insect Screen



Horizontal Section

Two-Panel Active-Stationary (ASR/ASL/SAL/SAR), Traditional Panels, Top-Hung Gliding or Gliding Insect Screen



Horizontal Section

Two-Panel Active-Passive (APLR/PALR), Taditional Panels, Hinged Insect Screen

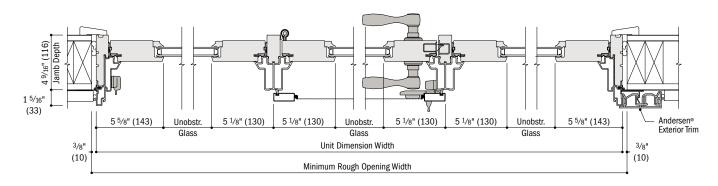
continued on next page

- 4 9/16" (116) base jamb depth measurement is from back side of installation flange
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
- Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

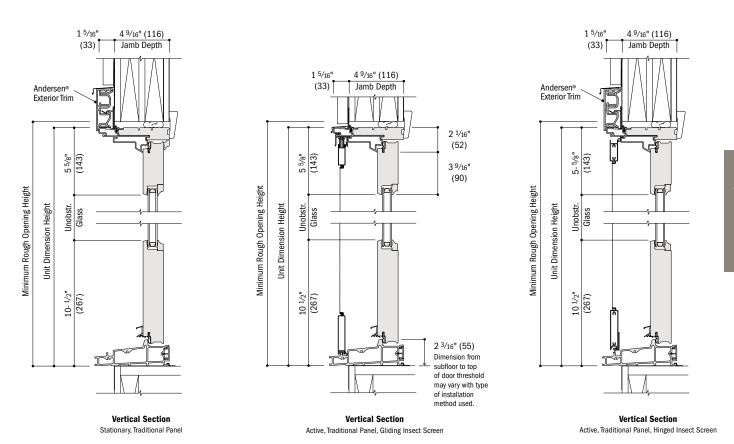


Hinged Inswing Patio Door Details – 4 9/16" (116) Base Jamb Depth with Traditional Panels (continued) Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Horizontal Section

Three-Panel Stationary-Active-Stationary (SASL/SASR/ASSL/ASSR/SSAL/SSAR),
Traditional Panels, Top-Hung Gliding or Gliding Insect Screen



For optional drop-nose channel and remodeler sill bracket details, see page 140.

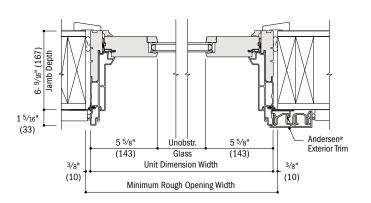
See pages 168-171 for joining details.

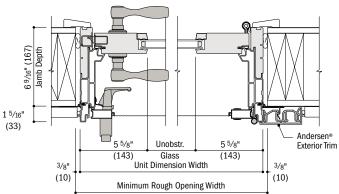
- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
- *Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com

HINGED INSWING PATIO DOORS

Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth with Contemporary Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



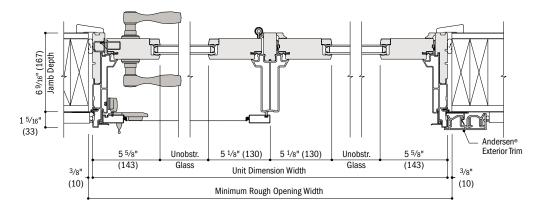


Horizontal Section

Stationary (S), Contemporary Panel

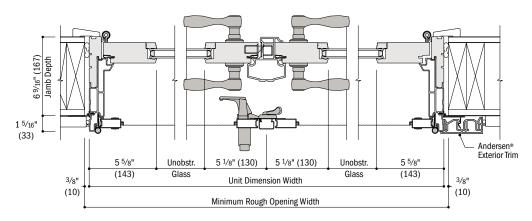
Horizontal Section

Active (AR/AL), Contemporary Panel, Hinged Insect Screen



Horizontal Section

Two-Panel Active-Stationary (ASR/ASL/SAL/SAR), Contemporary Panels, Top-Hung Gliding or Gliding Insect Screen



Horizontal Section

Two-Panel Active-Passive (APLR/PALR), Contemporary Panels, Hinged Insect Screen with Astragal

continued on next page

^{• 6 9/16&}quot; (167) base jamb depth measurement is from back side of installation flange.

[•] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

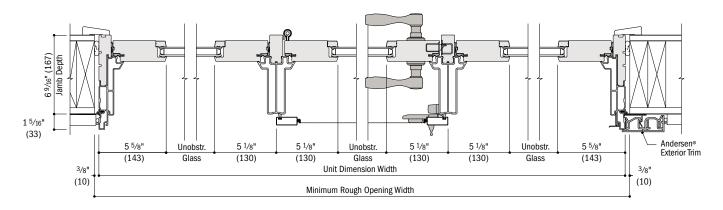
[•] Dimensions in parentheses are in millimeters.

^{*}Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

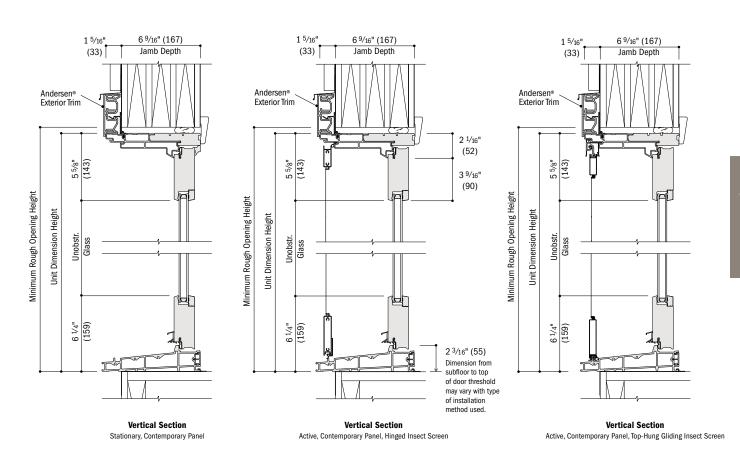


Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth with Contemporary Panels (continued) Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Three-Panel Stationary-Active-Stationary (SASL/SASR/ASSL/ASSR/SSAL/SSAR), Contemporary Panels, Top-Hung Gliding or Gliding Insect Screen



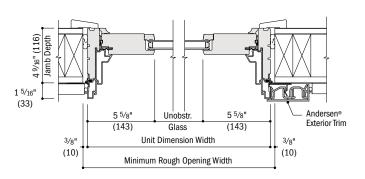
For optional drop-nose channel and remodeler sill bracket details, see page 140.

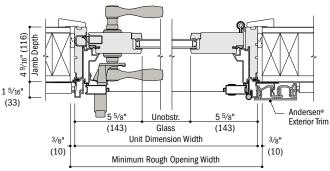
See pages 168-171 for joining details.

- 6 9/16" (167) base jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
 Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

Hinged Inswing Patio Door Details - 4 9/16" (116) Base Jamb Depth with Contemporary Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



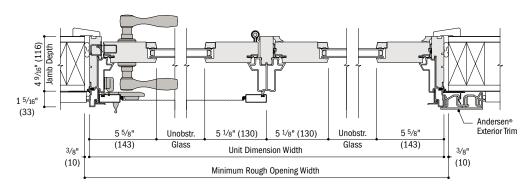


Horizontal Section

Stationary (S), Contemporary Panel

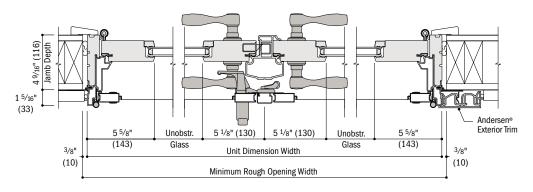
Horizontal Section

Active (AR/AL), Contemporary Panel, Hinged Insect Screen



Horizontal Section

Two-Panel Active-Stationary (ASR/ASL/SAL/SAR), Contemporary Panels, Top-Hung Gliding or Gliding Insect Screen



Horizontal Section — Two-Panel Active-Passive (APLR/PALR)

Two-Panel Active-Passive (APLR/PALR), Contemporary Panels, Hinged Insect Screen

continued on next page

^{• 4 9/16&}quot; (116) base jamb depth measurement is from back side of installation flange.

^{*}Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown

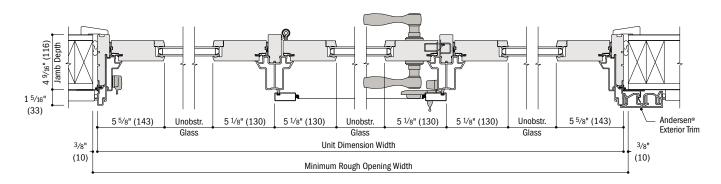
[•] Dimensions in parentheses are in millimeters.

^{*}Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not intended to represent product installation methods or methods or product installation instructions at andersenwindows.com.

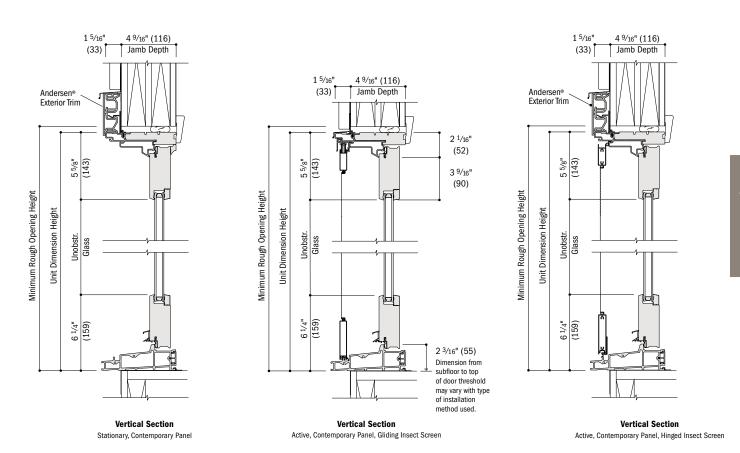


Hinged Inswing Patio Door Details – 4 9/16" (116) Base Jamb Depth with Contemporary Panels (continued) Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Horizontal Section

Three-Panel Stationary-Active-Stationary (SASL/SASR/ASSL/ASSR/SSAL/SSAR),
Contemporary Panels, Top-Hung Gliding or Gliding Insect Screen



For optional drop-nose channel and remodeler sill bracket details, see page 140.

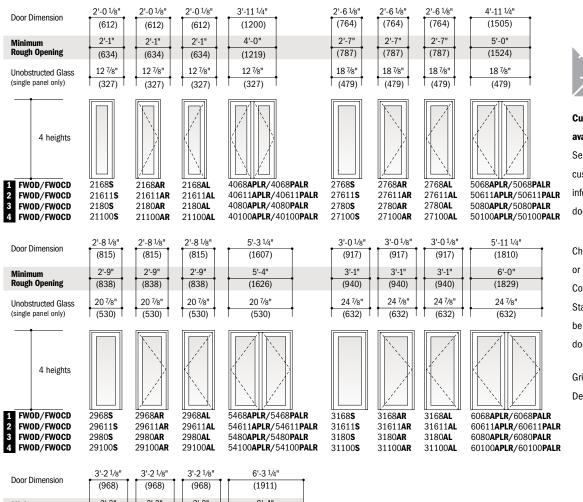
See pages 168-171 for joining details.

- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
- *Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instruction instruction sat andersenwindows.com

HINGED OUTSWING PATIO DOORS

Table of Hinged Outswing Patio Door Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96



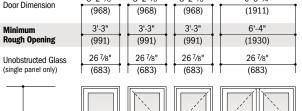


Custom-size patio doors are available in 1/8" (3) increments.

See pages 173 and 175 for custom sizes, specifications and information on shipping patio doors greater than 8' (2438).

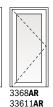
Choose traditional (FWOD) or contemporary (FWOCD) panel. Contemporary panels shown. Stationary (S) patio doors can be used as an individual patio door or a sidelight.

Grille patterns shown on page 151. Details shown on pages 153-155.



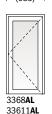






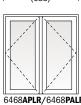
3380**AR**

33100AR



3380AL

33100AL

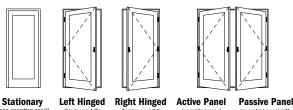


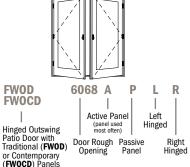
6468APLR/6468PALR 64611**APLR**/64611**PALR** 6480APLR/6480PALR 64100APLR/64100PALR

3380**S**

Identification and Order Designation Description

Viewed from the exterior. Traditional panels shown.





³³¹⁰⁰**S** . "Door Dimension" always refers to outside frame-to-frame dimension

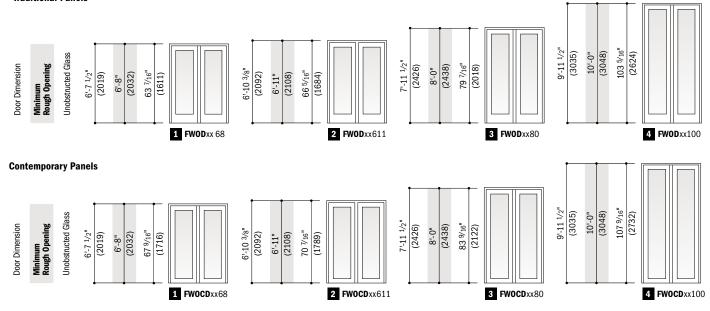
^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details

[·] Dimensions in parentheses are in millimeters.

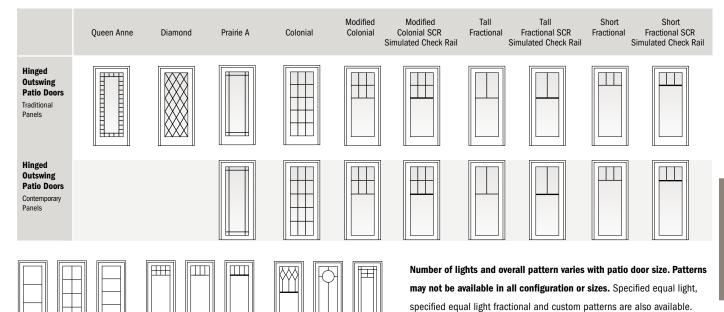


Four Patio Door Heights

Traditional Panels



Grille Patterns



^{*}Bottom horizontal bar located at center or at custom dimensions

Specified Equal Light Fractional Examples

For more grille options, see page 19 or visit andersenwindows.com/grilles.

HINGED OUTSWING PATIO DOORS

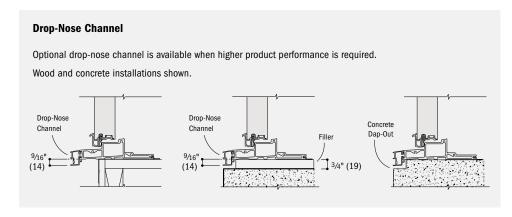
Hinged Outswing Patio Door Opening and Area Specifications

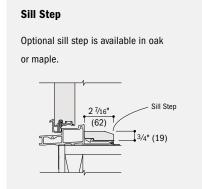
Door	Number of Panels in	CI	D 1			'	ng Maximu		- de A	Pa	tional nel	Pa	nporary nel			Overal	
Number	Open Position*		Opening t./(m²)	90° \ Inches	Width (mm)		Width s/(mm)	Hei Inches	ight /(mm)		:./(m²)	Glass Sq. Ft	Area ./(m²)		ent t./(m²)	Ar Sq. F1	rea t./(m
WOD/FWOCD2168	1	10.94	(1.02)	19 1/16"	(484)	20 3/4"	(527)	76 1/8"	(1934)	5.67	(0.53)	6.04	(0.56)	10.94	(1.02)	13.30	(1
WOD/FWOCD2768	1	14.11	(1.31)	25 1/16"	(637)	26 3/4"	(679)	76 1/8"	(1934)	8.31	(0.77)	8.86	(0.82)	14.11	(1.31)	16.61	(1
VOD/FWOCD2968	1	15.17	(1.41)	27 1/16"	(687)	28 3/4"	(730)	76 ¹ / ₈ "	(1934)	9.20	(0.85)	9.80	(0.91)	15.17	(1.41)	17.72	(1
VOD/FWOCD3168	1	17.28	(1.61)	31 1/16"	(789)	32 3/4"	(832)	76 ¹/ ₈ "	(1934)	10.96	(1.02)	11.68	(1.09)	17.28	(1.61)	19.93	(1
VOD/FWOCD3368	1	18.34	(1.70)	33 1/16"	(840)	34 3/4"	(883)	76 1/8"	(1934)	11.84	(1.10)	12.61	(1.17)	18.34	(1.70)	21.03	(1
VOD/FWOCD4068	2	23.18	(2.15)	40 5/8"	(1032)	43 7/8"	(1114)	76 1/8"	(1934)	11.34	(1.05)	12.09	(1.12)	23.18	(2.15)	26.09	(2
VOD/FWOCD4068	1	10.89	(1.01)	19"	(483)	20 5/8"	(524)	76 1/8"	(1934)	11.34	(1.05)	12.09	(1.12)	10.89	(1.01)	26.09	(:
NOD/FWOCD5068	2	29.52	(2.74)	52 ⁵ / ₈ "	(1337)	55 7/8"	(1419)	76 1/8"	(1934)	16.63	(1.54)	17.72	(1.65)	29.52	(2.74)	32.71	(
WOD/FWOCD5068	1	14.07	(1.31)	25"	(635)	26 5/8"	(676)	76 1/8"	(1934)	16.63	(1.54)	17.72	(1.65)	14.07	(1.31)	32.71	(:
NOD/FWOCD5468	2	31.63	(2.94)	56 5/8"	(1438)	59 7/8"	(1521)	76 1/8"	(1934)	18.39	(1.71)	19.60	(1.82)	31.63	(2.94)	34.92	(
WOD/FWOCD5468	1	15.12	(1.40)	27"	(686)	28 5/8"	(727)	76 1/8"	(1934)	18.39	(1.71)	19.60	(1.82)	15.12	(1.40)	34.92	(
NOD/FWOCD6068	2	35.86	(3.33)	64 5/8"	(1641)	67 7/8"	(1724)	76 1/8"	(1934)	21.92	(2.04)	23.35	(2.17)	35.86	(3.33)	39.34	(
NOD/FWOCD6068	1	17.24	(1.60)	31"	(787)	32 5/8"	(829)	76 1/8"	(1934)	21.92	(2.04)	23.35	(2.17)	17.24	(1.60)	39.34	
WOD/FWOCD6468	2	37.97	(3.53)	68 5/8"	(1743)	71 7/8"	(1826)	76 1/8"	(1934)	23.68	(2.20)	25.23	(2.34)	37.97	(3.53)	41.54	(
WOD/FWOCD6468	1	18.29	(1.70)	33"	(838)	34 5/8"	(879)	76 1/8"	(1934)	23.68	(2.20)	25.23	(2.34)	18.29	(1.70)	41.54	(
				_				_									
NOD/FWOCD21611	1	11.35	(1.05)	19 1/16"	(484)	20 3/4"	(527)	79"	(2007)	5.93	(0.55)	6.30	(0.59)	11.35	(1.05)	13.78	
WOD/FWOCD27611	1	14.64	(1.36)	25 1/16"	(637)	26 3/4"	(679)	79"	(2007)	8.69	(0.81)	9.24	(0.86)	14.64	(1.36)	17.22	(
WOD/FWOCD29611	1	15.74	(1.46)	27 1/16"	(687)	28 3/4"	(730)	79"	(2007)	9.61	(0.89)	10.21	(0.95)	15.74	(1.46)	18.36	(
WOD/FWOCD31611	1	17.93	(1.67)	31 1/16"	(789)	32 3/4"	(832)	79"	(2007)	11.45	(1.06)	12.17	(1.13)	17.93	(1.67)	20.65	(
WOD/FWOCD33611	1	19.03	(1.77)	33 1/16"	(840)	34 3/4"	(883)	79"	(2007)	12.38	(1.15)	13.15	(1.22)	19.03	(1.77)	21.79	(
WOD/FWOCD40611	2	24.05	(2.23)	40 5/8"	(1032)	43 7/8"	(1114)	79"	(2007)	11.86	(1.10)	12.60	(1.17)	24.05	(2.23)	27.03	(
WOD/FWOCD40611	1	11.31	(1.05)	19"	(483)	20 5/8"	(524)	79"	(2007)	11.86	(1.10)	12.60	(1.17)	11.31	(1.05)	27.03	(
WOD/FWOCD50611	2	30.63	(2.85)	52 5/8"	(1337)	55 7/8"	(1419)	79"	(2007)	17.38	(1.61)	18.47	(1.72)	30.63	(2.85)	33.89	(
NOD/FWOCD50611	1	14.60	(1.36)	25"	(635)	26 5/8"	(676)	79"	(2007)	17.38	(1.61)	18.47	(1.72)	14.60	(1.36)	33.89	(
NOD/FWOCD54611	2	32.83	(3.05)	56 5/8"	(1438)	59 7/8"	(1521)	79"	(2007)	19.22	(1.79)	20.43	(1.90)	32.83	(3.05)	36.18	(
NOD/FWOCD54611	1	15.69	(1.46)	27"	(686)	28 5/8"	(727)	79"	(2007)	19.22	(1.79)	20.43	(1.90)	15.69	(1.46)	36.18	(
NOD/FWOCD60611	2	37.21	(3.46)	64 5/8"	(1641)	67 7/8"	(1724)	79"	(2007)	22.91	(2.13)	24.34	(2.26)	37.21	(3.46)	40.76	(
WOD/FWOCD60611	1	17.89	(1.66)	31"	(787)	32 5/8"	(829)	79"	(2007)	22.91	(2.13)	24.34	(2.26)	17.89	(1.66)	40.76	(
NOD/FWOCD64611	2	39.41	(3.66)	68 5/8"	(1743)	71 7/8"	(1826)	79"	(2007)	24.75	(2.30)	26.30	(2.44)	39.41	(3.66)	43.05	(
NOD/FWOCD64611	1	18.98	(1.76)	33"	(838)	34 5/8"	(879)	79"	(2007)	24.75	(2.30)	26.30	(2.44)	18.98	(1.76)	43.05	(
NOD/FWOCD2180	1	13.24	(1.23)	19 1/16"	(484)	20 3/4"	(527)	92 1/8"	(2340)	7.10	(0.66)	7.47	(0.69)	13.24	(1.23)	15.98	(
WOD/FWOCD2780	1	17.07	(1.59)	25 1/16"	(637)	26 ³ / ₄ "	(679)	92 1/8"	(2340)	10.41	(0.97)	10.96	(1.02)	17.07	(1.59)	19.96	(
WOD/FWOCD2980	1	18.35	(1.71)	27 1/16"	(687)	28 3/4"	(730)	92 1/8"	(2340)	11.52	(1.07)	12.12	(1.13)	18.35	(1.71)	21.28	(
WOD/FWOCD3180	1	20.91	(1.94)	31 1/16"	(789)	32 3/4"	(832)	92 1/8"	(2340)	13.72	(1.27)	14.44	(1.34)	20.91	(1.94)	23.94	(
WOD/FWOCD3380	1	22.19	(2.06)	33 1/16"	(840)	34 3/4"	(883)	92 1/8"	(2340)	14.82	(1.38)	15.60	(1.45)	22.19	(2.06)	25.26	(
WOD/FWOCD4080	2	28.05	(2.61)	40 5/8"	(1032)	43 7/8"	(1114)	92 1/8"	(2340)	14.20	(1.32)	14.95	(1.39)	28.05	(2.61)	31.34	(
WOD/FWOCD4080	1	13.18	(1.22)	19"	(483)	20 5/8"	(524)	92 1/8"	(2340)	14.20	(1.32)	14.95	(1.39)	13.18	(1.22)	31.34	(
WOD/FWOCD5080	2	35.72	(3.32)	52 ⁵ / ₈ "	(1337)	55 7/8"	(1419)	92 1/8"	(2340)	20.82	(1.93)	21.91	(2.04)	35.72	(3.32)	39.29	(
WOD/FWOCD5080	1	17.02	(1.58)	25"	(635)	26 5/8"	(676)	92 1/8"	(2340)	20.82	(1.93)	21.91	(2.04)	17.02	(1.58)	39.29	(
WOD/FWOCD5480	2	38.28	(3.56)	56 5/8"	(1438)	59 7/8"	(1521)	92 1/8"	(2340)	23.03	(2.14)	24.23	(2.25)	38.28	(3.56)	41.95	(
WOD/FWOCD5480	1	18.30	(1.70)	27"	(686)	28 5/8"	(727)	92 1/8"	(2340)	23.03	(2.14)	24.23	(2.25)	18.30	(1.70)	41.95	(
WOD/FWOCD6080	2	43.40	(4.03)	64 5/8"	(1641)	67 7/8"	(1724)	92 1/8"	(2340)	27.44	(2.55)	28.88	(2.68)	43.40	(4.03)	47.25	(
WOD/FWOCD6080	1	20.86	(1.94)	31"	(787)	32 5/8"	(829)	92 1/8"	(2340)	27.44	(2.55)	28.88	(2.68)	20.86	(1.94)	47.25	(
WOD/FWOCD6080	2	45.96	(4.27)	68 5/8"	(1743)	71 7/8"	(1826)	92 1/8"	(2340)	29.65	(2.75)	31.20	(2.90)	45.96	(4.27)	49.91	(
WOD/FWOCD6480	1	22.14	(2.06)	33"	(838)	34 5/8"	(879)	92 1/8"	(2340)	29.65	(2.75)	31.20	(2.90)	22.14	(2.06)	49.91	(
WOD/FWOCD0400	1			_													(
· · · · · · · · · · · · · · · · · · ·		16.73	(1.55)	19 1/16"	(484)	20 3/4"	(527)	116 1/8"	(2950)	9.25	(0.86)	9.62	(0.89)	16.73	(1.55)	19.99	_
NOD/FWOCD27100	1	21.57	(2.00)	25 1/16"	(637)	26 3/4"	(679)	116 1/8"	(2950)	13.56	(1.26)	14.10	(1.31)	21.57	(2.00)	24.97	(
WOD/FWOCD29100	1	23.18	(2.15)	27 1/16"	(687)	28 3/4"	(730)	116 1/8"	(2950)	14.99	(1.39)	15.60	(1.45)	23.18	(2.15)	26.63	(
WOD/FWOCD31100	1	26.41	(2.45)	31 1/16"	(789)	32 3/4"	(832)	116 1/8"	(2950)	17.87	(1.66)	18.59	(1.73)	26.41	(2.45)	29.95	(
VOD/FWOCD33100	1	28.02	(2.60)	33 1/16"	(840)	34 3/4"	(883)	116 1/8"	(2950)	19.30	(1.79)	20.08	(1.87)	28.02	(2.60)	31.61	(
/OD/FWOCD40100	2	35.38	(3.29)	40 5/8"	(1032)	43 7/8"	(1114)	116 1/8"	(2950)	18.50	(1.72)	19.24	(1.79)	35.38	(3.29)	39.21	(
NOD/FWOCD40100	1	16.63	(1.55)	19"	(483)	20 5/8"	(524)	116 1/8"	(2950)	18.50	(1.72)	19.24	(1.79)	16.63	(1.55)	39.21	(
NOD/FWOCD50100	2	45.06	(4.19)	52 5/8"	(1337)	55 7/8"	(1419)	116 1/8"	(2950)	27.11	(2.52)	28.20	(2.62)	45.06	(4.19)	49.17	(
WOD/FWOCD50100	1	21.47	(1.99)	25"	(635)	26 5/8"	(676)	116 1/8"	(2950)	27.11	(2.52)	28.20	(2.62)	21.47	(1.99)	49.17	(
WOD/FWOCD54100	2	48.28	(4.49)	56 5/8"	(1438)	59 7/8"	(1521)	116 1/8"	(2950)	29.99	(2.79)	31.19	(2.90)	48.28	(4.49)	52.49	(
WOD/FWOCD54100	1	23.08	(2.14)	27"	(686)	28 5/8"	(727)	116 1/8"	(2950)	29.99	(2.79)	31.19	(2.90)	23.08	(2.14)	52.49	(
WOD/FWOCD60100	2	54.74	(5.09)	64 5/8"	(1641)	67 7/8"	(1724)	116 1/8"	(2950)	35.73	(3.32)	37.17	(3.45)	54.74	(5.09)	59.13	(
WOD/FWOCD60100	1	26.31	(2.45)	31"	(787)	32 5/8"	(829)	116 1/8"	(2950)	35.73	(3.32)	37.17	(3.45)	26.31	(2.45)	59.13	(
WOD/FWOCD64100	2	57.96	(5.39)	68 5/8"	(1743)	71 7/8"	(1826)	116 1/8"	(2950)	38.61	(3.59)	40.16	(3.73)	57.96	(5.39)	62.45	(
	1	27.92	(2.59)	33"	(838)	34 5/8"	(879)	116 1/8"	(2950)	38.61	(3.59)	40.16	(3.73)	27.92	(2.59)	62.45	(

Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel doors with only one panel open, clear opening is based on the active panel open and the passive panel closed.

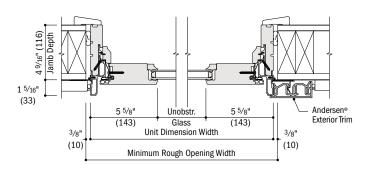


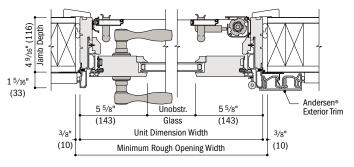




Hinged Outswing Patio Door Details - Traditional Panels

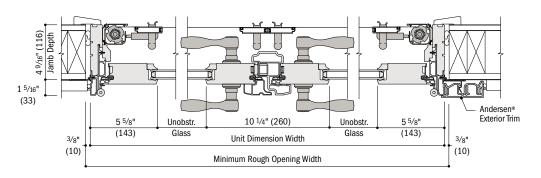
Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8





Horizontal Section Stationary (S), Traditional Panel

Horizontal Section
Active (AR/AL), Traditional Panel, Retractable Insect Screen



Horizontal Section

Two-Panel Active (APLR/PALR), Traditional Panels, Retractable Insect Screen

continued on next page

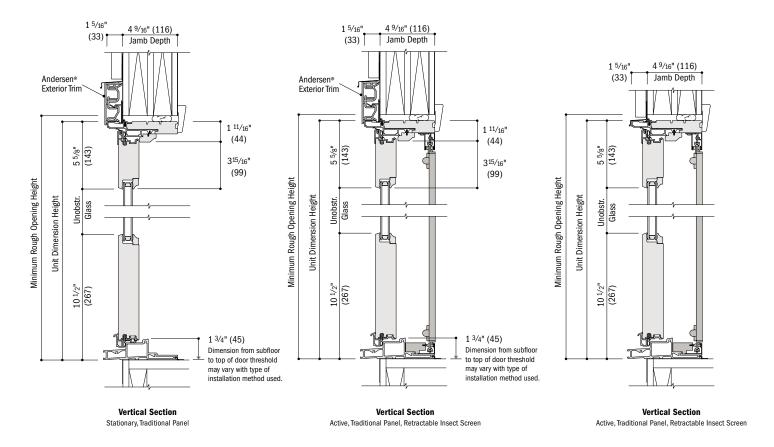
- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 226-227.

Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

HINGED OUTSWING PATIO DOORS

Hinged Outswing Patio Door Details - Traditional Panels (continued)

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

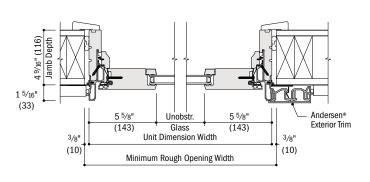


For optional drop-nose channel and sill step details, see page 153.

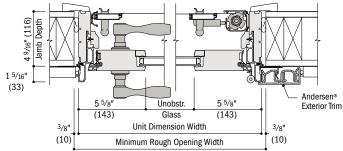
See pages 168-171 for joining details.

Hinged Outswing Patio Door Details - Contemporary Panels

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8







Horizontal Section

Active (AR/AL), Contemporary Panel, Retractable Insect Screen

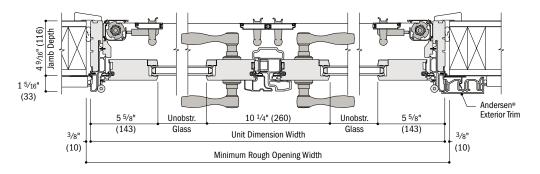
continued on next page

- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.



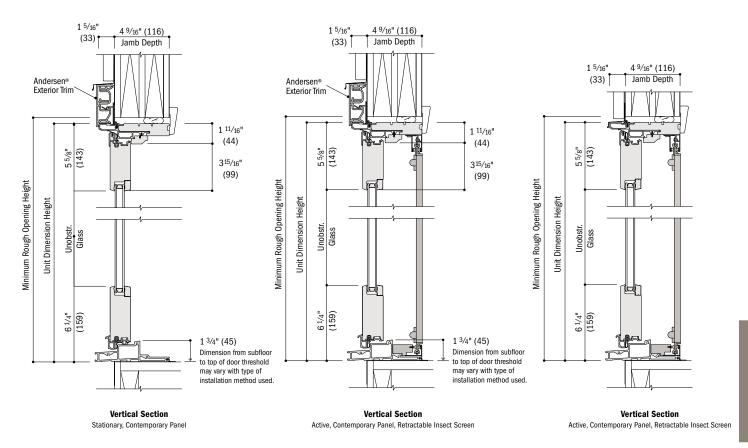
Hinged Outswing Patio Door Details - Contemporary Panels (continued)

Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Two-Panel Active (APLR/PALR), Contemporary Panels, Retractable Insect Screen



For optional drop-nose channel and sill step details, see page 153.

See pages 168-171 for joining details.

- 4 9/16" (116) base jamb depth measurement is from back side of installation flange.
- Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.
- Dimensions in parentheses are in millimeters.
- *Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

PATIO DOOR SIDELIGHTS & TRANSOMS

Table of Patio Door Transom and Sidelight Transom Sizes Notes on page 158 also apply to this page. Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96 1-21/4" 1'-61/4" 2'-01/8" 2'-61/8" 2'-81/8" 3'-01/8" 3'-21/8" 3'-111/4" 4'-111/4" 5-31/4" Transom Dimension (464) (612) (765) (816) (362) (918) (968) (1200)(1505)(1607)1'-3" 1'-7" 2'-1" 2'-7" 2'-9" 3'-1" 3'-3" 4'-0" 5'-0" 5'-4" **Rough Opening** (381) (483) (635) (787) (838) (940) (991) (1219)(1524)(1626)CUSTOM WIDTHS AVAILABLE - Vary based on transom style Unobstructed Glass 12 ⁷/8" (single sash only) 63/8" 10 3/8" 18 ⁷/8" 20 7/8" 24 7/8" 26 7/8' 52" 11 1/4" to 27 1/4" (264) (327) (915) (163) (479) (530) (1220) (1322) (632) (683) 3 3/8" 1'-0" (302)(87) FWSLTD-1-1310 FWSLTD-1-1710 FWTD-1-2110 FWTD-1-2710 FWTD-1-2910 **FWTD**-1-5010 **FWTD**-1-5410 FWTD-1-3110 FWTD-1-3310 FWTD-1-4010 FWSTCD-1-1310 FWTCD-1-2110 FWTCD-1-2710 FWTCD-1-2910 FWTCD-1-3110 FWTCD-1-3310 FWTCD-1-4010 FWTCD-1-5010 FWTCD-1-5410 18 ⁷/8" 20 7/8" (327) (479) (530) 3 3/8" (302) 1'-0" (87) **CUSTOM HEIGHTS FWTD**-2-4010 **FWTD**-2-5010 FWTD-2-5410 FWTCD-2-4010 FWTCD-2-5010 FWTCD-2-5410 20 7/16" 10 5/8" 14 5/8" 26 7/16" 28 7/16" 32 7/16 34 7/16" 43 5/8' 55 5/8⁵ 59 5/8' (269) (371) (519) (672) (722) (824) (875) (1107) (1412) (1514) 7 5/8" 1'-0" (302)**FWSTDS**1310 **FWSTDS**1710 **FWTDS**2110 FWTDS2710 FWTDS2910 **FWTDS**3110 **FWTDS**3310 **FWTDS**4010 **FWTDS**5010 **FWTDS**5410 FWSTCDS1310 **FWSTCDS**1710 **FWTCDS**2110 **FWTCDS**2710 **FWTCDS**2910 FWTCDS3110 FWTCDS3310 FWTCDS4010 **FWTCDS**5010 FWTCDS5410 63/8" 10 3/8" 12 7/8" 18 ⁷/8" 20 7/8" 24 7/8" 26 ⁷/8" 36" 48" 52" (163) (264) (327) (479) (530) (632) (683) (915) (1220) (1322) -3 1/4 7 3/8" (381)(406)188) FWSLTD-1-1314 FWSLTD-1-1714 FWTD-1-2114 **FWTD**-1-2714 **FWTD**-1-2914 **FWTD**-1-3114 **FWTD**-1-3314 FWTD-1-4014 FWTD-1-5014 FWTD-1-5414 FWSTCD-1-1314 FWSTCD-1-1714 FWTCD-1-2114 FWTCD-1-2714 FWTCD-1-2914 FWTCD-1-3114 FWTCD-1-3314 FWTCD-1-4014 FWTCD-1-5014 FWTCD-1-5414 20 7/8" 12 7/s" 18 7/8" (327) (479) (530) 7 3/8" (406)(188) FWTD-2-4014 FWTD-2-5014 FWTD-2-5414 FWTCD-2-4014 FWTCD-2-5014 FWTCD-2-5414 10 5/8" 14 5/8" 20 7/16" 26 7/16" 28 7/16" 32 7/16" 34 7/16" 43 5/8" 55 ⁵/8" 59 ⁵/8" (519) (269) (371) (672) (722) (824) (875) (1107) (1412) (1514) $11^{5/8}$ " (406)**FWSTDS**1314 FWSTDS1714 FWTDS2114 FWTDS2714 FWTDS2914 FWTDS3114 FWTDS3314 FWTDS4014 FWTDS5014 FWTDS5414 FWSTCDS1314 FWSTCDS1714 FWTCDS2114 FWTCDS2714 **FWTCDS**2914 **FWTCDS**3114 FWTCDS3314 FWTCDS4014 **FWTCDS**5014 FWTCDS5414 63/8" 10 3/8" 12 7/8" 18 7/8" 20 7/8" 24 7/8" 26 7/8" 36" 48' 52" (163) (264) (327) (479) (632) (1220) (1322) (530) (683) (915) $11^{3/8}$ " (290) 1-8 (208) FWSLTD-1-1318 FWSLTD-1-1718 FWTD-1-2118 FWTD-1-2718 FWTD-1-2918 FWTD-1-3118 FWTD-1-3318 FWTD-1-4018 FWTD-1-5018 FWTD-1-5418 FWSTCD-1-1318 FWSTCD-1-1718 FWTCD-1-2118 FWTCD-1-2718 FWTCD-1-2918 FWTCD-1-3118 FWTCD-1-3318 FWTCD-1-4018 FWTCD-1-5018 FWTCD-1-5418 12 ⁷/8" 18 ⁷/8" 20 7/8" (327) (479) (530) $11^{3/8}$ " (208)(290) 1-8" **FWTD**-2-5018 FWTD-2-4018 FWTD-2-5418 FWTCD-2-4018 FWTCD-2-5018 FWTCD-2-5418 59 ⁵/8" 10 5/8" 14⁵/8" 20 7/16" 26 7/16" 28 7/16" 32 7/16" 34 7/16" 43 5/8" 55 ⁵/8" (269) (371) (519) (672) (722) (824) (875) (1107) (1412) (1514)15 ⁵/₈" (396) (302)1-8 **FWSTDS**1318 **FWSTDS**1718 **FWTDS**2118 FWTDS2718 FWTDS2918 **FWTDS**3118 **FWTDS**3318 **FWTDS**5018 **FWTDS**5418 FWSTCDS1718 FWTCDS2118 **FWTCDS**2718 **FWTCDS**2918 FWTCDS3118 **FWTCDS**3318 **FWTCDS**5018 **FWTCDS**5418 FWSTCDS1318 6 3/8" 10 3/8" 12 7/8" 18 7/8" 20 7/8" 24 7/8" 26 7/8" 36" 48" 52" (163) (264) (327) (479) (530) (632) (683) (915) (1220)(1322).-11 1/4 $15^{3/8}$ " (610) (591)(391) 2'-0" FWSLTD-1-1320 FWSLTD-1-1720 FWTD-1-2120 **FWTD**-1-2720 FWTD-1-2920 **FWTD**-1-3120 **FWTD**-1-3320 FWTD-1-4020 FWTD-1-5020 FWTD-1-5420 FWSTCD-1-1320 FWSTCD-1-1720 FWTCD-1-2120 FWTCD-1-2720 FWTCD-1-2920 FWTCD-1-3120 FWTCD-1-3320 FWTCD-1-4020 FWTCD-1-5020 FWTCD-1-5420

^{• &}quot;Transom Dimension" always refers to outside frame-to-frame dimension.

^{*}Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters.



Notes on page 158 also apply to this page.

G1150 G115	•						
Column C	/1010\	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		•		-
CHASS C	(1010)	(1911)	(2114)	(2398)	(2419)	(2703)	(2856)
00° 04° 72° 83 7/m² 84° 65 7/m² 101 7/m²	·	-					
(1359) (1628) (1639) (2139) (2131) (2134) (2418) (2570)	(1829)	(1930)	(2133)	(2413)	(2438)	(2/1/)	(2870)
(1359) (1628) (1639) (2139) (2131) (2134) (2418) (2570)							
PMTD P					•	-	•
PMTD-1-9010	(1323)	(1020)	(1650)	(2113)	(2134)	(2418)	(2570)
(832) (883							FWTCD -1-9610
PMTD-2-6010 PMTD-2-6010 PMTD-2-6010 PMTD-2-6010 PMTD-3-6010							
Carrier Part	FWTD -2-6010	FWTD -2-6410		FWTD-3-71110		FWTD-3-81110	FWTD -3-9610
NVTDS6110	•			•			
### PWTD-16014 PWTD-17014 PWTD-17	(1717)	(1818)	(2022)	(2305)	(2326)	(2610)	(2762)
### PWTD-16014 PWTD-17014 PWTD-17	FWTDS 6010	FWTDS6410	FWTD\$7010	FWTD\$71110	FWTD\$8010	FWTD\$81110	FWTCDS9610
Company Comp							
Company Comp							
PWID-1-6014	60"	64"	72"	83 3/16"	84"	95 3/16"	101 3/16"
PMTD-1-6014 PMTD-1-6414 PMTD-1-7014 PMTD-1-7014 PMTD-1-7014 PMTD-1-8014 PMTD-1-8018	(1525)	(1626)	(1830)	(2113)	(2134)	(2418)	(2570)
PMTD-1-6014 PMTD-1-6414 PMTD-1-7014 PMTD-1-7014 PMTD-1-7014 PMTD-1-8014 PMTD-1-8018							
(632) (683) (632) (683) (632) (683)	FWTCD -1-6014	FWTCD-1-6414		FWTCD-1-71114		FWTCD-1-81114	FWTCD-1-9614
FWTCD-2-6014 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71118 FWTCD-1-6118 FWTCD-1-6418 FWTCD-1-7018 FWTCD-1-71118 FWTCD-1-71118 FWTCD-3-71118							
FWTCD-2-6014 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71114 FWTCD-3-71118 FWTCD-1-6118 FWTCD-1-6418 FWTCD-1-7018 FWTCD-1-71118 FWTCD-1-71118 FWTCD-3-71118							
(1717)							
FWTDS6014	•	· · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	•	•	•	
### FWTCD\$6014 FWTCD\$6414 FWTCD\$7014 FWTCD\$7014 FWTCD\$7014 FWTCD\$8014 FWTCD\$81114 FWTCD\$81114 FWTCD\$8014 #### FWTCD\$6014 FWTD\$6418 FWTD\$6418 FWTCD\$6418 F	(1717)	(1818)	(2022)	(2305)	(2326)	(2010)	(2762)
### FWTCD\$6014 FWTCD\$6414 FWTCD\$7014 FWTCD\$7014 FWTCD\$7014 FWTCD\$8014 FWTCD\$81114 FWTCD\$81114 FWTCD\$8014 #### FWTCD\$6014 FWTD\$6418 FWTD\$6418 FWTCD\$6418 F	FWTDS6014	FWTDS6414	FWTDS7014	FWTDS71114	FWTD\$8014	FWTD\$81114	FWTDS9614
(1525)							
(1525)							
FWTD-1-6018							
FWTCD-1-6018 FWTCD-1-7018 FWTCD-1-7018 FWTCD-1-7018 FWTCD-1-8018 FWTCD-1-81118 FWTCD-1-9618 24 7/8"	60"	64"	72"	83 3/16"	84"	95 ³ /16"	101 3/16"
FWTCD-1-6018 FWTCD-1-7018 FWTCD-1-7018 FWTCD-1-7018 FWTCD-1-8018 FWTCD-1-81118 FWTCD-1-9618 24 7/8"							•
G632 G633 G530 G632 G683 G530 G632 G683 G530 G632 G683 G530 G632 G683 G530							•
FWTD-2-6018 FWTD-2-6418 FWTCD-3-71118 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618 FWTCD-3-71118 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618 FWTCD-3-9618 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618	(1525) FWTD-1-6018 FWTCD-1-6018	(1626) FWTD-1-6418 FWTCD-1-6418	(1830) FWTD -1-7018	(2113) FWTD-1-71118 FWTCD-1-71118	(2134) FWTD -1-8018	(2418) FWTD-1-81118 FWTCD-1-81118	(2570) FWTD1-9618 FWTCD-1-9618
FWTCD-2-6018 FWTCD-2-6418 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618 FWTCD-3-9618 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618 FWTCD-3-9618 FWTCD-3-9618 FWTCDS6018 FWTCDS6	(1525) FWTD-1-6018 FWTCD-1-6018 24 ⁷ /8"	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s"	(1830) FWTD -1-7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8"	(2134) FWTD -1-8018	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8"	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8"
FWTCD-2-6018 FWTCD-2-6418 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618 FWTCD-3-9618 FWTCD-3-71118 FWTCD-3-81118 FWTCD-3-9618 FWTCD-3-9618 FWTCD-3-9618 FWTCDS6018 FWTCDS6	(1525) FWTD-1-6018 FWTCD-1-6018 24 ⁷ /8"	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s"	(1830) FWTD -1-7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8"	(2134) FWTD -1-8018	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8"	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8"
(1717) (1818) (2022) (2305) (2326) (2610) (2762) FWTDS6018 FWTCDS6418 FWTCDS7018 FWTCDS71118 FWTCDS8018 FWTCDS81118 FWTCDS81118 FWTCDS81118 FWTCDS8018 60" 64" 72" 83 ³/16" 84" 95 ³/16" 101 ³/16" (1525) (1626) (1830) (2113) (2134) (2418) (2570) FWTD-1-6020 FWTD-1-6420 FWTD-1-7020 FWTD-1-71120 FWTD-1-8020 FWTD-1-81120 FWTD-1-9620	(1525) FWTD-1-6018 FWTCD-1-6018 24 ⁷ /8" (632)	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s" (683)	(1830) FWTD -1-7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530)	(2134) FWTD -1-8018	FWTD-1-81118 FWTCD-1-81118 24 7/8" (632)	FWTD1-9618 FWTCD-1-9618 26 7/8" (683)
FWTDS6018 FWTCDS6418 FWTCDS7018 FWTCDS71118 FWTCDS8018 FWTCDS81118	(1525) FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /8" (683) FWTD-2-6418	(1830) FWTD -1-7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118	(2134) FWTD -1-8018	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618
FWTCDS6018 FWTCDS7018 FWTCDS71118 FWTCDS8018 FWTCDS81118 FWTCDS9618 60" 64" 72" 83 ³/16" 84" 95 ³/16" 101 ³/16" (1525) (1626) (1830) (2113) (2134) (2418) (2570) FWTD-1-6020 FWTD-1-6420 FWTD-1-7020 FWTD-1-71120 FWTD-1-8020 FWTD-1-81120 FWTD-1-9620	(1525) FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018 FWTCD-2-6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /s"	(1830) FWTD-1-7018 FWTCD-1-7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118	(2134) FWTD-1-8018 FWTCD-1-8018	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 ³ / ₄ "	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4"
FWTCDS6018 FWTCDS7018 FWTCDS71118 FWTCDS8018 FWTCDS81118 FWTCDS9618 60" 64" 72" 83 ³/16" 84" 95 ³/16" 101 ³/16" (1525) (1626) (1830) (2113) (2134) (2418) (2570) FWTD-1-6020 FWTD-1-6420 FWTD-1-7020 FWTD-1-71120 FWTD-1-8020 FWTD-1-81120 FWTD-1-9620	(1525) FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018 FWTCD-2-6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /s"	(1830) FWTD-1-7018 FWTCD-1-7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118	(2134) FWTD-1-8018 FWTCD-1-8018	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 ³ / ₄ "	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4"
60" 64" 72" 83 ³ / ₁₆ " 84" 95 ³ / ₁₆ " 101 ³ / ₁₆ " (1525) (1626) (1830) (2113) (2113) (2134) (2418) (2570) FWTD-1-6020 FWTD-1-6420 FWTD-1-7020 FWTD-1-71120 FWTD-1-8020 FWTD-1-81120 FWTD-1-9620	(1525) FWTD-1-6018 FWTCD-1-6018 24 ⁷ /8" (632) FWTD-2-6018 FWTCD-2-6018 67 ⁵ /8" (1717)	(1626) FWTD-1-6418 FWTCD-1-6418 26 7/8" (683) FWTD-2-6418 FWTCD-2-6418 71 5/8" (1818)	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022)	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305)	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ / ₈ " (2326)	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 ³ / ₄ " (2610)	FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762)
(1525) (1626) (1830) (2113) (2134) (2418) (2570) FWTD-1-6020 FWTD-1-6420 FWTD-1-7020 FWTD-1-71120 FWTD-1-8020 FWTD-1-81120 FWTD-1-9620	FWTD-1-6018 FWTCD-1-6018 24 ⁷ /8" (632) FWTCD-2-6018 FWTCD-2-6018 67 ⁵ /8" (1717)	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /s" (1818) FWTDS6418	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022) FWTDS7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305) FWTDS71118	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ / ₈ " (2326) FWTD\$8018	(2418) FWTD-1-81118 FWCD-1-81118 24 ⁷ /8" (632) FWTD-3-81118 FWCD-3-81118 102 ³ / ₄ " (2610) FWTDS81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762) FWTDS9618
(1525) (1626) (1830) (2113) (2134) (2418) (2570) (2	FWTD-1-6018 FWTCD-1-6018 24 ⁷ /8" (632) FWTCD-2-6018 FWTCD-2-6018 67 ⁵ /8" (1717)	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /s" (1818) FWTDS6418	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022) FWTDS7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305) FWTDS71118	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ / ₈ " (2326) FWTD\$8018	(2418) FWTD-1-81118 FWCD-1-81118 24 ⁷ /8" (632) FWTD-3-81118 FWCD-3-81118 102 ³ / ₄ " (2610) FWTDS81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762) FWTDS9618
	FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018 FWTCD-2-6018 67 5/8" (1717) FWTDS6018 FWTCDS6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /s" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /s" (1818) FWTDS6418 FWTCDS6418	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022) FWTDS7018 FWTCDS7018	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305) FWTDS71118 FWTCDS71118	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ / ₈ " (2326) FWTDS8018 FWTCDS8018	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 3/4" (2610) FWTDS81118 FWTCDS81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762) FWTDS9618 FWTDS9618 FWTDS9618
	FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018 FWTCD-2-6018 67 5/8" (1717) FWTDS6018 FWTCDS6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /8" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /8" (1818) FWTDS6418 FWTCDS6418	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022) FWTDS7018 FWTCDS7018 72"	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305) FWTDS71118 FWTCDS71118	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ /8" (2326) FWTDS8018 FWTCDS8018 84"	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 3/4" (2610) FWTDS81118 FWTCDS81118 FWTCDS81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762) FWTDS9618 FWTDS9618 FWTDS9618 FWTDS9618
	FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018 FWTCD-2-6018 67 5/8" (1717) FWTDS6018 FWTCDS6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /8" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /8" (1818) FWTDS6418 FWTCDS6418	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022) FWTDS7018 FWTCDS7018 72"	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305) FWTDS71118 FWTCDS71118	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ /8" (2326) FWTDS8018 FWTCDS8018 84"	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 3/4" (2610) FWTDS81118 FWTCDS81118 FWTCDS81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762) FWTDS9618 FWTDS9618 FWTDS9618 FWTDS9618
	FWTD-1-6018 FWTCD-1-6018 24 7/8" (632) FWTD-2-6018 FWTCD-2-6018 67 5/8" (1717) FWTDS6018 FWTCDS6018	(1626) FWTD-1-6418 FWTCD-1-6418 26 ⁷ /8" (683) FWTD-2-6418 FWTCD-2-6418 71 ⁵ /8" (1818) FWTDS6418 FWTCDS6418 FWTCDS6418	(1830) FWTD-1-7018 FWTCD-1-7018 79 5/8" (2022) FWTDS7018 FWTCDS7018 72" (1830)	(2113) FWTD-1-71118 FWTCD-1-71118 20 7/8" (530) FWTD-3-71118 FWTCD-3-71118 90 3/4" (2305) FWTDS71118 FWTCDS71118 83 3/16" (2113)	(2134) FWTD-1-8018 FWTCD-1-8018 91 ⁵ / ₈ " (2326) FWTDS8018 FWTCDS8018 84" (2134)	(2418) FWTD-1-81118 FWTCD-1-81118 24 7/8" (632) FWTD-3-81118 FWTCD-3-81118 102 3/4" (2610) FWTDS81118 FWTCDS81118 FWTCDS81118	(2570) FWTD1-9618 FWTCD-1-9618 26 7/8" (683) FWTD-3-9618 FWTCD-3-9618 108 3/4" (2762) FWTDS9618 FWTDS9618 101 3/16" (2570)

continued on next page

^{• &}quot;Transom Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

PATIO DOOR SIDELIGHTS & TRANSOMS

Table of Patio Door Transom and Sidelight Transom Sizes (continued)

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

1'-21/4" 1-61/4" 2'-01/8" 2'-61/8" 2'-81/8" 3'-01/8" 3'-21/8" 3'-111/4" 4'-111/4" 5'-31/4" Transom Dimension (362) (464) (612) (765) (1200) (816) (918) (968) (1505)(1607) 1'-3" 1'-7" 2'-1" 2'-7" 2'-9" 3'-1" 3'-3" 4'-0" 5'-0" 5'-4" Rough Opening (381) (483) (635) (787) (838) (940) (991) (1219)(1524)(1626)CUSTOM WIDTHS AVAILABLE — Vary based on transom style. Unobstructed Glass 12 7/8" 20 7/8" (single sash only) 18 ⁷/8" - 11 1/4" to 27 1/4" (327)(479) (530)15 3/8" (610)(391)(591)2'-0" FWTD-2-5420 FWTD-2-4020 FWTD-2-5020 FWTCD-2-4020 FWTCD-2-5020 FWTCD-2-5420 10 5/8" 14 5/8" 20 7/16" 26 7/16" 28 7/16" 32 7/16" 34 7/16" 43 5/8" 55 5/8" 59 5/8" **CUSTOM HEIGHTS** (371) (269) (519) (672) (722) (824) (875) (1107) (1514) (1412) 19 ⁵/₈" (498) (610)(591)2'-0" **FWSTDS**1320 **FWSTDS**1720 **FWTDS**2120 **FWTDS**2720 **FWTDS**2920 **FWTDS**3120 **FWTDS**3320 FWTDS4020 FWTDS5020 FWTDS5420 FWSTCDS1320 FWSTCDS1720 FWTCDS2120 **FWTCDS**2720 FWTCDS2920 FWTCDS3120 FWTCDS3320 FWTCDS4020 FWTCDS5020 FWTCDS5420 $6^{3/8}$ " 10 3/8" 12 ⁷/8" 18 ⁷/8" 20 7/8" 24 7/8" 26 ⁷/8" 36" 48" 52" (163) (264) (327) (479) (530) (632) (683) (915) (1220)(1322)19 3/8" (692)(711) 2'-4" (493) FWSLTD-1-1324 FWSLTD-1-1724 FWTD-1-2124 FWTD-1-2724 FWTD-1-2924 FWTD-1-3124 FWTD-1-3324 FWTD-1-4024 FWSTCD-1-1324 FWSCD-1-1724 FWTCD-1-2124 FWTCD-1-2724 FWTCD-1-2924 FWTCD-1-3124 FWTCD-1-3324 FWTCD-1-4024 **FWTD-1-**5024 FWTD-1-5424 FWTCD-1-5024 FWTCD-1-5424 18 ⁷/8" 20 7/8" 12 7/8" (327)(530)(479)19 3/8" (711) (692)2'-4" (493)



(692)

23 5/8"

(263)

(711)

2'-4"

Custom-size patio door transoms are available in 1/8" (3) increments. See pages 174-175 for custom sizes and specifications.

10 5/8"

(269)

FWSTDS1324

FWSTCDS1324

14 5/8"

(371)

FWSTDS1724

FWSTCDS1724

20 7/16"

(519)

FWTDS2124

FWTCDS2124

26 7/16"

(672)

FWTDS2724

FWTCDS2724

28 7/16"

(722)

FWTDS2924

32 7/16"

FWTDS3124

FWTCDS3124

(824)

34 7/16"

(875)

FWTDS3324

FWTCDS3324

Transoms with either traditional or contemporary glass stops are available either direct-set or sash-set. Direct-set transoms provide maximum unobstructed glass. For venting transom windows, see page 160. For patio door sidelights, see page 161.

Grille patterns shown on page 164. Details shown on pages 164-167.

Direct-Set Patio Door Sidelight Transom Traditional (FWSTDS)/Contemporary (FWSTCDS)

Sash-Set Patio Door Sidelight Transom Traditional (FWSLTD)/Contemporary (FWSTCD)

Direct-Set Patio Door Transom Traditional (FWTDS)/Contemporary (FWTCDS)

Sash-Set Patio Door Transoms

Traditional (FWTD-1, FWTD-2, FWTD-3)/Contemporary (FWTCD-1, FWTCD-2, FWTCD-3)

FWTD-2-4024

FWTCD-2-4024

43 5/8"

(1107)

FWTDS4024

FWTCDS4024

FWTD-2-5024

FWTCD-2-5024

55 ⁵/8"

(1412)

FWTDS5024

FWTCDS5024

FWTD-2-5424

FWTCD-2-5424

59 5/8"

(1514)

FWTDS5424

FWTCDS5424

^{• &}quot;Transom Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters



Notes on the previous page also apply to this page.

5'-11 ¹ /4"	6'-31/4"	6'-11 ¹ /4"	7'-10 7/16"	7'-11 ¹ /4"	8'-10 7/16"	9'-47/16"
(1810)	(1911)	(2114)	(2398)	(2419)	(2703)	(2856)
6'-0"	6'-4"	7'-0"	7'-11"	8'-0"	8'-11"	9'-5"
(1829)	(1930)	(2133)	(2413)	(2438)	(2717)	(2870)
24 ⁷ /8"	26 ⁷ /8"		20 7/8"		24 7/8"	26 ⁷ /8"
(632)	(683)		(530)		(632)	(683)
FWTD -2-6020	FWTD -2-6420		FWTD -3-71120		FWTD -3-81120	FWTD -3-9620
FWTCD-2-6020	FWTCD-2-6420		FWTCD-3-71120		FWTCD-3-81120	FWTCD-3-9620
67 ⁵ /8"	71 5/8"	79 ⁵ /8"	90 3/4"	91 5/8"	102 3/4"	108 3/4"
(1717)	(1818)	(2022)	(2305)	(2326)	(2610)	(2762)
FWTDS6020	FWTDS6420	FWTDS7020	FWTDS71120	FWTDS8020	FWTDS 81120	FWTDS9620
FWTCDS6020	FWTCDS6420	FWTCDS7020	FWTCDS71120	FWTCDS8020	FWTCDS81120	FWTCDS 9620
60"	64"	72"	83 3/16"	84"	95 3/16"	101 3/16"
(1525)	(1626)	(1830)	(2113)	(2134)	(2418)	(2570)
FWTD-1-6024 FWTCD-1-6024	FWTD-1-6424 FWTCD-1-6424	FWTD -1-7024 FWTCD -1-7024	FWTD -1-71124 FWTCD -1-71124	FWTD-1-8024 FWTCD-1-8024	FWTD -1-81124 FWTCD -1-81124	FWTD -1-9624 FWTCD -1-9624
24 7/8"	26 ⁷ /8"		20 7/8"		24 7/8"	26 7/8"
(632)	(683)		(530)		(632)	(683)
FWTD -2-6024	FWTD -2-6424		FWTD -3-71124		FWTD-3-81124	FWTD-3-9624
FWTCD-2-6024	FWTCD-2-6424		FWTCD-3-71124		FWTCD -3-81124	FWTCD -3-9624
67 5/8"	71 5/8"	79 ⁵ /8"	90 3/4"	91 5/8"	102 3/4"	108 3/4"
(1717)	(1818)	(2022)	(2305)	(2326)	(2610)	(2762)
FIATRC CO24	FUTDCC424	FWTDS7024	FMTDC71104	FWTD\$8024	FWTD\$81124	FWTD\$9624
FWTDS6024 FWTCDS6024	FWTDS6424 FWTCDS6424	FWTCDS7024	FWTDS71124 FWTCDS71124	FWTCDS8024	FWTCD\$81124 FWTCD\$81124	FWTCDS9624

^{• &}quot;Transom Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

PATIO DOOR SIDELIGHTS & TRANSOMS

Table of Venting Transom Window Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

Window Dimension	2'-0 ¹ /8" (612)	2'-6 ¹ /8" (765)	2'-8 ¹ /8" (816)	3'-0 ¹ /8" (918)	3'-2 ¹ /8" (968)	3'-11 ¹ /4" (1200)	4'-11 ¹ / ₄ " (1505)	5'-3 ¹ / ₄ " (1607)	5'-11 ¹ /4" (1810)
Minimum Rough Opening	2'-1" (635)	(787)	2'-9" (838)	3'-1" (940)	3'-3" (991)	4'-0" (1219)	5'-0" (1524)	5'-4" (1626)	6'-0" (1829)
Unobstructed Glass	CUSTOM SIZ	ZES AVAILABLE							
(single sash only)	17 5/8" (448)	23 5/8" (600)	25 ⁵ /8" (651)	29 5/8" (752)	31 5/8" (803)	40 5/8" (1032)	52 ⁵ /8" (1337)	56 ⁵ /8" (1438)	64 ⁵ /8" (1641)
1'-31/4 (387) 1'-4" (406) 8 5/8" (219)									
S A	ATV 2114	ATV 2714	ATV 2914	ATV 3114	ATV 3314	ATV 4014	ATV 5014	ATV 5414	ATV 6014
SIZES	17 5/8"	23 5/8"	25 5/8"	29 5/8"	31 5/8"	40 5/8"	52 5/8"	56 5/8"	64 5/8"
"4 C - C "8 C X	[(448)	(600)	(651)	T (752)	(803)	(1032)	(1337)	(1438)	(1641)
1'-7 1/4" (489) 1'-8" (508) 12 5/8" (321) CUSTOM									
· · · · ·	ATV2118	ATV 2718	ATV2918	ATV 3118	ATV3318	ATV 4018	ATV5018	ATV 5418	ATV6018
= 4	17 5/8" (448)	23 5/8" (600)	25 5/8" (651)	29 5/8" (752)	31 5/8" (803)	40 5/8" (1032)	52 5/8" (1337)	56 ⁵ /8" (1438)	64 ⁵ /8" (1641)
1'-11 1/4 (591) 2'-0" (610) 16 5/8" (422)									
	ATV2120	ATV2720	ATV2920	ATV 3120	ATV 3320	ATV 4020	ATV5020	ATV5420	ATV6020
	17 5/8"	23 5/8"	25 5/8"	29 5/8"	31 5/8"	40 5/8"	52 5/8"	56 ⁵ /8"	64 5/8"
=.	(448)	(600)	(651)	Ĭ (752) Ĭ	T (803)	(1032)	T (1337)	(1438)	(1641)
2'-3 1/4" (692) 2'-4" (711) 20 5/8" (524)									
	ATV2124	ATV2724	ATV2924	ATV 3124	ATV 3324	ATV4024	ATV5024	ATV5424	ATV6024



Custom-size venting transoms are available in 1/8" (3) increments.

See page 69 for custom sizes and specifications.



Venting Transom Window (ATV)

Venting transom windows have traditional glass stops and match patio doors with traditional panels.*

Grille patterns shown in the window section on page 58.

Details shown on page 166.

^{• &}quot;Window Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters.

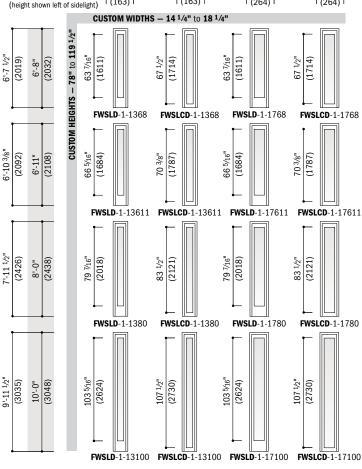
[•] Venting transom windows are not available with contemporary glass stops.

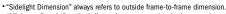


Table of Patio Door Sidelight Sizes

Scale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96







^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.



Custom-size patio door sidelights are available in 1/8" (3) increments. See page 175 for custom sizes and specifications.

Choose traditional (FWSLD) or contemporary (FWSLCD) panel. For patio door transoms, see pages 156-160.

Grille patterns shown on page 164. Details shown on pages 165 and 167.

Patio Door Sidelight Area Specifications

Sidelight Number	Traditional Panel Glass Area Sq. Ft./(m²)		Pa	nporary nel s Area s./(m²)	Overall Door Area Sq. Ft./(m²)		
FWSLD/FWSLCD1368	2.82	(0.26)	3.00	(0.28)	7.87	(0.73)	
FWSLD/FWSLCD13611	2.95	(0.27)	3.13	(0.29)	8.15	(0.76)	
FWSLD/FWSLCD1380	3.53	(0.33)	3.71	(0.34)	9.45	(0.88)	
FWSLD/FWSLCD13100	4.60	(0.43)	4.78	(0.44)	11.83	(1.10)	
FWSLD/FWSLCD1768	4.58	(0.43)	4.88	(0.45)	10.08	(0.94)	
FWSLD/FWSLCD17611	4.79	(0.44)	5.09	(0.47)	10.44	(0.97)	
FWSLD/FWSLCD1780	5.74	(0.53)	6.03	(0.56)	12.10	(1.12)	
FWSLD/FWSLCD17100	7.47	(0.69)	7.77	(0.72)	15.14	(1.41)	

[·] Dimensions in parentheses are in square meters.

Dimensions in parentheses are in millimeters.

Direct-Set Patio Door Transom and Sidelight Transom Area Specifications

		rea	Overall Transom Area Sq. Ft./(m²)		
DUCTOR / DUCTOR 1210		t./(m²)			
FWSTDS/FWSTCDS1310	0.56	(0.05)	1.11	(0.10)	
FWSTDS/FWSTCDS1314	0.85	(0.08)	1.51	(0.14)	
FWSTDS/FWSTCDS1318	1.15	(0.11)	1.90	(0.18)	
FWSTDS/FWSTCDS1320	1.44	(0.13)	2.30	(0.21)	
FWSTDS/FWSTCDS1324	1.74	(0.16)	2.70	(0.25)	
FWSTDS/FWSTCDS1710	0.77	(0.07)	1.43	(0.13)	
FWSTDS/FWSTCDS1714	1.18	(0.11)	1.93	(0.18)	
FWSTDS/FWSTCDS1718	1.58	(0.15)	2.44	(0.23)	
FWSTDS/FWSTCDS1720	1.99	(0.18)	2.95	(0.27)	
FWSTDS/FWSTCDS1724	2.39	(0.22)	3.45	(0.32)	
FWTDS/FWTCDS2110	1.08	(0.10)	1.88	(0.17)	
FWTDS/FWTCDS2114	1.65	(0.15)	2.55	(0.24)	
FWTDS/FWTCDS2118	2.21	(0.21)	3.22	(0.30)	
FWTDS/FWTCDS2120	2.78	(0.26)	3.89	(0.36)	
FWTDS/FWTCDS2124	3.35	(0.31)	4.56	(0.42)	
FWTDS/FWTCDS2710	1.39	(0.13)	2.35	(0.22)	
FWTDS/FWTCDS2714	2.13	(0.20)	3.19	(0.30)	
FWTDS/FWTCDS2718	2.86	(0.27)	4.02	(0.37)	
FWTDS/FWTCDS2720	3.60	(0.33)	4.86	(0.45)	
FWTDS/FWTCDS2724	4.33	(0.40)	5.69	(0.53)	
FWTDS/FWTCDS2910	1.50	(0.14)	2.51	(0.23)	
FWTDS/FWTCDS2914	2.29	(0.21)	3.40	(0.32)	
FWTDS/FWTCDS2918	3.08	(0.29)	4.29	(0.40)	
FWTDS/FWTCDS2920	3.87	(0.36)	5.18	(0.48)	
FWTDS/FWTCDS2924	4.66	(0.43)	6.07	(0.56)	
FWTDS/FWTCDS3110	1.71	(0.16)	2.82	(0.26)	
FWTDS/FWTCDS3114	2.61	(0.24)	3.82	(0.36)	
FWTDS/FWTCDS3118	3.51	(0.33)	4.83	(0.45)	
FWTDS/FWTCDS3120	4.41	(0.41)	5.83	(0.54)	
FWTDS/FWTCDS3124	5.31	(0.49)	6.83	(0.63)	
FWTDS/FWTCDS3310	1.82	(0.17)	2.98	(0.28)	
FWTDS/FWTCDS3314	2.77	(0.26)	4.03	(0.37)	
FWTDS/FWTCDS3318	3.73	(0.35)	5.09	(0.47)	
FWTDS/FWTCDS3320	4.69	(0.44)	6.15	(0.57)	
FWTDS/FWTCDS3324	5.64	(0.52)	7.21	(0.67)	
FWTDS/FWTCDS4010	2.30	(0.21)	3.69	(0.34)	
FWTDS/FWTCDS4014	3.51	(0.33)	5.00	(0.46)	
FWTDS/FWTCDS4018	4.72	(0.44)	6.32	(0.59)	
FWTDS/FWTCDS4020	5.93	(0.55)	7.63	(0.71)	
FWTDS/FWTCDS4024	7.14	(0.66)	8.94	(0.83)	
FWTDS/FWTCDS5010	2.93	(0.27)	4.63	(0.43)	
FWTDS/FWTCDS5014	4.48	(0.42)	6.27	(0.58)	
FWTDS/FWTCDS5018	6.02	(0.56)	7.92	(0.74)	
FWTDS/FWTCDS5020	7.56	(0.70)	9.57	(0.89)	
FWTDS/FWTCDS5024	9.11	(0.85)	11.21	(1.04)	
FWTDS/FWTCDS5410	3.14	(0.29)	4.94	(0.46)	
FWTDS/FWTCDS5414	4.80	(0.45)	6.70	(0.62)	
FWTDS/FWTCDS5418	6.45	(0.60)	8.46	(0.79)	
FWTDS/FWTCDS5420	8.11	(0.75)	10.21	(0.95)	
FWTDS/FWTCDS5424	9.76	(0.91)	11.97	(1.11)	
FWTDS/FWTCDS6010	3.56	(0.33)	5.57	(0.52)	
FWTDS/FWTCDS6014	5.44	(0.51)	7.55	(0.70)	
FWTDS/FWTCDS6018	7.32	(0.68)	9.52	(0.88)	
FWTDS/FWTCDS6020	9.20	(0.85)	11.50	(1.07)	
FWTDS/FWTCDS6024	11.08	(1.03)	13.48	(1.25)	
FWTDS/FWTCDS6410	3.78	(0.35)	5.88	(0.55)	
FWTDS/FWTCDS6414	5.76	(0.53)	7.97	(0.74)	
FWTDS/FWTCDS6418	7.75	(0.72)	10.06	(0.74)	
FWTDS/FWTCDS6420	9.74				
FWTDS/FWTCDS6424		(0.90)	12.15	(1.13)	
1 11103/ FW10030424	11.73	(1.09)	14.24	(1.32)	

Transom Number	Ai	ass rea t./(m²)	Ar	Transom ea t./(m²)
FWTDS/FWTCDS7010	4.20	(0.39)	6.50	(0.60)
FWTDS/FWTCDS7014	6.41	(0.60)	8.82	(0.82)
FWTDS/FWTCDS7018	8.62	(0.80)	11.13	(1.03)
FWTDS/FWTCDS7020	10.83	(1.01)	13.44	(1.25)
FWTDS/FWTCDS7024	13.04	(1.21)	15.75	(1.46)
FWTDS/FWTCDS71110	4.79	(0.44)	7.38	(0.69)
FWTDS/FWTCDS71114	7.31	(0.68)	10.00	(0.93)
FWTDS/FWTCDS71118	9.83	(0.91)	12.62	(1.17)
FWTDS/FWTCDS71120	12.35	(1.15)	15.24	(1.42)
FWTDS/FWTCDS71124	14.87	(1.38)	17.87	(1.66)
FWTDS/FWTCDS8010	4.83	(0.45)	7.44	(0.69)
FWTDS/FWTCDS8014	7.37	(0.68)	10.09	(0.94)
FWTDS/FWTCDS8018	9.92	(0.92)	12.73	(1.18)
FWTDS/FWTCDS8020	12.46	(1.16)	15.38	(1.43)
FWTDS/FWTCDS8024	15.01	(1.39)	18.02	(1.67)
FWTDS/FWTCDS81110	5.42	(0.50)	8.31	(0.77)
FWTDS/FWTCDS81114	8.27	(0.77)	11.27	(1.05)
FWTDS/FWTCDS81118	11.13	(1.03)	14.22	(1.32)
FWTDS/FWTCDS81120	13.98	(1.30)	17.18	(1.60)
FWTDS/FWTCDS81124	16.84	(1.56)	20.14	(1.87)
FWTDS/FWTCDS9610	5.74	(0.53)	8.78	(0.82)
FWTDS/FWTCDS9614	8.76	(0.81)	11.90	(1.11)
FWTDS/FWTCDS9618	11.78	(1.09)	15.03	(1.40)
FWTDS/FWTCDS9620	14.80	(1.37)	18.15	(1.69)
FWTDS/FWTCDS9624	17.82	(1.66)	21.27	(1.98)

[•] Dimensions in parentheses are in square meters.

Sash-Set Patio Door Transom and Sidelight Transom Area Specifications

Transom Number	1A	ass ea t./(m²)	Ar	Transom ea t./(m²)
FWSLTD/FWSTCD1310	0.15	(0.01)	1.11	(0.10)
FWSLTD/FWSTCD1314	0.33	(0.03)	1.51	(0.14)
FWSLTD/FWSTCD1318	0.51	(0.05)	1.90	(0.18)
FWSLTD/FWSTCD1320	0.69	(0.06)	2.30	(0.21)
FWSLTD/FWSTCD1324	0.86	(0.08)	2.70	(0.25)
FWSLTD/FWSTCD1710	0.25	(0.02)	1.43	(0.13)
FWSLTD/FWSTCD1714	0.54	(0.05)	1.93	(0.18)
FWSLTD/FWSTCD1718	0.82	(0.08)	2.44	(0.23)
FWSLTD/FWSTCD1720	1.11	(0.10)	2.95	(0.27)
FWSLTD/FWSTCD1724	1.40	(0.13)	3.45	(0.32)
FWTD/FWTCD-1-2110	0.30	(0.03)	1.88	(0.17)
FWTD/FWTCD-1-2114	0.66	(0.06)	2.55	(0.24)
FWTD/FWTCD-1-2118	1.02	(0.09)	3.22	(0.30)
FWTD/FWTCD-1-2120	1.38	(0.13)	3.89	(0.36)
FWTD/FWTCD-1-2124	1.73	(0.16)	4.56	(0.42)
FWTD/FWTCD-1-2710	0.45	(0.04)	2.35	(0.22)
FWTD/FWTCD-1-2714	0.97	(0.09)	3.19	(0.30)
FWTD/FWTCD-1-2718	1.49	(0.14)	4.02	(0.37)
FWTD/FWTCD-1-2720	2.02	(0.19)	4.86	(0.45)
FWTD/FWTCD-1-2724	2.54	(0.24)	5.69	(0.53)
FWTD/FWTCD-1-2910	0.49	(0.05)	2.51	(0.23)
FWTD/FWTCD-1-2914	1.07	(0.10)	3.40	(0.32)
FWTD/FWTCD-1-2918	1.65	(0.15)	4.29	(0.40)
FWTD/FWTCD-1-2920	2.23	(0.21)	5.18	(0.48)
FWTD/FWTCD-1-2924	2.81	(0.26)	6.07	(0.56)
FWTD/FWTCD-1-3110	0.59	(0.05)	2.82	(0.26)
FWTD/FWTCD-1-3114	1.28	(0.12)	3.82	(0.35)

Transom Number	Ar	ess ea t./(m²)	Ar	Transom ea :./(m²)
FWTD/FWTCD-1-3118	1.97	(0.18)	4.83	(0.45)
FWTD/FWTCD-1-3120	2.66	(0.25)	5.83	(0.54)
FWTD/FWTCD-1-3124	3.35	(0.31)	6.83	(0.63)
FWTD/FWTCD-1-3310	0.64	(0.06)	2.98	(0.28)
FWTD/FWTCD-1-3314	1.38	(0.13)	4.03	(0.37)
FWTD/FWTCD-1-3318	2.13	(0.20)	5.09	(0.47)
FWTD/FWTCD-1-3320	2.88	(0.27)	6.15	(0.57)
FWTD/FWTCD-1-3324	3.62	(0.34)	7.21	(0.67)
FWTD/FWTCD-1-4010	0.85	(0.08)	3.69	(0.34)
FWTD/FWTCD-2-4010	0.61	(0.06)	3.69	(0.34)
FWTD/FWTCD-1-4014	1.85	(0.17)	5.00	(0.46)
FWTD/FWTCD-2-4014	1.32	(0.12)	5.00	(0.46)
FWTD/FWTCD-1-4018	2.85	(0.26)	6.32	(0.59)
FWTD/FWTCD-2-4018	2.04	(0.19)	6.32	(0.59)
FWTD/FWTCD-1-4020	3.85	(0.36)	7.63	(0.71)
FWTD/FWTCD-2-4020	2.75	(0.26)	7.63	(0.71)
FWTD/FWTCD-1-4024	4.86	(0.45)	8.94	(0.83)
FWTD/FWTCD-2-4024	3.47	(0.32)	8.94	(0.83)
FWTD/FWTCD-1-5010	1.14	(0.11)	4.63	(0.43)
FWTD/FWTCD-2-5010	0.89	(0.08)	4.63	(0.43)
FWTD/FWTCD-1-5014	2.47	(0.23)	6.27	(0.58)
FWTD/FWTCD-2-5014	1.94	(0.18)	6.27	(0.58)
FWTD/FWTCD-1-5018	3.80	(0.35)	7.92	(0.74)
FWTD/FWTCD-2-5018	2.99	(0.28)	7.92	(0.74)
FWTD/FWTCD-1-5020	5.14	(0.48)	9.57	(0.89)
FWTD/FWTCD-2-5020	4.04	(0.38)	9.57	(0.89)
FWTD/FWTCD-1-5024	6.47	(0.60)	11.21	(1.04)
FWTD/FWTCD-2-5024	5.09	(0.47)	11.21	(1.04)
FWTD/FWTCD-1-5410	1.23	(0.11)	4.94	(0.46)
FWTD/FWTCD-2-5410	0.99	(0.09)	4.94	(0.46)
FWTD/FWTCD-1-5414	2.68	(0.25)	6.70	(0.62)
FWTD/FWTCD-2-5414	2.15	(0.20)	6.70	(0.62)
FWTD/FWTCD-1-5418	4.12	(0.38)	8.46	(0.79)
FWTD/FWTCD-2-5418	3.31	(0.31)	8.46	(0.79)
FWTD/FWTCD-1-5420	5.57	(0.52)	10.21	(0.95)
FWTD/FWTCD-2-5420	4.47	(0.42)	10.21	(0.95)
FWTD/FWTCD-1-5424	7.01	(0.65)	11.97	(1.11)
FWTD/FWTCD-2-5424	5.63	(0.52)	11.97	(1.11)
FWTD/FWTCD-1-6010	1.42	(0.13)	5.57	(0.52)
FWTD/FWTCD-2-6010	1.18	(0.11)	5.57	(0.52)
FWTD/FWTCD-1-6014	3.09	(0.29)	7.55	(0.70)
FWTD/FWTCD-2-6014	2.56	(0.24)	7.55	(0.70)
FWTD/FWTCD-1-6018	4.75	(0.44)	9.52	(0.88)
FWTD/FWTCD-2-6018	3.94	(0.37)	9.52	(0.88)
FWTD/FWTCD-1-6020	6.42	(0.60)	11.50	(1.07)
FWTD/FWTCD-2-6020	5.32	(0.49)	11.50	(1.07)
FWTD/FWTCD-1-6024	8.09	(0.75)	13.48	(1.25)
FWTD/FWTCD-2-6024	6.70	(0.62)	13.48	(1.25)
FWTD/FWTCD-1-6410	1.51	(0.14)	5.88	(0.55)
FWTD/FWTCD-2-6410	1.27	(0.12)	5.88	(0.55)
FWTD/FWTCD-1-6414	3.29	(0.31)	7.97	(0.74)
FWTD/FWTCD-2-6414	2.76	(0.26)	7.97	(0.74)
FWTD/FWTCD-1-6418	5.07	(0.47)	10.06	(0.93)
FWTD/FWTCD-2-6418	4.26	(0.40)	10.06	(0.93)
FWTD/FWTCD-1-6420	6.85	(0.64)	12.15	(1.13)
FWTD/FWTCD-2-6420	5.75	(0.53)	12.15	(1.13)
FWTD/FWTCD-1-6424	8.63	(0.80)	14.24	(1.32)
FWTD/FWTCD-2-6424	7.24	(0.67)	14.24	(1.32)
FWTD/FWTCD-1-7010	1.70	(0.16)	6.50	(0.60)

 $[\]ensuremath{^{\bullet}}\xspace$ Dimensions in parentheses are in square meters.



Sash-Set Patio Door Transom and Sidelight Transom Area Specifications (continued)

		IIO (cona	,	
Transom Number	1A	ass ea t./(m²)	Ar	Transom ea t./(m²)
FWTD/FWTCD-1-7014	3.70	(0.34)	8.82	(0.82)
FWTD/FWTCD-1-7018	5.71	(0.53)	11.13	(1.03)
FWTD/FWTCD-1-7020	7.71	(0.72)	13.44	(1.25)
FWTD/FWTCD-1-7024	9.71	(0.90)	15.75	(1.46)
FWTD/FWTCD-1-71110	1.97	(0.18)	7.38	(0.69)
FWTD/FWTCD-3-71110	1.48	(0.14)	7.38	(0.69)
FWTD/FWTCD-1-71114	4.28	(0.40)	10.00	(0.93)
FWTD/FWTCD-3-71114	3.22	(0.30)	10.00	(0.93)
FWTD/FWTCD-1-71118	6.59	(0.61)	12.62	(1.17)
FWTD/FWTCD-3-71118	4.95	(0.46)	12.62	(1.17)
FWTD/FWTCD-1-71120	8.90	(0.83)	15.24	(1.42)
FWTD/FWTCD-3-71120	6.69	(0.62)	15.24	(1.42)
FWTD/FWTCD-1-71124	11.21	(1.04)	17.87	(1.66)
FWTD/FWTCD-3-71124	8.43	(0.78)	17.87	(1.66)
FWTD/FWTCD-1-8010	1.99	(0.18)	7.44	(0.69)
FWTD/FWTCD-1-8014	4.32	(0.40)	10.09	(0.94)
FWTD/FWTCD-1-8018	6.66	(0.62)	12.73	(1.18)
FWTD/FWTCD-1-8020	8.99	(0.84)	15.38	(1.43)
FWTD/FWTCD-1-8024	11.32	(1.05)	18.02	(1.67)
FWTD/FWTCD-1-81110	2.25	(0.21)	8.31	(0.77)
FWTD/FWTCD-3-81110	1.76	(0.16)	8.31	(0.77)
FWTD/FWTCD-1-81114	4.90	(0.46)	11.27	(1.05)
FWTD/FWTCD-3-81114	3.83	(0.36)	11.27	(1.05)
FWTD/FWTCD-1-81118	7.54	(0.70)	14.22	(1.32)
FWTD/FWTCD-3-81118	5.90	(0.55)	14.22	(1.32)
FWTD/FWTCD-1-81120	10.18	(0.95)	17.18	(1.60)
FWTD/FWTCD-3-81120	7.97	(0.74)	17.18	(1.60)
FWTD/FWTCD-1-81124	12.83	(1.19)	20.14	(1.87)
FWTD/FWTCD-3-81124	10.05	(0.93)	20.14	(1.87)
FWTD/FWTCD-1-9610	2.39	(0.22)	8.78	(0.82)
FWTD/FWTCD-3-9610	1.91	(0.18)	8.78	(0.82)
FWTD/FWTCD-1-9614	5.20	(0.48)	11.90	(1.11)
FWTD/FWTCD-3-9614	4.14	(0.38)	11.90	(1.11)
FWTD/FWTCD-1-9618	8.01	(0.74)	15.03	(1.40)
FWTD/FWTCD-3-9618	6.38	(0.59)	15.03	(1.40)
FWTD/FWTCD-1-9620	10.83	(1.01)	18.15	(1.69)
FWTD/FWTCD-3-9620	8.62	(0.80)	18.15	(1.69)
FWTD/FWTCD-1-9624	13.64	(1.27)	21.27	(1.98)
FWTD/FWTCD-3-9624	10.85	(1.01)	21.27	(1.98)

[•] Dimensions in parentheses are in square meters.

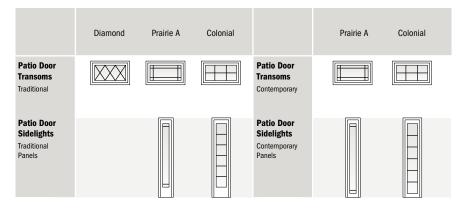
Venting Transom Window Opening and Area Specifications

Window Number		pening ./(m²)	Wie	dth		pth	Ar	ass rea :./(m²)		ent t./(m²)	to Top o	Subfloor of Inside Stop	Ar	Window rea t./(m²)
ATV 2114	0.79	(0.07)	Inches 19 3/16"	(487)	5 7/8"	(149)	1.04	(0.10)	0.79	(0.07)	69 1/2"	(1765)	2.56	(0.24)
ATV 2714	1.03	(0.10)	25 3/16"	(640)	5 7/8"	(149)	1.40	(0.13)	1.03	(0.10)	69 1/2"	(1765)	3.19	(0.30)
ATV 2914	1.11	(0.10)	27 3/16"	(691)	5 7/8"	(149)	1.52	(0.14)	1.11	(0.10)	69 1/2"	(1765)	3.40	(0.32)
ATV 3114	1.28	(0.12)	31 3/16"	(792)	5 7/8"	(149)	1.76	(0.16)	1.28	(0.12)	69 1/2"	(1765)	3.83	(0.36)
ATV 3314	1.36	(0.13)	33 3/16"	(843)	5 7/8"	(149)	1.88	(0.17)	1.36	(0.13)	69 1/2"	(1765)	4.04	(0.38)
ATV 4014	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(149)	2.43	(0.23)	1.73	(0.16)	69 1/2"	(1765)	5.00	(0.46)
ATV 5014	2.22	(0.21)	54 5/16"	(1380)	5 7/8"	(149)	3.14	(0.29)	2.22	(0.21)	69 1/2"	(1765)	6.28	(0.58)
ATV 5414	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(149)	3.38	(0.31)	2.39	(0.22)	69 1/2"	(1765)	6.70	(0.62)
ATV 6014	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(149)	3.86	(0.36)	2.71	(0.25)	69 1/2"	(1765)	7.55	(0.70)
ATV 2118	0.79	(0.07)	19 3/16"	(487)	5 7/8"	(149)	1.53	(0.14)	0.79	(0.07)	65 1/2"	(1664)	3.23	(0.30)
ATV 2718	1.03	(0.10)	25 3/16"	(640)	5 7/8"	(149)	2.05	(0.19)	1.03	(0.10)	65 1/2"	(1664)	4.03	(0.37)
ATV 2918	1.11	(0.10)	27 3/16"	(691)	5 7/8"	(149)	2.23	(0.21)	1.11	(0.10)	65 1/2"	(1664)	4.29	(0.40)
ATV 3118	1.28	(0.12)	31 3/16"	(792)	5 7/8"	(149)	2.58	(0.24)	1.28	(0.12)	65 1/2"	(1664)	4.83	(0.45)
ATV 3318	1.36	(0.13)	33 3/16"	(843)	5 7/8"	(149)	2.75	(0.26)	1.36	(0.13)	65 1/2"	(1664)	5.10	(0.47)
ATV 4018	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(149)	3.55	(0.33)	1.73	(0.16)	65 1/2"	(1664)	6.32	(0.59)
ATV 5018	2.22	(0.21)	54 5/16"	(1380)	5 7/8"	(149)	4.60	(0.43)	2.22	(0.21)	65 1/2"	(1664)	7.92	(0.74)
ATV 5418	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(149)	4.95	(0.46)	2.39	(0.22)	65 1/2"	(1664)	8.46	(0.79)
ATV 6018	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(149)	5.65	(0.52)	2.71	(0.25)	65 1/2"	(1664)	9.53	(0.89)
ATV 2120	0.79	(0.07)	19 3/16"	(487)	5 7/8"	(149)	2.01	(0.19)	0.79	(0.07)	61 1/2"	(1562)	3.90	(0.36)
ATV 2720	1.03	(0.10)	25 3/16"	(640)	5 7/8"	(149)	2.71	(0.25)	1.03	(0.10)	61 1/2"	(1562)	4.86	(0.45)
ATV 2920	1.11	(0.10)	27 3/16"	(691)	5 7/8"	(149)	2.94	(0.27)	1.11	(0.10)	61 1/2"	(1562)	5.19	(0.48)
ATV 3120	1.28	(0.12)	31 3/16"	(792)	5 7/8"	(149)	3.40	(0.32)	1.28	(0.12)	61 1/2"	(1562)	5.83	(0.54)
ATV 3320	1.36	(0.13)	33 3/16"	(843)	5 7/8"	(149)	3.63	(0.34)	1.36	(0.13)	61 1/2"	(1562)	6.16	(0.57)
ATV 4020	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(149)	4.68	(0.44)	1.73	(0.16)	61 1/2"	(1562)	7.63	(0.71)
ATV 5020	2.22	(0.21)	54 5/16"	(1380)	5 7/8"	(149)	6.06	(0.56)	2.22	(0.21)	61 1/2"	(1562)	9.57	(0.89)
ATV 5420	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(149)	6.53	(0.61)	2.39	(0.22)	61 1/2"	(1562)	10.21	(0.95)
ATV 6020	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(149)	7.45	(0.69)	2.71	(0.25)	61 1/2"	(1562)	1.07	(0.10)
ATV 2124	0.79	(0.07)	19 3/16"	(487)	5 7/8"	(149)	2.50	(0.23)	0.79	(0.07)	57 1/2"	(1461)	4.57	(0.42)
ATV 2724	1.03	(0.10)	25 3/16"	(640)	5 7/8"	(149)	3.36	(0.31)	1.03	(0.10)	57 1/2"	(1461)	5.70	(0.53)
ATV 2924	1.11	(0.10)	27 3/16"	(691)	5 7/8"	(149)	3.64	(0.34)	1.11	(0.10)	57 1/2"	(1461)	6.08	(0.56)
ATV 3124	1.28	(0.12)	31 3/16"	(792)	5 7/8"	(149)	4.22	(0.39)	1.28	(0.12)	57 1/2"	(1461)	6.84	(0.64)
ATV 3324	1.36	(0.13)	33 3/16"	(843)	5 7/8"	(149)	4.50	(0.42)	1.36	(0.13)	57 1/2"	(1461)	7.23	(0.67)
ATV 4024	1.73	(0.16)	42 5/16"	(1075)	5 7/8"	(149)	5.81	(0.54)	1.73	(0.16)	57 1/2"	(1461)	8.94	(0.83)
ATV 5024	2.22	(0.21)	54 5/16"	(1380)	5 7/8"	(149)	7.53	(0.70)	2.22	(0.21)	57 1/2"	(1461)	11.21	(1.04)
ATV 5424	2.39	(0.22)	58 5/16"	(1481)	5 7/8"	(149)	8.10	(0.75)	2.39	(0.22)	57 1/2"	(1461)	11.97	(1.11)
ATV 6024	2.71	(0.25)	66 5/16"	(1684)	5 7/8"	(149)	9.24	(0.86)	2.71	(0.25)	57 1/2"	(1461)	13.49	(1.25)

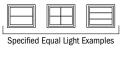
^{• &}quot;Top of Subfloor to Top of Inside Sill Stop" is calculated based upon a structural header height of 6° - $10^{\circ}1/2^{\circ}$ (2096).
• Dimensions in parentheses are in millimeters or square meters.

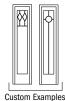
PATIO DOOR SIDELIGHTS & TRANSOMS

Grille Patterns



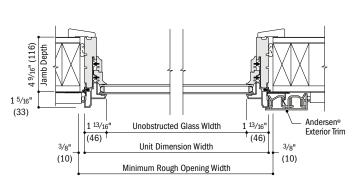
Number of lights and overall pattern varies with transom or sidelight size. Patterns may not be available in all configuration or sizes. Specified equal light patterns are also available. Custom patterns are only available for sidelights with traditional panels. For venting transom window grille patterns, see page 58. For more grille options, see page 19 or visit andersenwindows.com/grilles.



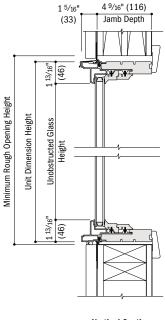


Direct-Set Patio Door Transom and Sidelight Transom Details - Traditional

Scale 1 $^{1}/_{2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section Transom and Sidelight Transom, Traditional



Vertical Section Transom and Sidelight Transom, Traditional

^{• 4 9/16&}quot; (116) jamb depth measurement is from back side of installation flange.

[·] Light-colored areas are parts included with sidelights and/or transoms. Dark-colored areas are additional Andersen* parts required to complete assembly as shown.

[·] Dimensions in parentheses are in millimeters.

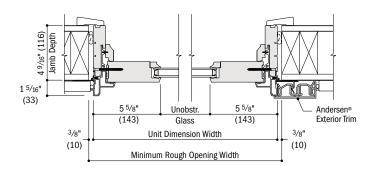
[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

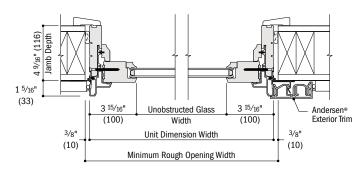
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.



Sash-Set Patio Door Transom, Sidelight Transom and Sidelight Details - Traditional

Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8



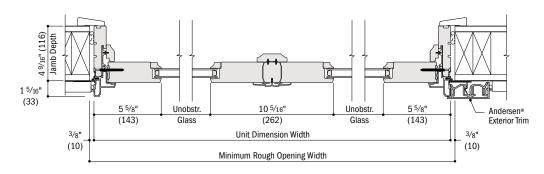


Horizontal Section

Transom, Traditional

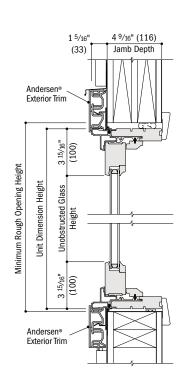
Horizontal Section

Sidelight Transom and Sidelight, Traditional

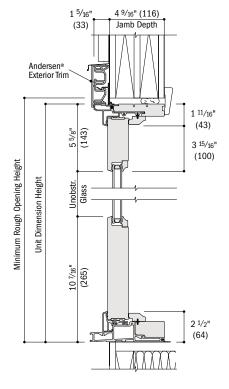


Horizontal Section

Twin Transom, Traditional



Vertical Section Transom and Sidelight Transom, Traditional



Vertical Section Sidelight, Traditional

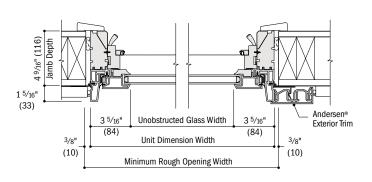
See pages 168-171 for joining details.

- $^{\circ}$ 4 $^{9}/_{16}$ " (116) jamb depth measurement is from back side of installation flange. • Light-colored areas are parts included with
- Light-colored areas are parts included with sidelights and/or transoms. Dark-colored areas are additional Andersen* parts required to complete assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

PATIO DOOR SIDELIGHTS & TRANSOMS

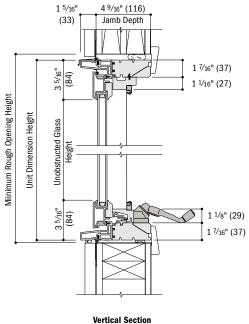
Venting Transom Window Details - Traditional

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

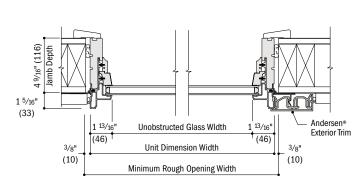
Venting Transom Window, Traditional



Venting Transom Window, Traditional

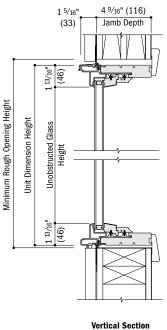
Direct-Set Patio Door Transom and Sidelight Transom Details - Contemporary

Scale 1 $\frac{1}{2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section

Transom and Sidelight Transom, Contemporary



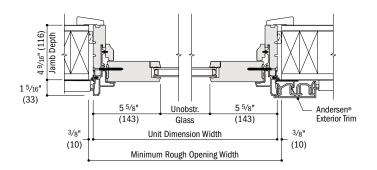
Transom and Sidelight Transoms

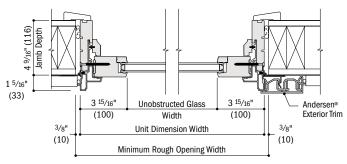
- 4 9/16" (116) jamb depth measurement is from back side of installation flange.
- · Light-colored areas are parts included with sidelights and/or transoms. Dark-colored areas are additional Andersen* parts required to complete assembly as shown
- · Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.



Sash-Set Patio Door Transom, Sidelight Transom and Sidelight Details - Contemporary

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



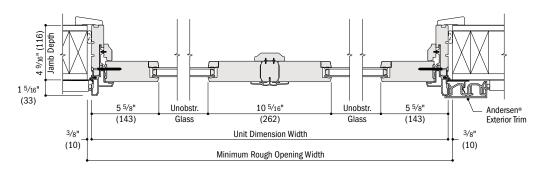


Horizontal Section

Transom, Contemporary

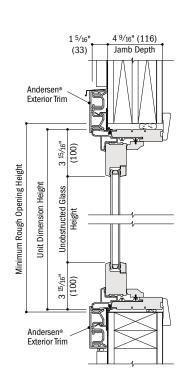
Horizontal Section

Transom and Sidelight Transom, Contemporary

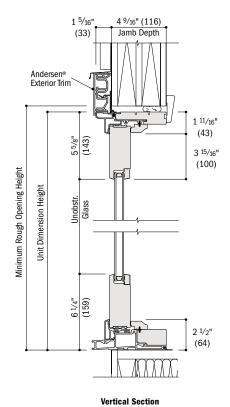


Horizontal Section

Twin Transom, Contemporary



Vertical Section Transom and Sidelight Transom, Contemporary



Sidelight, Contemporary

intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

See pages 168-171 for joining details.

• 4 9/16" (116) jamb depth measurement is from back side of installation flange.
• Light-colored areas are parts included with

are additional Andersen* parts required to complete assembly as shown.

• Dimensions in parentheses are in millimeters.

sidelights and/or transoms. Dark-colored areas

• Minimum rough openings may need to be increased to allow for use of building wraps,

flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

Details are for illustration only and are not

Vertical (ribbon) Easy Connect Fiberglass Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

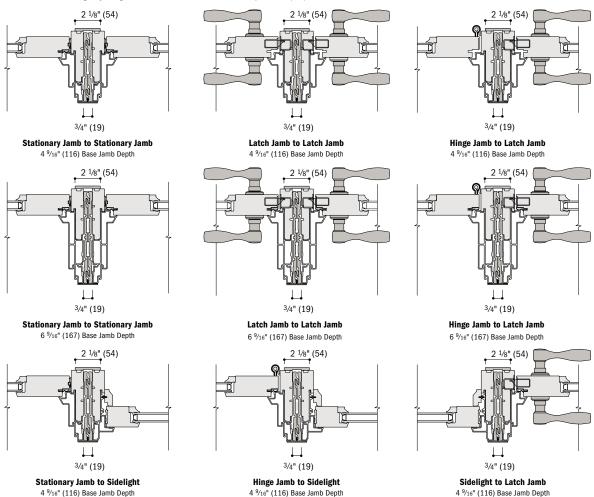
Patio doors, sidelights and transoms can be joined using 3/4" (19) x 5 3/4" (146) fiberglass joining material for 4 9/16" (116) base jamb depths. 3/4" (19) x 7 3/4" (197) fiberglass joining material is used for higher performance and is required for hinged inswing patio doors with 6 9/16" (167) base jamb depths.

Products with traditional option shown. Details also apply to products with contemporary option. Do not join inswing or outswing doors hinge jamb to hinge jamb.

Hinged Inswing Patio Doors

 $\textbf{Overall Door-Door or Door-Sidelight Dimension Width} - Sum of individual door-door or door-sidelight widths plus $\frac{3}{4}$" (19) per join.$

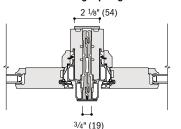
Overall Minimum Rough Opening Width - Overall dimension width plus 3/4" (19).



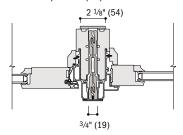
Hinged Outswing Patio Doors

Overall Door-Door or Door-Sidelight Dimension Width – Sum of individual door-door or door-sidelight widths plus 3/4" (19) per join.

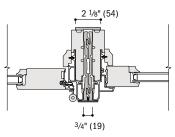
Overall Minimum Rough Opening Width - Overall dimension width plus 3/4" (19).



Stationary Door to Stationary Door



Stationary Door to Sidelight



Hinge Jamb to Sidelight

- Light-colored areas are parts included with patio doors, sidelights and/or transoms. Dark-colored areas are additional Andersen* parts required to complete assembly as shown.
 Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions
- at andersenwindows.com.
 Structural performance of any
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.



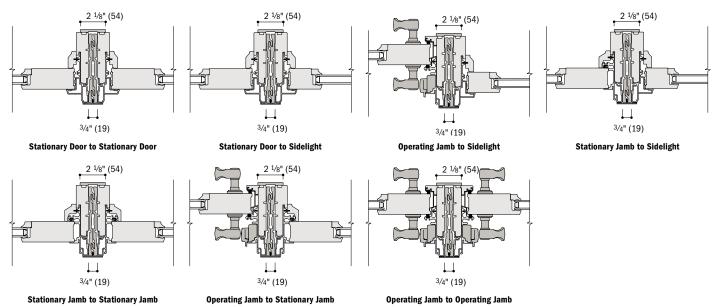
Vertical (ribbon) Easy Connect Fiberglass Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8

Gliding Patio Doors

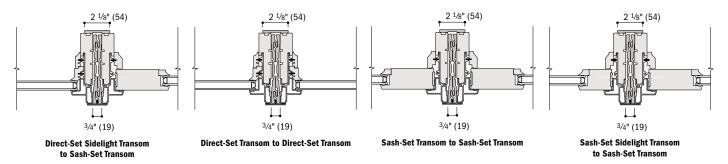
Overall Door-Door or Door-Sidelight Dimension Width – Sum of individual door-door or door-sidelight widths plus 34" (19) per join.

Overall Minimum Rough Opening Width - Overall dimension width plus 3/4" (19).



Patio Door Transoms and Sidelight Transoms

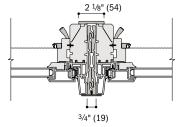
Overall "Transom-Transom" or "Transom-Sidelight Transom" Dimension Width – Sum of individual "transom-transom" or "transom-sidelight transom" widths plus 3/4" (19) per join. Overall Minimum Rough Opening Width – Overall dimension width plus 3/4" (19).



Venting Transom Windows

Overall "Venting Transom Window"-"Venting Transom Window" Dimension Width – Sum of individual "venting transom window"-"venting transom window" widths plus ¾" (19) per join.

Overall Minimum Rough Opening Width – Overall dimension width plus ¾" (19).



Venting Transom Window* to Venting Transom Window

For more information on joining, refer to the combination designs section starting on page 196.

- Light-colored areas are parts included with doors, sidelights and/or transoms. Dark-colored areas are additional Andersen* parts required to complete assembly as shown.
- Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill
 panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials.
 Refer to product installation instructions at andersenwindows.com.
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- *Not available with contemporary option.

Transom Options

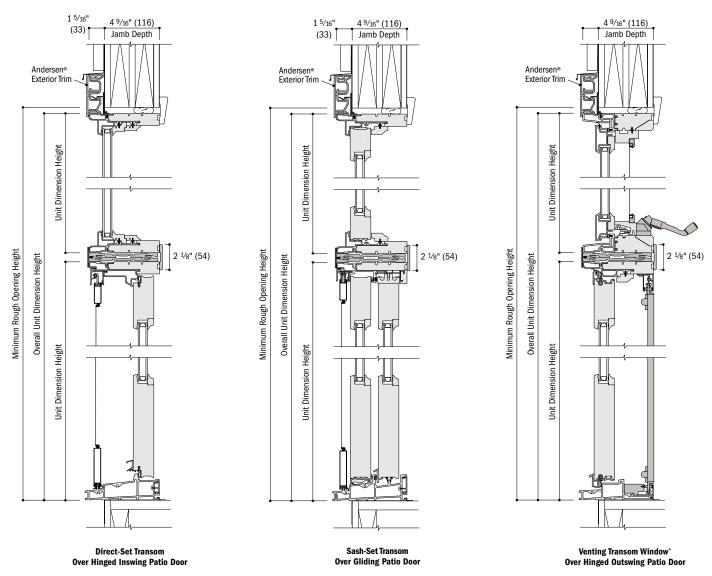


Horizontal (stack) Easy Connect Fiberglass Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

Products with traditional option shown. Details also apply to products with contemporary option. Venting transoms windows are only available in traditional option.

A structural header is required to separate patio door transoms and transom windows from four-panel gliding patio doors.



- Light-colored areas are parts included with doors, sidelights and/or transoms. Dark-colored areas are additional Andersen* parts required to complete assembly as shown.
 Dimensions in parentheses are in millimeters.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
 Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- *Join venting transom windows over doors with traditional option only. Venting transom windows are not available with contemporary option.



Horizontal (stack) Easy Connect Fiberglass Joining Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

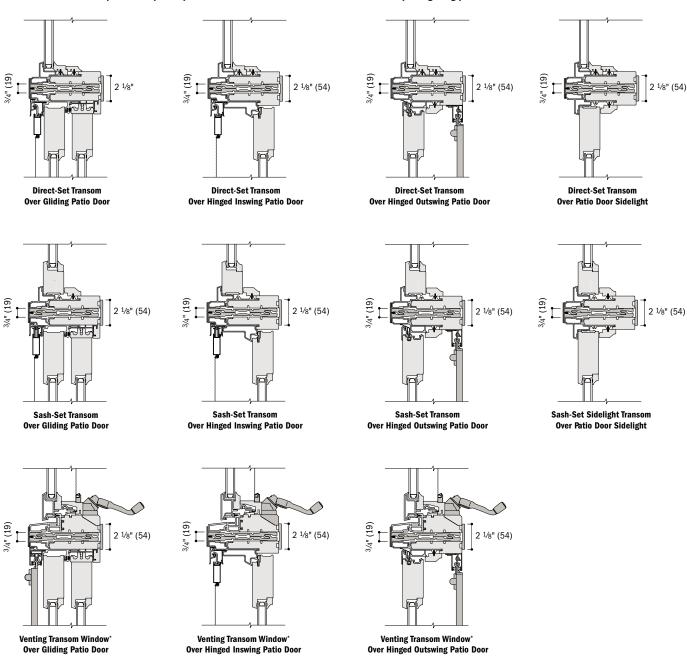
Overall Transom/Door Dimension Height - Sum of individual transom/door heights plus 3/4" (19) per join.

Overall Sidelight Transom/Sidelight Dimension Height - Sum of individual sidelight transom/sidelight heights plus 3/4" (19) per join.

Overall Minimum Rough Opening Height - Overall dimension height plus 1/2" (13).

Products with traditional option shown. Details also apply to products with contemporary option. Venting transoms windows are only available in traditional option.

A structural header is required to separate patio door transoms and transom windows from four-panel gliding patio doors.



For specialty windows over patio doors, see page 112. Formore information on joining, refer to the combination designs section starting on page 196.

[•] Light-colored areas are parts included with doors, sidelights and/or transoms. Dark-colored areas are additional Andersen® parts required to complete assembly as shown.

Dimensions in parentheses are in millimeters.

^{*} Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

[•] Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
• Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

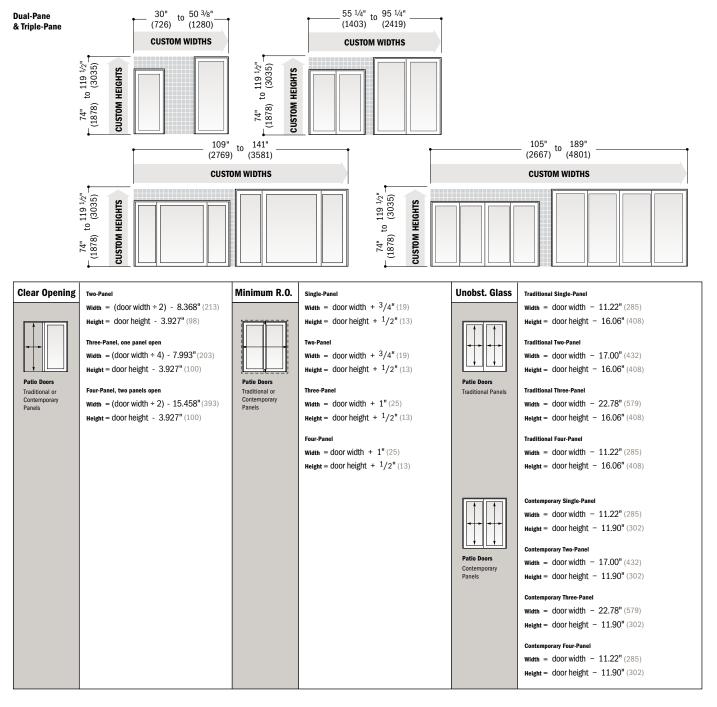
^{*}Join venting transom windows over doors with traditional option only. Venting transom windows are not available with contemporary option

Custom Sizes and Specification Formulas



A-Series custom-size patio doors, sidelights and transoms are available in 1/8" (3) increments between minimum and maximum widths and heights. Some restrictions apply. Contact your Andersen supplier.

Gliding Patio Doors



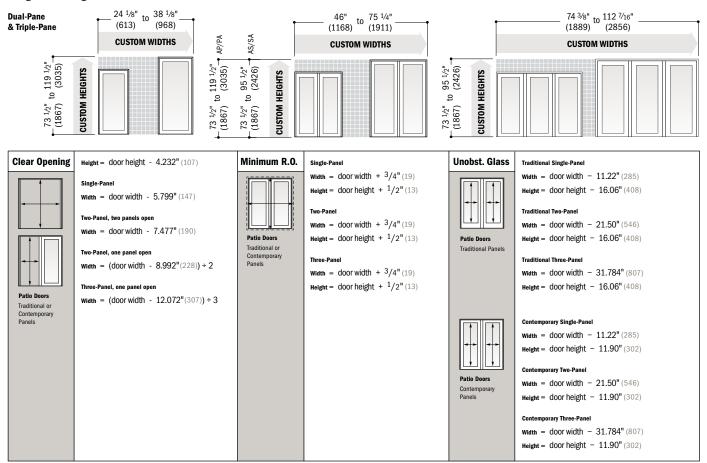
[•] Dimensions in parentheses are in millimeters.

[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

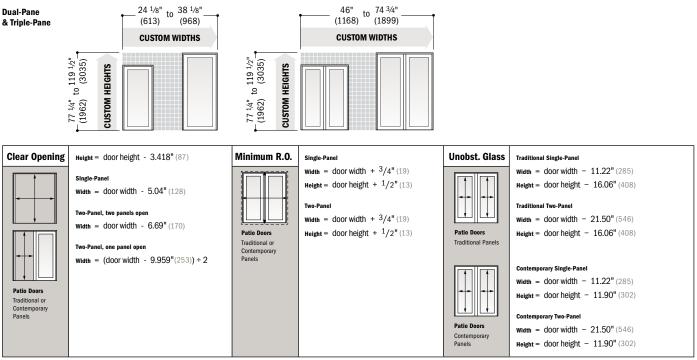
[•] Custom minimum and maximum dimensions apply to patio doors with either traditional and contemporary panels. Contemporary panels shown



Hinged Inswing Patio Doors



Hinged Outswing Patio Doors



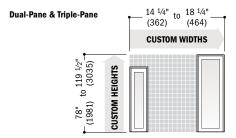
[•] Dimensions in parentheses are in millimeters.

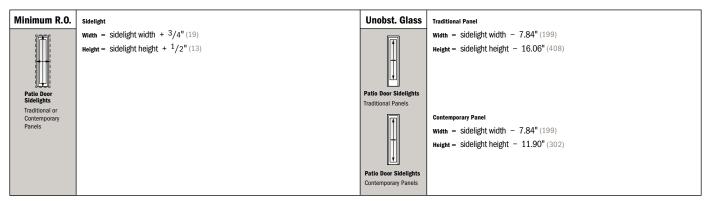
[•] Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

Custom minimum and maximum dimensions apply to patio doors with either traditional and contemporary panels. Contemporary panels shown.

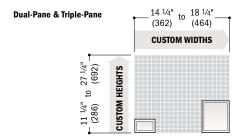
PATIO DOORS

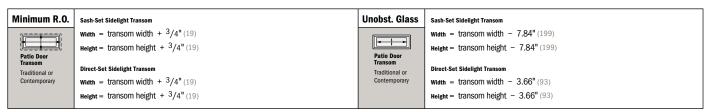
Patio Door Sidelights





Patio Door Sidelight Transoms

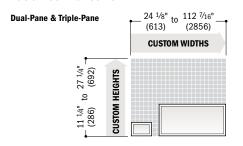




[•] Dimensions in parentheses are in millimeters.
• Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.
• Custom minimum and maximum dimensions apply to patio door sidelights with either traditional and contemporary panels. Contemporary panels shown.



Patio Door Transoms

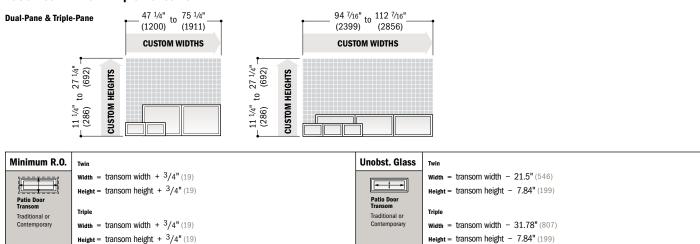


For custom sizes and specification formulas

for venting transom windows, see page 69.



Patio Door Twin and Triple Transoms



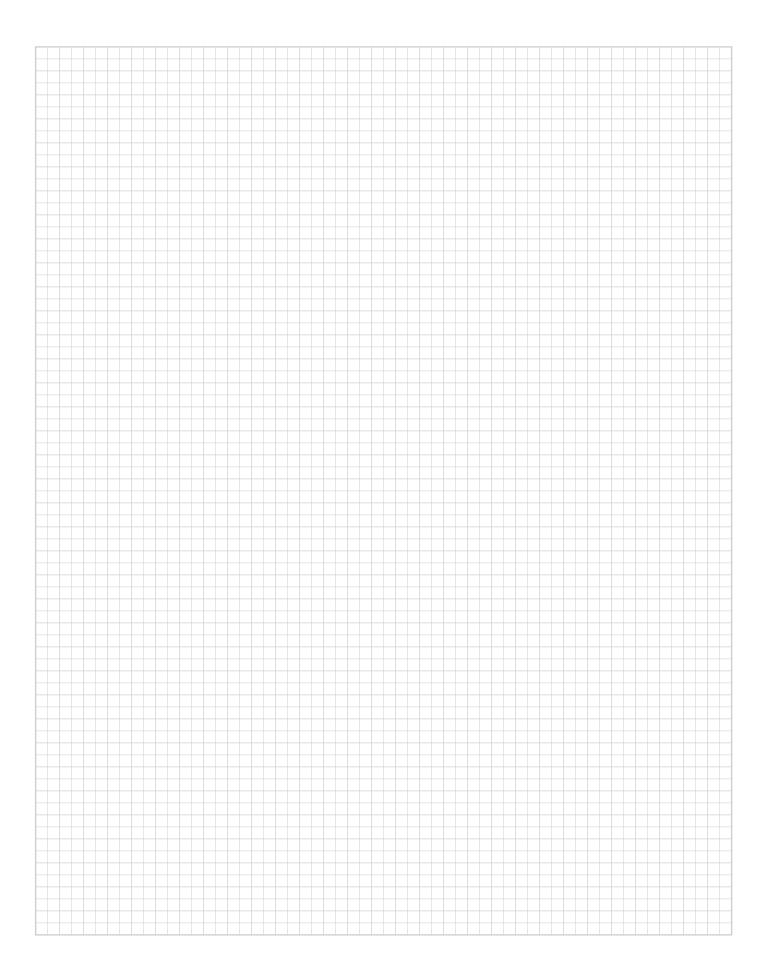
Custom Size Patio Door Shipping Information

	DOOR PRODUCT TYPE & SIZE		FACTORY- ASSEMBLED	UNASSEMBLED with Assembled Frame Panels ship separately	UNASSEMBLED with Unassembled Frame Panels ship separately
	Single-Panel	Gliding	√		
LESS	Single-Panel	Hinged	√		
OR LE	Two-Panel	Gliding	√		√
TALL (Two-Panel	Hinged	\checkmark		
8, 1	Three- or Four-Panel	Gliding			√
	Three-Panel	Hinged	√		
_					
	Single-Panel	Gliding	\checkmark		
TALL	Single-Panel	Hinged	\checkmark		
80	Two-Panel	Gliding			√
OVER	Two-Panel*	Hinged		√	
	Three- or Four-Panel	Gliding			√

^{*}Two-panel hinged inswing patio doors over 8' (2438) tall are only available active/passive or passive/active (AP/PA).

[•] Dimensions in parentheses are in millimeters.
• Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

NOTES







COMPLEMENTARY CURVED TOP PATIO DOORS

FEATURES

FRAME

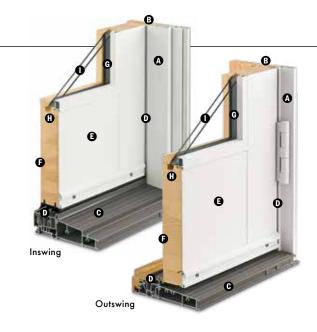
♠ Heavy-duty extruded aluminum cladding protects the frame exterior, providing low-maintenance durability. Standard cladding finish meets the AAMA 2604 specification. An optional finish that meets the AAMA 2605 specification is also available.

Installation flange extends 1 ½" (38) around three sides of the unit to help properly position the unit in the opening. Installation clips are standard for increased structural anchoring to building members. Mounted around the frame perimeter, the clips rotate into position and can be bent into place against the framing members to suit all jamb conditions.

- ⚠ Wood frame members are treated with a water-repellent wood preservative for long-lasting* protection and performance. Radii are made of laminated continuous veneers. Lineal components are engineered wood with a pine core.
- © Extruded aluminum sill is thermally broken and available in a painted bronze or gray finish. Innovative sill design provides superior water management. Standard outswing sills have an oak cap. Maple or mahogany** is optional. Inswing sills have an interior wood trim strip to match the interior finish.
- One-piece compression weatherstrip at the frame sides and head protects against air and water infiltration. Flexible thermoplastic sweep is featured at the bottom of the panel on inswing units. Outswing doors also feature a polypropylene rain skirt at the panel sides and top for added protection.

PANEL

- Heavy-duty extruded aluminum cladding protects the panel exterior, providing low-maintenance durability.
- Panel interior surfaces are unfinished wood veneers. Available species are pine, maple, vertical grain Douglas fir, oak, mahogany,** alder, mixed grain Douglas fir, hickory, cherry, white oak and walnut. Available prefinished in all interior paint colors.



GLASS

- **6** In addition to stainless steel glass spacers, black or white glass spacers are available to allow the spacer to blend in with the unit color.
- Silicone glazing bead combined with two-sided silicone tape provide superior weathertightness.
- High-Performance glass options include:
- Low-E4® tempered glass
- Low-E4 HeatLock® tempered glass
- Low-E4 SmartSun™ tempered glass
- Low-E4 SmartSun HeatLock tempered glass
- Low-E4 Sun tempered glass

Additional glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

OPERATION

Inswing and outswing units are available. Choose left-hinged, right-hinged or stationary as viewed from the exterior.

HARDWARE

Multi-Point Locking System

The complementary hinged patio door has a multi-point locking system with a hook bolt above and below the center dead bolt. This system provides a weathertight seal and enhanced security.

Hinges

Adjustable hinges are standard on inswing doors and have ball-bearing pivots for smooth, frictionless movement. Feature easy horizontal and vertical adjustment, plus quick-release for easy panel removal. The release feature is ideal for transporting large units up stairs or to other hard-to-reach areas.

Ball-bearing hinges are standard on outswing doors and are available in finishes that coordinate with hardware trim sets. For units with a prefinished white interior, white finish hinges are standard. Also available in finishes that coordinate with hardware.

ACCESSORIES Sold Separately

FRAME

Extension Jambs

Interior extension jambs on inswing units will restrict the full opening of the door.

Casings



Curved interior casings are available in the same profiles as other Andersen® products. Curved exterior aluminum and wood casings are available in matching radii and a variety of profiles.

HARDWARE

Exterior Keyed Lock



A six-pin key cylinder lock is available for all patio doors in styles and finishes that coordinate with the hardware. This lock allows the door to be locked and unlocked from the exterior.

GRILLES

Grilles are available in a variety of configurations and widths.

ART GLASS

Decorative insulated art glass designs are available.



EXTERIORS & INTERIORS

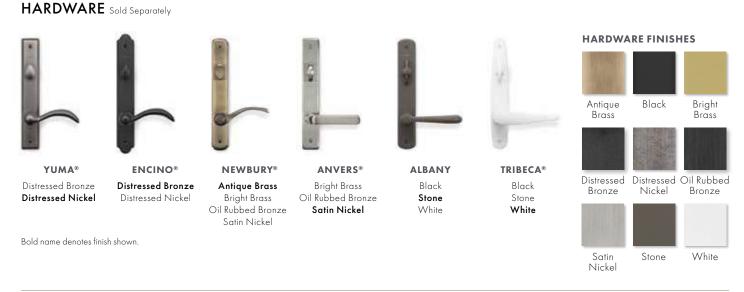
EXTERIOR COLORS





Oak

Douglas Fir



FSB® HARDWARE FOR HINGED PATIO DOORS







Anodized Aluminum

Stainless Steel

*Actual wood species is either Sapele or Sipo, both non-endangered species grown in Africa, with color and characteristics similar to Central American mahoganies. **FSB style 1102 is not available in black anodized aluminum. Matching hinges available in most hardware finishes for inswing patio doors; excludes FSB hardware. Mix and match interior and exterior style and finish options are available; excludes FSB hardware. Bright brass and satin nickel finishes feature a 10-year limited warranty. Albany and Tribeca hardware are zinc die-cast with powder-coated durable finish; Yuma, Encino, Newbury and Anvers are solid forged brass... Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use. Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

"FSB" is a registered trademark of Franz Schneider Brakel GmbH & Co.

INTERIOR PAINT COLORS

Birch Bark

black also available on maple.

Primed

(for paint)

Also available in 11 exterior colors shown above and

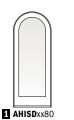
custom colors. Painted colors on pine, except anodized silver; anodized silver on maple only. Dark bronze and

Anodized

Silver

White

COMPLEMENTARY CURVED TOP PATIO DOORS







Custom-size doors are available in 1/8" (3) increments.

Traditional panels are standard. Custom-designed and 3 /4-light panels are also available. Stationary doors are also available (i.e., 3180**S** or 4080**SS**). Add **AHISD** to "Door Number" listed in table (i.e., **AHISD**3180).

Complementary Springline™ Hinged Inswing Patio Door Dimensions and Specifications

	Number		Door Di	mensions		Min. Roug	h Opening	Clear	Clear	Opening Maxim	ums			
Door Number	of Panels Open*	Radius Inches/(mm)	Side Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Opening Area Sq. Ft./(m²)	90° Open Position Width Inches/(mm)	Full Open Position Width Inches/(mm)	Height Inches/(mm)	Glass Area Sq. Ft./(m²)	Vent Area Sq. Ft./(m²)	Overall Door Area Sq. Ft./(m ²)
3180	1	18" (457)	77 1/2" (1969)	$35 {}^{15}\!/_{16}$ " (913)	95 1/2" (2426)	37" (940)	96" (2438)	17.26 (1.60)	30 7/8" (784)	$32 {}^{13}\!/_{16}$ " (833)	75 3/4" (1924)	13.28 (1.23)	20.27 (1.88)	22.88 (2.13)
3380	1	19" (483)	76 1/2" (1943)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (2438)	18.07 (1.68)	32 7/8" (835)	34 13/16" (884)	74 3/4" (1899)	14.31 (1.33)	21.45 (1.99)	24.09 (2.24)
4080	2	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	21.34 (1.98)	39 15/16" (1014)	43 13/16" (1113)	70 1/8" (1781)	13.27 (1.23)	26.72 (2.48)	29.67 (2.76)
4080	1	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	10.17 (0.94)	18 15/16" (481)	20 7/8" (530)	70 1/8" (1781)	13.27 (1.23)	11.72 (1.09)	29.67 (2.76)
5080	2	29 5/8" (752)	65 7/8" (1673)	59 1/4" (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	24.85 (2.31)	51 15/16" (1319)	55 13/16" (1418)	64 1/8" (1629)	19.14 (1.78)	33.54 (3.12)	36.68 (3.41)
5080	1	29 5/8" (752)	65 7/8" (1673)	59 1/4" (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	11.97 (1.11)	24 15/16" (633)	26 7/8" (683)	64 1/8" (1629)	19.14 (1.78)	14.53 (1.35)	36.68 (3.41)
5480	2	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	25.80 (2.40)	55 ¹⁵ / ₁₆ " (1421)	59 13/16" (1519)	62 1/8" (1578)	21.05 (1.96)	35.77 (3.32)	38.97 (3.62)
5480	1	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	12.46 (1.16)	26 15/16" (684)	28 7/8" (733)	62 1/8" (1578)	21.05 (1.96)	15.45 (1.44)	38.97 (3.62)
6080	2	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	27.37 (2.54)	63 15/16" (1624)	67 13/16" (1722)	58 1/8" (1476)	24.79 (2.30)	40.15 (3.73)	43.47 (4.04)
6080	1	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	13.27 (1.23)	30 15/16" (786)	32 7/8" (835)	58 1/8" (1476)	24.79 (2.30)	17.24 (1.60)	43.47 (4.04)
6480	2	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	27.99 (2.60)	67 15/16" (1726)	71 13/16" (1824)	56 1/8" (1426)	26.63 (2.47)	42.30 (3.93)	45.69 (4.24)
6480	1	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	13.59 (1.26)	32 15/16" (837)	34 7/8" (886)	56 1/8" (1426)	26.63 (2.47)	19.84 (1.84)	45.69 (4.24)

^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension







Custom-size doors are available in 1/8" (3) increments.

Traditional panels are standard. Custom-designed and ³/₄-light panels are also available. Stationary doors are also available (i.e., 3180**S** or 4080**SS**). Add **AOSD** to "Door Number" listed in table (i.e., **AOSD**3180).

Complementary Springline™ Hinged Outswing Patio Door Dimensions and Specifications

	Number		Door Di	mensions		Min. Roug	h Opening	Clear	Clear	Opening Maxim	iums			
Door	of		Side					Opening	90° Open	Full Open		Glass	Vent	Overall Door
Number	Panels	Radius	Height	Width	Height	Width	Height	Area	Position Width	Position Width	Height	Area	Area	Area
	Open*	Inches/(mm)	Inches/(mm)	Inches/(mm)		Inches/(mm)		Sq. Ft./(m ²)	Inches/(mm)	Inches/(mm)	Inches/(mm)	Sq. Ft./(m ²)	Sq. Ft./(m ²)	Sq. Ft./(m ²)
0400	4	/ /	, ,	, ,	, , ,	, ,	, , ,		, , ,	, , ,	, , , ,			
3180	1	18" (457)	77 1/2" (1969)	35 ¹⁵ / ₁₆ " (913)	95 1/2" (2426)	37" (940)	96" (2438)	17.52 (1.63)	31 3/8" (797)	33 5/16" (846)	75 3/4" (1924)	13.28 (1.23)	20.53 (1.91)	22.88 (2.13)
3380	1	19" (483)	76 1/2" (1943)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (2438)	18.33 (1.70)	33 3/8" (848)	35 5/16" (897)	74 3/4" (1899)	14.31 (1.33)	21.71 (2.02)	24.09 (2.24)
4080	2	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	21.73 (2.02)	40 11/16" (1033)	44 5/8" (1133)	70 1/8" (1781)	13.27 (1.23)	27.12 (2.52)	29.67 (2.76)
4080	1	23 5/8" (600)	71 7/8" (1826)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	10.35 (0.96)	19 1/4" (489)	21 1/4" (540)	70 1/8" (1781)	13.27 (1.23)	11.72 (1.09)	29.67 (2.76)
5080	2	29 5/8" (752)	65 7/8" (1673)	59 1/4" (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	25.22 (2.34)	52 11/16" (1338)	56 5/8" (1438)	64 1/8" (1629)	19.14 (1.78)	33.90 (3.15)	36.68 (3.41)
5080	1	29 5/8" (752)	65 7/8" (1673)	59 ¹ / ₄ " (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	12.13 (1.13)	25 1/4" (641)	27 1/4" (692)	64 1/8" (1629)	19.14 (1.78)	14.53 (1.35)	36.68 (3.41)
5480	2	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	26.16 (2.43)	56 11/16" (1440)	60 5/8" (1540)	62 1/8" (1578)	21.05 (1.96)	36.12 (3.36)	38.97 (3.62)
5480	1	31 5/8" (803)	63 7/8" (1622)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	12.62 (1.17)	27 1/4" (692)	29 1/4" (743)	62 1/8" (1578)	21.05 (1.96)	15.45 (1.44)	38.97 (3.62)
6080	2	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	27.70 (2.57)	64 11/16" (1643)	68 5/8" (1743)	58 1/8" (1476)	24.79 (2.30)	40.48 (3.76)	43.47 (4.04)
6080	1	35 5/8" (905)	59 7/8" (1521)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	13.42 (1.25)	31 1/4" (794)	33 1/4" (845)	58 ¹ / ₈ " (1476)	24.79 (2.30)	17.24 (1.60)	43.47 (4.04)
6480	2	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	28.31 (2.63)	68 11/16" (1745)	72 5/8" (1845)	56 ¹ / ₈ " (1426)	26.63 (2.47)	42.62 (3.96)	45.69 (4.24)
6480	1	37 5/8" (956)	57 7/8" (1470)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	13.74 (1.28)	33 1/4" (845)	35 1/4" (895)	56 1/8" (1426)	26.63 (2.47)	19.84 (1.84)	45.69 (4.24)

 $[\]ensuremath{^{\circ}}$ "Door Dimension" always refers to outside frame-to-frame dimension.

^{• &}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.

^{*&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

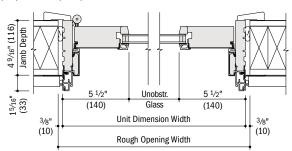
[•] Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.

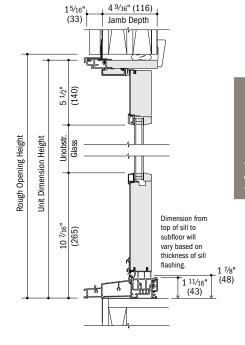


Complementary Springline™ Hinged Inswing Patio Door Details - 4 9/16" (116) Base Jamb Depth

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



Horizontal Section 4 9/16" (116) Jamb Depth .⁵/₁₆" (33) 5 1/2" Unobstr. 10 7/16" (265) Unobstr. 5 1/2" Glass Glass (140) (140) Unit Dimension Width 3/81 3/8 (10) (10) Rough Opening Width



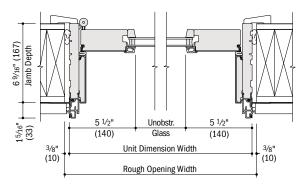
Vertical Section

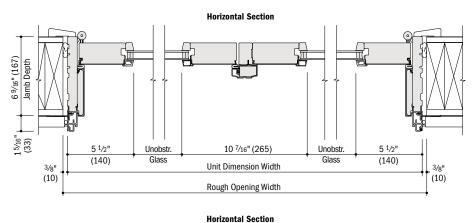
Horizontal Section

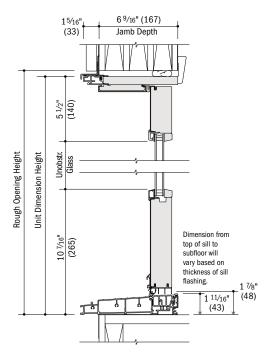
Two-Panel

Complementary Springline™ Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8







Vertical Section

• 4 9/16" (116) and 6 9/16" (167) overall jamb depth measurements are from back side of installation flange.

· Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.

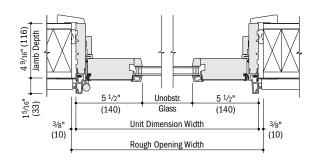
Two-Panel

- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- · Dimensions in parentheses are in millimeters.

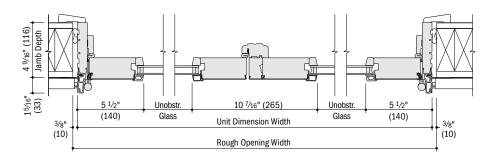
COMPLEMENTARY CURVED TOP PATIO DOORS

Complementary Springline™ Hinged Outswing Patio Door Details

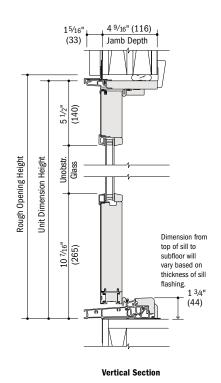
Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



Horizontal Section



Horizontal Section Two-Panel



^{• 4 9/16&}quot; (116) overall jamb depth measurements are from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

^{*} Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.

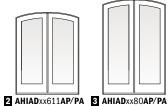
Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.











Custom-size doors are available in 1/8" (3) increments. Traditional panels are standard. Custom-designed and $^{3}\!/_{4}$ -light panels are also available. Stationary doors are also available (i.e., 2168 $\!S$ or 4068 $\!S$). Add $\!AHIAD\!$ to "Door Number" listed in table (i.e., AHIAD2168).

Compl	nplementary Arch Hinged Inswing Patio Do				Door Din	Door Dimensions and Specifications				"Door Number" listed in table (i.e., AHIAD 2168).				
	Number	_	Door D				th Opening		Clea	ar Opening Maxi	mums			
Door Number	of Panels	Radius	Side Height	Width	Height	Width	Height	Clear Opening Area	90° Open Position Width	Full Open Position Width	Height	Glass Area	Vent Area	Overall Door Area
			Inches/(mm)	Inches/(mm)	Inches/(mm)				Inches/(mm)	Inches/(mm)	Inches/(mm)	Sq. Ft./(m ²)	Sq. Ft./(m ²)	Sq. Ft./(m ²)
2168	1	36" (914)	77 7/16" (1967)	23 15/16" (608)	79 1/2" (2019)	25" (635)	80" (2032)	10.79 (1.00)	18 7/8" (479)	20 13/16" (529)	74 11/16" (1897)	5.66 (0.53)	12.46 (1.16)	14.49 (1.35)
2768	1	48" (1219)	77 1/8" (1959)	29 15/16" (760)	79 1/2" (2019)	31" (787)	80" (2032)	13.84 (1.29)	24 7/8" (632)	26 13/16" (681)	74 5/16" (1888)	8.28 (0.77)	15.70 (1.46)	17.85 (1.66)
2968	1	48" (1219)	76 ³ / ₄ " (1949)	31 15/16" (811)	79 1/2" (2019)	33" (838)	80" (2032)	14.81 (1.38)	26 7/8" (683)	28 13/16" (732)	74" (1880)	9.15 (0.85)	16.77 (1.56)	18.95 (1.76)
3168	1	48" (1219)	76" (1930)	35 15/16" (913)	79 1/2" (2019)	37" (940)	80" (2032)	16.71 (1.55)	30 7/8" (784)	32 13/16" (833)	73 5/16" (1862)	10.87 (1.01)	18.88 (1.75)	21.13 (1.96)
3368	1	48" (1219)	75 5/8" (1921)	37 15/16" (964)	79 1/2" (2019)	39" (991)	80" (2032)	17.86 (1.66)	32 7/8" (835)	34 13/16" (884)	73 7/8" (1876)	11.72 (1.09)	22.01 (2.04)	24.36 (2.26)
21611	1	36" (914)	80 5/16" (2040)	23 15/16" (608)	82 3/8" (2092)	25" (635)	83" (2108)	11.21 (1.04)	18 7/8" (479)	20 13/16" (529)	77 9/16" (1970)	5.93 (0.55)	14.39 (1.34)	16.65 (1.55)
27611	1	48" (1219)	80" (2032)	29 15/16" (760)	82 3/8" (2092)	31" (787)	83" (2108)	14.37 (1.33)	24 7/8" (632)	26 13/16" (681)	77 3/16" (1961)	8.68 (0.81)	18.17 (1.69)	20.55 (1.91)
29611	1	48" (1219)	79 5/8" (2022)	31 15/16" (811)	82 3/8" (2092)	33" (838)	83" (2108)	15.38 (1.43)	26 7/8" (683)	28 13/16" (732)	76 7/8" (1953)	9.58 (0.89)	19.41 (1.80)	21.83 (2.03)
31611	1	48" (1219)	78 7/8" (2003)	35 15/16" (913)	82 3/8" (2092)	37" (940)	83" (2108)	17.36 (1.61)	30 7/8" (784)	32 13/16" (833)	76 ³ / ₁₆ " (1935)	11.39 (1.06)	21.89 (2.03)	24.37 (2.26)
33611	1	48" (1219)	78 ¹ / ₂ " (1994)	37 15/16" (964)	82 3/8" (2092)	39" (991)	83" (2108)	18.55 (1.72)	32 7/8" (835)	34 13/16" (884)	76 ³ / ₄ " (1949)	12.28 (1.14)	25.19 (2.34)	27.78 (2.58)
2180	1	36" (914)	93 7/16" (2373)	23 15/16" (608)	95 1/2" (2426)	25" (635)	96" (2438)	13.11 (1.22)	18 7/8" (479)	20 13/16" (529)	90 11/16" (2303)	7.09 (0.66)	16.31 (1.52)	18.81 (1.75)
2780	1	48" (1219)	93 1/8" (2365)	29 15/16" (760)	95 1/2" (2426)	31" (787)	96" (2438)	16.82 (1.56)	24 7/8" (632)	26 13/16" (681)	90 5/16" (2294)	10.38 (0.96)	20.63 (1.92)	23.25 (2.16)
2980	1	48" (1219)	92 3/4" (2356)	31 15/16" (811)	95 1/2" (2426)	33" (838)	96" (2438)	18.01 (1.67)	26 7/8" (683)	28 13/16" (732)	90" (2286)	11.47 (1.07)	22.06 (2.05)	24.71 (2.30)
3180	1	48" (1219)	92" (2337)	35 15/16" (913)	95 1/2" (2426)	37" (940)	96" (2438)	20.35 (1.89)	30 7/8" (784)	32 13/16" (833)	89 5/16" (2269)	13.63 (1.27)	24.89 (2.31)	27.62 (2.57)
3380	1	48" (1219)	91 5/8" (2327)	37 15/16" (964)	95 1/2" (2426)	39" (991)	96" (2438)	21.73 (2.02)	32 7/8" (835)	34 13/16" (884)	89 7/8" (2283)	14.71 (1.37)	28.38 (2.64)	31.20 (2.90)
4068	2	48" (1219)	73 5/16" (1862)	47 1/4" (1200)	79 ¹ / ₂ " (2019)	48" (1219)	80" (2032)	21.56 (2.00)	39 15/16" (1014)	43 13/16" (1113)	70 7/8" (1800)	10.93 (1.02)	25.61 (2.38)	28.07 (2.61)
4068	1	48" (1219)	73 5/16" (1862)	47 1/4" (1200)	79 1/2" (2019)	48" (1219)	80" (2032)	10.27 (0.95)	18 ¹⁵ / ₁₆ " (481)	20 7/8" (530)	70 7/8" (1800)	10.93 (1.02)	12.22 (1.14)	28.07 (2.61)
5068	2	96" (2438)	74 13/16" (1900)	59 ¹ / ₄ " (1505)	79 1/2" (2019)	60" (1524)	80" (2032)	27.95 (2.60)	51 15/16" (1319)	55 ¹³ / ₁₆ " (1418)	72 1/8" (1832)	16.30 (1.51)	32.24 (3.00)	34.97 (3.25)
5068	1	96" (2438)	74 13/16" (1900)	59 ¹ / ₄ " (1505)	79 1/2" (2019)	60" (1524)	80" (2032)	13.46 (1.25)	24 15/16" (633)	26 7/8" (683)	72 1/8" (1832)	16.30 (1.51)	15.54 (1.44)	34.97 (3.25)
5468	2	96" (2438)	74 1/8" (1883)	63 1/4" (1607)	79 1/2" (2019)	64" (1626)	80" (2032)	29.70 (2.76)	55 15/16" (1421)	59 13/16" (1519)	71 1/2" (1816)	17.97 (1.67)	34.29 (3.19)	37.09 (3.45)
5468	1	96" (2438)	74 1/8" (1883)	63 1/4" (1607)	79 1/2" (2019)	64" (1626)	80" (2032)	14.34 (1.33)	26 15/16" (684)	28 7/8" (733)	71 1/2" (1816)	17.97 (1.67)	16.56 (1.54)	37.09 (3.45)
6068	2	96" (2438)	72 5/8" (1845)	71 1/4" (1810)	79 ¹ / ₂ " (2019)	72" (1829)	80" (2032)	32.99 (3.06)	63 15/16" (1624)	67 ¹³ / ₁₆ " (1722)	70 1/16" (1780)	21.25 (1.97)	38.33 (3.56)	41.27 (3.83)
6068	1	96" (2438)	72 5/8" (1845)	71 1/4" (1810)	79 ¹ / ₂ " (2019)	72" (1829)	80" (2032)	16.00 (1.49)	30 15/16" (786)	32 7/8" (835)	70 1/16" (1780)	21.25 (1.97)	18.58 (1.73)	41.27 (3.83)
6468	2	96" (2438)	71 13/16" (1824)	75 ¹ / ₄ " (1911)	79 1/2" (2019)	76" (1930)	80" (2032)	34.53 (3.21)	67 15/16" (1726)	71 13/16" (1824)	69 ¹ / ₄ " (1759)	22.86 (2.12)	44.22 (4.11)	47.36 (4.40)
6468	1	96" (2438)	71 13/16" (1824)	75 1/4" (1911)	79 1/2" (2019)	76" (1930)	80" (2032)	16.77 (1.56)	32 15/16" (837)	34 7/8" (886)	69 1/4" (1759)	22.86 (2.12)	21.53 (2.00)	47.36 (4.40)
40611	2	48" (1219)	76 ³ / ₁₆ " (1935)	47 1/4" (1200)	82 3/8" (2092)	48" (1219)	83" (2108)	22.44 (2.08)	39 15/16" (1014)	43 13/16" (1113)	73 3/4" (1873)	11.46 (1.06)	29.64 (2.75)	32.34 (3.00)
40611	1	48" (1219)	76 ³ / ₁₆ " (1935)	47 1/4" (1200)	82 3/8" (2092)	48" (1219)	83" (2108)	10.69 (0.99)	18 ¹⁵ / ₁₆ " (481)	20 7/8" (530)	73 3/4" (1873)	11.46 (1.06)	14.29 (1.33)	32.34 (3.00)
50611	2	96" (2438)	77 11/16" (1973)	59 ¹ / ₄ " (1505)	82 3/8" (2092)	60" (1524)	83" (2108)	29.07 (2.70)	51 15/16" (1319)	55 ¹³ / ₁₆ " (1418)	75" (1905)	17.09 (1.59)	37.35 (3.47)	40.32 (3.75)
50611	1	96" (2438)	77 11/16" (1973)	59 ¹ / ₄ " (1505)	82 3/8" (2092)	60" (1524)	83" (2108)	14.00 (1.30)	24 15/16" (633)	26 7/8" (683)	75" (1905)	17.09 (1.59)	18.15 (1.69)	40.32 (3.75)
54611	2	96" (2438)	77" (1956)	63 1/4" (1607)	82 3/8" (2092)	64" (1626)	83" (2108)	30.89 (2.87)	55 ¹⁵ / ₁₆ " (1421)	59 13/16" (1519)	74 3/8" (1889)	18.84 (1.75)	39.77 (3.69)	42.80 (3.98)
54611	1	96" (2438)	77" (1956)	63 1/4" (1607)	82 3/8" (2092)	64" (1626)	83" (2108)	14.91 (1.39)	26 15/16" (684)	28 7/8" (733)	74 3/8" (1889)	18.84 (1.75)	19.35 (1.80)	42.80 (3.98)
60611	2	96" (2438)	75 ¹ / ₂ " (1918)	71 1/4" (1810)	82 3/8" (2092)	72" (1829)	83" (2108)	34.35 (3.19)	63 15/16" (1624)	67 ¹³ / ₁₆ " (1722)	72 15/16" (1853)	22.28 (2.07)	44.53 (4.14)	47.71 (4.43)
60611	1	96" (2438)	75 1/2" (1918)	71 1/4" (1810)	82 3/8" (2092)	72" (1829)	83" (2108)	16.65 (1.55)	30 15/16" (786)	32 7/8" (835)	72 15/16" (1853)	22.28 (2.07)	21.74 (2.02)	47.71 (4.43)
64611	2	96" (2438)	74 11/16" (1897)	75 ¹ / ₄ " (1911)	82 3/8" (2092)	76" (1930)	83" (2108)	35.97 (3.34)	67 ¹⁵ / ₁₆ " (1726)	71 13/16" (1824)	72 1/8" (1832)	23.98 (2.23)	50.78 (4.72)	54.16 (5.03)
64611	1	96" (2438)	74 11/16" (1897)	75 ¹ / ₄ " (1911)	82 3/8" (2092)	76" (1930)	83" (2108)	17.47 (1.62)	32 15/16" (837)	34 7/8" (886)	72 1/8" (1832)	23.98 (2.23)	25.22 (2.34)	54.16 (5.03)
4080	2	48" (1219)	89 5/16" (2269)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	26.43 (2.46)	39 15/16" (1014)	43 13/16" (1113)	86 7/8" (2207)	13.76 (1.28)	33.66 (3.13)	36.60 (3.40)
4080	1	48" (1219)	89 5/16" (2269)	47 1/4" (1200)	95 1/2" (2426)	48" (1219)	96" (2438)	12.59 (1.17)	18 15/16" (481)	20 7/8" (530)	86 7/8" (2207)	13.76 (1.28)	14.29 (1.33)	36.60 (3.40)
5080	2	96" (2438)	90 13/16" (2307)	59 ¹ / ₄ " (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	34.16 (3.17)	51 15/16" (1319)	55 ¹³ / ₁₆ " (1418)	88 1/8" (2238)	20.50 (1.90)	42.47 (3.95)	45.67 (4.24)
5080	1	96" (2438)	90 13/16" (2307)	59 1/4" (1505)	95 1/2" (2426)	60" (1524)	96" (2438)	16.45 (1.53)	24 15/16" (633)	26 7/8" (683)	88 1/8" (2238)	20.50 (1.90)	18.15 (1.69)	45.67 (4.24)
5480	2	96" (2438)	90 1/8" (2289)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	36.34 (3.38)	55 15/16" (1421)	59 ¹³ / ₁₆ " (1519)	87 1/2" (2223)	22.61 (2.10)	45.24 (4.20)	48.51 (4.51)
5480	1	96" (2438)	90 1/8" (2289)	63 1/4" (1607)	95 1/2" (2426)	64" (1626)	96" (2438)	17.55 (1.63)	26 15/16" (684)	28 7/8" (733)	87 1/2" (2223)	22.61 (2.10)	19.35 (1.80)	48.51 (4.51)
6080	2	96" (2438)	88 5/8" (2251)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	40.53 (3.77)	63 15/16" (1624)	67 13/16" (1722)	86 1/16" (2186)	26.78 (2.49)	50.73 (4.71)	54.14 (5.03)
6080	1	96" (2438)	88 5/8" (2251)	71 1/4" (1810)	95 1/2" (2426)	72" (1829)	96" (2438)	19.65 (1.83)	30 15/16" (786)	32 7/8" (835)	86 1/16" (2186)	26.78 (2.49)	21.74 (2.02)	54.14 (5.03)
6480	2	96" (2438)	87 13/16" (2230)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	42.51 (3.95)	67 15/16" (1726)	71 13/16" (1824)	85 1/4" (2165)	28.83 (2.68)	57.33 (5.33)	60.95 (5.66)
6480	1	96" (2438)	87 13/16" (2230)	75 1/4" (1911)	95 1/2" (2426)	76" (1930)	96" (2438)	20.65 (1.92)	32 15/16" (837)	34 7/8" (886)	85 1/4" (2165)	28.83 (2.68)	25.22 (2.34)	60.95 (5.66)

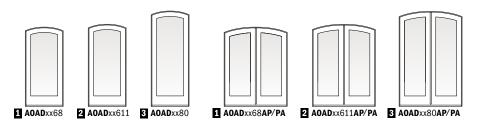
^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.

^{*&}quot;Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.

[•] Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.

COMPLEMENTARY CURVED TOP PATIO DOORS





Custom-size doors are available in $^1\!/\!s"$ (3) increments. Traditional panels are standard. Custom-designed and 3/4-light panels are also available. Stationary doors are also available (i.e., 2168 \boldsymbol{s} or 4068 $\boldsymbol{s}\boldsymbol{s}$). Add $\boldsymbol{a0aD}$ to "Door Number" listed in table (i.e., AOAD2168).

Complementary Arch Hinged Outswing Patio Door Dimensions and Specifications

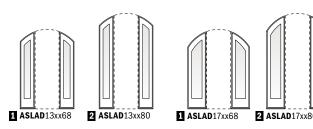
ompl	ement	ary Arch		itswing Pat	tio Door D			pecificati				u III table (I.	0., NOND 210	,0).
Door	Number of		Door D Side	imensions		Min. Roug	th Opening	Clear Opening		r Opening Maxii Full Open	nums	Glass	Vent	Overall Do
Number	Panels	Radius Inches/(mm)	Height	Width Inches/(mm)	Height Inches/(mm)	Width Inches/(mm)	Height Inches/(mm)	Area	Position Width Inches/(mm)		Height Inches/(mm)	Area Sq. Ft./(m ²)	Area Sq. Ft./(m ²)	Area Sq. Ft./(m
168	1	36" (914)		23 15/16" (608)				11.06 (1.03)			74 3/4" (1899)	5.66 (0.53)	12.46 (1.16)	14.49 (1.3
768	1	48" (1219)			79 1/2" (2019)			14.11 (1.31)			74 3/8" (1889)	8.28 (0.77)		17.85 (1.6
968	1	48" (1219)			79 1/2" (2019)			15.08 (1.40)			74 1/16" (1881)	9.15 (0.85)	. ,	18.95 (1.7
168	1	48" (1219)			79 1/2" (2019)			16.97 (1.58)			73 3/8" (1864)		` ′	21.13 (1.9
368	1	48" (1219)	, ,		79 1/2" (2019)		80" (2032)	, ,				11.72 (1.09)	22.01 (2.04)	
1611	1	36" (914)		23 15/16" (608)			83" (2108)		7	21 5/16" (541)	77 5/8" (1972)	5.93 (0.55)		16.65 (1.
611	1	48" (1219)		29 15/16" (760)		` ′		14.65 (1.36)			77 1/4" (1962)	8.68 (0.81)		20.55 (1.
611	1	48" (1219)		31 15/16" (811)			83" (2108)	, ,	27 3/8" (695)		76 15/16" (1954)	9.58 (0.89)	19.41 (1.80)	21.83 (2
611	1	48" (1219)			82 3/8" (2092)	` ′	, ,	` '	31 3/8" (797)		76 1/4" (1937)	. ,	. ,	24.37 (2.
611	1	48" (1219)		37 15/16" (964)	,- , ,	. , ,		18.61 (1.73)			75 7/8" (1927)			27.78 (2
80	1	, ,		23 15/16" (608)	,,,,,	` ′		13.43 (1.25)	19 3/8" (492)		90 3/4" (2305)	7.09 (0.66)		18.81 (1
80	1	48" (1219)		29 15/16" (760)			. ,	17.14 (1.59)				10.38 (0.96)		23.25 (2
80	1	48" (1219)		31 15/16" (811)			96" (2438)		27 3/8" (695)	29 5/16" (745)	90 1/16" (2288)	11.47 (1.07)		24.71 (2
80	1	48" (1219)		35 ½/16 (811) 35 ½/16" (913)	,- , ,	` ′	` '	, ,	31 3/8" (797)		89 3/8" (2270)	. ,	. ,	27.62 (2
80	1	48" (1219)		37 ¹⁵ / ₁₆ " (964)			96" (2438)		33 3/8" (848)	35 ⁵ / ₁₆ " (897)	89" (2261)	14.71 (1.37)		31.20 (2
68	2	48" (1219)			79 1/2" (2019)		` '		40 11/16" (1033)		70 3/4" (1797)		. ,	28.07 (2
68	1	48" (1219)					, ,	,			70 3/4" (1797)	10.93 (1.02)		28.07 (2
68	2				79 ¹ / ₂ " (2019) 79 ¹ / ₂ " (2019)		, ,	, ,			72 1/8" (1832)		. ,	34.97 (3
68		, ,	74 ¹³ / ₁₆ " (1900) 74 ¹³ / ₁₆ " (1900)						52 11/16" (1338)				` '	
	1					60" (1524)	` ′	, ,	25 1/4" (641)		72 1/8" (1832)			34.97 (3
68 ee	2	96" (2438)	74 1/8" (1883)	, , , ,	79 1/2" (2019)	` '	` ′		56 11/16" (1440)		71 7/16" (1815)		` '	37.09 (3
68 68	2	96" (2438) 96" (2438)	74 1/8" (1883)		79 ¹ / ₂ " (2019) 79 ¹ / ₂ " (2019)			14.51 (1.35)			71 ⁷ / ₁₆ " (1815) 70" (1778)			37.09 (3 41.27 (3
68	1	96" (2438)	72 ⁵ / ₈ " (1845) 72 ⁵ / ₈ " (1845)				` '		64 11/16" (1643)		70" (1778) 70" (1778)		` '	41.27 (3
68	2				79 ¹ / ₂ " (2019) 79 ¹ / ₂ " (2019)			, ,	31 ¹ / ₄ " (794) 68 ¹¹ / ₁₆ " (1745)				` ′	47.36 (4
68	1	, ,									69 3/16" (1757)	. ,		-
	2	, ,	71 13/16" (1824)		79 1/2" (2019)			16.94 (1.57)		35 ¹ / ₄ " (895)				47.36 (4
611 611	1		76 ³ / ₁₆ " (1935)		82 3/8" (2092)	. ,	, ,		40 11/16" (1033)		73 5/8" (1870)	11.46 (1.06)		32.34 (3 32.34 (3
	2	, ,	76 ³ / ₁₆ " (1935)		82 3/8" (2092)	, ,	` '	, ,	19 1/4" (489)	21 1/4" (540)	73 5/8" (1870)	11.46 (1.06)	14.29 (1.33)	
611			77 11/18" (1973)		82 3/8" (2092)				52 11/16" (1338)			17.09 (1.59)	37.35 (3.47)	40.32 (3
611	1		77 11/16" (1973)		82 3/8" (2092)	, ,	` '	, ,	25 1/4" (641)	27 1/4" (692)	75" (1905)	17.09 (1.59)	18.15 (1.69)	40.32 (3
611	1	96" (2438)	77" (1956)			64" (1626)			56 11/16" (1440)		74 5/16" (1888)		39.77 (3.69)	42.80 (3
611 611	2	96" (2438) 96" (2438)	77" (1956)) 82 ³ / ₈ " (2092)) 82 ³ / ₈ " (2092)				27 ¹ / ₄ " (692) 64 ¹¹ / ₁₆ " (1643)		74 5/16" (1888)		19.35 (1.80)	42.80 (3
											72 7/8" (1851)			47.71 (4
611	2	96" (2438)	75 1/2" (1918)) 82 ³ / ₈ " (2092)	, ,			31 1/4" (794)		72 1/ " (1851)		21.74 (2.02)	47.71 (4 54.16 (5
611 611	1		74 ¹¹ / ₁₆ " (1897) 74 ¹¹ / ₁₆ " (1897)) 82 ³ / ₈ " (2092)) 82 ³ / ₈ " (2092)				68 ¹¹ / ₁₆ " (1745) 33 ¹ / ₄ " (845)		72 ¹ / ₁₆ " (1830) 72 ¹ / ₁₆ " (1830)		. ,	54.16 (5
						, ,								
80 en	2	48" (1219)			95 1/2" (2426)				40 ¹¹ / ₁₆ " (1033) 19 ¹ / ₄ " (489)		86 3/4" (2203)			36.60 (3
30	1	48" (1219)	89 5/16" (2269)			48" (1219)		, ,	7	,, , ,	86 3/4" (2203)	. ,		36.60 (3
30	2									56 5/8" (1438)				
80 en	1									27 1/4" (692)				
80	2									0 60 5/8" (1540)				
80	1									29 1/4" (743)				
80	2									68 5/8" (1743)			50.73 (4.71)	
180	1									33 1/4" (845)				
80	2									72 5/8" (1845)				
180	1	96" (2438)	8/13/16" (2230)	75 ¹ / ₄ " (1911)	95 1/2" (2426)	/6" (1930)	96" (2438)	20.85 (1.94)	33 1/4" (845)	35 1/4" (895)	85 ³ / ₁₆ " (2164)	28.83 (2.68)	25.22 (2.34)	60.95 (5.

^{• &}quot;Door Dimension" always refers to outside frame-to-frame dimension.
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 226-227 for more details.
• Dimensions in parentheses are in millimeters or square meters.

^{*}For two-panel patio doors with one panel open, clear opening is based on active panel being open and passive panel being closed.



Complementary Arch Patio Door Sidelights

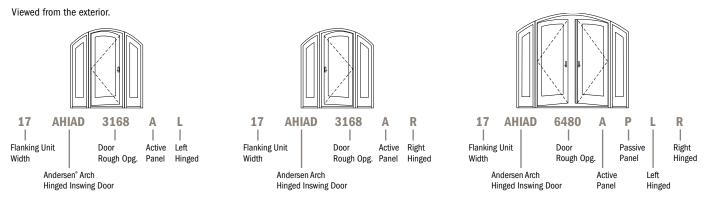




Custom sized in 1/8" (3) increments.

Standard sizes in two widths and heights. Contact your Andersen supplier for sidelight dimensions and specifications. Sash-set arch patio door sidelights, shown, are standard. Direct-set sidelights are available by special order.

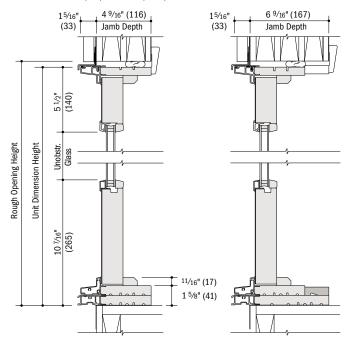
Order Designation Description



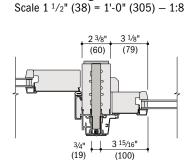
Arch inswing patio doors (AHIAD) shown above; for arch outswing patio doors use AOAD. Outswing patio doors open outward to the exterior.

Complementary Arch Patio Door Sidelight Details

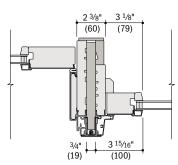
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8



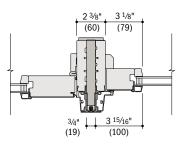
Vertical Joining Details



Complementary Arch Inswing Patio Door to Complementary Arch Patio Door Sidelight 4 9/16" (116) Base Jamb Depth



Complementary Arch Inswing Patio Door to Complementary Arch Patio Door Sidelight 6 9/16" (167) Base Jamb Depth



Complementary Arch Outswing Patio Door to Complementary Arch Patio Door Sidelight

• 4 9/16" (116) and 6 9/16" (167) overall jamb depth measurements are from back side of installation flange.

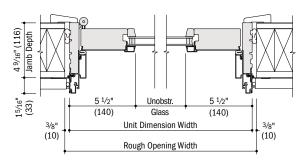
Vertical Sections

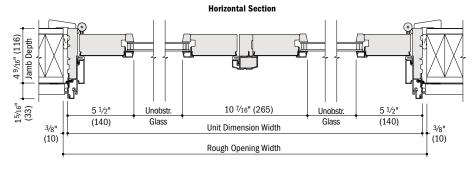
- Light-colored areas are parts included with window and/or door. Dark-colored areas are additional Andersen* parts required to complete window and/or door assembly as shown.
- * Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
- Dimensions in parentheses are in millimeters

COMPLEMENTARY CURVED TOP PATIO DOORS

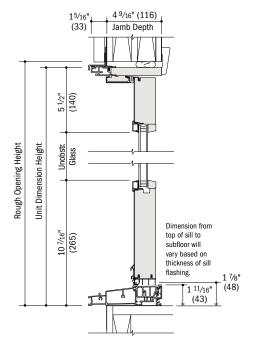
Complementary Arch Hinged Inswing Patio Door Details - 4 9/16" (116) Base Jamb Depth

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8





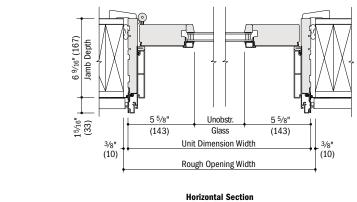
Horizontal Section
Two-Panel

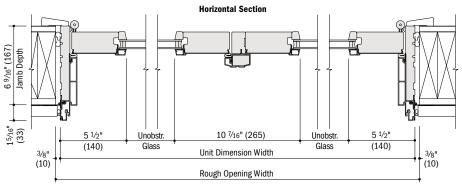


Vertical Section

Complementary Arch Hinged Inswing Patio Door Details - 6 9/16" (167) Base Jamb Depth

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8

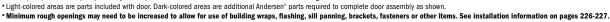




Horizontal Section

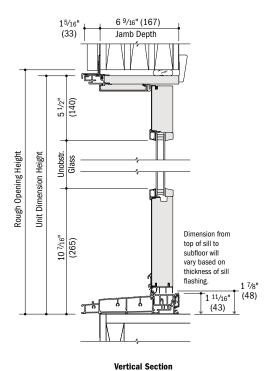
Two-Panel

 \cdot 4 $^{9}/_{18}$ " (116) and 6 $^{9}/_{18}$ " (167) overall jamb depth measurements are from back side of installation flange



Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

• Dimensions in parentheses are in millimeters.



4 9/16" (116)

Jamb Depth

Dimension from top of sill to

1 3/4"

(44)

subfloor will vary based on thickness of sill flashing.

15/16"1 (33)

5 1/2" (140)

Unobstr. Glass

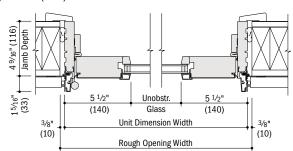
10 7/16" (265)

Rough Opening Height Unit Dimension Height



Complementary Arch Hinged Outswing Patio Door Details

Scale $1^{1/2}$ " (38) = 1'-0" (305) -1:8



Horizontal Section 4 ⁹/₁₆" (116) Jamb Depth 15/16" (33) Unobstr. 5 1/2" 10 1/16" (256) Unobstr. 5 1/2" (140) Glass Glass (140) ^{3/8}" (10) Unit Dimension Width ^{3/8}" (10) Rough Opening Width



Horizontal Section

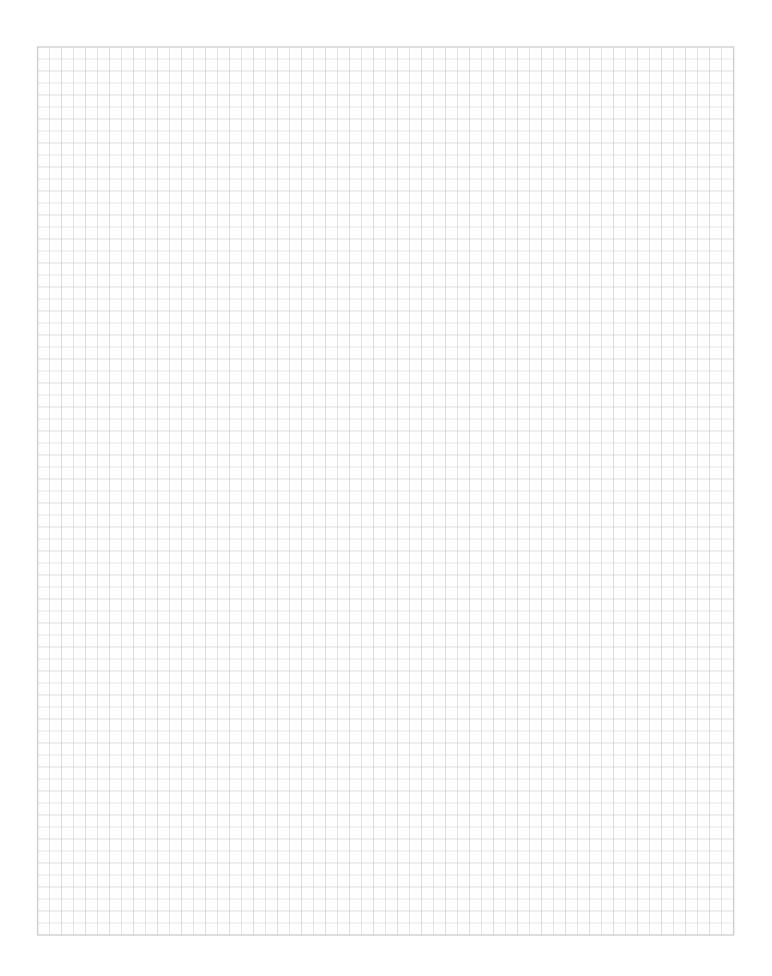
Two-Panel

^{• 4 9/16&}quot; (116) overall jamb depth measurement is from back side of installation flange.

[·] Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

[•] Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 226-227.
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

[·] Dimensions in parentheses are in millimeters.







FEATURES

EXTERIOR TRIM SYSTEM

Easier Installation

- Installs independently of water management system
- No nail holes to fill
- No visible fasteners
- No painting



Made of Fibrex® material that is an environmentally smart composite, containing 40% pre-consumer reclaimed wood fiber by weight.



EXTERIOR TRIM

- For exceptional long-lasting performance, exterior trim is made from Fibrex material or high-density urethane with low-maintenance exterior finishes
- **3** Sill nose profile, made from Fibrex material, is placed at the sill for a traditional look.
- **©** Trim is securely fastened to the home using factory-applied trim flange or field applied attachment strips
- Trim surrounds are assembled with corner keys and stainless steel fasteners for stability and strength.

Profiles

Exterior trim is available in four profiles made from our Fibrex material. Profiles include 3 ½" (89) flat casing, 4 ½" (114) flat casing, 2" (51) brick mould and a sill nose for the bottom trim piece. See profiles and sill options on the next page.

Thick trim profiles overlap the window frame to create clean lines without visible sealant joints.

Drip Cap

Full-length, color-matched aluminum drip cap is included with kits and surrounds.

End Caps

Provide a clean appearance when joining two trim members.

Corner Keys

Provide tight alignment of corner joints.

Fasteners

Screws are made of high-quality stainless steel and provide corner joints with a secure, tight fit.



EXTERIOR TRIM COLORS



Head Trim Options

Three styles are available. All can be used above our flat casing and include an integrated installation flange. The decorative drip cap is made from our Fibrex material. Both the 2" (51) cornice and 3 5/k" (92) cornice are made from highly durable urethane material. See head options on the next page.

Specialty Trim



Made of highly durable factoryfinished urethane material for selected shapes. Contact your Andersen supplier for availability.

INSTALLATION OPTIONS

Preassembled Trim Surrounds

Factory-assembled surrounds install in seconds on A-Series windows with optional factory-applied exterior trim flange.



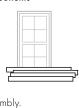
Precut Kits

Knock-down kits include precut and predrilled trim with all the necessary components for on-site assembly for windows and patio doors up to 12' (3658) in width or height.



Individual Trim Components

13' (3962) factoryfinished trim lineals, end caps, corner keys, fasteners, metal drip caps and field attachment strips allow for field fabrication and assembly.



^{*}See the A-Series Limited Warranty for exterior trim applied to A-Series products. Visit andersenwindows.com/warranty for details.

Dimensions in parentheses are in millimeters.



PROFILES



2" (51) Brick Mould in canvas with Sandtone window



3 1/2" (89) or 4 1/2" (114) Flat Casing in red rock with Sandtone window



3 1/2" (89) or 4 1/2" (114) Flat Casing in Terratone with Sandtone window

ACCESSORIES

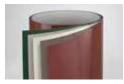
INSTALLATION

Fibrex® Trim Board



Available in the same 11 colors as our exterior trim, this solid cellular Fibrex trim board can be cut or ripped to size, and can be fastened using nails or screws. 3 ½" (89) x 3/4" (19) thick in 10' (3048) lengths.

Coil Stock



Andersen aluminum coil stock allows you to form your own profiles in the field and can be ordered to match any of our 11 exterior trim colors. Made from .018" thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Color-matched 1 ½" (32)-long stainless steel trim nails are also available and can be ordered in 1 lb/454 kg boxes.

HEAD OPTIONS



Decorative Drip Cap over flat casing in forest green with Sandtone window



2" (51) Cornice over flat casing in prairie grass with Sandtone window



3 5/8" (92) Cornice over flat casing in white with Sandtone window

SILL OPTIONS



Sill nose and brick mould in Terratone with white window



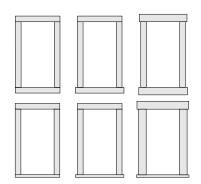
Sill nose and flat casing in Terratone with red rock window



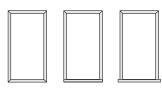
3 1/2" (89) or 4 1/2" (114) Flat Casing in white with white window

TRIM COMBINATIONS

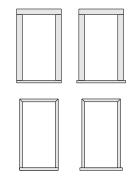
Mix and match trim to create a variety of combinations. Not all sill combinations are shown. Contact your Andersen supplier for more information.



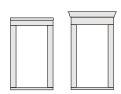
Flat Casing can be used on all four sides flush or extended at the head or sill. Combine 3 ½" (89) and 4 ½" (114) flat casing, or use with a flush or extended sill nose.



Brick Mould can be used on all four sides or with a flush or extended sill nose.



Sill Nose can be used with flat casing or brick mould. It can be applied flush or extended.



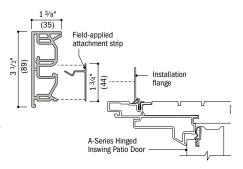
Decorative Drip Cap or **Cornice** can be used above flat casing at the head.

EXTERIOR TRIM

Window and Patio Door Attachment

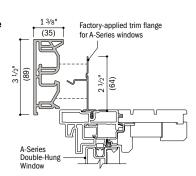
Field-Applied Attachment Strip

Field-applied attachment strip fastens to framing through window or patio door installation flange and flashing tape with screws. Exterior trim connects securely to the field-applied attachment strip. Follow window and patio door installation guides for flashing instructions.

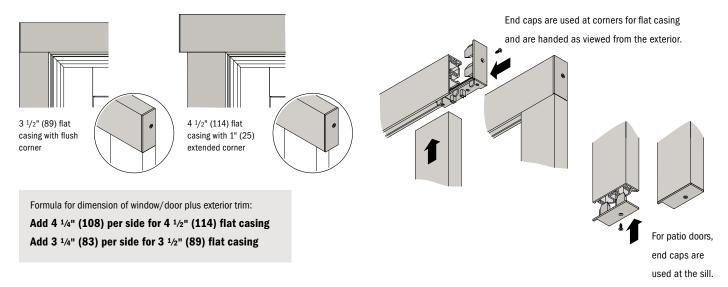


Factory-Applied Trim Flange

Factory-applied trim flanges are also available. Exterior trim connects securely to the trim flange already in place.

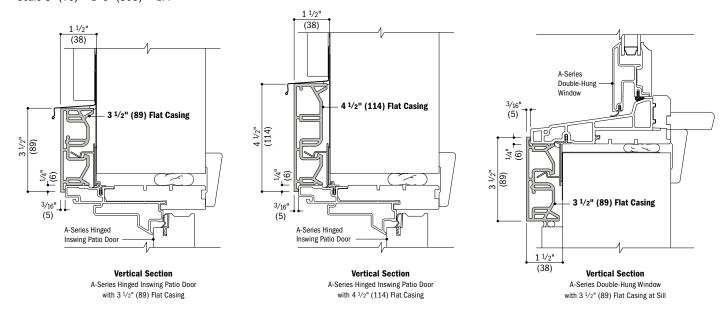


3 1/2" (89) Flat Casing and 4 1/2" (114) Flat Casing



Trim Details

Scale 3" (76) = 1'-0" (305) - 1:4



- Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. Contact your Andersen supplier for more information.
- Dimensions in parentheses are in millimeters.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.



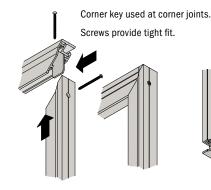
Brick Mould



Brick mould with mitered corners

Formula for dimension of window/door plus exterior trim:

Add 1 3/4" (44) per side for brick mould

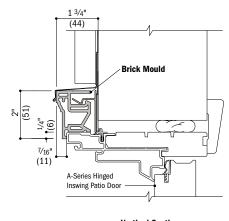




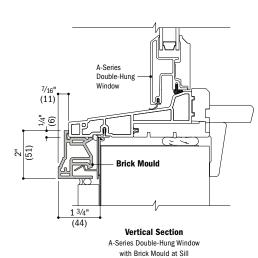
For patio doors, end caps are used at the sill.

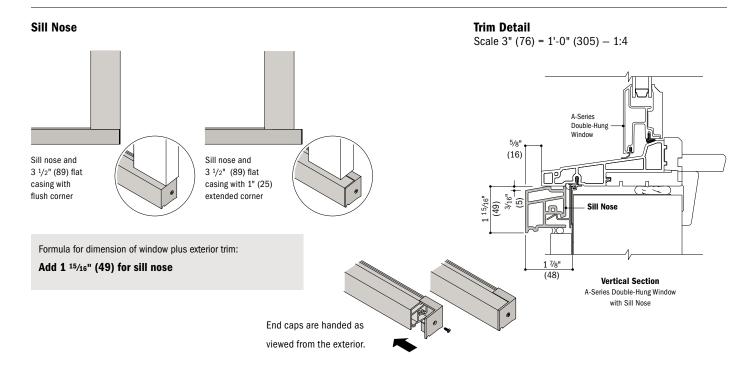
Trim Details

Scale 3" (76) = 1'-0" (305) - 1:4

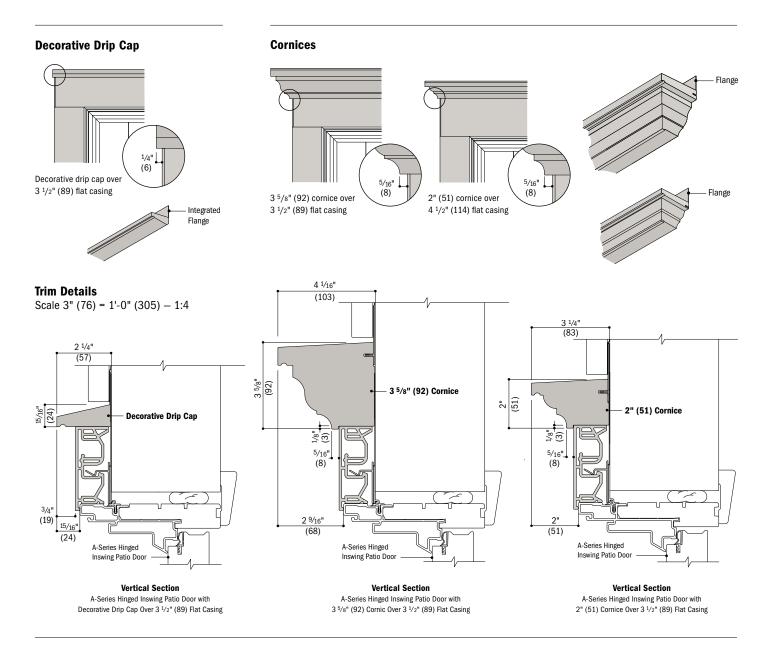


Vertical Section A-Series Hinged Inswing Patio Door with Brick Mould



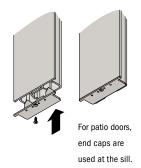


- Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. Contact your Andersen supplier for more information.
 Dimensions in parentheses are in millimeters.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.



Mull Cover

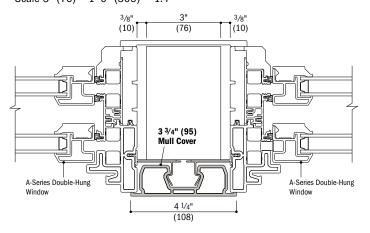
3 $^5/8\ensuremath{^{"}}$ (95) mull cover is available for installations where windows or patio doors have been installed into separate rough openings to obtain a joined appearance.



[•] Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply.

Separate Rough Opening Detail

Scale 3" (76) = 1'-0" (305) - 1:4



Horizontal Section

A-Series Double-Hung Windows and 3 3/4" (95) Mull Cover

Contact your Andersen supplier for more information.

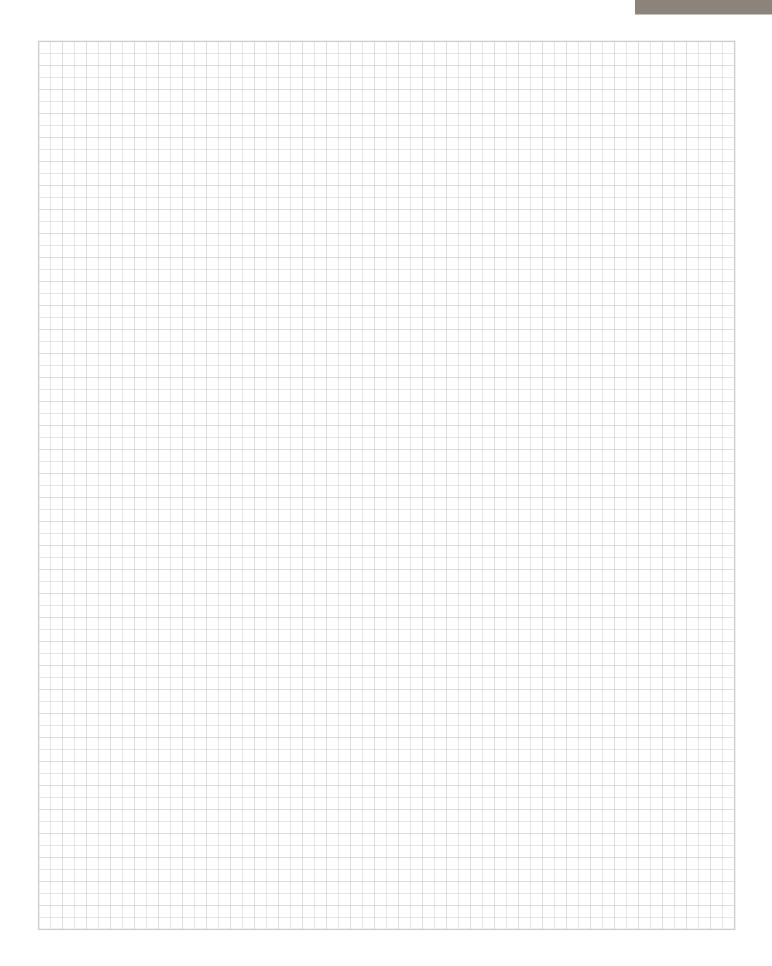
• Dimensions in parentheses are in millimeters.

[•] Details are for illustration only and are not intended to represent product installation methods or materials.

Refer to product installation instructions at andersenwindows.com.

Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.





Andersen® windows and patio doors make it easy to create a wide variety of combination designs

Combination Types

Ribbon Combination

Ribbons are horizontal window combinations (vertical joins) where opposite ends (head and sill) of individual windows are fastened to the building structure. Stacks are vertical window combinations (horizontal joins) where opposite sides (both side jambs) of individual windows are fastened to the building structure. One-way configurations or two-way configurations are used in combination designs.

One-Way Two-Way

Two-way combinations exist when multiple vertical stacks and horizontal ribbons are joined together. Unlike one-way combinations, the adjacent sides (head and sill, or both side jambs) of individual units are not necessarily fastened directly to the building structure. Two-way combinations are joined with both vertical and horizontal joining material, and may require reinforced joining materials and brackets depending on the local building code requirement for design wind load (measured in pounds per square foot, psf).

Multiple Ribbon/Stack Combination

Determining Design Wind Load Performance

Stack Combination

Proper combination design in conformance with local wind load requirements is vital to the success of your project. To make sure a combination is safe and that it complies with local building codes, the combination design wind load performance capacity must be determined. Correctly determining this performance capacity involves the following three steps:

STEP 1: Determine Building Code Requirement

Make sure you have the proper local codes and have identified specified compliance values. This calculated value (psf) will be used to determine if the combination will be acceptable (STEP 3).



STEP 2: Determine Product Performance

Compare product Design Pressure Rating data to the local building code (psf) requirement. This will show whether the individual units in a combination design are acceptable.



STEP 3: Determine Combination Performance

This step helps determine whether a given product, size, configuration and joining material type will meet the local building code design wind load requirement. To determine what joining material type to use (fiberglass, LVL or clips), compare the local building code design wind load requirement to the design wind load table value for a particular joining material on the following pages.

Andersen Joining Materials

For a successful installation, one engineered to provide the required design pressure, it is important Andersen joining materials and installation accessories be specified by a project architect or contractor. For one- and two-way combinations, Andersen offers a joining system to meet specified performance requirements.

Patio door combinations are joined using fiberglass material. Window joining materials include fiberglass, Laminated Veneer Lumber (LVL) or clips. Each creates a joining system that enhances the look of Andersen products without sacrificing performance.

The addition of joining materials will affect the overall rough opening dimension; see page 226. For all joining methods, read and follow product joining and installation instructions in their entirety. Visit andersenwindows.com for instructions.

Exterior trim strips and trim strip end caps are included with each kit for finishing the exterior join. Interior casing is included with each window joining kit for finishing the join on the interior. Components used with each joining system will vary depending on products being joined. Check with your Andersen supplier for more information.

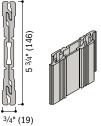
Reinforced joining material is used to create product alignment, positive joining and load transfer between Andersen windows and doors and the rough opening. They provide added strength capable of withstanding a greater range of wind load pressures. Non-reinforced joining material is used to create alignment and positive joining between windows. The structural performance of any combination is only as high as the lowest structural performance rating of any individual window or joining material in the combination.

Contact your Andersen supplier for specific performance and product recommendations.

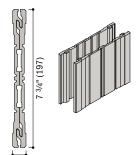


Joining Materials

Easy Connect fiberglass joining material utilizes either ¾" (19) x 5 ¾" (146) fiberglass interlocking joining plates for 4 ¾16" (116) jamb depths or ¾4" (19) x 7 ¾1" (197) fiberglass interlocking joining plates for higher performance for one-way and two-way joining, and is required for hinged inswing patio doors with 6 %16" (167) jambs. For windows, the Easy Connect Joining System makes installation at the job site easier with smaller, factory-assembled sub-group combinations that join as they are installed in the rough opening. The innovative design eliminates the need to disassemble units prior to joining and provides higher performance. Also available for windows, fully joined combinations are factory assembled and arrive ready for installation in sizes up to 12' (3658) x 8' (2438) or 8' (2438) x 12' (3658). Joining kits for windows and patio doors include the necessary joining materials for individual units to be joined at the job site. Extension jamb kits are available for field-joined combinations. Extension jambs are available factory applied for factory-joined window combinations. In some situations, joining material may prohibit the application of perimeter extension jambs. For more information on fiberglass joining see page 20 or contact your Andersen supplier. Visit andersenwindow.com/joining to view an Easy Connect Joining System video.



34" (19) x 5 34" (146) **Easy Connect Fiberglass Joining Material** For 4 9/16" (116) base jamb depths.



34" (19) x 7 34" (197) Easy Connect Fiberglass Joining Material For higher performance for 1-way and 2-way joining Required for hinged inswing patio doors with 6 % 16" (167) or greater exterior extension jamb depths.

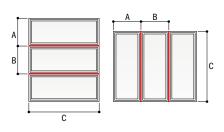
Laminated Veneer Lumber (LVL) joining materials with aluminum exterior trim receiver are used for factory-joined specialty-to-specialty window combinations only. Available for both 4.9/16" (116) and 6.9/16" (167) depths in lengths up to 10'-4" (3150).

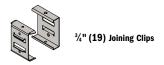
Clips are mounted to the midpoint of the jambs being joined and are used for one-way (ribbon or stack) joining only. Clip joining includes a CPVC exterior trim receiver and foam insulation.

1-Way Clip Joining

A-Series Casement, Awning, Double-Hung, Picture, Transom, Specialty Windows*

	(A + B) ÷ 2 = 10'-0" (3048)	63	42	32				
	(A + B) ÷ 2 = 9¹-6" (2896)	63	42	32				
	(A + B) ÷ 2 = 9'-0" (2743)	63	42	32				
	(A + B) ÷ 2 = 8'-6" (2591)	63	42	32				
5	(A + B) ÷ 2 = 8'-0" (2438)	63	42	32				
ensi	(A + B) ÷ 2 = 7'-6" (2286)	63	42	32				
Ë	(A + B) ÷ 2 = 7'-0" (2134)	63	42	32				
Average Adjacent Window Dimension	(A + B) ÷ 2 = 6'-6" (1981)	63	42	32				
Ä	(A + B) ÷ 2 = 6'-0" (1829)	63	42	32				
Ħ	(A + B) ÷ 2 = 5'-6" (1676)	63	42	33				
ace	(A + B) ÷ 2 = 5'-0" (1524)	63	43	34				
Adj	(A + B) ÷ 2 = 4'-6" (1372)	65	45	35				
rage	(A + B) ÷ 2 = 4'-0" (1219)	67	47	37				
Ave	(A + B) ÷ 2 = 3'-6" (1067)	70	51	41	31			
	(A + B) ÷ 2 = 3'-0" (914)	70	55	44	33			
	(A + B) ÷ 2 = 2'-6" (762)	70	64	52	39	33		
	(A + B) ÷ 2 = 2'-0" (610)	70	70	60	45	38	30	
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	60	50	40	34
	C = (length of join)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)





- · Numerical values in charts represent structural pressure only.
- . Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- *Andersen* products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
- · Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.
- Dimensions in parentheses are in millimeters.
- *LVL joining material will be used for factory-joined specialty-to-specialty window combinations. See charts on pages 200-201.

COMBINATION DESIGNS

1-Way Easy Connect Fiberglass Joining*

A-Series Casement, Awning, Double-Hung, Picture, Transom, Specialty Windows**

4 %16" (116)Minimum Wall Depth

	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	70	70	70	70	70	70	66	58	50
		70	70	70	70	70	70	70	70	70	70	66	58	50
	$(A+B) \div 2 = 11'-6'' (3505)$					70								
	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	70		70	70	70	70	70	66	58	50
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	70	70	70	70	70	70	70	66	58	50
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	70	70	70	70	70	66	58	50
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	70	70	70	70	66	58	50
<u>::</u>	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	70	70	70	70	70	66	58	50
Dimension	$(A + B) \div 2 = 8' - 6'' (2591)$	70	70	70	70	70	70	70	70	70	70	66	58	50
	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	70	70	70	66	58	50
8	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	70	70	66	58	50
Ĕ	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	70	66	58	51
Ħ	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	67	59	52
jace	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	68	60	54
e Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	69	62	56
Average Adjacent Window	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	65	59
¥	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	69	63
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	68
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	$(A + B) \div 2 = 2' - 6'' (762)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	$(A + B) \div 2 = 2^{1} - 0^{11} (610)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)

continued on next page

continued on next page

2-Way Easy Connect Fiberglass Joining*

A-Series Casement, Awning, Double-Hung, Picture, Transom, Specialty Windows**

4 1/16" (116) Minimum Wall Depth

	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	$(A + B) \div 2 = 1'-6'' (457)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	66	62	57
	$(A + B) \div 2 = 4'-0'' (1219)$	70	70	70	70	70	70	70	70	68	62	58	54	50
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	66	60	55	51	48	45
rage	$(A + B) \div 2 = 5' - 0'' (1524)$	70	70	70	70	70	70	65	59	54	50	46	43	40
Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	66	59	54	49	45	42	39	36
jace	$(A + B) \div 2 = 6' - 0'' (1829)$	70	70	70	70	68	60	54	49	45	41	38	36	33
T V	$(A + B) \div 2 = 6' - 6'' (1981)$	70	70	70	70	62	55	50	45	41	38	35	33	31
Average Adjacent Window	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	66	58	51	46	42	38	35	33	31	
W	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	62	54	48	43	39	36	33	31]	
Ē	(A + B) ÷ 2 = 8'-0" (2438)	70	70	68	58	51	45	40	37	34	31			
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	64	54	48	42	38	35	32				
E	(A + B) ÷ 2 = 9'-0" (2743)	70	70	60	51	45	40	36	33	30				
	(A + B) ÷ 2 = 9'-6" (2896)	70	68	57	49	43	38	34	31					
	(A + B) ÷ 2 = 10'-0" (3048)	70	65	54	46	40	36	32						
	(A + B) ÷ 2 = 10'-6" (3200)	70	62	51	44	38	34	31]					
	(A + B) ÷ 2 = 11'-0" (3353)	70	59	49	42	37	33							
	(A + B) ÷ 2 = 11'-6" (3505)	70	56	47	40	35	31							
	(A + B) ÷ 2 = 12'-0" (3658)	68	54	45	38	34	30							

· Numerical values in charts represent structural pressure only.

• Easy Connect and other fiberglass joins are certified up to PG70 when installed according to Andersen installation instructions.
• Andersen* products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

^{*} Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

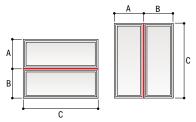
*Fixed transom windows (ATF) can only be joined to venting transoms windows (ATV) vertically and double-hung windows (ADH) can only be joinined to double-hung windows (ADH) vertically. For *T" combinations not found in iQ+,

^{**}LVL joining material will be used for factory-joined specialty-to-specialty window combinations. See charts on pages 200-201.



1-Way Easy Connect Fiberglass Joining continued from previous page

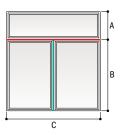
			1				
42	35	30					
42	35	30					
42	35	30					
42	35	30					
42	35	30					
42	35	30					
42	35	30					
42	35	30					
42	36	31					
43	37	32					
44	38	33					
45	39	34	30				
47	41	36	31				
50	44	39	33				
54	47	42	36	31			
58	51	46	39	34			
62	57	50	43	37	32		
69	64	57	49	42	36	32	
70	70	66	56	48	42	37	32
70	70	70	67	58	50	44	38
70	70	70	70	70	62	54	48
70	70	70	70	70	70	70	63
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)





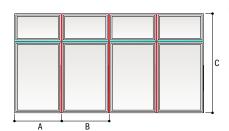
3/4" (19) x 5 3/4" (146) **Easy Connect Fiberglass Joining Material**

For 4 9/16" (116) base jamb depths.

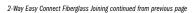


3/4" (19) x 5 3/4" (146)

Easy Connect Fiberglass Joining Material For 4 %16" (116) base jamb depths.



Red lines represent priority join (dimension C in table).



32							
35	32						
39	35	31					
44	40	35	32				
51	45	41	37	33	30		
59	53	47	43	39	35	32	30
70	64	57	51	47	42	39	36
70	70	70	64	58	53	49	45
70	70	70	70	70	70	65	60
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)



[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
• Easy Connect and other fiberglass joins are certified up to PG70 when installed according to Andersen installation instructions.

^{*}Andersen* products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

Dimensions in parentheses are in millimeters.
 Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

^{*}Fixed transom windows (ATF) can only be joined to venting transoms windows (ATV) vertically and double-hung windows (ADH) can only be joinined to double-hung windows (ADH) vertically. For "T" combinations not found in iQ+,

contact your Andersen supplier.

**LVL joining material will be used for factory-joined specialty-to-specialty window combinations. See charts on pages 200-201.

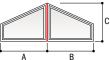
COMBINATION DESIGNS

1-Way LVL Joining

A-Series Factory-Joined Specialty Windows

4 9/16" (116)Minimum Wall Depth

	C = (length of join)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	67	59	49
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	62	50	44	36
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	62	53	43	37	31
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	67	53	45	36	31	
Ave	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	61	48	41	33		
rage	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	67	55	43	36	1		
Average Adjacent Window Dimension	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	64	52	40	34	1		
jace	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	60	49	38	32	1		
Ĭ	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	58	47	36	30]		
Ving	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	56	45	35				
NO.	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	56	45	34				
Ē	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	55	44	33				
ensi	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	55	44	33				
5	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	55	44	33				•
	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	55	44	33				
	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	55	44	33				
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	55	44	33				
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	55	44	33				





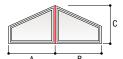
LVL Joining Material For $4^{9/16}$ " (116) base jamb depths.

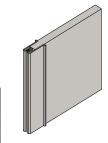
1-Way LVL Joining

A-Series Factory-Joined Specialty Windows

6 %16" (167) Minimum Wall Depth

	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	66	54	42	35	
	(A + B) ÷ 2 = 9¹-6" (2896)	70	70	70	70	70	66	54	42	35	
	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	66	54	42	35	
	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	66	54	42	35	
<u>=</u>	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	66	54	42	36	A
ens	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	67	55	43	36	
ᆵ	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	67	56	44	37	
Adjacent Window Dimension	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	69	57	45	39	
Ninc	$(A + B) \div 2 = 6'-0'' (1829)$	70	70	70	70	70	70	59	47	40	
Ĭ	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	62	49	42	
jace	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	65	52	44	
	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	56	48	40
Average	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	60	52	42
Ave	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	67	58	48
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	64	53
	$(A + B) \div 2 = 2^{1} - 6^{11} (762)$	70	70	70	70	70	70	70	70	70	63
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)





34" (19) x 7 34" (197) **LVL Joining Material** For $6\%_{16}$ " (167) base jamb depths.

[·] Numerical values in charts represent structural pressure only.

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen' products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

• Dimensions in parentheses are in millimeters.

[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

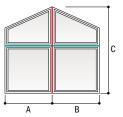


2-Way LVL Joining

A-Series Windows: Factory-Joined Specialty

4 %16"	
(116)	
Minimum Wall Depth	
Wall	

	C = (length of join)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)
⋖ `	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	57	49	40
Average	$(A + B) \div 2 = 2' - 0'' (610)$	70	70	70	61	52	41	35	
-	$(A + B) \div 2 = 2^{1}-6^{11} (762)$	70	70	66	51	43	34		
Adjacent Window Dimension	(A + B) ÷ 2 = 3'-0" (914)	70	65	54	41	35			Α Α
cen	$(A + B) \div 2 = 3'-6'' (1067)$	70	58	47	36	31			
፮ ፞	$(A + B) \div 2 = 4'-0'' (1219)$	67	49	40	31				
ğ	(A + B) ÷ 2 = 4'-6" (1372)	61	45	37					
<u>~</u> ≥	(A + B) ÷ 2 = 5'-0" (1524)	54	40	32					
me.	(A + B) ÷ 2 = 5'-6" (1676)	50	37	30					
Sio	(A + B) ÷ 2 = 6'-0" (1829)	45	33						
_	$(A + B) \div 2 = 6'-6'' (1981)$	42	31						



35

9'-6"

(2896)

(dimension C in table).

Red lines represent priority join

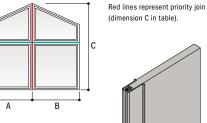
3/4" (19) x 5 3/4" (146) LVL Joining Material For 4 9/16" (116) base jamb depths.

2-Way LVL Joining

A-Series Windows: Factory-Joined Specialty

6 ⁹ / ₁₆ " (167)	
Minimum Wall Depth	

	C = (length of join)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	80	80	80	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	80	80	70	62	52
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	80	71	59	51	43
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	67	58	48	42	35
Ave	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	59	51	42	37	31
rage	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	64	51	44	36	32	
Average Adjacent Window	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	69	58	46	40	33		
jace	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	61	51	41	35			
ji ,	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	56	48	38	33			
Ĭ.	(A + B) ÷ 2 = 6'-0" (1829)	70	70	66	51	43	34	30			
8	(A + B) ÷ 2 = 6'-6" (1981)	70	70	62	48	40	32		• A	В	
Ë	(A + B) ÷ 2 = 7'-0" (2134)	70	69	57	44	37					=- -
Dimension	(A + B) ÷ 2 = 7'-6" (2286)	70	65	54	41	35					
5	(A + B) ÷ 2 = 8'-0" (2438)	70	61	50	38	32					
	(A + B) ÷ 2 = 8'-6" (2591)	70	58	47	37	31					c
	(A + B) ÷ 2 = 9'-0" (2743)	70	54	44	34						
	(A + B) ÷ 2 = 9'-6" (2896)	70	52	42	33						
	(A + B) ÷ 2 = 10'-0" (3048)	69	49	40	31						



3/4" (19) x 7 3/4" (197) LVL Joining Material For 6 %16" (167) base jamb depths.

[•] Numerical values in charts represent structural pressure only.
• Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen' products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
• Dimensions in parentheses are in millimeters.

[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

COMBINATION DESIGNS

1-Way Easy Connect Fiberglass Joining

A-Series Gliding and Hinged Patio Doors, Sidelights and Transoms

4 9/16" (116)Minimum Wall Depth

	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2¹-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	70
rage	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	70	70
e Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	70	70	70
jace	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	70	70	70
ant .	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	70	70	70
Average Adjacent Window	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	70	70	70	68
NOK.	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	70	70	70	70	70	67
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	70	70	70	70	70	70	70	67
<u></u>	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	70	70	70	70	70	70	70	70	70	67
	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	70	70	70	70	70	70	70	70	67

continued on next page

1-Way Easy Connect Fiberglass Joining

A-Series Gliding and Hinged Patio Doors, Sidelights and Transoms

6 9/16" (167)Minimum Wall Depth

	(A + B) ÷ 2 = 12'-0" (3658)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	70	70	70	70	70	70	70	70	70	70
	$(A + B) \div 2 = 10'-6'' (3200)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 10¹-0" (3048)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	70	70	70	70	70	70	70	70	70
ë	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	70	70	70	70	70	70	70	70	70
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	70	70	70	70	70	70	70	70
φ	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	70	70	70	70	70	70	70
Win	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	70	70	70	70	70	70
ent	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	70	70	70	70	70
djac	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	70	70	70	70	70
ě.	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	70	70	70
Average Adjacent Window	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	70	70
₹	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	70
	$(A + B) \div 2 = 4'-0'' (1219)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)

. Numerical values in charts represent structural pressure only.

continued on next page

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Easy Connect and other fiberglass joins are certified up to PG70 when installed according to Andersen installation instructions.

• Andersen 'products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

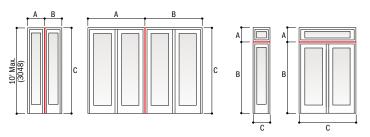
• Dimensions in parentheses are in millimeters.

[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.
• Hinged inswing patio doors with a 6 9/1c" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.
"Two-panel doors shown. Three- and four-panel doors similar with different overall A and B widths.



1-Way Easy Connect Fiberglass Joining continued from previous page

52	42	33	27	22			
52	42	33	27	22			
52	42	33	27	22			
52	42	33	27	22			
-							
52	42	33	27	22			
52	42	33	27	23			
52	42	34	27	23			
52	42	34	28	23	20		
53	42	35	29	24	20		
53	43	35	29	25	21		
55	44	37	31	26	22		
56	46	38	32	27	23	20	
59	48	40	34	29	25	21	
62	51	43	36	31	26	23	20
66	55	46	39	33	28	25	21
70	59	50	42	36	31	27	24
70	65	55	47	40	35	30	26
70	70	62	53	45	39	34	30
70	70	70	61	52	45	39	34
70	70	70	70	62	54	47	41
70	70	70	70	70	67	58	51
70	70	70	70	70	70	70	68
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)





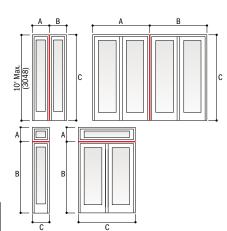
3/4" (19) x 5 3/4" (146) Easy Connect Fiberglass Joining Material For 4 9/16" (116) base jamb depths.

When joining hinged patio doors, do not join hinge jamb to hinge jamb.

A structural header is required to separate patio door transoms and transom windows from 4-panel gliding patio doors.



										,	
70	64	58	52	47	39	33	28	23	20		
70	64	58	52	47	39	33	28	23	20		
70	64	58	52	47	39	33	28	23	20		
70	64	58	52	47	39	33	28	24	21		
70	64	58	52	47	40	34	29	24	21		
70	64	58	52	48	40	34	29	25	22		
70	64	58	53	48	41	35	30	25	22		
70	65	58	53	49	42	36	31	26	23	20	
70	65	59	54	50	43	37	32	27	24	21	
70	66	60	56	51	45	39	33	29	25	22	20
70	68	62	57	53	47	40	35	30	26	23	21
70	70	64	59	55	49	43	37	32	28	25	22
70	70	67	62	58	52	45	39	34	30	26	24
70	70	70	65	61	56	48	42	36	32	29	25
70	70	70	70	65	60	52	46	40	35	33	28
70	70	70	70	70	66	57	52	44	38	34	30
70	70	70	70	70	70	64	56	48	43	38	34
70	70	70	70	70	70	70	63	55	49	43	39
70	70	70	70	70	70	70	70	64	56	50	45
70	70	70	70	70	70	70	70	70	67	60	54
70	70	70	70	70	70	70	70	70	70	70	67
70	70	70	70	70	70	70	70	70	70	70	70
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3658)	13'-0" (3658)	13'-6" (3658)	14'-0" (3658)





3/4" (19) x 7 3/4" (197) Easy Connect Fiberglass Joining Material

For higher performance for 1-way and 2-way joining. Required for hinged inswing patio doors with $6\,^9\!/_{16}$ " (167) or greater exterior extension jamb depths.

When joining hinged patio doors, do not join hinge jamb to hinge jamb. A structural header is required to separate patio door transoms and transom windows from 4-panel gliding patio doors.

[.] Numerical values in charts represent structural pressure only.

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Easy Connect and other fiberglass joins are certified up to PG70 when installed according to Andersen installation instructions

[•] Andersen* products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

[•] Dimensions in parentheses are in millimeters.

[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.
• Hinged inswing patio doors with a 6 9/1c" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.
"Two-panel doors shown. Three- and four-panel doors similar with different overall A and B widths.

COMBINATION DESIGNS

2-Way Easy Connect Fiberglass Joining

A-Series Gliding and Hinged Patio Doors, Sidelights and Transoms

4 1/16" (116)Minimum Wall Depth

	(A + B) ÷ 2 = 12'-0" (3658)	70	70	69	59	52	46	41	38	34	32	29	27	26
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	62	54	48	43	39	36	33	31	29	27
	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	65	57	50	45	41	38	35	32	30	28
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	68	59	53	47	43	39	36	34	31	29
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	62	55	50	45	41	38	35	33	31
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	66	58	52	48	44	40	37	35	32
<u>=</u>	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	69	62	55	50	46	43	39	37	34
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	65	59	53	49	45	42	39	36
Ë	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	69	62	57	52	48	44	41	39
Mor	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	67	60	55	51	47	44	41
Average Adjacent Window	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	65	59	55	51	47	44
Ħ	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	64	59	55	51	48
jac	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	69	64	59	55	52
e Ad	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	65	60	56
rag	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	67	62
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	69
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-6" (762)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)

continued on next page

2-Way Easy Connect Fiberglass Joining

A-Series Gliding and Hinged Patio Doors, Sidelights and Transoms

6 ⁹/₁₆" (167) Minimum Wall Depth

	(A + B) ÷ 2 = 12'-0" (3658)	70	70	69	59	52	46	41	38	34	32	29	27	26
	(A + B) ÷ 2 = 11'-6" (3505)	70	70	70	62	54	48	43	39	36	35	31	29	27
	(A + B) ÷ 2 = 11'-0" (3353)	70	70	70	65	57	50	45	41	38	35	32	30	28
	(A + B) ÷ 2 = 10'-6" (3200)	70	70	70	68	59	53	47	43	39	36	34	31	29
	(A + B) ÷ 2 = 10'-0" (3048)	70	70	70	70	62	55	50	45	41	38	35	33	31
	(A + B) ÷ 2 = 9'-6" (2896)	70	70	70	70	66	58	52	48	44	40	37	35	33
<u></u>	(A + B) ÷ 2 = 9'-0" (2743)	70	70	70	70	69	62	55	50	46	43	39	37	34
Dimension	(A + B) ÷ 2 = 8'-6" (2591)	70	70	70	70	70	65	59	53	49	45	42	39	37
Ë	(A + B) ÷ 2 = 8'-0" (2438)	70	70	70	70	70	69	62	57	52	48	44	41	39
8	(A + B) ÷ 2 = 7'-6" (2286)	70	70	70	70	70	70	67	60	55	51	47	44	41
Window	(A + B) ÷ 2 = 7'-0" (2134)	70	70	70	70	70	70	70	65	59	55	51	47	44
Ħ	(A + B) ÷ 2 = 6'-6" (1981)	70	70	70	70	70	70	70	70	64	59	56	51	48
jace	(A + B) ÷ 2 = 6'-0" (1829)	70	70	70	70	70	70	70	70	69	64	59	55	52
P A	(A + B) ÷ 2 = 5'-6" (1676)	70	70	70	70	70	70	70	70	70	70	62	60	57
Average Adjacent	(A + B) ÷ 2 = 5'-0" (1524)	70	70	70	70	70	70	70	70	70	70	70	67	62
Ave	(A + B) ÷ 2 = 4'-6" (1372)	70	70	70	70	70	70	70	70	70	70	70	70	69
	(A + B) ÷ 2 = 4'-0" (1219)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-6" (1067)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 3'-0" (914)	70	70	70	70	70	70	70	70	70	70	70	70	70
	$(A + B) \div 2 = 2' - 6'' (762)$	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 2'-0" (610)	70	70	70	70	70	70	70	70	70	70	70	70	70
	(A + B) ÷ 2 = 1'-6" (457)	70	70	70	70	70	70	70	70	70	70	70	70	70
	C = (length of join)	2'-0" (610)	2'-6" (762)	3'-0" (914)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)

• Easy Connect and other fiberglass joins are certified up to PG70 when installed according to Andersen installation instructions.

continued on next page

[•] Numerical values in charts represent structural pressure only.
• Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Andersen* products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
• Dimensions in parentheses are in millimeters.

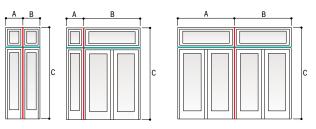
[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

[•] Hinged inswing patio doors with a 6 9/is" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material. Two-panel doors shown. Three- and four-panel doors similar with different overall A and B widths.



2-Way Easy Connect Fiberglass Joining continued from previous page

23	20						
24	21						
25	22	20					
26	23	21					
27	24	22	20				
29	26	23	21				
30	27	24	22	20			
32	29	26	23	21]		
34	30	27	25	22	20		
36	32	29	26	24	22	20	
39	35	31	28	25	23	21	
42	38	34	30	27	25	23	21
46	41	36	33	30	27	25	23
50	44	40	36	33	30	27	25
55	49	44	40	36	33	30	27
61	54	49	44	40	36	33	30
69	61	55	50	45	41	37	34
70	54	63	57	51	47	43	39
70	70	70	66	60	55	50	46
70	70	70	70	70	66	60	55
70	70	70	70	70	70	70	69
70	70	70	70	70	70	70	70
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)



Red lines represent priority join (dimension C in table).

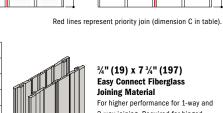


3/4" (19) x 5 3/4" (146) Easy Connect Fiberglass Joining Material For $4^{9}/_{16}$ " (116) base jamb depths.

When joining hinged patio doors, do not join hinge jamb to hinge jamb. A structural header is required to separate patio door transoms and transom windows from 4-panel gliding patio doors.

2-Way Easy Connect Fiberglass Joining continued from previous page

				1						. A . B	. A
24	23	22	20		1						
25	24	23	21	20		1					
26	25	24	22	21	20						
28	26	25	23	22	21	20					c
29	27	26	25	23	22	21	20				
31	29	27	26	25	24	23	22				
32	31	29	27	26	25	24	23	21			
34	32	31	29	28	26	25	24	22	21		
37	34	33	31	29	28	27	26	24	22	20	
39	37	35	33	31	30	29	27	25	23	22	20
42	39	37	35	34	32	31	29	27	25	23	22
45	43	40	38	36	35	33	32	29	27	25	23
49	46	44	41	39	38	36	34	32	29	27	26
53	50	48	45	43	41	39	38	35	32	30	28
59	55	52	50	47	45	43	42	38	35	33	30
65	62	58	55	53	50	48	46	43	39	37	34
70	69	66	62	59	57	54	52	48	44	41	38
70	70	70	70	68	65	62	59	55	51	47	44
70	70	70	70	70	70	70	69	64	59	55	51
70	70	70	70	70	70	70	70	70	70	66	61
70	70	70	70	70	70	70	70	70	70	70	70
70	70	70	70	70	70	70	70	70	70	70	70
8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3658)	13'-0" (3658)	13'-6" (3658)	14'-0" (3658)



3/4" (19) x 7 3/4" (197) **Easy Connect Fiberglass** Joining Material

For higher performance for 1-way and 2-way joining. Required for hinged inswing patio doors with 6 1/16" (167) or greater exterior extension jamb depths.

When joining hinged patio doors, do not join hinge jamb to hinge jamb. A structural header is required to separate patio door transoms and transom windows from 4-panel gliding patio doors.

[.] Numerical values in charts represent structural pressure only.

[•] Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

[•] Easy Connect and other fiberglass joins are certified up to PG70 when installed according to Andersen installation instructions.

[•] Andersen* products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

[•] Dimensions in parentheses are in millimeters.

[•] Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

[•] Hinged inswing patio doors with a 6 9/1s" (167) or greater extenor extension jamb depth require 7 3/4" (197) fiberglass joining material. "Two-panel doors shown. Three- and four-panel doors similar with different overall A and B widths.

Andersen® Window and Patio Door Altitude Limits - Dual-Pane Glass

The chart below gives the altitude limit in feet for most A-Series products in this guide. If the installation of a given product is at an altitude greater than that shown in this chart, a capillary breather tube must be ordered. Be aware that the use of a capillary breather tube eliminates argon gas blend fill and will result in a slightly lower thermal performance (approximately 0.02 increase in window U-Factor). For NFRC certified total unit performance on units with capillary breather tubes for higher altitude applications, please visit andersenwindows.com/nfrc.

The use of dual-pane insulating glass at altitudes higher than its rating will result in severe glass distortion, increased glass breakage potential and a risk of seal failure. Smaller windows are most affected by altitude changes. An increase in altitude results in a decrease in atmospheric pressure. A sealed insulating glass unit attempts to combat this change by increasing its volume to reduce its pressure. One way to increase its volume is by glass deflection. A smaller window is stiffer and does not deflect as much as a larger window; therefore, it cannot relieve the pressure as readily. Thus the load applied to the glass is greater, resulting in a greater risk for breakage. Another way the window tries to increase its volume is by increasing the edge area; i.e., the seal area. The increased pressure applied to the edge seal load for smaller windows is therefore greater, increasing the chance for seal failure.

Product	3,000	ACW1820 ACW1838 ACW1854 ACW2028		5,0	000	6,0	000	7,0	000	8,0	000	9,000		10,	000			
A-Series Casement Windows		ACW1824 ACW1828 ACW1830 ACW1834	ACW1840 ACW1844 ACW1848 ACW1850	ACW1858 ACW1860 ACW2020 ACW2024	ACW2030 ACW2034 ACW2420	ACW2038 ACW2040 ACW2044 ACW2048 ACW2050 ACW2054 ACW2058 ACW2060	ACW2424 ACW2428 ACW2430 ACW2434 ACW2438 ACW2440 ACW2624 ACW2824	ACW2444 ACW2448 ACW24250 ACW2454 ACW2458 ACW2460 ACW2628 ACW2630	ACW2634 ACW2638 ACW2640 ACW2644 ACW2660 ACW2828 ACW21028 ACW3028	ACW2648 ACW2650 ACW2654 ACW2658 ACW2830 ACW2834 ACW2838 ACW2840 ACW2844 ACW2848	ACW2854 ACW2858 ACW2860 ACW21030 ACW21034 ACW21038 ACW21040 ACW21044 ACW21048 ACW21050	ACW2850 ACW21054 ACW21058 ACW21060 ACW3030 ACW3034 ACW3038	ACW3040 ACW3044 ACW3048 ACW3050 ACW3054 ACW3058 ACW3060					
A-Series Awning Windows		AAN1814 AAN2014 AAN2414 AAN2614 AAN21014 AAN3014 AAN3014 AAN3014 AAN3414 AAN3614 AAN4614 AAN4614 AAN5614 AAN5614	AAN6014 AAN1818 AAN2018 AAN2018 AAN2618 AAN2618 AAN21018 AAN3018 AAN3018 AAN3418 AAN3418 AAN4018 AAN4418 AAN4018 AAN4518	AAN5818 AAN6018 AAN18110 AAN1820 AAN1824 AAN1828 AAN1830 AAN20110 AAN24110 AAN28110 AAN28110 AAN30110 AAN32110 AAN32110 AAN34110 AAN34110	AAN40110 AAN44110 AAN50110 AAN50110 AAN56110 AAN60110 AAN2020 AAN2420 AAN2620 AAN2620 AAN21020 AAN220 AAN2024 AAN2028 AAN2028 AAN2030	AAN3420 AAN4820 AAN4420 AAN4820 AAN5020 AAN5420 AAN5420 AAN5420 AAN5420 AAN5420 AAN5420	AAN2624 AAN2824 AAN21024 AAN3024 AAN3224 AAN3424 AAN3424 AAN2428 AAN2430	AAN4024 AAN4824 AAN4824 AAN5024 AAN5424 AAN6824 AAN6024 AAN2628 AAN2630	AAN2828 AAN21028 AAN3028 AAN3228 AAN3428 AAN3428 AAN4028 AAN4028	AAN4828 AAN5028 AAN5428 AAN5828 AAN6028 AAN2830 AAN21030		AAN3030 AAN3230 AAN3430 AAN3430 AAN4030 AAN4430 AAN4830 AAN5030 AAN5030 AAN5030		AAN5430				
A-Series Double-Hung Windows		ADH1830 ADH1834 ADH18838 ADH1840 ADH1844 ADH1848 ADH1850 ADH1854 ADH1850 ADH1864 ADH1868 ADH1868 ADH1868 ADH1868	ADH1880 ADH2030 ADH2034 ADH2038 ADH2040 ADH2044 ADH2048 ADH2050 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054 ADH2054	ADH2434 ADH2438 ADH2630 ADH2634 ADH2638 ADH2830 ADH2830 ADH21034 ADH21034 ADH21034 ADH21034 ADH3030 ADH3030 ADH3034	ADH3038 ADH3230 ADH3234 ADH3238 ADH3430 ADH3434 ADH3438 ADH3830 ADH3830 ADH3634 ADH4034	ADH2068 ADH2074 ADH2080 ADH2440 ADH2444 ADH2445 ADH2450 ADH2454 ADH2460 ADH2464 ADH2464 ADH2464 ADH2644 ADH2644 ADH2844 ADH2844 ADH2844 ADH21040	ADH3040 ADH3044 ADH2840 ADH2844 ADH21040 ADH21040 ADH3040 ADH3040 ADH3040 ADH3044 ADH3844 ADH3844 ADH3844 ADH3840 ADH3088 ADH4038 ADH4038 ADH4044	ADH2480 ADH2648 ADH2650 ADH2654 ADH2658 ADH2660 ADH2664 ADH2668 ADH26674	ADH2680 ADH2848 ADH21048 ADH3048 ADH3248 ADH3484 ADH3448 ADH4048	ADH2850 ADH2854 ADH2863 ADH2860 ADH2864 ADH2864 ADH2874 ADH21054 ADH21054 ADH21054 ADH21056 ADH21060 ADH21064	ADH21068 ADH21074 ADH21080 ADH3050 ADH3054 ADH3254 ADH3254 ADH3450 ADH3454 ADH3850 ADH3454 ADH3850 ADH3050 ADH3050 ADH3050 ADH3050 ADH3050 ADH3050 ADH3050	ADH3058 ADH3060 ADH3064 ADH3068 ADH3074 ADH3080 ADH3258 ADH3260 ADH3264	ADH3268 ADH3274 ADH3280 ADH3458 ADH3460 ADH3460 ADH3858 ADH4058 ADH4060	ADH3464 ADH3468 ADH3474 ADH3480 ADH3480 ADH3864 ADH4064	ADH3868 ADH3874 ADH3880 ADH4068 ADH4074 ADH4080			
A-Series Picture Windows		APW1420 APW1424 APW1428 APW1430 APW1434 APW1438 APW1440 APW1448 APW1450 APW1454	APW1458 APW1460 APW1464 APW1468 APW1474 APW1480 APW1820 APW1824 APW1820 APW1824 APW1828 APW1830	APW1834 APW1848 APW1840 APW1844 APW1848 APW1850 APW1850 APW1860 APW1864	APW1868 APW1874 APW1880 APW2020 APW2420 APW2820 APW2820 APW31020 APW31020 APW31020 APW31020	APW3420 APW3420 APW4420 APW4420 APW5020 APW5020 APW5020 APW6020 APW6020 APW6020 APW6020 APW7020 APW7420 APW7020 APW7020 APW2038 APW2030 APW2030 APW2038	APW2040 APW2044 APW2044 APW2050 APW2054 APW2064 APW2064 APW2068 APW2074 APW2084 APW2084 APW2084 APW2084 APW2824 APW2824 APW31024 APW3224 APW3224 APW3024	APW4424 APW4824 APW5024 APW5624 APW6624 APW6024 APW6024 APW7024 APW7024 APW724	APW2434 APW2438 APW2440 APW2460 APW2464 APW2468 APW2474 APW2480 APW2638 APW2634 APW2634 APW2634 APW2634 APW2634 APW2644	APW2444 APW2448 APW2450 APW2454 APW2658 APW2650 APW2654 APW2664 APW2664 APW2664 APW2668 APW2680 APW2828 APW2674 APW21028 APW3028 APW3028 APW3028 APW34028 APW34028 APW34028 APW44028 APW44028	APW4828 APW6028 APW6028 APW7028 APW71828 APW71828 APW2830 APW2834 APW2834 APW2838 APW2840 APW2844 APW2854 APW2854 APW2854 APW2854 APW2854 APW2864 APW2860 APW2844 APW2858 APW2860 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2869 APW2864 APW2	APW5028 APW5028 APW5828 APW2850 APW21034 APW21034 APW21044 APW21044 APW21046 APW21054 APW21060 APW21060 APW21060 APW21060 APW21064 APW21068 APW21074 APW21080 APW21080 APW230 APW230 APW	APW3830 APW4430 APW4430 APW4830 APW5430 APW5430 APW5430 APW6830 APW7430 APW7830 APW7830 APW3034 APW3034 APW3044 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045 APW3045	APW36830 APW3060 APW3064 APW3064 APW3068 APW3074 APW3080 APW3244 APW3248 APW3249 APW3250 APW3254 APW3256 APW3254 APW3258 APW3264 APW3268 APW3264 APW3268 APW3484 APW4884 APW4884 APW5484 APW3446 APW3456 APW3456 APW3460	APW6034 APW6034 APW7034 APW7034 APW7034 APW7834 APW3034 APW3464 APW3464 APW3468 APW3483 APW4038 APW4438 APW4038 APW6438 APW6438 APW6438 APW6038 APW6038 APW6038 APW6038 APW6038 APW6038 APW6038 APW6038 APW6038 APW6038 APW6038 APW804 APW806 A	APW4840 APW5440 APW5440 APW5840 APW6840 APW6840 APW6840 APW6840 APW7440 APW7440 APW7440 APW7440 APW4054 APW4054 APW4054 APW4054 APW4050 APW4054 APW4050 APW4054 APW4050 APW4054 APW4050 APW4054 APW4050 APW4054 APW4050 APW4054 APW4454 APW4456 APW4456 APW4456 APW4456 APW4856 APW4856 APW4856 APW4856	APW4868 APW4874 APW4880 APW5044 APW5054 APW50554 APW50564 APW50564 APW5068 APW5068 APW5074 APW5068 APW5074 APW5044 APW5444 APW5448 APW5480 APW5480 APW5480 APW5480 APW5480 APW5480 APW5848 APW5848 APW5848 APW5886 APW5886 APW5860 APW5864 APW5864 APW5864 APW5864 APW5864 APW5864 APW5864 APW6066 APW6068 APW6066 APW6066 APW60664 APW60664 APW60644	APW6448 APW6454 APW6454 APW6458 APW6458 APW6458 APW6844 APW6844 APW6884 APW6886 APW7686 APW7044 APW7050 APW705

^{*}Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows, gliding windows or gliding patio doors, some interference may occur, affecting operation of these units.

continued on next page

Altitude limits for patio doors shown in two-panel configurations. These limits also qualify for same size panels used in single or multiple panel configurations.

^{*}Contact your Andersen supplier for altitude limits for custom-sized windows and doors.



Andersen® Window and Patio Door Altitude Limits - Dual-Pane Glass (continued)

Product	3,000		4,000		5,0			000		000	8,00	0	9,000		10,0	00
A-Series Fixed Transom Windows	AIF8010 AIF1 AIF8014 AIF1 AIF8014 AIF1 AIF2 AIF2 AIF2 AIF2 AIF2 AIF2 AIF3 AIF3 AIF3 AIF4 AIF4 AIF4 AIF4 AIF4 AIF4 AIF4 AIF4	0100 AFF1424 1101 AFF181 1610 AFF204 1610	0 AF3016 4 AF3216 4 AF3216 4 AF3416 4 AF4416 4 AF4416 4 AF4416 4 AF5416 4 AF5416 4 AF5616 4 AF6416 4 AF6416 4 AF6416 4 AF6416 4 AF6416 4 AF6416 4 AF7616 4 AF7616 4 AF7816 6 AF7816 6 AF7830 6 AF7830 6 AF7830	AIF2818 AIF21018 AIF3218 AIF3218 AIF3418 AIF3418 AIF4018 AIF4418 AIF4018 AIF5818 AIF6018 AIF6618 AIF6618 AIF6618 AIF6619 AIF610 AIF21010 AIF21010 AIF210110 AIF3110 AIF3110 AIF78110 AIF78110	AIF40110 AIF44110 AIF48110 AIF58110 AIF58110 AIF58110 AIF58110 AIF68110 AIF68110 AIF68110 AIF2020 AIF2030	AIF3420 AIF3820 AIF4420 AIF4420 AIF5420 AIF5520 AIF6520 AIF6620 AIF6620 AIF6720 AIF7820 AIF7820 AIF7820 AIF3820 AIF3822 AIF2622 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822 AIF3822	AIF-4022 AIF-4422 AIF-4422 AIF-5022 AIF-5022 AIF-6022 AIF-6022 AIF-6022 AIF-7022 AIF-7022 AIF-7022 AIF-7024 AIF-2434 AIF-2430 AIF-2434 AIF-2430 AIF-2434 AIF	AIF3824 AIF4024 AIF6024 AIF6824 AIF7624 AIF7724 AIF7724 AIF2626 AIF2628 AIF2630 AIF2634 AIF2830 AIF2634 AIF2830 AIF2634 AIF3266 AIF31026 AIF31026 AIF3266 AIF3426 AIF4426	AIF4424 AIF4824 AIF5024 AIF52424 AIF5426 AIF4826 AIF5026 AIF6026 AIF6026 AIF6026 AIF6026 AIF7026 AIF7026 AIF7026 AIF7026 AIF8026 AIF8026 AIF8026 AIF8026	AIF2834 AIF21028 AIF3028 AIF3428 AIF3428 AIF4028 AIF4428 AIF5428 AIF5428 AIF6428 AIF6428 AIF6428 AIF7628 AIF7028 AIF7828	ATF21034 ATF3030 ATF3230 ATF3430 ATF3830 ATF4030 ATF4430 ATF4030 ATF5030 ATF5430		AIF5830 AIF6030 AIF6430 AIF6830 AIF76830 AIF7830 AIF7830 AIF8034 AIF3434 AIF4434 AIF4434 AIF4434 AIF45034 AIF5834 AIF5834 AIF5834	AIF6434 AIF6834 AIF7034 AIF7434 AIF7834 AIF8034		
A-Series Venting Transom Windows	ATF1 ATV1 ATV2 ATV2 ATV2 ATV2 ATV2 ATV2 ATV2 ATV2	426 AF281814 AFV281814 AFV281814 AFV281814 AFV281814 AFV381814 AFV38181 AFV3	6 AFZ618 6 AFV2618 6 AFV2618 6 AFV21018 6 AFV2108 6 AFV2108 6 AFV3218 6 AFV3218 6 AFV3418 6 AFV4618 6 AFV4618 6 AFV5618 6 AFV5618 6 AFV5618 8 AFV6018 10 AFV22110 12 AFV24110 14 AFV26110 15 AFV26118 8 AFV20110 16 AFV28110 17 AFV28110 18 AFV20110 18 AFV30110	ATV21020 ATV3020 ATV3220	ATV4020 ATV4420 ATV4820 ATV5020 ATV5420 ATV5820	ATV4422 ATV4822 ATV5022 ATV5422 ATV5822 ATV6022 ATV6022 ATV2424 ATV24624 ATV2824 ATV21024 ATV3024 ATV3024 ATV3824 ATV34024 ATV34024 ATV34024 ATV34024	ATV4424 ATV4524 ATV5024 ATV5024 ATV5624 ATV6024 ATV2628 ATV2826	ATV21026 ATV3026 ATV3226 ATV3426 ATV4026 ATV4426 ATV4026 ATV6026	ATV4826 ATV5026 ATV5426 ATV28428 ATV21028 ATV3028 ATV3228 ATV3428	ATV3828 ATV4028 ATV4428 ATV4828 ATV5828 ATV56028						
A-Series Patio Door Transoms Sash-Set	3,000 FWID-1-81110 FWID-1-9610 FWID-1-81114 FWID-1-9614	FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD- FWTD-	1-2910 1-3110 1-3110 2-4010 2-5010 2-5010 2-5410 2-6010 2-6410 3-7110 -81110 3-9610 1-4010 1-5010	FWTD-1-641 FWTD-1-701 FWTD-1-701 FWTD-1-711: FWTD-1-801 FWTD-1-211 FWTD-1-291 FWTD-1-291 FWTD-2-501 FWTD-2-501 FWTD-2-501 FWTD-2-641 FWTD-3-811: FWTD-3-811: FWTD-3-811: FWTD-3-811:	0 PM 0 PW 10 PM 0 PW 4 PM 4 PW 4 PW 4 PW 4 PW 4 PW 4 PW 4 PW 4 PW	4,000 TD-1-4014 TD-1-5014 TD-1-5014 TD-1-6014 TD-1-6014 TD-1-6114 TD-1-7014 TD-1-71114 TD-1-7118 TD-1-2718 TD-1-2918 TD-1-3318 TD-1-3318 TD-2-4018 TD-2-6018 TD-2-6018	PWTC PWTD PWTC PWTC PWTC PWTC PWTC PWTC PWTC PWTC	0-2-6418 0-3-7118 0-3-9618 0-1-4018 0-1-5418 0-1-5418 0-1-6418 0-1-6418 0-1-6418 0-1-6418 0-1-9618 0-1-9618 0-1-9618 0-1-2220 0-1-2220	FWTD-1 FWTD-2 FWTD-2 FWTD-2 FWTD-2 FWTD-3 FWTD-3 FWTD-1 FWTD-1 FWTD-1 FWTD-1	-3320 -4020 -5020 -5420 -6020 -7120 -81120 -9620 -5420 -6020 -6420 -7020 -7120	FWTD-1-4020 FWTD-1-15020 FWTD-1-15020 FWTD-1-7112 FWTD-1-8112 FWTD-1-9620 FWTD-1-2924 FWTD-1-2924 FWTD-1-3124 FWTD-1-3324 FWTD-2-5024) 0 0 0 0 1 1 1	RWID-2-5424 RWID-2-6024 RWID-3-7124 RWID-3-81124 RWID-3-9624 RWID-1-5024 RWID-1-6024	FWTD- FWTD- FWTD- FWTD- FWTD-	1-6424 1-7024 1-7024 1-71124 1-8024 1-81124 1-9624	7,000
A-Series Patio Door fransoms Direct-Set	PWTDS81110 PWTDS9610	FWTD FWTD FWTD FWTD FWTD FWTD FWTD FWTD	52110 52710 52910 53110 53310 54010 55010	FWTDS6410 FWTDS7010 FWTDS7111 FWTDS8010 FWTDS2114 FWTDS2714 FWTDS2914 FWTDS3314	O FV O FV O FV O FV 4 FV 4 FV 4 FV 4 FV	VTDS4014 VTDS5014 VTDS5014 VTDS5414 VTDS6014 VTDS6414 VTDS7014 TTDS71114 VTDS8014 TTDS81114	FWT FWT FWT FWT FWT FWT	DS9614 DS2118 DS2718 DS2718 DS2918 DS5018 DS5418 DS6018			FWTDS3118 FWTDS3318 FWTDS4018 FWTDS7018 FWTDS70118 FWTDS8018 FWTDS81118 FWTDS9618 FWTDS2120		FWTDS2720 FWTDS2920 FWTDS3120 FWTDS3320 FWTDS4020 FWTDS5020 FWTDS5420 FWTDS2124	FWTD FWTD FWTD: FWTD: FWTD: FWTD FWTD	\$6020 \$6420 \$7020 \$71120 \$8020 \$81120 \$9620 \$2724 \$2924 \$3124	FWTDS324 FWTDS4024 FWTDS5024 FWTDS5424 FWTDS6024 FWTDS7024 FWTDS7024 FWTDS7024 FWTDS81124
A-Series Patio Door Sidelight Transoms		FWSLTD FWSLTD FWSLTD	-1-1310 -1-1710 -1-1314 -1-1714 -1-1318	FWSLTD-1-17 FWSLTD-1-13 FWSLTD-1-17 FWSLTD-1-13 FWSLTD-1-17	20 FW 20 FW 24 FW	STDS1310 STDS1710 STDS1314 STDS1714 STDS1318	FWS' FWS' FWS'	TDS1718 TDS1320 TDS1720 TDS1324 TDS1724								
A-Series Patio Door Sidelights					8,000					10,0			FWSLD1768 FWSLD17611 FWSLD1780			
A-Series Patio Doors					FWHID2168 FWHID21611 FWHID2180 FWOD2168 FWOD21611 FWOD2180	FI F F F	WGD2968 WGD29611 WGD2980 WGD3368 WGD33611 WGD3380 WGD3968	FWG FWGE FWGD-	039611 03980 04368 043611 04380 3-91068	FWGD-3- FWGD-3-1 FWGD-3-1 FWHID FWHID2 FWHID2	-91080 111068 1110611 111080 12768 27611	FWHID296; FWHID2961 FWHID298; FWHID316; FWHID3161 FWHID336;	11 0 8 I 11	FWHID33611 FWHID3380 FWOD2768 FWOD27611 FWOD2780 FWOD2968 FWOD29611		FW0D2980 FW0D3168 FW0D31611 FW0D3180 FW0D3368 FW0D33611 FW0D3380

^{*}Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows, gliding windows or gliding patio doors, some interference may occur, affecting operation of these units.

^{*}Attitude limits for patio doors shown in two-panel configurations. These limits also qualify for same size panels used in single or multiple panel configurations.

*Contact your Andersen supplier for altitude limits for custom-sized windows and doors.

Andersen® Window and Patio Door Altitude Limits - Triple-Pane Glass

The chart below gives the altitude limit in feet for most A-Series products in this guide. If the installation of a given product is at an altitude greater than that shown in this chart, a capillary breather tube must be ordered. Be aware that the use of a capillary breather tube eliminates argon gas blend fill and will result in a slightly lower thermal performance (approximately 0.02 increase in window U-Factor). For NFRC certified total unit performance on units with capillary breather tubes for higher altitude applications, please visit andersenwindows.com/nfrc.

The use of triple-pane insulating glass at altitudes higher than its rating will result in severe glass distortion, increased glass breakage potential and a risk of seal failure. Smaller windows are most affected by altitude changes. An increase in altitude results in a decrease in atmospheric pressure. A sealed insulating glass unit attempts to combat this change by increasing its volume to reduce its pressure. One way to increase its volume is by glass deflection. A smaller window is stiffer and does not deflect as much as a larger window; therefore, it cannot relieve the pressure as readily. Thus the load applied to the glass is greater, resulting in a greater risk for breakage. Another way the window tries to increase its volume is by increasing the edge area; i.e., the seal area. The increased pressure applied to the edge seal load for smaller windows is therefore greater, increasing the chance for seal failure.

Product	3,000		4,0	000		5,0	000		6,000		7,0	000	8,0	000	9,0	000	10,	000
A-Series Casement Windows		ACW1820 ACW1824 ACW1828 ACW1830 ACW1834 ACW1838 ACW1840 ACW1844	ACW1848 ACW1850 ACW1854 ACW1858 ACW1860 ACW2020 ACW2020 ACW2024	ACW2028 ACW2030 ACW2034 ACW2038 ACW2040 ACW2044 ACW2048 ACW2050	ACW2054 ACW2058 ACW2060 ACW2424 ACW2624 ACW2824	ACW2428 ACW2430 ACW2434 ACW2438 ACW2440 ACW2448 ACW2450 ACW2454 ACW2458 ACW2460	ACW2628 ACW2630 ACW2634 ACW2638 ACW2640 ACW2644 ACW2828 ACW21028 ACW3028	ACW2648 ACW2650 ACW2654 ACW2658 ACW2660 ACW2830 ACW2834 ACW2838	ACW2840 ACW2844 ACW2848 ACW21030 ACW21034 ACW21040 ACW21044	ACW21048 ACW21050 ACW3030 ACW21044 ACW21048 ACW21050 ACW3030	ACW2850 ACW2854 ACW2858 ACW2860 ACW21054 ACW21058 ACW21060	ACW3034 ACW3038 ACW3040 ACW3044 ACW3048 ACW3050 ACW3054	ACW3058 ACW3060					
A-Series Awning Windows	AAN1814 AAN2014 AAN2414 AAN2614 AAN2614 AAN201014 AAN3014 AAN3214 AAN3414 AAN3414 AAN4014 AAN414 AAN5014 AAN5014 AAN5014 AAN5014	AN1818 AAN2018 AAN2018 AAN2618 AAN2618 AAN21018 AAN3018 AAN3018 AAN3418 AAN4018 AAN4018 AAN4018 AAN4018 AAN5018	AAN18110 AAN1820 AAN1824 AAN1830 AAN20110 AAN24110 AAN26110 AAN210110 AAN30110 AAN3110 AAN3110 AAN3110 AAN3110 AAN4110 AAN4110 AAN44110 AAN44110 AAN44110 AAN44110 AAN44110	ANN50110 AAN54110 AAN54110 AAN58110 AAN58110 AAN2020 AAN2420 AAN2420 AAN2820 AAN21020 AAN3020 AAN3220 AAN3220 AAN3220 AAN3420 AAN3420 AAN3420 AAN3420 AAN3620 AAN4620 AAN4620 AAN4620 AAN4620 AAN4620 AAN4620	AAN5420 AAN6820 AAN6820 AAN2024 AAN2028 AAN2030 AAN2424 AAN2624 AAN2824 AAN21024 AAN3024 AAN3224 AAN3824 AAN3824	AAN4024 AAN4824 AAN4824 AAN5024 AAN5424 AAN5824 AAN6024 AAN2428 AAN2430 AAN2628	AAN2630 AAN2828 AAN21028 AAN3028 AAN3228 AAN3428 AAN3428 AAN4428	AAN4828 AAN5028 AAN5428 AAN5828 AAN6028 AAN21030 AAN21030	AAN3230 AAN3430 AAN3830 AAN4030 AAN4430 AAN4830 AAN5030				AAN5430 AAN5830 AAN6030					
A-Series Double-Hung Windows	MINOCAT	ADH1830 ADH1834 ADH1884 ADH1840 ADH1844 ADH1850 ADH1850 ADH1850 ADH1864 ADH1868 ADH1868 ADH1860 ADH1874 ADH1874 ADH1874 ADH1874 ADH1874	ADH2630 ADH2830 ADH21030 ADH3030 ADH3230 ADH3430 ADH3430 ADH3434 ADH2634 ADH2634 ADH2634 ADH2634 ADH2634 ADH2634 ADH3034 ADH3034 ADH3034 ADH3034 ADH3034	ADH3834 ADH4034 ADH2040 ADH2044 ADH2045 ADH2050 ADH2054 ADH2056 ADH2064 ADH2064 ADH2068 ADH2064 ADH2068 ADH2074 ADH2080 ADH2074 ADH2083 ADH2074	ADH2838 ADH31038 ADH3038 ADH3038 ADH3438 ADH3438 ADH40404 ADH2640 ADH2240 ADH21040 ADH3040 ADH3440 ADH3440 ADH3440 ADH3840	ADH4040 ADH2444 ADH2448 ADH24450 ADH2454 ADH2458 ADH2460 ADH2464 ADH2464 ADH2464 ADH2464 ADH2480 ADH2644 ADH2844 ADH2104 ADH2844	ADH4044 ADH2648 ADH2650 ADH2654 ADH2658 ADH2660 ADH2664 ADH2668 ADH2674 ADH2880 ADH2848 ADH21048 ADH3048 ADH3484 ADH3484 ADH3484 ADH3444 ADH3848 ADH3444	ADH2850 ADH2854 ADH2856 ADH2860 ADH2864 ADH2868 ADH21050 ADH21050 ADH3250 ADH3250 ADH3250 ADH3850	ADH4050 ADH21054 ADH21054 ADH21060 ADH21060 ADH21064 ADH21074 ADH21074 ADH21074 ADH3054 ADH3054 ADH3054 ADH3054 ADH3054 ADH3054 ADH3054 ADH3054		ADH3058 ADH3060 ADH3064 ADH3068 ADH3074 ADH3080 ADH3258 ADH3458 ADH3858	ADH4058 ADH3260 ADH3264 ADH3268 ADH3274 ADH3280 ADH3460 ADH3460 ADH3460	ADH3464 ADH3468 ADH3474 ADH3480	ADH3864 ADH4064 ADH3868 ADH4068	ADH3874 ADH3880		ADH4074 ADH4080	
A-Series Picture Windows	APW1414 APW1814 APW2014 APW2014 APW2014 APW2814 APW3014 APW3014 APW3014 APW3014 APW3014 APW4014 APW4014 APW4014 APW4014 APW6014 APW6014 APW6014 APW6014 APW6014 APW101	3,000 APW1460 APW1460 APW1460 APW1460 APW1460 APW1460 APW1470 APW1471 APW1473 APW1478 APW1480 APW2181 APW2218 APW2218 APW2218 APW2218 APW2218 APW2618 APW2618 APW2618 APW2618 APW3018 APW418 APW4018 APW6018 APW6018 APW7018 APW7018 APW7018 APW7018 APW7018 APW1810 APW1810 APW1824 APW1830	APW1834 APW1838 APW1840 APW1844 APW1848 APW1850 APW1864 APW1868 APW1860 APW1870 APW1874 APW1870 APW1871 APW1870 APW26110 APW26110 APW26110 APW30110 APW3010	4,4 APW2020 APW2620 APW2620 APW3620 APW3020 APW31020 APW3420 APW3420 APW3420 APW4820 APW4820 APW6020 APW6420 APW6020 APW6420 APW6820 APW6020 APW620 APW6204 APW7420 APW2044 APW2034 APW2034 APW2034 APW2034 APW2034 APW2044	DOO APW2048 APW2050 APW2054 APW2058 APW2060 APW2064 APW2068 APW2070 APW2074 APW2078 APW2080 APW2044 APW2624 APW2624 APW3024 A	APW4424 APW4624 APW5024 APW5024 APW5024 APW6024 APW6024 APW7024 APW7824 APW2444 APW2445 APW2445 APW2445 APW2450 APW2464 APW2464 APW2468 APW2469 APW2474 APW2474 APW2478 APW2478 APW2460 APW2638 APW2634 APW2638 APW2634 APW2634 APW2644 APW2644 APW2644 APW2645 APW2645 APW2654 APW2654 APW2654 APW2654 APW2654 APW2654 APW2654	APW2658 APW2660 APW2664 APW2668 APW2670 APW2680 APW3028 APW3028 APW3028 APW3428 APW3428 APW3428 APW4428 APW4428 APW4830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW2830 APW300 APW3030 APW3030 APW3030 APW3030 APW3030 APW3030 APW3030 APW3030	APW5028 APW5428 APW5828 APW6828 APW6828 APW6828 APW7428 APW7285 APW2850 APW2854 APW2854 APW2864 APW2864 APW2864 APW2874 APW2874 APW2874 APW21034 APW21034 APW21034 APW21034 APW21044 APW21044 APW21046 APW21054 APW21064 APW21064 APW21064 APW21066 APW21068	APW21070 APW21074 APW3030 APW3430 APW3430 APW4430 APW4630 APW6430 APW65030 APW6430 APW5034 APW3038 APW3040 APW3044 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3054 APW3234 APW3054 APW3244 APW3234 APW3240 APW3244 APW3240 APW3244 APW3258 APW3258 APW3258 APW3258 APW3258 APW3258 APW3258 APW3258 APW3278 APW3278 APW3278 APW3278		APW5830 APW6630 APW66430 APW6830 APW7030 APW3058 APW3064 APW3064 APW3064 APW3260 APW3264 APW3268 APW3434 APW4034 APW4034 APW4034 APW4034 APW4034 APW6034 APW5834 APW5834 APW5834 APW7034 APW7034 APW7034 APW7034 APW7034 APW7034	APW3438 APW3440 APW3444 APW3445 APW3458 APW3450 APW3470 APW3474 APW3474 APW3474 APW3474 APW3474 APW3474 APW3870 APW7038 APW7838 APW8038 APW8038 APW3880 APW3870 APW3870 APW3874 APW7040 APW4074 APW7040 APW4074 APW7040	APW6434 APW3663 APW3464 APW3466 APW3838 APW4038 APW4038 APW5438 APW5438 APW5638 APW6638 APW6638 APW6638 APW3844 APW3846 APW3846 APW3846 APW3846 APW3860 APW3860 APW3864	APW3868 APW7440 APW7840 APW8040 APW4078 APW4078 APW4070 APW4474 APW4478 APW7448 APW7448 APW7448 APW7448 APW7448 APW8648 APW7848 APW8684 APW8684 APW8684 APW869 APW8	APW4040 APW4440 APW4440 APW5040 APW5640 APW56440 APW66440 APW6044 APW4048 APW4050 APW4050 APW4050 APW4054 APW4050 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054 APW4054	APW5444 APW6644 APW6644 APW6844 APW6844 APW6850 APW7450 APW7450 APW7850 APW8050 APW8050 APW8050 APW5068 APW5068 APW5070 APW5078 APW5078 APW5078 APW5078	APW4448 APW4450 APW4454 APW4458 APW4460 APW4464 APW4464 APW5488 APW5848 APW5848 APW6048 APW6048 APW6058 APW6050 APW6050 APW6050 APW5054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6054 APW6058 APW6058 APW6054 APW6054 APW6058	APW6458 APW7058 APW7058 APW7458 APW7458 APW5460 APW5660 APW6660 APW6660 APW7660 APW7460 APW7460 APW7460 APW7460 APW7460 APW5464 APW5468 APW5468 APW5468 APW547 APW6074 APW547 APW6074 APW547 APW6074 APW547 APW6074 APW547 APW6074 APW547 APW6074 APW547 APW6074 APW547 APW6078 APW548 APW548 APW548 APW548 APW548 APW548 APW547 APW6074 APW657 APW677 APW677 APW677 APW677 APW678 APW5878 APW5878 APW5880 APW5880 APW5880 APW5880

^{*}Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows, gliding windows or gliding patio

continued on next page

doors, some interference may occur, affecting operation of these units.

*Altitude limits for patio doors shown in two-panel configurations. These limits also qualify for same size panels used in single or multiple panel configurations.

^{*}Contact your Andersen supplier for altitude limits for custom-sized windows and doors.



Andersen® Window and Patio Door Altitude Limits - Triple-Pane Glass (continued)

Andersen	willuu		Patio L	OUI AI	utuue L		IIIhie.	raile Gi		ntinuea)								
Product A-Series Fixed Transom Windows	ATF1410 ATF1810 ATF2010 ATF2010 ATF22010 ATF22010 ATF2610 ATF2610 ATF2610 ATF2610 ATF3010 ATF3010 ATF3010 ATF3010 ATF3010 ATF3010 ATF3010 ATF3010 ATF4410 ATF4810 ATF4810 ATF4810 ATF4810 ATF4810 ATF4810 ATF6010 ATF6010 ATF6010 ATF6010 ATF6010 ATF410 ATF7011 ATF7011 ATF7011 ATF1010 ATF111 A	3, AIF4414 AIF4814 AIF56144 AIF56144 AIF66144 AIF67146 AIF78144 AIF78144 AIF81416 AIF1418 AIF1416 AIF1418 AIF1416 AIF1420 AIF1424 AIF1420 AIF1424 AIF1420 AIF1424 AIF1420 AIF1424 AIF1430 AIF1440 AIF1440 AIF1440 AIF1440 AIF1440 AIF1440 AIF1440 AIF1448 AIF1450 AIF1454 AIF1458 AIF1468 AIF1468 AIF1468 AIF1478 AIF1478 AIF1478 AIF1478	OOO AIF1816 AIF2016 AIF2416 AIF2416 AIF2416 AIF2416 AIF2416 AIF2416 AIF2416 AIF2416 AIF3416 AIF3416 AIF3416 AIF3416 AIF3416 AIF3416 AIF4416 AIF4416 AIF4416 AIF4416 AIF4416 AIF4516 A	ATF5018 ATF5018 ATF5418 ATF5418 ATF5818 ATF6418 ATF6418 ATF6418 ATF7418 ATF7418 ATF7418 ATF7418 ATF18110 ATF1822 ATF1824 ATF1822 ATF1824 ATF1824 ATF1824 ATF1824 ATF1828 ATF1830 ATF18340 ATF1834 ATF1835 ATF1840 ATF1841 ATF1841 ATF1841 ATF1841 ATF1841 ATF1854 ATF1856 ATF1866 ATF1866 ATF1866 ATF1874 ATF1874 ATF1878 ATF1874 ATF1878 ATF1880	ATF20110 ATF24110 ATF24110 ATF24110 ATF26110 ATF26110 ATF26110 ATF36110 ATF36110 ATF34110 ATF34110 ATF34110 ATF48110 ATF48110 ATF48110 ATF68110 ATF68110 ATF68110 ATF68110 ATF68110 ATF68110 ATF68110 ATF68110 ATF68110 ATF68120 ATF3620 ATF36	4,000 AIFS020 AIFS020 AIFS420 AIFS820 AIFS820 AIF6820 AIF6820 AIF7420 AIF7202 AIF7202 AIF7202 AIF7202 AIF2024 AIF2028 AIF2028 AIF2030 AIF2038 AIF2038 AIF2038 AIF2040 AIF2054 AIF2056 AIF2056 AIF2056 AIF2056 AIF2056 AIF2056 AIF2056 AIF2067 AIF2058 AIF2068 AIF2068 AIF2068 AIF2074 AIF2068 AIF2074 AIF2078	AIF3222 AIF3422 AIF3422 AIF4422 AIF4422 AIF4422 AIF5422 AIF56422 AIF6622 AIF6622 AIF6622 AIF6622 AIF6622 AIF6622 AIF6624 AIF6224 AIF6224 AIF3024 AIF8026 AIF2438 AIF38026	AIF4424 AIF4824 AIF4824 AIF5824 AIF5824 AIF5824 AIF6824 AIF6824 AIF6824 AIF7824 AIF7824 AIF7824 AIF7824 AIF7824 AIF2459 AIF2459 AIF2450 AIF245	5,000 5,000 41F3826 41F3826 41F3826 41F4226 41F4226 41F4226 41F4226 41F6826 41F6026 41F6826 41F6426 41F6826 41F6426 41F6826 41F6426 41F6826 41F6426 41F62634 41F2634 41F2634 41F2634 41F2644 41F2644 41F2644 41F2644 41F2644 41F2656 41F2656 41F2656 41F2656 41F2657 41F2658 41F2668 41F2668	AIF2674 AIF2678 AIF2680 AIF2680 AIF3028 AIF31028 AIF31028 AIF31288 AIF3428 AIF3428 AIF4428 AIF4428 AIF42830 AIF2830 AIF2834 AIF2830 AIF2834 AIF2830 AIF3070 AIF3070 AIF3070 AIF3070 AIF3070 AIF3070 AIF3070 AIF3070 AIF3070 AIF8030	AIF5028 AIF5428 AIF5828 AIF5828 AIF6428 AIF6428 AIF6428 AIF6728 AIF7428 AIF72860 AIF2860 AIF2860 AIF2864 AIF2860 AIF2864 AIF2864 AIF2860 AIF21033 AIF21044 AIF21058 AIF210560 AIF21060 AIF21064 AIF21068 AIF21060 AIF21074 AIF3030 AIF3030 AIF3034	ATF3038 ATF3040 ATF3044 ATF3048 ATF3050 ATF3050 ATF3050 ATF3050 ATF3050 ATF3050 ATF4300 ATF4300 ATF4300 ATF4300 ATF4300 ATF4300 ATF4300 ATF4300 ATF4300 ATF3254 ATF3274 ATF3278 ATF3276 ATF3277 ATF3277 ATF3477 ATF347	7,000 AIF3058 AIF3064 AIF3064 AIF3064 AIF3064 AIF3064 AIF30630 AIF6430 AIF6430 AIF6430 AIF6430 AIF6436 AIF3266 AIF3266 AIF3266 AIF3266 AIF3266 AIF3266 AIF3266 AIF3434 AIF3434 AIF3434 AIF3434 AIF3456 AIF3476	8,1 AIF3464 AIF3468 AIF6434 AIF6834 AIF6834 AIF3838 AIF3840 AIF3854 AIF3854 AIF3854 AIF3858 AIF3868 AIF4438 AIF4438 AIF4438 AIF4438 AIF4478 AIF6438	AIF4080 AIF7840 AIF8040 AIF8040 AIF4477 AIF4474 AIF7444 AIF7844 AIF7844 AIF8044 AIF4864 AIF4870 AIF4870 AIF4870 AIF4870 AIF4878 AIF4880 AIF4870 AIF4878 AIF4880 AIF4880 AIF4880 AIF4880 AIF6448 AIF6488 AIF6488 AIF6488 AIF6488	AIF4040 AIF4048 AIF4058 AIF4068 AIF4068 AIF4060 AIF5060 AIF5060 AIF5060 AIF5060 AIF5064 AIF5064 AIF5068	AIF4444 AIF4450 AIF4450 AIF4450 AIF4460 AIF4460 AIF4460 AIF5444 AIF5644 AIF5644 AIF5644 AIF6644 AIF6644 AIF6644 AIF6644 AIF6644 AIF6644 AIF6644 AIF6648 AIF6664 AIF6668 AIF66768 AIF66776	ATF5480 ATF5858 ATF5864 ATF5864 ATF5864 ATF5860 ATF5870 ATF6877 ATF6877 ATF6878 ATF6000
A-Series Venting Transom Windows	AIV1814 AIV2014 AIV2414 AIV2614 AIV2814 AIV21014 AIV3014 AIV3214 AIV3414	AIV3814 ATV4014 ATV4414 ATV4814 ATV5014 ATV5414 ATV5814 ATV6014	ATV2016 ATV2416 ATV2616 ATV2816 ATV21016 ATV3016 ATV3216 ATV3416 ATV3816 ATV4016 ATV4416	AIV4816 AIV5016 AIV5416 AIV5816 AIV6016 AIV1818 AIV2018 AIV2418 AIV2418 AIV2218 AIV21018 AIV21018 AIV3018	ATV3218 ATV3418 ATV4018 ATV4418 ATV4818 ATV5018 ATV5418 ATV5818 ATV6018 ATV18110 ATV1820	AIV1822 ATV1824 ATV1826 ATV1828 ATV20110 ATV24110 ATV26110 ATV28110 ATV210110 ATV30110 ATV32110 ATV34110	AIV38110 AIV40110 AIV44110 AIV48110 AIV50110 AIV54110 AIV58110 AIV60110 AIV2020 AIV2420 AIV2620 AIV2820	AIV21020 AIV3020 AIV3220 AIV3420 AIV4420 AIV4420 AIV4420 AIV5020 AIV5420 AIV5820 AIV6020	AIV2022 AIV2024 AIV2026 AIV2028 AIV2422 AIV2622 AIV2822 AIV3022 AIV3022 AIV3222 AIV3422 AIV3822	AIV4022 AIV4422 AIV4822 AIV5022 AIV5422 AIV5822 AIV6022 AIV2424 AIV2624 AIV2624 AIV21024 AIV3024	AIV3224 ATV3424 ATV3424 ATV4024 ATV4424 ATV5024 ATV5024 ATV5824 ATV6024 ATV2426 ATV2426 ATV2428	AIV2626 AIV2826 AIV21026 AIV3026 AIV3226 AIV3426 AIV4026 AIV4426 AIV4826 AIV4826 AIV2628	AIV5026 AIV5426 AIV5826 AIV21028 AIV3028 AIV3028 AIV3428 AIV3428 AIV4028 AIV4428 AIV4428	ATV5428 ATV5828			5,000	
A-Series Patio Door Transoms Sash-Set	FWTD-1-2 FWTD-1-2 FWTD-1-3 FWTD-1-3 FWTD-1-4 FWTD-1-5 FWTD-1-5 FWTD-1-6 FWTD-1-6	1710 1910 1910 19110 19110 1910 1910 191	FWTD-1-81110 FWTD-1-9610 FWTD-1-2114 FWTD-1-2714 FWTD-1-2914 FWTD-1-3314 FWTD-1-3314 FWTD-1-4014 FWTD-1-5014 FWTD-1-5014 FWTD-1-6014	FWTD FWTD FWTD FWTD FWTD FWTD FWTD FWTD	0-1-6414 0-1-7014 -1-81114 0-1-9614 -1-81118 0-1-9618 0-2-4010 0-2-5010 0-2-5410 0-2-6010 0-2-6410	FWTD-2-40 FWTD-2-50 FWTD-2-54 FWTD-2-64 FWTD-3-71 FWTD-3-81: FWTD-3-71 FWTD-3-96	114 14 14 14 15 16 17 17 17 17 17 17 17	WTD-1-71110 FWTD-1-8010 WTD-1-71114 FWTD-1-8014 FWTD-1-8014 FWTD-1-2118 FWTD-1-2918 FWTD-1-3118 FWTD-1-3318 FWTD-1-3318 FWTD-1-5018 FWTD-1-5018	FWTD-FWTD-FWTD-FWTD-FWTD-FWTD-FWTD-FWTD-	1-6418 1-7018 1-71118 1-8018 1-2120 1-2720 1-3120 1-3120 1-3320 1-4020 1-5020 1-5420 1-6420	FWTD-1-702 FWTD-1-7012 FWTD-1-802 FWTD-1-812 FWTD-1-962 FWTD-1-212- FWTD-1-272- FWTD-1-312- FWTD-1-332- FWTD-1-402- FWTD-2-4013	P.O FV D FV D FV D FV 4 FV 4 FV 4 FV 4 FV 4 FV 4 FV 8 FV	VTD-2-5418 VTD-2-6018 VTD-2-6418 VTD-2-4020 VTD-2-5020 VTD-2-5420 VTD-2-6420 VTD-2-6420 VTD-2-6424 VTD-2-5424 VTD-2-6024 VTD-2-6024 VTD-2-6024 VTD-2-6024	FWTD-3 FWTD-3 FWTD-3 FWTD-3 FWTD-3 FWTD-3 FWTD-3 FWTD-3	81118 -9618 -7120 81120 -9620 -7124 81124	FWTD-1-5024 FWTD-1-5424 FWTD-1-6024 FWTD-1-6024 FWTD-1-7024 FWTD-1-7024 FWTD-1-8024 FWTD-1-8024 FWTD-1-9624	4	
A-Series Patio Door Transoms Direct-Set	FWTDS2: FWTDS2: FWTDS3: FWTDS3: FWTDS4! FWTDS5:	710 910 110 310 010 010 410	FWTDS6010 FWTDS6410 FWTDS7010 FWTDS81110 FWTDS9610 FWTDS9614					FWTD-1-6018 FWTDS71110 FWTDS8010 FWTDS20114 FWTDS2714 FWTDS2914 FWTDS3114 FWTDS3114 FWTDS3114 FWTDS3114 FWTDS3114 FWTDS4014 FWTDS5014	FWTD FWTD FWTD FWTD FWTD FWTD FWTD FWTD	1-6420 S5414 S66014 S6614 S7014 S71114 S8014 S2118 S2718 S2918	FWTD-2-501 FWTDS3118 FWTDS3318 FWTDS4018 FWTDS5018 FWTDS5418 FWTDS6018 FWTDS7018 FWTDS71116	F F F F F F F F F F F F F F F F F F F	WTDS8018 WTDS81118 WTDS9618 WTDS2120 WTDS2720 WTDS2920 WTDS3120 WTDS3320			FWTDS4020 FWTDS5020 FWTDS5020 FWTDS6420 FWTDS6420 FWTDS71120 WTDS8020 FWTDS81120 FWTDS92124 FWTDS2124	FW FW FW FW FW FW FW FW FW	TDS2924 TDS3124 TDS3124 TDS3224 TDS4024 TDS5024 TDS5024 TDS6024 TDS6024 TDS7024 TDS7024 TDS7024
A-Series Patio Door Sidelight Transoms A-Series Patio Door	FWSLTD-1- FWSTDS-1- FWSLTD-1-	1310	FWSTDS-1-1710 FWSLTD-1-1314 FWSLTD-1-1714				F	WSTDS-1-1314 WSTDS-1-1714 WSLTD-1-1318 FWSLD1368 FWSLD13611	FWSTDS FWSTDS	0-1-1718 S-1-1318 S-1-1718 D1380	FWSLTD-1-133 FWSLTD-1-173 FWSTDS-1-133	20 FW	STDS-1-1720 SLTD-1-1324 SLTD-1-1724			FWSTDS-1-132 FWSTDS-1-172 FWSLD1768 FWSLD17611	4 FW:	SLD1780
A-Series Patio Doors	FW0D21 FW0D21 FW0D21 FW0D4(FWHID2: FWHID2:	611 180 168 168 611	FW0D4068 FW0D40611 FW0D4080 FWHID4068 FWHID40611 FWHID4080	FWG FWG FWG FWG FWG FWGE FWG	GD2968 D29611 GD2980 D55068 D550611 GD5080 D91068 D910611 D91080 -4-91068 4-910611	FWGD-4-911 FWGD336 FWGD338 FWGD606 FWGD606 FWGD1110 FWGD1110 FWGD-4-111	080 FV 68 F1 11 80 68 111 80 968 611	/GD-4-1110611 WGD-4-111080 FWGD3968 FWGD39611 FWGD7068 FWGD70611 FWGD7080 FWGD7080 FWGD4368 FWGD43611 FWGD4380	FWGD FWGD-4 FWGD-4 FWGD-4 FWOL FWOL FWOL FWOL FWOL FWOL	D8068 080611 D8080 -151068 -1510611 -151080 D2768 027611 D2780 D2768 027611	10,000 FWHID2780 FWOD5068 FWOD50611 FWOD5080 FWHID5061: FWHID5062: FWHID5080 FWOD2968 FWOD29611 FWOD2980 FWHID2968	F F F N F FN	WHID29611 WHID2980 WOD5468 WOD54611 WOD5480 WHID5480 WHID5468 WHID5480 WHID71168 WHID711611 WHID71180	FWODS FWODS FWHID FWHIDS FWHOD FWODG FWODG FWHID FWHID	1611 3180 3168 31611 3180 6068 0611 5080 6068	FWHID6080 FWHID81168 FWHID81161 FWHID81180 FWOD3368 FWOD33611 FWOD3380 FWHID33611 FWHID3360 FWHID3360 FWHID3360	FWI FWI FWI FWI FWI FWI FWI FWI FWI	0064611 /006464 0064611 /006464 HID6468 HID64611 HID6464 HID9668 HID96611 HID9680

^{*}Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on double-hung windows, gliding windows or gliding patio doors, some interference may occur, affecting operation of these units.

*Altitude limits for patio doors shown in two-panel configurations. These limits also qualify for same size panels used in single or multiple panel configurations.

[•]Contact your Andersen supplier for altitude limits for custom-sized windows and doors.

PRODUCT PERFORMANCE

PERFORMANCE STANDARDS

The Window and Door Manufacturers Association (WDMA), the American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) jointly release the North American Fenestration Standard/Specification for Windows, Doors and Skylights (NAFS-11) where "-11" refers to the most recent publication year of 2011. NAFS is also referred to as AAMA/WDMA/CSA 101/l.S.2/A440, which is how the International Code Council (ICC) lists this standard in the 2012, 2015 and 2018 International Residential Code (IRC) and International Building Code (IBC) as the means to indicate the window, door or skylights design pressure rating used to determine compliance to the job site design pressure requirements.

A product only achieves a "Performance Grade" or "PG" rating when it complies with all of the NAFS performance requirements such as ease of operation, air infiltration resistance, resistance to water penetration and resistance to forced entry, etc. A "Design Pressure Rating" or "DP" rating only depicts the design and structural load performance.

Performance Classes

The NAFS Standard/Specification defines requirements for four performance classes. Performance classes are designated R, LC, CW and AW. This classification system provides for several levels of performance. Product selection is always based on the performance and building code requirements of the particular project.

Elements of Performance Grade (PG) Designations

In order to qualify for a given performance grade (PG), test specimens need to pass all required performance tests for the following, in addition to all required auxiliary (durability) and applicable material/component tests (not shown here) for the applicable product type and desired performance class:

- (a) Operating force (if applicable): Maximum operating force varies by product type and performance class.
- **(b) Air leakage resistance:** Tested in accordance with ASTM E283 at a test pressure of 1.57 psf. Allowable air infiltration for R, LC and CW class designations is 0.3 cubic feet per minute per square foot of frame (cfm/ft²).
- (c) Water penetration resistance: Tested in accordance with ASTM E547 with the specified test pressure applied per NAFS-11. Test consists of four cycles. Each cycle consists of five minutes with pressure applied and one minute with the pressure released, during which the water spray is continuously applied. Water spray shall be uniformly applied at a constant rate of 5 U.S. gal/ft²·hr.
- (d) Uniform load deflection test: Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS-11) with the load maintained for a period of 10 seconds. The test specimen shall be evaluated for deflection during each load for permanent damage after each load and for any effects on the normal operation of the specimen. Starting with the 2008 version of NAFS, design pressure (DP) will only represent the "uniform load deflection test."
- **(e) Uniform load structural test:** Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS-11) with the load maintained for a period of 10 seconds. After loads are removed, there shall be no permanent deformation in excess of 0.4% of its span and no damage to the unit, which would make it inoperable.
- **(f) Forced-entry resistance (if applicable):** Tested in accordance with ASTM F588 (windows), F476 (swinging doors) and F842 (sliding doors) at a performance level 10 rating.

Performance Grades (PG) and Corresponding Test Pressures (psf)

Performance Class/ Performance Grade		Air Infiltration Test Pressure		Maximum Allowable Air Infiltration/ Exfiltration Rate		Resista	netration nce Test sure	Design	Pressure	Structural Test Pressure		
R	LC	Pa	psf	L/s·m²	cfm/ft²	Pa	psf	Pa	psf	Pa	psf	
15	-	75	1.57	1.5	0.30	140	2.92	720	15.04	1080	22.56	
20	-	75	1.57	1.5	0.30	150	3.13	960	20.05	1440	30.08	
25	25	75	1.57	1.5	0.30	180	3.76	1200	25.06	1800	37.59	
30	30	75	1.57	1.5	0.30	220	4.59	1440	30.08	2160	45.11	
35	35	75	1.57	1.5	0.30	260	5.43	1680	35.09	2520	52.63	
40	40	75	1.57	1.5	0.30	290	6.06	1920	40.10	2880	60.15	
45	45	75	1.57	1.5	0.30	330	6.89	2160	45.11	3240	67.67	
50	50	75	1.57	1.5	0.30	360	7.52	2400	50.13	3600	75.19	
55	55	75	1.57	1.5	0.30	400	8.35	2640	55.14	3960	82.71	
60	60	75	1.57	1.5	0.30	440	9.19	2880	60.15	4320	90.23	
65	65	75	1.57	1.5	0.30	470	9.82	3120	65.16	4680	97.74	
70	70	75	1.57	1.5	0.30	510	10.65	3360	70.18	5040	105.26	
75	75	75	1.57	1.5	0.30	540	11.28	3600	75.19	5400	112.78	
80	80	75	1.57	1.5	0.30	580	12.11	3840	80.20	5760	120.30	
85	85	75	1.57	1.5	0.30	620	12.94	4080	85.21	6120	127.82	
90	90	75	1.57	1.5	0.30	660	13.78	4320	90.23	6480	135.34	
95	95	75	1.57	1.5	0.30	682	14.25	4560	95.24	6840	142.86	
100	100	75	1.57	1.5	0.30	718	15.00	4800	100.25	7200	150.38	

HALLMARK CERTIFICATION

The Window and Door Manufacturers Association (WDMA)-sponsored Hallmark Certification Program provides manufacturers with certification to the AAMA/WDMA/CSA 101/I.S.2/A440-11 Standard and is designed to provide builders, architects, specifiers and consumers with an easily recognizable means of identifying products that have been manufactured and tested in accordance with NAFS (AAMA/WDMA/CSA 101/I.S.2/A440) industry standards and other applicable performance standards. Conformance is determined by periodic in-plant inspections by a third-party administrator. Inspections include auditing licensee quality control procedures and processes, and a review to confirm products are manufactured in accordance with the appropriate performance standards. Periodic testing of representative product constructions and components by an independent testing laboratory is also required. When all of the program requirements are met, the licensee is authorized to use the WDMA Hallmark registered logo on their certification label as a means of identifying products and their performance ratings.

Products successfully obtaining Hallmark Certification will be labeled with a three-part code, which includes performance class, performance grade and size tested. In addition to this mandatory requirement, you are allowed to list the design pressure on a separate line.

WINDOW & DOOR MANUFACTURERS ASSOCIATION WORK AND MANUFACTURERS ASSOCIATION WINDOW MANUFACTURERS ASSOCIATION WINDOW MANUFACTURE AND MANUFACTURE	Andersen Corporation A-SERIES CASEMENT WINDOW Manufacturer stipulates certification as indicated below.
STANDARD	RATING
AAMA/WDMA/CSA 101/I.S.2/A440-11	CLASS LC ⁽¹⁾ – PG50 ⁽²⁾ – SIZE TESTED 35.3 x 71.3 in. ⁽³⁾ DP+50/-50 ⁽⁴⁾
AAMA/WDMA/CSA 101/I.S.2/A440-08	CLASS LC ⁽¹⁾ – PG50 ⁽²⁾ – SIZE TESTED 35.3 x 71.3 in. ⁽³⁾ DP+50/-50 ⁽⁴⁾

(1) - Performance Class

(2) - Performance Grade

(3) - Size Tested

(4) - Design Pressure

In the example above, the performance class is LC, the performance grade (PG) is 50 pounds per square foot (psf) and the size tested is 35.3" x 71.3". What this means to the specifier is, based on the performance grade chart, the laboratory-tested air infiltration was less than 0.3 cfm/ft² (test pressure is always 1.57 psf and the allowable airflow is 0.3 cfm/ft²), the product tested successfully resisted a laboratory water penetration test at a test pressure of 7.5 psf, the product tested successfully withstood a laboratory positive test pressure of 75 psf and a laboratory negative test pressure of 75 psf, and the product tested passed the laboratory requirements for operational force and forced-entry resistance. Based on this test, all products of the same design that are smaller than the tested size can be labeled with this product performance rating.

IMPORTANT

Building codes prescribe design pressure based on a variety of criteria (i.e., windspeed zone, building height, building type, job site exposure, etc.). Design pressures derived from Performance Grade (PG) test requirements should be used to determine compliance to building code required design pressures. Structural test pressures, which are tested at 1.5 times the design pressure, should **not** be used for determining design pressure code compliance. In the example above, a PG 50 performance grade rating, which passes a 50 psf design pressure, should be used for determining code compliance, not the structural test pressure of 75 psf.

If you need further details about how Andersen* products perform to this standard, contact your Andersen supplier.

If you need further information about the AAMA/WDMA/CSA 101/I.S.2/A440-11 standard or the Hallmark Certification Program, please contact: WDMA, 2001 K Street NW, 3rd Floor North, Washington, D.C. 20006. Phone: 202-367-1157. Website: wdma.com

Where designated, Andersen products are tested, certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

For sound transmission ratings, see page 214.



Performance Grade and Air Infiltration - A-Series Windows and Patio Doors

For current performance information, please visit andersenwindows.com.

Andersen [®] Product	Glass Construction	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT ²
Casement Windows				
Casement (venting/stationary)	Dual-Pane	Class LC-PG50 Size Tested 47" x 95"	50/50	< 0.2
Casement, PG Upgrade (venting/stationary)	Dual-Pane	Class LC-PG70 Size Tested 35" x 95"	70/70	< 0.2
Casement, PG Upgrade (stationary)	Dual-Pane	Class LC-PG70 Size Tested 47" x 47"	70/70	< 0.2
Casement, PG Upgrade (stationary)	Dual-Pane	Class LC-PG60 Size Tested 47" x 95"	60/60	< 0.2
Casement, PG Upgrade (venting)	Dual-Pane	Class LC-PG60 Size Tested 47" x 46"	60/60	< 0.2
Casement, PG Upgrade (venting)	Dual-Pane	Class LC-PG70 Size Tested 47" x 47"	70/70	< 0.2
Casement, PG Upgrade (venting)	Dual-Pane	Class LC-PG60 Size Tested 39" x 95"	60/60	< 0.2
Casement, PG Upgrade (venting)	Dual-Pane	Class LC-PG60 Size Tested 41" x 71"	60/60	< 0.2
Awning Windows				
Awning (venting/stationary)	Dual-Pane	Class LC-PG50 Size Tested 71" x 47"	50/50	< 0.2
wning, PG Upgrade (stationary)	Dual-Pane	Class LC-PG70 Size Tested 71" x 47"	70/70	< 0.2
Awning, PG Upgrade (venting)	Dual-Pane	Class LC-PG70 Size Tested 47" x 47"	70/70	< 0.2
Awning, PG Upgrade (venting)	Dual-Pane	Class LC-PG60 Size Tested 59" x 47"	60/60	< 0.2
Awning, PG Upgrade (venting)	Dual-Pane	Class LC-PG60 Size Tested 71" x 31"	60/60	< 0.2
Oouble-Hung Windows				
Double-Hung	Dual-Pane	Class LC-PG50 Size Tested 47" x 95"	50/50	< 0.2
Double-Hung, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 47" x 95"	70/70	< 0.2
Picture Windows				
Picture	Dual-Pane	Class LC-PG50 Size Tested 71" x 95"	50/50	< 0.2
Picture, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 71" x 95"	70/70	< 0.2
ransom Windows				
ixed Transom	Dual-Pane	Class LC-PG50 Size Tested 71" x 95"	50/50	< 0.2
ixed Transom, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 71" x 95"	70/70	< 0.2
enting Transom	Dual-Pane	Class LC-PG50 Size Tested 71" x 31"	50/50	< 0.2
/enting Transom, PG Upgrade (stationary)	Dual-Pane	Class LC-PG70 Size Tested 71" x 31"	70/70	< 0.2
/enting Transom, PG Upgrade (venting)	Dual-Pane	Class LC-PG70 Size Tested 59" x 31"	70/70	< 0.2
/enting Transom, PG Upgrade (venting)	Dual-Pane	Class LC-PG60 Size Tested 71" x 31"	60/60	< 0.2
Pirect-Set Specialty Windows				
tectangle	Dual-Pane	Class LC-PG50 Size Tested 125" x 84"	50/50	< 0.2
Rectangle, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 125" x 84"	70/70	< 0.2
urch	Dual-Pane	Class LC-PG50 Size Tested 125" x 84"	50/50	< 0.2
urch, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 125" x 84"	70/70	< 0.2
pringline™	Dual-Pane	Class LC-PG50 Size Tested 84" x 125"	50/50	< 0.2
Springline, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 84" x 125"	70/70	< 0.2
Sash-Set Specialty Windows	טעעו־ו מווכ	STAND ED 1 ST. O STED TOUTON OF A 120	10/10	- 0.2
Rectangular	Dual-Pane	Class LC-PG50 Size Tested 125" x 75"	50/50	< 0.2
Rectangular, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 125" x 75"	70/70	< 0.2
	Dual-Pane Dual-Pane	Class LC-PG50 Size Tested 125" x 75"	50/50	< 0.2
rch		Class LC-PG70 Size Tested 125" x 75"		
rch, PG Upgrade	Dual-Pane		70/70	< 0.2
pringline™	Dual-Pane	Class LC-PG50 Size Tested 75" x 125"	50/50	< 0.2
pringline, PG Upgrade	Dual-Pane Dual-Pane	Class LC-PG70 Size Tested 75" x 125"	70/70	< 0.2
Complementary Casement Windows	5 15	0110.2022.01	E0/E-	
casement (venting)	Dual-Pane	Class LC-PG50 Size Tested 35" x 84"	50/50	< 0.2
Casement (stationary)	Dual-Pane	Class LC-PG60 Size Tested 120" x 78"	60/60	< 0.2
French Casement (venting)	Dual-Pane	Class LC-PG30 Size Tested 56" x 72"	30/30	< 0.2

continued on next page

^{• &}quot;Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
• This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
• Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based

on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

• Contact your Andersen supplier for more information.

PRODUCT PERFORMANCE

Performance Grade and Air Infiltration - A-Series Windows and Patio Doors (continued)

For current performance information, please visit andersenwindows.com.

Andersen* Product	Glass Construction	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltratio
Gliding Patio Doors				
Single Stationary (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 50" x 119"	45/45	< 0.2
Single Stationary, PG Upgrade (611, 80)	Dual-Pane	Class LC-PG65 Size Tested 50" x 95"	65/80	< 0.2
Single Stationary, PG Upgrade (100)	Dual-Pane	Class LC-PG55 Size Tested 50" x 119"	55/55	< 0.2
Two-Panel (611, 80)	Dual-Pane	Class LC-PG50 Size Tested 95" x 95"	50/50	< 0.2
Two-Panel (100)	Dual-Pane	Class LC-PG45 Size Tested 95" x 119"	45/45	< 0.2
wo-Panel, PG Upgrade (611)	Dual-Pane	Class LC-PG70 Size Tested 95" x 82"	70/80	< 0.2
wo-Panel, PG Upgrade (80)	Dual-Pane	Class LC-PG70 Size Tested 95" x 95"	70/70	< 0.2
wo-Panel, PG Upgrade (100)	Dual-Pane	Class LC-PG55 Size Tested 95" x 119"	55/55	< 0.2
hree-Panel (611)	Dual-Pane	Class LC-PG50 Size Tested 141" x 82"	50/50	< 0.2
hree-Panel (80, 100)	Dual-Pane	Class LC-PG40 Size Tested 141" x 119"	40/40	< 0.2
hree-Panel, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 141" x 82"	65/70	< 0.2
hree-Panel, PG Upgrade (80, 100)	Dual-Pane	Class LC-PG50 Size Tested 141" x 119"	50/50	< 0.2
our-Panel (611)	Dual-Pane	Class LC-PG50 Size Tested 189" x 82"	50/50	< 0.2
our-Panel (80, 100)	Dual-Pane	Class LC-PG40 Size Tested 189" x 119"	40/40	< 0.2
our-Panel, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 189" x 82"	65/70	< 0.2
our-Panel, PG Upgrade (80, 100)	Dual-Pane	Class LC-PG50 Size Tested 189" x 119"	50/50	< 0.2
linged Inswing Patio Doors				
ingle Stationary (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 38" x 119"	45/55	< 0.2
ingle Stationary, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 38" x 82"	65/80	< 0.2
Single Stationary, PG Upgrade (80, 100)	Dual-Pane	Class LC-PG65 Size Tested 38" x 119"	65/70	< 0.2
ingle Active (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 38" x 119"	45/55	< 0.2
Single Active, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 38" x 82"	65/80	< 0.2
Single Active, PG Upgrade (80, 100)	Dual-Pane	Class LC-PG65 Size Tested 38" x 119"	65/70	< 0.2
wo-Panel AP/PA (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 75" x 119"	45/55	< 0.2
wo-Panel AP/PA, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 75" x 82"	65/80	< 0.2
wo-Panel AP/PA, PG Upgrade (80)	Dual-Pane	Class LC-PG65 Size Tested 75" x 95"	65/70	< 0.2
wo-Panel AP/PA, PG Upgrade (100)	Dual-Pane	Class LC-PG50 Size Tested 75" x 119"	50/65	< 0.2
wo-Panel AS/SA/SS (611, 80)	Dual-Pane	Class LC-PG45 Size Tested 71" x 95"	45/55	< 0.2
wo-Panel AS/SA/SS, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 75" x 82"	65/80	< 0.2
wo-Panel AS/SA/SS, PG Upgrade (80)	Dual-Pane	Class LC-PG65 Size Tested 75" x 95"	65/70	< 0.2
Three-Panel (611, 80)	Dual-Pane	Class LC-PG45 Size Tested 106" x 95"	45/55	< 0.2
linged Outswing Patio Doors				
Single Stationary (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 38" x 119"	45/55	< 0.2
Single Stationary, PG Upgrade (611, 80)	Dual-Pane	Class LC-PG65 Size Tested 38" x 95"	65/80	< 0.2
single Stationary, PG Upgrade (100)	Dual-Pane	Class LC-PG65 Size Tested 38" x 119"	65/70	< 0.2
ingle Active (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 38" x 119"	45/55	< 0.2
ingle Active, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 38" x 82"	65/80	< 0.2
Single Active, PG Upgrade (80, 100)	Dual-Pane	Class LC-PG65 Size Tested 38" x 119"	65/70	< 0.2
wo-Panel (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 75" x 119"	45/45	< 0.2
'wo Panel, PG Upgrade (611)	Dual-Pane	Class LC-PG65 Size Tested 75" x 82"	65/80	< 0.2
(wo Panel, PG Upgrade (80)	Dual-Pane	Class LC-PG65 Size Tested 75" x 95"	65/70	< 0.2
wo Panel, PG Upgrade (100)	Dual-Pane	Class LC-PG55 Size Tested 75" x 119"	55/55	< 0.2

For sound transmission ratings, see page 214.

continued on next page

^{• &}quot;Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
• This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
• Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

^{*}Contact your Andersen supplier for more information.



Performance Grade and Air Infiltration - A-Series Windows and Patio Doors (continued)

For current performance information, please visit andersenwindows.com.

Andersen° Product	Glass Construction	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT ²
Patio Door Transoms & Sidelights				
Transom	Dual-Pane	Class LC-PG70 Size Tested 112" x 27"	70/80	< 0.2
Sidelight Transom	Dual-Pane	Class LC-PG70 Size Tested 18" x 27"	70/70	< 0.2
Sidelight Transom, PG Upgrade	Dual-Pane	Class LC-PG70 Size Tested 18" x 27"	70/80	< 0.2
Sidelight (611, 80, 100)	Dual-Pane	Class LC-PG45 Size Tested 18" x 119"	45/70	< 0.2
Sidelight, PG Upgrade (611, 80, 100)	Dual-Pane	Class LC-PG70 Size Tested 18" x 119"	70/80	< 0.2
Complementary Springline™ & Arch Hinged Inswing Pa	tio Doors			
Single Stationary	Dual-Pane	Class LC-PG45 Size Tested 75.3" x 95.5"	45/45	< 0.2
Single Active	Dual-Pane	Class LC-PG45 Size Tested 37.9" x 95.5"	45/45	< 0.2
Two-Panel Stationary	Dual-Pane	Class LC-PG45 Size Tested 75.3" x 95.5"	45/45	< 0.2
Two-Panel Active*	Dual-Pane	Class LC-PG45 Size Tested 75.3" x 95.5"	45/45	< 0.2
Complementary Springline & Arch Hinged Outswing Pa	itio Doors			
Single Stationary	Dual-Pane	Class LC-PG45 Size Tested 75.3" x 95.5"	45/45	< 0.2
Single Active*	Dual-Pane	Class LC-PG45 Size Tested 37.9" x 95.5"	45/45	< 0.2
Two-Panel Stationary	Dual-Pane	Class LC-PG45 Size Tested 75.3" x 95.5"	45/45	< 0.2
Two-Panel Active*	Dual-Pane	Class LC-PG45 Size Tested 75.3" x 95.5"	45/45	< 0.2

^{• &}quot;Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
• This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.

Andersen® Products Total Unit Recycled Content Percentages

 $\textit{For current performance information, please \textit{visit} } \textbf{andersenwindows.com}.$

Andersen° Product	% Pre-Consumer Recycled Content
A-Series Windows	
Casement	10%
Awning	10%
Double-Hung	10%
Picture	6%
Fixed Transom	5%
Venting Transom	10%
Specialty	5%
Complementary Casement	5%
A-Series Patio Doors	
Gliding	4%
Hinged Inswing	3%
Hinged Outswing	3%
Patio Door Sidelight	3%
Patio Door Transom	3%
Complementary Springline™ Hinged	3%
Complementary Arch Hinged	3%

^{• &}quot;% Pre-Consumer Recycled Content" is calculated to meet ISO 14021 standards based on NFRC sizing. Actual recycled content dependent on product size.

For sound transmission ratings, see page 214.

[.] Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

*Contact your Andersen supplier for more information.

^{*}Tested with standard multi-point hardware.

PRODUCT PERFORMANCE

Sound Transmission Ratings - A-Series Windows and Patio Doors

For current performance information, please visit andersenwindows.com.

Andersen* Product	Glass Construction	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
Casement Windows			
Casement	Dual-Pane	27	23
- Customent	Triple-Pane	30	25
Awning	Dual-Pane	t	t
Arrilla	Triple-Pane	29	23
Double-Hung	Dual-Pane	27	22
Double Hung	Triple-Pane	28	23
Picture	Dual-Pane	27	22
	Triple-Pane	30	25
Venting Transom	Dual-Pane	28	22
	Triple-Pane	28	23
Fixed Transom	Dual-Pane	27	22
TIAGU TIUTIGOTTI	Triple-Pane	31	24
Direct-Set Specialty Windows			
Rectangular	Dual-Pane	28	24
Arch	Dual-Pane	28	24
Springline™	Dual-Pane	28	24
Sash-Set Specialty Windows			
Rectangular	Dual-Pane	29	24
Arch	Dual-Pane	29	24
Springline	Dual-Pane	29	24
Gliding Patio Doors			
Single Stationary	Dual-Pane	t	t
Single Stationary	Triple-Pane	32	28
Single Stationary, PG Upgrade	Dual-Pane	t	t
Two-Panel	Dual-Pane	t	t
I WO-Fallet	Triple-Pane	29	25
Two-Panel, PG Upgrade	Dual-Pane	t	t
Three-Panel	Dual-Pane	t	t
Three-Panel, PG Upgrade	Dual-Pane	t	t
Four-Panel	Dual-Pane	t	t
Four-Panel, PG Upgrade	Dual-Pane	t	t
Hinged Inswing Patio Doors			
Single Stationary	Dual-Pane	30	26
Single Stationary, PG Upgrade	Dual-Pane	30	26
Charles Author	Dual-Pane	30	26
Single Active	Triple-Pane	31	25
Single Active, PG Upgrade	Dual-Pane	30	26
Toro Devict AD /24	Dual-Pane	30	25
Two-Panel AP/PA	Triple-Pane	31	25
Two-Panel AP/PA, PG Upgrade	Dual-Pane	30	25
Two-Panel AS/SA/SS	Dual-Pane	30	25
Two-Panel AS/SA/SS, PG Upgrade	Dual-Pane	30	25
Three-Panel	Dual-Pane	t	t

			l
Andersen* Product	Glass Construction	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
Hinged Outswing Patio Doors			
Single Stationary	Dual-Pane	30	25
Single Stationary, PG Upgrade	Dual-Pane	30	25
Clared - Auditor	Dual-Pane	30	25
Single Active	Triple-Pane	31	25
Single Active, PG Upgrade	Dual-Pane	30	25
Two-Panel	Dual-Pane	31	25
IWU-Fallel	Triple-Pane	31	25
Two-Panel, PG Upgrade	Dual-Pane	31	25
Patio Door Sidelights and Transoms			
Transom	Dual-Pane	†	†
Sidelight Transom	Dual-Pane	†	t
Sidelight Transom, PG Upgrade	Dual-Pane	t	t
Sidelight	Dual-Pane	†	t
Sidelight, PG Upgrade	Dual-Pane	†	t
Complementary Springline™ & Arch Hinged	Inswing Patio Doors		
Single Stationary	Dual-Pane	†	t
Single Active	Dual-Pane	30	25
Two-Panel Stationary	Dual-Pane	t	t
Two-Panel Active	Dual-Pane	30	25
Complementary Springline & Arch Hinged O	Outswing Patio Doors		
Single Stationary	Dual-Pane	t	t
Single Active	Dual-Pane	31	25
Two-Panel Stationary	Dual-Pane	t	t
Two-Panel Active	Dual-Pane	31	25

^{• &}quot;Sound Transmission Class (STC)" and "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.
• This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new

industry standards, this data may change over time.
• Contact your Andersen supplier for more information.
†Data not available.



Center of Glass Performance Data - A-Series Windows and Patio Doors

For current performance information, please visit andersenwindows.com.

						Fad	ing	%RH	
1.1	Low-E4° Dual-Pane Glass	VT¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ center ⁷	IGST ⁸
ANE	A-Series Products								
NAL-	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	72%	0.48	0.41	98.2	16%	33%	61%	56°F
	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	71%	0.47	0.41	97.5	16%	33%	61%	56°F
	Complementary Curved Top Patio Doors	65%	0.31	0.27	207	5%	21%	61%	56°F

						Fad	ing	%RH	
101	Low-E4° Sun Dual-Pane Glass	VT¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ center ⁷	IGST ⁸
PANE	A-Series Products								
UAL-	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	40%	0.29	0.25	61.1	16%	24%	60%	55° F
۵	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	39%	0.29	0.25	60.6	15%	23%	61%	56° F
	Complementary Curved Top Patio Doors	72%	0.48	0.41	310	16%	33%	61%	56°F

						Fad	ing	%RH	
ш	Low-E4° SmartSun™ Dual-Pane Glass	VT ¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ center ⁷	IGST ⁸
PANE	A-Series Products								
JAL-	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	65%	0.31	0.27	65.6	5%	21%	62%	56° F
<u>D</u>	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	64%	0.32	0.27	66.3	5%	21%	62%	56° F
	Complementary Curved Top Patio Doors	40%	0.29	0.25	193	16%	24%	59%	55°F

						Fad	ing	%RH	
	Low-E4° Triple-Pane Glass	VT¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ center ⁷	IGST ⁸
	A-Series Products								
	Low-E4								
¥	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	66%	0.44	0.38	91.6	14%	30%	64%	57° F
TRIPLE-PANE	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	66%	0.44	0.38	91.6	14%	30%	64%	57° F
PE	Low-E4 Enhanced								
표	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	63%	0.43	0.37	88.6	8%	24%	71%	60° F
	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	63%	0.43	0.37	88.6	8%	24%	71%	60° F
	Low-E4 Enhanced with HeatLock® Technology								
	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	62%	0.41	0.36	84.3	8%	23%	54%	52° F
	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	63%	0.43	0.37	88.6	8%	24%	71%	60° F

						Fad	ing	%RH	
	Low-E4° SmartSun™ Triple-Pane Glass	VT ¹	SC ²	SHGC ³	RHG ⁴	Tuv ⁵	Tdw ⁶	@ center ⁷	IGST ⁸
	A-Series Products								
	SmartSun								
ш	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	59%	0.29	0.26	62.0	4%	19%	65%	57° F
TRIPLE-PANE	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	59%	0.29	0.26	62.0	4%	19%	65%	57° F
품	SmartSun Enhanced								
Ŧ	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	57%	0.29	0.25	59.6	2%	16%	71%	60° F
	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	57%	0.29	0.25	59.6	2%	16%	71%	60° F
	SmartSun Enhanced with HeatLock® Technology								
	Casement, Awning, Double-Hung, Picture, Transom & Specialty Windows	56%	0.27	0.24	56.9	2%	16%	54%	53° F
	Gliding, Hinged Inswing & Outswing Patio Doors, Patio Door Sidelights & Transoms	56%	0.27	0.24	56.9	2%	16%	54%	53° F

^{• &}quot;Low-E4" and "Low-E4" SmartSun" are Andersen trademarks for "Low-E" glass.

Based on NFRC testing/simulation conditions using Windows v7.4.6.0 and NFRC validated spectral data. 0°F outside temperature, 70°F inside temperature and a 15 mph wind.

1) Visible Transmittance (VT) measures how much light comes through the glass. The higher the value, from 0 to 1, the more daylight the glass lets in. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum. 2) Shading Coefficient (SC) defines the amount of heat gain through the glass compared to a single light of clear ½" (3) glass. 3) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 4) Relative Heat Gain (RHG) is the amount of heat gain through a glazing incorporating U-Factor and Solar Heat Gain Coefficient. 5) Transmission Ultra-Violet Energy (Tuv). The transmission of short-wave energy in the 300-380 nanometer portion of the solar spectrum. The energy can cause fabric fading. 6) Transmission Damage Function (Tdw). The transmission of UV and visible light energy in the 300-600 nanometer portion of the solar spectrum. The value includes both the UV and visible light energy that can cause fabric fading. This rating has also been referred to as the Krochmann Damage Function. This rating better predicts fading potential than UV transmission alone. The lower the Damage Function rating, the less transmission of short-wave energy through the glass that can potentially cause fabric fading. Fabric type is also a key component of fading potential. 7) Percent relative humidity before condensation occurs at the center of glass, taken using center of glass temperature. 8) Inside glass surface temperatures are taken at the center of glass.

^{*}This data is accurate as of November 2022. Due to ongoing product changes, updated test results or new industry standards, this data may change over time. Contact your Andersen supplier for current performance information or upgrade options

[•] Contact your Andersen supplier for center of glass performance data on windows with patterned glass, tempered glass and products ordered with capillary breather tubes.

Andersen® NFRC Certified Total Unit Performance - Dual-Pane Glass

For current performance information, please visit andersenwindows.com.

Andorson ^e Broduct	High Do	eformance Dual Dana Class Time	II Footowi	CHCC2	V/T3
Andersen® Product	High-Pe	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
	*	Without Grilles	0.27	0.27	0.45
	Low-E4°	Simulated Divided Light Grilles	0.27	0.24	0.41
	2	Finelight™ Grilles Full Divided Light Grilles	0.27	0.24	0.41
	_	Without Grilles	0.24	0.24	0.41
	4 *X	Simulated Divided Light Grilles	0.24	0.24	0.44
	Low-E4 w/HeatLock*	Finelight Grilles	0.24	0.24	0.40
	N. W.	Full Divided Light Grilles	0.24	0.24	0.40
		Without Grilles	0.28	0.16	0.25
	4 -	Simulated Divided Light Grilles	0.28	0.15	0.23
A-Series Casement Windows	ow-E4	Finelight Grilles	0.28	0.15	0.23
AND-N-86		Full Divided Light Grilles	0.29	0.15	0.23
		Without Grilles	0.27	0.18	0.41
	. =_	Simulated Divided Light Grilles	0.27	0.16	0.37
	Low-E4 SmartSun"	Finelight Grilles	0.27	0.16	0.37
	Sma	Energy Spacer Divided Light Grilles	0.27	0.16	0.37
		Full Divided Light Grilles	0.28	0.16	0.37
		Without Grilles	0.23	0.17	0.40
	4 = ž	Simulated Divided Light Grilles	0.23	0.16	0.36
	w-E4 artSu satLo	Finelight Grilles	0.23	0.16	0.36
	Low-E4 SmartSun w/ HeatLock	Energy Spacer Divided Light Grilles	0.23	0.16	0.36
	_	Full Divided Light Grilles	0.25	0.16	0.36
		Without Grilles	0.28	0.26	0.44
	E4*	Simulated Divided Light Grilles	0.28	0.23	0.39
	Low-E4°	Finelight [™] Grilles	0.28	0.23	0.39
	_	Full Divided Light Grilles	0.28	0.23	0.39
	•	Without Grilles	0.25	0.25	0.43
	₽ 15 15 15 15 15 15 15 15 15 15 15 15 15	Simulated Divided Light Grilles	0.25	0.23	0.38
	Low-E4 w/HeatLock*	Finelight Grilles	0.25	0.23	0.38
	*	Full Divided Light Grilles	0.26	0.23	0.38
		Without Grilles	0.28	0.16	0.24
	Low-E4 Sun	Simulated Divided Light Grilles	0.28	0.15	0.22
A-Series Awning Windows	Si	Finelight Grilles	0.28	0.15	0.22
AND-N-87		Full Divided Light Grilles	0.29	0.15	0.22
		Without Grilles	0.27	0.17	0.39
	4. E	Simulated Divided Light Grilles	0.27	0.16	0.35
	Low-E4 SmartSun"	Finelight Grilles	0.27	0.16	0.35
	- S	Energy Spacer Divided Light Grilles	0.27	0.16	0.35
		Full Divided Light Grilles	0.28	0.16	0.35
	~	Without Grilles	0.24	0.17	0.39
	Low-E4 SmartSun n/HeatLock	Simulated Divided Light Grilles	0.24	0.15	0.35
	Low- mart Hea	Finelight Grilles	0.24	0.15	0.35
	S ≯	Energy Spacer Divided Light Grilles	0.24	0.15	0.35
		Full Divided Light Grilles	0.25	0.15	0.35
	*	Without Grilles	0.29	0.30	0.52
	Low-E4®	Simulated Divided Light Grilles	0.29	0.27	0.46
	3	Finelight™ Grilles Full Divided Light Grilles	0.29	0.27	0.46
		Without Grilles	0.30	0.27	0.46
	.0ck*	Simulated Divided Light Grilles	0.25	0.30	0.45
	Low-E4 w/HeatLock*	Finelight Grilles	0.25	0.27	0.45
		Full Divided Light Grilles	0.23	0.27	0.45
		Without Grilles	0.29	0.19	0.43
	44 ~	Simulated Divided Light Grilles	0.29	0.17	0.26
A-Series	Low-E4 Sun	Finelight Grilles	0.29	0.17	0.26
Double-Hung Windows AND-N-91	_	Full Divided Light Grilles	0.31	0.17	0.26
AND-N-91		Without Grilles	0.27	0.20	0.47
	- ² -	Simulated Divided Light Grilles	0.27	0.18	0.41
	Low-E4 SmartSun"	Finelight Grilles	0.27	0.18	0.41
	Sme	Energy Spacer Divided Light Grilles	0.27	0.18	0.41
		Full Divided Light Grilles	0.30	0.18	0.41
		Without Grilles	0.25	0.20	0.46
	4 in %	Simulated Divided Light Grilles	0.25	0.18	0.40
	Low-E4 SmartSun v/HeatLock	Finelight Grilles	0.25	0.18	0.40
	S A	Energy Spacer Divided Light Grilles	0.25	0.18	0.40
		Full Divided Light Grilles	0.27	0.18	0.40

Andersen* Product	High-Pe	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.27	0.31	0.54
	£4*	Simulated Divided Light Grilles	0.27	0.28	0.48
	Low-E4*	Finelight™ Grilles	0.27	0.28	0.48
		Full Divided Light Grilles	0.28	0.28	0.48
	*~	Without Grilles	0.23	0.31	0.53
	45	Simulated Divided Light Grilles	0.23	0.28	0.47
	Low-E4 w/HeatLock*	Finelight Grilles	0.23	0.28	0.47
	*	Full Divided Light Grilles	0.25	0.28	0.47
		Without Grilles	0.27	0.19	0.30
	ά -	Simulated Divided Light Grilles	0.27	0.17	0.27
A-Series	Low-E4 Sun	Finelight Grilles	0.27	0.17	0.27
Picture Windows AND-N-88		Full Divided Light Grilles	0.29	0.17	0.27
AND II GO		Without Grilles	0.26	0.21	0.49
	4 =	Simulated Divided Light Grilles	0.26	0.19	0.43
	Low-E4 SmartSun"	Finelight Grilles	0.26	0.19	0.43
	S E	Energy Spacer Divided Light Grilles	0.26	0.19	0.43
		Full Divided Light Grilles	0.28	0.19	0.43
		Without Grilles	0.22	0.20	0.48
	규 득 충	Simulated Divided Light Grilles	0.22	0.18	0.42
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.22	0.18	0.42
		Energy Spacer Divided Light Grilles	0.22	0.18	0.42
		Full Divided Light Grilles	0.25	0.18	0.42
	.E4*	Without Grilles	0.28	0.27	0.46
		Simulated Divided Light Grilles	0.28	0.25	0.41
	Low-E4°	Finelight™ Grilles	0.28	0.25	0.41
	_	Full Divided Light Grilles	0.28	0.25	0.41
	*	Without Grilles	0.25	0.26	0.45
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.25	0.24	0.40
	Low 'Hea	Finelight Grilles	0.25	0.24	0.40
	*	Full Divided Light Grilles	0.26	0.24	0.40
		Without Grilles	0.28	0.17	0.26
	Low-E4 Sun	Simulated Divided Light Grilles	0.28	0.15	0.23
A-Series Venting Transom Windows	Si	Finelight Grilles	0.28	0.15	0.23
AND-N-90		Full Divided Light Grilles	0.29	0.15	0.23
		Without Grilles	0.27	0.18	0.41
	4 [‡]	Simulated Divided Light Grilles	0.27	0.16	0.37
	Low-E4 SmartSun"	Finelight Grilles	0.27	0.16	0.37
	Sm	Energy Spacer Divided Light Grilles	0.27	0.16	0.37
		Full Divided Light Grilles	0.28	0.16	0.37
		Without Grilles	0.24	0.18	0.40
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.24	0.16	0.36
	ow-E nartS leatL	Finelight Grilles	0.24	0.16	0.36
	S [™]	Energy Spacer Divided Light Grilles	0.24	0.16	0.36
		Full Divided Light Grilles	0.25	0.16	0.36

^{• &}quot;Low-E4", "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft².ºF. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

⁷⁶⁰ nanometer portion of the solar spectrum.

NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

compliance with NFRC program and procedural requirements.

*This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

glass with capillary breather tubes for high altitudes, etc.

Values are for single units with given pane thickness and 3/4" (19 mm) grilles for windows and 1" (25 mm) grilles for door products.



Andersen® NFRC Certified Total Unit Performance - Dual-Pane Glass (continued) For current performance information, please visit andersenwindows.com.

Andersen® Product	High Do	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
Allueisell Flouuct	nigii-rei				
	**	Without Grilles Simulated Divided Light Grilles	0.27	0.32	0.55
	Low-E4°	Finelight™ Grilles	0.27	0.29	0.49
	7	Full Divided Light Grilles	0.28	0.29	0.49
		Without Grilles	0.23	0.31	0.54
	75. 0 X	Simulated Divided Light Grilles	0.23	0.28	0.48
	Low-E4 w/HeatLock®	Finelight Grilles	0.23	0.28	0.48
	- ×	Full Divided Light Grilles	0.25	0.28	0.48
		Without Grilles	0.27	0.20	0.31
	4 c	Simulated Divided Light Grilles	0.27	0.18	0.27
A-Series	Low-E4 Sun	Finelight Grilles	0.27	0.18	0.27
Fixed Transom Windows AND-N-89	_	Full Divided Light Grilles	0.29	0.18	0.27
AND-N-09		Without Grilles	0.26	0.21	0.49
	_ =	Simulated Divided Light Grilles	0.26	0.19	0.44
	Low-E4 SmartSun"	Finelight Grilles	0.26	0.19	0.44
	Sms	Energy Spacer Divided Light Grilles	0.26	0.19	0.44
		Full Divided Light Grilles	0.28	0.19	0.44
		Without Grilles	0.22	0.21	0.48
	4 = 5 5 4	Simulated Divided Light Grilles	0.22	0.19	0.43
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.22	0.19	0.43
	Sm. W/Hc	Energy Spacer Divided Light Grilles	0.22	0.19	0.43
		Full Divided Light Grilles	0.25	0.19	0.43
		Without Grilles	0.29	0.35	0.61
	.E4*	Simulated Divided Light Grilles	0.29	0.32	0.54
	Low-E4°	Finelight™ Grilles	0.30	0.32	0.54
		Full Divided Light Grilles	0.30	0.32	0.54
	**	Without Grilles	0.25	0.35	0.59
	Low-E4 w/HeatLock [®]	Simulated Divided Light Grilles	0.25	0.31	0.53
		Finelight Grilles	0.26	0.31	0.53
A-Series		Full Divided Light Grilles	0.27	0.31	0.53
Specialty Windows		Without Grilles	0.30	0.22	0.34
Direct-Set	Low-E4 Sun	Simulated Divided Light Grilles	0.30	0.20	0.30
AND-N-126	Si	Finelight Grilles	0.31	0.20	0.30
		Full Divided Light Grilles	0.31	0.20	0.30
	2_	Without Grilles	0.28	0.23	0.55
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.28	0.21	0.49
	Low	Finelight Grilles	0.30	0.21	0.49
		Full Divided Light Grilles	0.30	0.21	0.49
	- 5	Without Grilles	0.24	0.23	0.53
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.24	0.21	0.48
	Lov Sma v/He	Finelight Grilles	0.25	0.21	0.48
	8	Full Divided Light Grilles	0.26	0.21	0.48
		Without Grilles	0.30	0.32	0.55
	v-E4°	Simulated Divided Light Grilles	0.30	0.29	0.49
	Low	Finelight™ Grilles	0.31	0.29	0.49
		Full Divided Light Grilles	0.31	0.29	0.49
	Ť,Ř	Without Grilles	0.26	0.31	0.53
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.26	0.28	0.48
	/He	Finelight Grilles	0.27	0.28	0.48
A-Series		Full Divided Light Grilles	0.28	0.28	0.48
A-Series Specialty Windows Sash-Set AND-N-128	-	Without Grilles	0.30	0.20	0.30
	ow-E4 Sun	Simulated Divided Light Grilles	0.30	0.18	0.27
	3,	Finelight Grilles	0.31	0.18	0.27
		Full Divided Light Grilles	0.31	0.18	0.27
	4 <u>;</u>	Without Grilles	0.29	0.21	0.49
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.29	0.19	0.44
	Sms	Finelight Grilles	0.30	0.19	0.44
		Full Divided Light Grilles	0.30	0.19	0.44
	4 H %	Without Grilles	0.25	0.21	0.48
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.25	0.19	0.43
	Sm Sw	Finelight Grilles	0.26	0.19	0.43
	o, ≥	Full Divided Light Grilles	0.27	0.19	0.43

Andersen® Product	High-Pe	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.30	0.28	0.47
	#	Simulated Divided Light Grilles	0.30	0.25	0.42
	Low-E4*	Finelight [™] Grilles	0.30	0.25	0.42
		Full Divided Light Grilles	0.31	0.25	0.42
	*_	Without Grilles	0.27	0.27	0.46
	t	Simulated Divided Light Grilles	0.27	0.25	0.41
	Low-E4 w/HeatLock*	Finelight Grilles	0.27	0.25	0.41
A-Series		Full Divided Light Grilles	0.28	0.25	0.41
Complementary Casement		Without Grilles	0.30	0.17	0.26
Windows	ow-E4 Sun	Simulated Divided Light Grilles	0.30	0.16	0.23
AND-N-107	Su	Finelight Grilles	0.30	0.16	0.23
		Full Divided Light Grilles	0.31	0.16	0.23
	,	Without Grilles	0.30	0.18	0.42
	-E4 Sun	Simulated Divided Light Grilles	0.30	0.17	0.38
	Low-E4 SmartSun [™]	Finelight Grilles	0.30	0.17	0.38
		Full Divided Light Grilles	0.30	0.17	0.38
	Low-E4 SmartSun w/HeatLock	Without Grilles	0.26	0.18	0.41
		Simulated Divided Light Grilles	0.26	0.17	0.37
		Finelight Grilles	0.26	0.17	0.37
		Full Divided Light Grilles	0.28	0.17	0.37
	Low-E4*	Without Grilles	0.30	0.27	0.45
		Blinds-Between-the-Glass*	0.35	0.24	0.40
		Simulated Divided Light Grilles	0.30	0.23	0.39
		Finelight™ Grilles	0.30	0.23	0.39
		Full Divided Light Grilles	0.31	0.23	0.39
	•	Without Grilles	0.27	0.26	0.44
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.27	0.23	0.38
	Low	Finelight Grilles	0.27	0.23	0.38
	×	Full Divided Light Grilles	0.29	0.23	0.38
		Without Grilles	0.30	0.16	0.25
A-Series	ow-E4 Sun	Simulated Divided Light Grilles	0.30	0.15	0.22
Gliding Patio Doors Traditional Panels	Su	Finelight Grilles	0.30	0.15	0.22
AND-N-99		Full Divided Light Grilles	0.32	0.15	0.22
		Without Grilles	0.29	0.18	0.40
	4 <u>r</u>	Simulated Divided Light Grilles	0.29	0.16	0.35
	Low-E4 SmartSun"	Finelight Grilles	0.29	0.16	0.35
	Smi	Energy Spacer Divided Light Grilles	0.29	0.16	0.35
		Full Divided Light Grilles	0.31	0.16	0.35
		Without Grilles	0.26	0.17	0.40
	4 = 50 OCK	Simulated Divided Light Grilles	0.26	0.15	0.34
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.26	0.15	0.34
	Sr W/H	Energy Spacer Divided Light Grilles	0.26	0.15	0.34
		Full Divided Light Grilles	0.29	0.15	0.34

^{• &}quot;Low-E4," "Low-E4° SmartSun,"" "Low-E4° Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft²-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to

⁷⁶⁰ nanometer portion of the solar spectrum.

•NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

[•]This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc. • Values are for single units with given pane thickness and 3 / $_4$ " (19 mm) grilles for windows and 1" (25 mm)

grilles for door products.
*Available for select patio door sizes. Data based on blinds in full open position.

Andersen® NFRC Certified Total Unit Performance - Dual-Pane Glass (continued)

For current performance information, please visit andersenwindows.com.

Andersen° Product	High-Pe	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.29	0.28	0.48
	4	Blinds-Between-the-Glass	0.35	0.26	0.43
	Low-E4	Simulated Divided Light Grilles	0.29	0.25	0.41
	_	Finelight™ Grilles	0.31	0.25	0.41
		Full Divided Light Grilles Without Grilles	0.31	0.25	0.41
	0.05 *	Simulated Divided Light Grilles	0.26	0.24	0.47
	Low-E4 w/HeatLock*	Finelight Grilles	0.27	0.24	0.40
	*	Full Divided Light Grilles	0.29	0.24	0.40
		Without Grilles	0.30	0.17	0.27
A-Series Gliding Patio Doors	Low-E4 Sun	Simulated Divided Light Grilles	0.30	0.15	0.23
Contemporary Panels	So	Finelight Grilles	0.31	0.15	0.23
AND-N-212		Full Divided Light Grilles	0.31	0.15	0.23
	2_	Without Grilles Simulated Divided Light Grilles	0.29	0.19	0.43
	Low-E4 SmartSun"	Finelight Grilles	0.30	0.17	0.37
	Sma	Energy Spacer Divided Light Grilles	0.29	0.17	0.37
		Full Divided Light Grilles	0.31	0.17	0.37
		Without Grilles	0.25	0.18	0.42
	Sun Lock	Simulated Divided Light Grilles	0.25	0.16	0.36
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.27	0.16	0.36
	δ,	Energy Spacer Divided Light Grilles	0.25	0.16	0.36
		Full Divided Light Grilles Without Grilles	0.28	0.16	0.36
		Blinds-Between-the-Glass*	0.35	0.24	0.41
	Low-E4*	Simulated Divided Light Grilles	0.30	0.21	0.35
	Po	Finelight™ Grilles	0.30	0.21	0.35
		Full Divided Light Grilles	0.32	0.21	0.35
	*	Without Grilles	0.27	0.24	0.40
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.27	0.20	0.34
	2 £	Finelight Grilles	0.28	0.20	0.34
		Full Divided Light Grilles Without Grilles	0.30	0.20	0.34
A-Series	4 -	Simulated Divided Light Grilles	0.31	0.13	0.23
Hinged Inswing Patio Doors	Low-E4 Sun	Finelight Grilles	0.32	0.13	0.19
Traditional Panels		Full Divided Light Grilles	0.32	0.13	0.19
AND-N-92		Without Grilles	0.30	0.16	0.37
	4. un	Simulated Divided Light Grilles	0.30	0.14	0.31
	Low-E4 SmartSun"	Finelight Grilles	0.31	0.14	0.31
	_ \overline{\sigma}	Energy Spacer Divided Light Grilles	0.30	0.14	0.31
		Full Divided Light Grilles Without Grilles	0.31	0.14	0.31
	5 ء		0.27	0.16	0.36
	w-E4 artSu eatLo	Finelight Grilles	0.28	0.14	0.31
	Low-E4 SmartSun w/HeatLock	Energy Spacer Divided Light Grilles	0.27	0.14	0.31
		Full Divided Light Grilles	0.29	0.14	0.31
		Without Grilles	0.30	0.25	0.43
	E4*	Blinds-Between-the-Glass*	0.35	0.24	0.40
	Low-E4	Simulated Divided Light Grilles	0.30	0.22	0.37
		Finelight™ Grilles Full Divided Light Grilles	0.31	0.22	0.37
		Without Grilles	0.27	0.25	0.42
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.27	0.22	0.36
	Low /Hea	Finelight Grilles	0.28	0.22	0.36
	*	Full Divided Light Grilles	0.29	0.22	0.36
A-Series	_	Without Grilles	0.30	0.16	0.24
Hinged Inswing Patio Doors	ow-E4 Sun	Simulated Divided Light Grilles	0.30	0.14	0.21
Contemporary Panels	3	Finelight Grilles Full Divided Light Grilles	0.32	0.14	0.21
AND-N-211		Without Grilles	0.32	0.14	0.39
	- [*] -	Simulated Divided Light Grilles	0.29	0.15	0.33
	Low-E4 SmartSun"	Finelight Grilles	0.31	0.15	0.33
	Smi	Energy Spacer Divided Light Grilles	0.29	0.15	0.33
		Full Divided Light Grilles	0.31	0.15	0.33
	¥	Without Grilles	0.26	0.17	0.38
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.26	0.15	0.33
	Low Smar	Finelight Grilles Energy Spacer Divided Light Grilles	0.28	0.15 0.15	0.33
	3	Full Divided Light Grilles	0.29	0.15	0.33
			2.20	10	2.00

Without Grilles	Andersen* Product	High-Pe	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
Blinds-Between-the-Glass' 0.34 0.23 0.38						0.41
Simulated Divided Light Grilles 0.30 0.21 0.35						
Finelight Grilles		,-E4		0.30	0.21	0.35
Full Divided Light Grilles 0.31 0.21 0.35		Low		0.31		
Without Grilles						
A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 AND-N-93 A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 AND				0.27	0.24	0.40
A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 March Patio Doors		5 E				0.34
A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 March Patio Doors		-ow-		0.28	0.21	0.34
A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 AND-N-93 AND-N-93 A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 AND-N-93 A-Series Hinged Outswing Patio Doors Traditional Panels AND-N-93 A-Series Hinged Outswing Patio Outs Hinged Outswing Patio Outs Finelight Grilles AND-N-210 Without Grilles 0.32 0.13 0.19 Full Divided Light Grilles 0.32 0.13 0.19 Full Divided Light Grilles 0.32 0.13 0.19 Full Divided Light Grilles 0.29 0.14 0.31 Energy Spacer Divided Light Grilles 0.29 0.14 0.31 Finelight Grilles 0.26 0.14 0.31 Finelight Grilles 0.26 0.14 0.31 Finelight Grilles 0.26 0.14 0.31 Finelight Grilles 0.29 0.14 0.31 Finelight Grilles 0.29 0.14 0.31 Full Divided Light Grilles 0.29 0.20 0.30 Full Divided Light Grilles 0.29 0.20 0.30 Finelight Grilles 0.29 0.20 0.30 Full Divided Light Grilles 0.30 0.31 0.37 Full Divided Light Grilles 0.31 0.31 0.37 Full Divided Light Grilles 0.31 0.31 0.33 Full Divided Light Grilles 0.30 0.31 0.31 0.31 0.33 Full Divided Light Grilles 0.30 0.31 0.31 0.33 Full Divided Light Grilles 0.30 0.31 0.30 0.30 0.30 0.30 0.30 0.30		*		0.29	0.21	0.34
Simulated Divided Light Grilles 0.30 0.13 0.19				0.30	0.15	0.23
Full Divided Light Grilles 0.32 0.13 0.19		E4	Simulated Divided Light Grilles	0.30	0.13	0.19
No. No. 1938 No. 1		Su Su	Finelight Grilles	0.31	0.13	0.19
Simulated Divided Light Grilles 0.29 0.16 0.37			Full Divided Light Grilles	0.32	0.13	0.19
Finelight Grilles 0.31 0.14 0.31	AND-N-93		Without Grilles	0.29	0.16	0.37
Full Divided Light Grilles 0.31 0.14 0.31		4 E	Simulated Divided Light Grilles	0.29	0.14	0.31
Full Divided Light Grilles 0.31 0.14 0.31		w-E	Finelight Grilles	0.31	0.14	0.31
Without Grilles 0.26 0.16 0.36		Sme	Energy Spacer Divided Light Grilles	0.29	0.14	0.31
Simulated Divided Light Grilles 0.26 0.14 0.31			Full Divided Light Grilles	0.31	0.14	0.31
Full Divided Light Grilles 0.29 0.14 0.31			Without Grilles	0.26	0.16	0.36
Full Divided Light Grilles 0.29 0.14 0.31		4 E 8	Simulated Divided Light Grilles	0.26	0.14	0.31
Full Divided Light Grilles 0.29 0.14 0.31		ow-E lartS leatL	Finelight Grilles	0.28	0.14	0.31
Without Grilles 0.29 0.26 0.43		Sr. W/H	Energy Spacer Divided Light Grilles	0.26	0.14	0.31
Blinds-Between-the-Glass 0.34 0.24 0.40			Full Divided Light Grilles	0.29	0.14	0.31
Simulated Divided Light Grilles 0.29 0.23 0.37			Without Grilles	0.29	0.26	0.43
A-Series Hinged Outswing Patio Boors Contemporary Panels AND-N-210 AND-N-210 Finelight Grilles Light Space Simulated Divided Light Grilles Light Grilles		*	Blinds-Between-the-Glass*	0.34	0.24	0.40
A-Series Hinged Outswing Patio Boors Contemporary Panels AND-N-210 AND-N-210 Finelight Grilles Light Space Simulated Divided Light Grilles Light Grilles		W-E	Simulated Divided Light Grilles	0.29	0.23	0.37
A-Series Hinged Outswing Patio Doors Contemporary Panels AND-N-210 AND-N-210 AND-N-210 A-Series Finelight Grilles AND-N-210 AND-N-210 A-Series Binulated Divided Light Grilles AND-N-210 AND-N		3	Finelight™ Grilles	0.31	0.23	0.37
A-Series Hinged Outswing Patio Doors Contemporary Panels AND-N-210 The string of thes			Full Divided Light Grilles	0.31	0.23	0.37
A-Series Hinged Outswing Patio Doors Contemporary Panels AND-N-210 A-Series Without Grilles 0.30 0.16 0.24		*	Without Grilles	0.26	0.25	0.42
A-Series Hinged Outswing Patio Doors Contemporary Panels AND-N-210 Part of the part of th		v-E4 atLoc	Simulated Divided Light Grilles	0.26	0.22	0.36
A-Series Hinged Outswing Patio Doors Contemporary Panels AND-N-210 The series of the		₹ 1	Finelight Grilles	0.27	0.22	0.36
Simulated Divided Light Grilles 0.30 0.14 0.21		>	Full Divided Light Grilles	0.29	0.22	0.36
Patio Doors Patio Doors Patio Doors Patio Doors	A-Series		Without Grilles	0.30	0.16	0.24
Contemporary Panels Full Divided Light Grilles 0.31 0.14 0.21		r. un	Simulated Divided Light Grilles	0.30	0.14	0.21
Non-N-210 Without Grilles 0.29 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.17 0.39 0.18 0.29 0.15 0.30 0.15		S	Finelight Grilles	0.31	0.14	0.21
Simulated Divided Light Grilles 0.29 0.17 0.39			Full Divided Light Grilles	0.31	0.14	0.21
Full Divided Light Grilles 0.30 0.15 0.33 Without Grilles 0.26 0.17 0.38 Without Grilles 0.26 0.15 0.33 Simulated Divided Light Grilles 0.26 0.15 0.33 Finelight Grilles 0.27 0.15 0.33 Energy Spacer Divided Light Grilles 0.26 0.15 0.33	,D II 2 10		Without Grilles	0.29	0.17	0.39
Full Divided Light Grilles 0.30 0.15 0.33 Without Grilles 0.26 0.17 0.38 Without Grilles 0.26 0.15 0.33 Simulated Divided Light Grilles 0.26 0.15 0.33 Finelight Grilles 0.27 0.15 0.33 Energy Spacer Divided Light Grilles 0.26 0.15 0.33		E4 Sun"				
Full Divided Light Grilles 0.30 0.15 0.33 Without Grilles 0.26 0.17 0.38 Without Grilles 0.26 0.15 0.33 Simulated Divided Light Grilles 0.26 0.15 0.33 Finelight Grilles 0.27 0.15 0.33 Energy Spacer Divided Light Grilles 0.26 0.15 0.33		Low-I narts				
Without Grilles 0.26 0.17 0.38		S				
Simulated Divided Light Grilles			_			
		Ų				
		Sun tLock				
		Low- mart Hear				
Full Divided Light Grilles 0.28 0.15 0.33		× ×				
			Full Divided Light Grilles	0.28	0.15	0.33

^{• &}quot;Low-E4"," "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft²-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

[•]NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in

ompliance with NFRC program and procedural requirements.

*This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

•Values are for single units with given pane thickness and $^3/_4$ " (19 mm) grilles for windows and 1" (25 mm)

^{*}Available for select patio door sizes. Data based on blinds in full open position.



Andersen* NFRC Certified Total Unit Performance – Dual-Pane Glass (continued) For current performance information, please visit **andersenwindows.com**.

Andersen® Product	High-Per	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.28	0.34	0.58
	Low-E4*	Simulated Divided Light Grilles	0.28	0.31	0.53
	Lov	Finelight™ Grilles	0.29	0.31	0.53
		Full Divided Light Grilles	0.29	0.31	0.53
	* 3	Without Grilles	0.24	0.33	0.57
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.24	0.30	0.51
	, , , ,	Finelight Grilles	0.24	0.30	0.51
		Full Divided Light Grilles	0.26	0.30	0.51
-Series		Without Grilles	0.28	0.21	0.32
atio Door Sidelight	ow-E4 Sun	Simulated Divided Light Grilles	0.28	0.19	0.29
ransoms	9 %	Finelight Grilles	0.29	0.19	0.29
irect-Set ND-N-96		Full Divided Light Grilles	0.29	0.19	0.29
ND-N-90		Without Grilles	0.27	0.22	0.52
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.27	0.20	0.47
	Low- narts	Finelight Grilles	0.28	0.20	0.47
	_ 22	Energy Spacer Divided Light Grilles	0.27	0.20	0.47
		Full Divided Light Grilles	0.28	0.20	0.47
	J	Without Grilles	0.23	0.22	0.51
	Sun Lock	Simulated Divided Light Grilles	0.23	0.20	0.46
	Low-E4 SmartSun n/HeatLock	Finelight Grilles	0.24	0.20	0.46
	S ≯	Energy Spacer Divided Light Grilles	0.23	0.20	0.46
		Full Divided Light Grilles	0.25	0.20	0.46
		Without Grilles	0.29	0.26	0.43
	Low-E4*	Simulated Divided Light Grilles	0.29	0.23	0.39
	Lo	Finelight™ Grilles	0.30	0.23	0.39
		Full Divided Light Grilles	0.30	0.23	0.39
	~ _* %	Without Grilles	0.26	0.25	0.42
	Low-E4 v/HeatLock*	Simulated Divided Light Grilles	0.26	0.23	0.38
	3 ¥	Finelight Grilles	0.27	0.23	0.38
		Full Divided Light Grilles	0.28	0.23	0.38
C	5+	Without Grilles	0.30	0.16	0.24
-Series atio Door Sidelight	Low-E4 Sun	Simulated Divided Light Grilles	0.30	0.15	0.21
ansoms		Finelight Grilles	0.30	0.15	0.21
ash-Set		Full Divided Light Grilles	0.30	0.15	0.21
ND-N-95	,	Without Grilles	0.29	0.17	0.39
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.29	0.16	0.35
	Low	Finelight Grilles	0.29	0.16	0.35
	S	Energy Spacer Divided Light Grilles	0.29	0.16	0.35
		Full Divided Light Grilles	0.30	0.16	0.35
	_ *	Without Grilles	0.26	0.17	0.38
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.26	0.15	0.34
	Low Smar Hea	Finelight Grilles	0.26	0.15	0.34
	o, ≥	Energy Spacer Divided Light Grilles	0.26	0.15	0.34
		Full Divided Light Grilles	0.27		
	*	Without Grilles	0.28	0.34	0.58
	Low-E4®	Simulated Divided Light Grilles Finelight™ Grilles	0.28	0.31	0.53
	2	Full Divided Light Grilles	0.29	0.31	0.53
		Without Grilles	0.29	0.31	0.53
	9.4 0.0CK*	Simulated Divided Light Grilles	0.24	0.33	0.57
	Low-E4 w/HeatLock*	Finelight Grilles	0.24	0.30	0.51
	ô T	Full Divided Light Grilles			0.51
		_	0.26	0.30	0.51
	4	Without Grilles	0.28	0.21	0.32
Series atio Door Transoms	ow-E4 Sun	Simulated Divided Light Grilles Finelight Grilles	0.28	0.19	0.29
atio Door Transoms irect-Set	7				0.29
ID-N-96		Full Divided Light Grilles Without Grilles	0.29	0.19	0.29
AND-N-96	2		0.27		
	Low-E4 SmartSun"	Simulated Divided Light Grilles Finelight Grilles	0.27	0.20	0.47
	Low	Energy Spacer Divided Light Grilles	0.28	0.20	0.47
	S	Full Divided Light Grilles	0.27		
		_	0.28	0.20	0.47
	_ *	Without Grilles	0.23	0.22	0.51
	tSun tLoc	Simulated Divided Light Grilles	0.23	0.20	0.46
	Low-E4 SmartSun w/HeatLock	Finelight Grilles Energy Spacer Divided Light Grilles	0.24	0.20	0.46

Andersen® Product	High-Pe	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.30	0.25	0.41
	£4*	Simulated Divided Light Grilles	0.30	0.22	0.37
	Low-E4°	Finelight [™] Grilles	0.30	0.22	0.37
	_	Full Divided Light Grilles	0.30	0.22	0.37
	*	Without Grilles	0.27	0.24	0.40
	Low-E4 //HeatLock*	Simulated Divided Light Grilles	0.27	0.22	0.36
	Low- Heat	Finelight Grilles	0.27	0.22	0.36
	*	Full Divided Light Grilles	0.28	0.22	0.36
		Without Grilles	0.30	0.15	0.23
A-Series	n ا	Simulated Divided Light Grilles	0.30	0.14	0.20
Patio Door Transoms	Low-E4 Sun	Finelight Grilles	0.31	0.14	0.20
Sash-Set		Full Divided Light Grilles	0.31	0.14	0.20
AND-N-95		Without Grilles	0.29	0.16	0.37
	,	Simulated Divided Light Grilles	0.29	0.15	0.33
	Low-E4 SmartSun"	Finelight Grilles	0.30	0.15	0.33
	Sma	Energy Spacer Divided Light Grilles	0.29	0.15	0.33
		Full Divided Light Grilles	0.30	0.15	0.33
		Without Grilles	0.26	0.16	0.36
	구르충	Simulated Divided Light Grilles	0.26	0.15	0.32
	w-E⁄ artSu eatLo	Finelight Grilles	0.27	0.15	0.32
	Low-E4 SmartSun w/HeatLock	Energy Spacer Divided Light Grilles	0.26	0.15	0.32
		Full Divided Light Grilles	0.28	0.15	0.32
		Without Grilles	0.30	0.23	0.39
	£4*	Simulated Divided Light Grilles	0.30	0.21	0.34
	Low-E4°	Finelight [™] Grilles	0.31	0.21	0.34
		Full Divided Light Grilles	0.31	0.21	0.34
	•	Without Grilles	0.27	0.23	0.38
	Low-E4 v/HeatLock*	Simulated Divided Light Grilles	0.27	0.21	0.34
	Low- Heat	Finelight Grilles	0.28	0.21	0.34
	*	Full Divided Light Grilles	0.29	0.21	0.34
		Without Grilles	0.30	0.15	0.22
A-Series	4, ⊏	Simulated Divided Light Grilles	0.30	0.13	0.19
Patio Door Sidelights	Low-E4 Sun	Finelight Grilles	0.31	0.13	0.19
Traditional Panels		Full Divided Light Grilles	0.31	0.13	0.19
AND-N-94		Without Grilles	0.29	0.16	0.35
	4 =	Simulated Divided Light Grilles	0.29	0.14	0.31
	Low-E4 SmartSun"	Finelight Grilles	0.30	0.14	0.31
	Smg	Energy Spacer Divided Light Grilles	0.29	0.14	0.31
		Full Divided Light Grilles	0.30	0.14	0.31
		Without Grilles	0.27	0.15	0.34
	4 = 5	Simulated Divided Light Grilles	0.27	0.14	0.30
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.27	0.14	0.30
	Sm. W	Energy Spacer Divided Light Grilles	0.27	0.14	0.30
		Full Divided Light Grilles	0.28	0.14	0.30

^{• &}quot;Low-E4," "Low-E4* SmartSun,"" "Low-E4* Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft².ºF. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

[•]This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

[•] Values are for single units with given pane thickness and $^3/_4$ " (19 mm) grilles for windows and 1" (25 mm) grilles for door products.

Andersen® NFRC Certified Total Unit Performance - Dual-Pane Glass (continued)

For current performance information, please visit andersenwindows.com.

Andersen* Product	High-Pe	rformance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.30	0.22	0.36
	£4*	Simulated Divided Light Grilles	0.30	0.20	0.32
	Low-E4*	Finelight™ Grilles	0.31	0.20	0.32
		Full Divided Light Grilles	0.31	0.20	0.32
	*	Without Grilles	0.28	0.21	0.35
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.28	0.19	0.31
	Low	Finelight Grilles	0.28	0.19	0.31
	*	Full Divided Light Grilles	0.29	0.19	0.31
		Without Grilles	0.30	0.14	0.20
A-Series	ow-E4 Sun	Simulated Divided Light Grilles	0.30	0.12	0.18
Patio Door Sidelights	S IS	Finelight™ Grilles	0.31	0.12	0.18
Contemporary Panels		Full Divided Light Grilles	0.31	0.12	0.18
AND-N-213		Without Grilles	0.30	0.15	0.32
	4 H	Simulated Divided Light Grilles	0.30	0.13	0.29
	Low-E4 SmartSun"	Finelight Grilles	0.31	0.13	0.29
	S.	Energy Spacer Divided Light Grilles	0.30	0.13	0.29
		Full Divided Light Grilles	0.31	0.13	0.29
		Without Grilles	0.27	0.14	0.32
	4 no	Simulated Divided Light Grilles	0.27	0.13	0.28
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.28	0.13	0.28
	S W/H	Energy Spacer Divided Light Grilles	0.27	0.13	0.28
		Full Divided Light Grilles	0.29	0.13	0.28
		Without Grilles	0.33	0.24	0.41
	Low-E4*	Simulated Divided Light Grilles	0.33	0.21	0.35
	Low	Finelight™ Grilles	0.34	0.21	0.35
		Full Divided Light Grilles	0.34	0.21	0.35
	*~	Without Grilles	0.29	0.24	0.40
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.29	0.21	0.34
	Low Hea	Finelight Grilles	0.31	0.21	0.34
	*	Full Divided Light Grilles	0.32	0.21	0.34
A-Series		Without Grilles	0.33	0.15	0.23
Complementary Hinged Inswing Patio Doors	ow-E4 Sun	Simulated Divided Light Grilles	0.33	0.13	0.20
Springline™ & Arch	δÑ	Finelight Grilles	0.34	0.13	0.20
AND-N-127		Full Divided Light Grilles	0.34	0.13	0.20
	2_	Without Grilles	0.32	0.16	0.37
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.32	0.14	0.32
	Low	Finelight Grilles	0.33	0.14	0.32
		Full Divided Light Grilles	0.34	0.14	0.32
	ح خ	Without Grilles	0.29	0.16	0.36
	Low-E4 SmartSun n/HeatLock	Simulated Divided Light Grilles	0.29	0.14	0.31
	Sma //He	Finelight Grilles	0.30	0.14	0.31
	3	Full Divided Light Grilles	0.32	0.14	0.31
		Without Grilles	0.33	0.25	0.41
	Low-E4*	Simulated Divided Light Grilles	0.33	0.22	0.35
	Low	Finelight [™] Grilles	0.35	0.22	0.35
		Full Divided Light Grilles	0.35	0.22	0.35
	* *	Without Grilles	0.30	0.24	0.40
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.30	0.21	0.34
	/Fe	Finelight Grilles	0.31	0.21	0.34
		Full Divided Light Grilles	0.33	0.21	0.34
A-Series Complementary Hinged		Without Grilles	0.33	0.16	0.23
Outswing Patio Doors	ow-E4 Sun	Simulated Divided Light Grilles	0.33	0.14	0.20
Springline & Arch	Lo So	Finelight Grilles	0.35	0.14	0.20
AND-N-127		Full Divided Light Grilles	0.35	0.14	0.20
	_ "_	Without Grilles	0.33	0.17	0.37
	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.33	0.15	0.32
	Lo	Finelight Grilles	0.34	0.15	0.32
		Full Divided Light Grilles	0.34	0.15	0.32
	_ = ž	Without Grilles	0.30	0.16	0.36
	w-E4 artSu aatLo	Simulated Divided Light Grilles	0.30	0.14	0.31
	Low-E4 SmartSun w/HeatLock	Finelight Grilles	0.31	0.14	0.31
		Full Divided Light Grilles	0.32	0.14	0.31

Andersen® Product	High-Per	formance Dual-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.32	0.23	0.39
	Low-E4*	Simulated Divided Light Grilles	0.32	0.21	0.34
	Low-	Finelight [™] Grilles	0.34	0.21	0.34
		Full Divided Light Grilles	0.33	0.21	0.34
	**	Without Grilles	0.29	0.23	0.38
	Low-E4 w/HeatLock*	Simulated Divided Light Grilles	0.29	0.21	0.34
	Low /Hea	Finelight Grilles	0.30	0.21	0.34
	*	Full Divided Light Grilles	0.31	0.21	0.34
A-Series		Without Grilles	0.33	0.15	0.22
Complementary Patio Door Sidelights	Low-E4 Sun	Simulated Divided Light Grilles	0.33	0.13	0.19
Arch	Low	Finelight Grilles	0.34	0.13	0.19
AND-N-131		Full Divided Light Grilles	0.33	0.13	0.19
	2	Without Grilles	0.32	0.16	0.35
	-E4 tSun	Simulated Divided Light Grilles	0.32	0.14	0.31
	Low-E4 SmartSun"	Finelight Grilles	0.33	0.14	0.31
	0,	Full Divided Light Grilles	0.33	0.14	0.31
	- 5	Without Grilles	0.29	0.15	0.34
	Low-E4 SmartSun w/HeatLock	Simulated Divided Light Grilles	0.29	0.14	0.30
	Low Smar	Finelight Grilles	0.30	0.14	0.30
	37 ≱	Full Divided Light Grilles	0.31	0.14	0.30

^{• &}quot;Low-E4," "Low-E4" SmartSun," "Low-E4" Sun" and "HeatLock" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft².ºF. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in

NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

[•]This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.
•Values are for single units with given pane thickness and 3 /₄" (19 mm) grilles for windows and 1" (25 mm)

Values are for single units with given pane thickness and ³/₄" (19 mm) grilles for windows and 1" (25 mm grilles for door products.



Andersen® NFRC Certified Total Unit Performance - Triple-Pane Glass

For current performance information, please visit andersenwindows.com.

Andersen° Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.25	0.25	0.41
	E4*	Simulated Divided Light Grilles	0.25	0.23	0.37
	Low-E4®	Finelight™ Grilles	0.25	0.23	0.37
	_	Full Divided Light Grilles	-	-	-
	ъ	Without Grilles	0.21	0.24	0.40
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.21	0.22	0.36
	Low	Finelight Grilles	0.22	0.22	0.36
	ш	Full Divided Light Grilles	-	-	-
	₽*\$	Without Grilles	0.20	0.23	0.39
	rte art	Simulated Divided Light Grilles	0.20	0.21	0.35
A-Series	Low-E4 Enhanced w/HeatLock	Finelight Grilles	0.20	0.21	0.35
Casement Windows	× ×	Full Divided Light Grilles	-	-	-
AND-N-86	_ =	Without Grilles	0.24	0.17	0.37
	rtSu	Simulated Divided Light Grilles	0.24	0.15	0.34
	Low-E4 SmartSun"	Finelight Grilles	0.25	0.15	0.34
	0)	Full Divided Light Grilles	-	-	-
	4 5 2	Without Grilles	0.21	0.16	0.36
	artSi anc	Simulated Divided Light Grilles	0.21	0.15	0.32
	Low-E4 SmartSun Enhanced	Finelight Grilles	0.21	0.15	0.32
		Full Divided Light Grilles	-	- 0.10	
	4 - 5 9 9	Without Grilles	0.20	0.16	0.35
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.20	0.14	0.32
	Sm.	Finelight Grilles	0.20	0.14	0.32
	>	Full Divided Light Grilles	- 0.25	- 0.24	- 0.40
	*4	Without Grilles	0.25	0.24	0.40
	Low-E4°	Simulated Divided Light Grilles	0.25	0.22	0.36
	9	Finelight™ Grilles Full Divided Light Grilles	0.25	0.22	0.36
		Without Grilles	0.22	0.23	0.38
	5 5d	Simulated Divided Light Grilles	0.22	0.23	0.35
	Low-E4 Enhanced	Finelight Grilles	0.22	0.21	0.35
	고등	Full Divided Light Grilles	-	-	-
	*	Without Grilles	0.20	0.22	0.38
	Low-E4 Enhanced w/HeatLock	Simulated Divided Light Grilles	0.20	0.20	0.34
	ow-F han leatl	Finelight Grilles	0.20	0.20	0.34
A-Series	J H ×	Full Divided Light Grilles	-	-	- 0.54
Awning Windows	-	Without Grilles	0.24	0.16	0.36
AND-N-87	Low-E4 SmartSun™	Simulated Divided Light Grilles	0.24	0.15	0.32
	ow-	Finelight Grilles	0.25	0.15	0.32
	Su	Full Divided Light Grilles	-	-	-
	T	Without Grilles	0.22	0.16	0.35
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.22	0.14	0.31
	nar	Finelight Grilles	0.22	0.14	0.31
	_ \overline{\Pi}	Full Divided Light Grilles	-	-	-
	c 7 5	Without Grilles	0.20	0.15	0.34
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.20	0.14	0.30
	Low inha 'Hea	Finelight Grilles	0.20	0.14	0.30
	S π ≯	Full Divided Light Grilles	-	-	-
		Without Grilles	0.26	0.28	0.47
	Low-E4®	Simulated Divided Light Grilles	0.26	0.25	0.42
	Low	Finelight™ Grilles	0.26	0.25	0.42
		Full Divided Light Grilles	-	-	-
	4 p	Without Grilles	0.22	0.27	0.46
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.22	0.25	0.40
	Lo	Finelight Grilles	0.23	0.25	0.40
		Full Divided Light Grilles	-		-
	Low-E4 Enhanced w/HeatLock*	Without Grilles	0.20	0.26	0.44
	w-E4 ance atLc	Simulated Divided Light Grilles	0.20	0.23	0.39
A-Series	Enh.	Finelight Grilles	0.21	0.23	0.39
Double-Hung Windows		Full Divided Light Grilles	- 0.26	- 0.10	- 0.42
AND-N-91	Low-E4 SmartSun ^w	Without Grilles	0.26	0.19	0.43
	w-E	Simulated Divided Light Grilles	0.26	0.17	0.38
	Sma	Finelight Grilles	0.26	0.17	0.38
		Full Divided Light Grilles	- 0.00	- 0.10	- 0.41
	ed n	Without Grilles	0.22	0.18	0.41
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.22	0.16	0.36
	SE	Finelight Grilles	0.22	0.16	0.36
		Full Divided Light Grilles	- 0.20	- 0.10	- 0.40
		Without Grilles	0.20	0.18	0.40
	4 7 9 9 9	Simulated Divided Light Crilles			
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles Finelight Grilles	0.20	0.16 0.16	0.36

Andersen* Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.24	0.29	0.49
	-E4	Simulated Divided Light Grilles	0.24	0.26	0.43
	Low-E4*	Finelight™ Grilles	0.24	0.26	0.43
		Full Divided Light Grilles	-	-	-
	ъ	Without Grilles	0.20	0.28	0.47
	nce	Simulated Divided Light Grilles	0.20	0.25	0.42
	Low-E4 Enhanced	Finelight Grilles	0.20	0.25	0.42
	ш	Full Divided Light Grilles	-	-	-
	₽*8	Without Grilles	0.18	0.27	0.46
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.18	0.24	0.41
A Cardan	Low	Finelight Grilles	0.18	0.24	0.41
A-Series Picture Windows	× E	Full Divided Light Grilles	-	-	-
AND-N-88	2_	Without Grilles	0.23	0.20	0.44
	/E4 tSur	Simulated Divided Light Grilles	0.23	0.18	0.39
	Low-E4 SmartSun [™]	Finelight Grilles	0.24	0.18	0.39
	Š	Full Divided Light Grilles	-	-	-
	- P	Without Grilles	0.20	0.19	0.42
	tSu nce	Simulated Divided Light Grilles	0.20	0.17	0.38
	Low-E4 SmartSun Enhanced	Finelight Grilles	0.20	0.17	0.38
	ωш	Full Divided Light Grilles	-	-	-
	502	Without Grilles	0.18	0.18	0.41
	tSu The The	Simulated Divided Light Grilles	0.18	0.17	0.37
	Low-E4 SmartSun Enhanced w/ HeatLock	Finelight Grilles	0.18	0.17	0.37
	оπ≽	Full Divided Light Grilles	-	-	-
		Without Grilles	0.25	0.25	0.42
	E4	Simulated Divided Light Grilles	0.25	0.23	0.38
	Low-E4*	Finelight [™] Grilles	0.25	0.23	0.38
	_	Full Divided Light Grilles	-	-	-
	ъ	Without Grilles	0.22	0.24	0.40
	-E4	Simulated Divided Light Grilles	0.22	0.22	0.36
	Low-E4 Enhanced	Finelight Grilles	0.22	0.22	0.36
	ш	Full Divided Light Grilles	-	-	-
	جْ ۾	Without Grilles	0.20	0.23	0.39
	nce tLoc	Simulated Divided Light Grilles	0.20	0.21	0.36
A-Series	Low-E4 Enhanced w/HeatLock*	Finelight Grilles	0.20	0.21	0.36
Venting Transom	×	Full Divided Light Grilles	-	-	-
Windows	2_	Without Grilles	0.25	0.17	0.38
AND-N-90	Low-E4 SmartSun ¹¹	Simulated Divided Light Grilles	0.25	0.15	0.34
	Low	Finelight Grilles	0.25	0.15	0.34
	Š	Full Divided Light Grilles	-	-	-
	_ D	Without Grilles	0.22	0.16	0.36
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.22	0.15	0.33
	Low	Finelight Grilles	0.22	0.15	0.33
	νы	Full Divided Light Grilles	-	-	-
	ج ہ ج	Without Grilles	0.20	0.16	0.36
	tSur The	Simulated Divided Light Grilles	0.20	0.14	0.32
	Low-E4 SmartSun Enhanced w/HeatLock	Finelight Grilles	0.20	0.14	0.32
	. S ⊡ ≥	Full Divided Light Grilles	-	-	-

^{• &}quot;Low-E4"," "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft²-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

[•] NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in

compliance with NFRC program and procedural requirements.

*This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options,

glass with capillary breather tubes for high altitudes, etc.

• Values are for single units with given pane thickness and $\frac{9}{4}$ " (19 mm) grilles for windows and door products.

Andersen® NFRC Certified Total Unit Performance - Triple-Pane Glass (continued)

For current performance information, please visit andersenwindows.com.

Andersen® Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.24	0.29	0.50
	Low-E4*	Simulated Divided Light Grilles	0.24	0.26	0.44
	Low	Finelight™ Grilles	0.24	0.26	0.44
		Full Divided Light Grilles	-	-	-
	ed 4	Without Grilles	0.20	0.28	0.48
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.20	0.26	0.42
	고급	Finelight Grilles Full Divided Light Grilles	0.20	0.26	0.42
	*.	Without Grilles	0.18	0.27	0.47
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.18	0.24	0.41
	-ow- ihan leat	Finelight Grilles	0.18	0.24	0.41
A-Series	_ F E	Full Divided Light Grilles	-	-	-
Fixed Transom Windows AND-N-89	2_	Without Grilles	0.23	0.20	0.45
AND IV 03	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.23	0.18	0.40
	Low	Finelight Grilles	0.24	0.18	0.40
	0)	Full Divided Light Grilles	-	-	
	4 n p	Without Grilles	0.20	0.19	0.43
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.20	0.17	0.38
	고유급	Finelight Grilles Full Divided Light Grilles	0.20	0.17	0.38
		Without Grilles	0.18	0.18	0.42
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.18	0.17	0.42
	Low- mart han Heat	Finelight Grilles	0.18	0.17	0.37
	_ S F ×	Full Divided Light Grilles	-	-	-
		Without Grilles	0.22	0.33	0.56
	-E4*	Simulated Divided Light Grilles	0.22	0.29	0.50
	Low-E4*	Finelight [™] Grilles	0.23	0.29	0.50
		Full Divided Light Grilles	0.23	0.29	0.50
	ъ	Without Grilles	0.18	0.32	0.53
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.18	0.29	0.48
	J.E	Finelight Grilles	0.18	0.29	0.48
		Full Divided Light Grilles	0.18	0.29	0.48
	Low-E4 Enhanced w/HeatLock*	Without Grilles	0.16	0.30	0.52
	w-E lanc eatL	Simulated Divided Light Grilles	0.16	0.28	0.47
A-Series Specialty Windows	그룹꽃	Finelight Grilles	0.16	0.28	0.47
Direct-Set		Full Divided Light Grilles Without Grilles	0.17	0.28	0.47
AND-N-126	Low-E4 SmartSun [™]	Simulated Divided Light Grilles	0.22	0.20	0.45
	ow-	Finelight Grilles	0.23	0.20	0.45
	- S	Full Divided Light Grilles	0.23	0.20	0.45
	g 2	Without Grilles	0.17	0.21	0.48
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.17	0.19	0.43
	Lov Enha	Finelight Grilles	0.17	0.19	0.43
		Full Divided Light Grilles	0.18	0.19	0.43
	4 = 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Without Grilles	0.16	0.20	0.47
	ow-E nartS nanc leatL	Simulated Divided Light Grilles Finelight Grilles	0.16 0.16	0.18 0.18	0.42
	Low-E4 SmartSun Enhanced w/HeatLock	Full Divided Light Grilles	0.17	0.18	0.42
		Without Grilles	0.23	0.29	0.50
	E4*	Simulated Divided Light Grilles	0.23	0.27	0.44
	Low-E4®	Finelight™ Grilles	0.24	0.27	0.44
		Full Divided Light Grilles	0.24	0.27	0.44
	. 5	Without Grilles	0.19	0.29	0.48
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.19	0.26	0.43
	Fine	Finelight Grilles	0.19	0.26	0.43
		Full Divided Light Grilles	0.19	0.26	0.43
	Low-E4 Enhanced w/HeatLock*	Without Grilles	0.17	0.28	0.47
A-Series	ow-E nanc eatL	Simulated Divided Light Grilles Finelight Grilles	0.17	0.25	0.42
Specialty Windows	M/H	Full Divided Light Grilles	0.18	0.25	0.42
Sash-Set		Without Grilles	0.18	0.25	0.42
AND-N-128	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.23	0.18	0.40
	Low- nart:	Finelight Grilles	0.23	0.18	0.40
	- ns	Full Divided Light Grilles	0.23	0.18	0.40
	<u> </u>	Without Grilles	0.18	0.19	0.43
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.18	0.17	0.39
	Low	Finelight Grilles	0.19	0.17	0.39
		Full Divided Light Grilles	0.19	0.17	0.39
	4 문 원 성	Without Grilles	0.17	0.18	0.42
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.17	0.17	0.38
	Smile	Finelight Grilles	0.17	0.17	0.38
		Full Divided Light Grilles	0.18	0.17	0.38

Andersen® Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.28	0.25	0.41
	Ė4	Simulated Divided Light Grilles	0.28	0.22	0.35
	Low-E4*	Finelight™ Grilles	0.28	0.22	0.35
		Full Divided Light Grilles	-	-	-
	-	Without Grilles	0.25	0.24	0.40
	F4	Simulated Divided Light Grilles	0.25	0.21	0.34
	Low-E4 Enhanced	Finelight Grilles	0.25	0.21	0.34
	ш	Full Divided Light Grilles	-	-	-
	₽.¥	Without Grilles	0.23	0.23	0.39
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.23	0.20	0.33
A-Series	Low	Finelight Grilles	0.23	0.20	0.33
Gliding Patio Doors	×	Full Divided Light Grilles	-	-	-
Traditional Panels	2_	Without Grilles	0.27	0.17	0.37
AND-N-99	Sur	Simulated Divided Light Grilles	0.27	0.15	0.32
	Low-E4 SmartSun [™]	Finelight Grilles	0.28	0.15	0.32
	_ ız	Full Divided Light Grilles	-	-	-
		Without Grilles	0.24	0.16	0.36
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.24	0.14	0.31
	Low	Finelight Grilles	0.25	0.14	0.31
	SΞ	Full Divided Light Grilles	-	-	-
	c 7 5	Without Grilles	0.23	0.16	0.35
	tSur Sur Itlo	Simulated Divided Light Grilles	0.23	0.14	0.30
	Low-E4 SmartSun Enhanced n/HeatLock	Finelight Grilles	0.23	0.14	0.30
	хπ≯	Full Divided Light Grilles	-	-	-
		Without Grilles	0.27	0.26	0.44
	E4°	Simulated Divided Light Grilles	0.27	0.23	0.38
	Low-E4°	Finelight™ Grilles	0.28	0.23	0.38
		Full Divided Light Grilles	-	-	-
	ъ	Without Grilles	0.24	0.26	0.42
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.24	0.22	0.36
	Low	Finelight Grilles	0.24	0.22	0.36
	ш	Full Divided Light Grilles	-	-	-
	₽.*X	Without Grilles	0.22	0.24	0.41
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.22	0.22	0.36
A-Series	Low nha Hea	Finelight Grilles	0.22	0.22	0.36
Gliding Patio Doors	×	Full Divided Light Grilles	-	-	-
Contemporary Panels	3_	Without Grilles	0.27	0.18	0.39
AND-N-212	-E4 tSur	Simulated Divided Light Grilles	0.27	0.16	0.34
	Low-E4 SmartSun"	Finelight Grilles	0.27	0.16	0.34
	v.	Full Divided Light Grilles	-	-	-
	c 7	Without Grilles	0.24	0.17	0.38
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.24	0.15	0.33
	Low	Finelight Grilles	0.24	0.15	0.33
	SП	Full Divided Light Grilles	-	-	-
	ک ہے	Without Grilles	0.22	0.16	0.37
	tSu nce itlo	Simulated Divided Light Grilles	0.22	0.15	0.32
	Low-E4 SmartSun Enhanced n/HeatLock	Finelight Grilles	0.22	0.15	0.32
	× м	Full Divided Light Grilles	-	-	-

^{• &}quot;Low-E4"," "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft 2 - $^\circ$ F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

[•] NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

• This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new

industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

• Values are for single units with given pane thickness and 3/4" (19 mm) grilles for windows and door products.



Andersen® NFRC Certified Total Unit Performance - Triple-Pane Glass (continued)

For current performance information, please visit andersenwindows.com.

Andersen® Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
	J	Without Grilles	0.28	0.22	0.37
	£4*	Simulated Divided Light Grilles	0.28	0.19	0.32
	Low-E4*	Finelight™ Grilles	0.28	0.19	0.32
	_	Full Divided Light Grilles	-	-	-
	-	Without Grilles	0.25	0.22	0.36
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.25	0.19	0.31
	Low	Finelight Grilles	0.26	0.19	0.31
	ш	Full Divided Light Grilles	-	-	-
	n*x	Without Grilles	0.24	0.21	0.35
	tLoc	Simulated Divided Light Grilles	0.24	0.18	0.30
N-Series	Low-E4 Enhanced w/HeatLock*	Finelight Grilles	0.24	0.18	0.30
linged Inswing Patio Doors	×	Full Divided Light Grilles	-	-	-
raditional Panels	2_	Without Grilles	0.28	0.15	0.34
ND-N-92	Low-E4 SmartSun ^w	Simulated Divided Light Grilles	0.28	0.13	0.29
14 JZ	Low	Finelight Grilles	0.29	0.13	0.29
	Š	Full Divided Light Grilles	-	-	-
	5.0	Without Grilles	0.25	0.15	0.32
	tSul nce	Simulated Divided Light Grilles	0.25	0.13	0.28
	Low-E4 SmartSun Enhanced	Finelight Grilles	0.26	0.13	0.28
	ωĒ	Full Divided Light Grilles	-	-	-
	502	Without Grilles	0.24	0.14	0.32
	rtSu nce	Simulated Divided Light Grilles	0.24	0.12	0.27
	Low-E4 SmartSun Enhanced w/HeatLock	Finelight Grilles	0.24	0.12	0.27
	⊗ ⊞ ≽	Full Divided Light Grilles	-	-	-
		Without Grilles	0.28	0.24	0.40
	E4*	Simulated Divided Light Grilles	0.28	0.21	0.34
	Low-E4*	Finelight™ Grilles	0.28	0.21	0.34
		Full Divided Light Grilles	-	-	-
	70	Without Grilles	0.25	0.23	0.38
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.25	0.20	0.33
	Low	Finelight Grilles	0.25	0.20	0.33
	ū	Full Divided Light Grilles	-	-	-
	ъ**	Without Grilles	0.23	0.22	0.37
	-E4 ncec tLoc	Simulated Divided Light Grilles	0.23	0.19	0.32
N-Series	Low-E4 Enhanced w/HeatLock*	Finelight Grilles	0.24	0.19	0.32
linged Inswing Patio Doors	, E	Full Divided Light Grilles	-	-	-
		Without Grilles	0.27	0.16	0.36
Contemporary Panels ND-N-211	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.27	0.14	0.31
11 2 1 1	Low	Finelight Grilles	0.29	0.14	0.31
	S	Full Divided Light Grilles	-	-	-
	<u> </u>	Without Grilles	0.25	0.15	0.34
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.25	0.14	0.29
	Low	Finelight Grilles	0.25	0.14	0.29
	νш	Full Divided Light Grilles	-	-	-
	c 7 5	Without Grilles	0.23	0.15	0.33
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.23	0.13	0.29
	Low mar nhai Hea	Finelight Grilles	0.23	0.13	0.29
	o <u>m</u> ≥	Full Divided Light Grilles	-	-	-
		Without Grilles	0.28	0.23	0.37
	.Е4°	Simulated Divided Light Grilles	0.28	0.20	0.32
	Low-E4*	Finelight™ Grilles	0.28	0.20	0.32
		Full Divided Light Grilles	-	-	-
	73	Without Grilles	0.25	0.22	0.36
	-E4	Simulated Divided Light Grilles	0.25	0.19	0.31
	Low-E4 Enhanced	Finelight Grilles	0.25	0.19	0.31
	ū	Full Divided Light Grilles	-	-	-
	₽**	Without Grilles	0.24	0.21	0.35
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.24	0.19	0.30
A-Series	Low	Finelight Grilles	0.24	0.19	0.30
linged Outswing Patio Doors	× E	Full Divided Light Grilles	-	-	
	ž	Without Grilles	0.28	0.15	0.34
raditional Panels ND-N-93	Low-E4 SmartSun™	Simulated Divided Light Grilles	0.28	0.14	0.29
14-93 CE-11-UI	Low	Finelight Grilles	0.28	0.14	0.29
	S	Full Divided Light Grilles	-	-	-
		Without Grilles	0.25	0.15	0.32
	tSur 1Cec	Simulated Divided Light Grilles	0.25	0.13	0.28
	Low-E4 SmartSun Enhanced	Finelight Grilles	0.25	0.13	0.28
	_ \tilde{P}	Full Divided Light Grilles	-	-	-
	c = *	Without Grilles	0.23	0.14	0.32
	E4 Sur iced	Simulated Divided Light Grilles	0.23	0.13	0.27
	Low-E4 SmartSun Enhanced w/ HeatLock	Finelight Grilles	0.24	0.13	0.27

Andersen® Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.27	0.24	0.40
	Low-E4*	Simulated Divided Light Grilles	0.27	0.21	0.34
	Low.	Finelight™ Grilles	0.28	0.21	0.34
	_	Full Divided Light Grilles	-	-	-
	ъ	Without Grilles	0.24	0.23	0.38
	-E4	Simulated Divided Light Grilles	0.24	0.20	0.33
	Low-E4 Enhanced	Finelight Grilles	0.25	0.20	0.33
	ш	Full Divided Light Grilles	-	-	-
	2,8	Without Grilles	0.23	0.22	0.37
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.23	0.20	0.32
A-Series	Low	Finelight Grilles	0.23	0.20	0.32
Hinged Outswing Patio Doors	×	Full Divided Light Grilles	-	-	
	2_	Without Grilles	0.27	0.16	0.36
Contemporary Panels AND-N-210	-E4	Simulated Divided Light Grilles	0.27	0.14	0.31
NID 14-210	Low-E4 SmartSun [™]	Finelight Grilles	0.28	0.14	0.31
	_ <u>\</u>	Full Divided Light Grilles	-	-	-
		Without Grilles	0.24	0.16	0.34
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.24	0.14	0.29
	nar har	Finelight Grilles	0.24	0.14	0.29
	_ \(\overline{\Pi} \)	Full Divided Light Grilles	-	-	-
	- ×	Without Grilles	0.23	0.15	0.33
	E4 Sur Sur Loc	Simulated Divided Light Grilles	0.23	0.13	0.29
	Low-E4 SmartSun Enhanced n/HeatLock	Finelight Grilles	0.23	0.13	0.29
	_ ∾ म ≫	Full Divided Light Grilles	-	-	-
		Without Grilles	0.25	0.31	0.53
	£4.	Simulated Divided Light Grilles	0.25	0.29	0.48
	Low-E4®	Finelight™ Grilles	0.25	0.29	0.48
	_	Full Divided Light Grilles	-	-	-
		Without Grilles	0.21	0.30	0.51
	E4	Simulated Divided Light Grilles	0.21	0.28	0.46
	Low-E4 Enhanced	Finelight Grilles	0.21	0.28	0.46
	_ 5	Full Divided Light Grilles	-	-	-
	- °×	Without Grilles	0.19	0.29	0.50
	E4 LLoc	Simulated Divided Light Grilles	0.19	0.27	0.45
A-Series	Low-E4 Enhanced w/HeatLock®	Finelight Grilles	0.19	0.27	0.45
Patio Door Sidelight	, Er L	Full Divided Light Grilles	-	-	-
Transoms		Without Grilles	0.24	0.21	0.48
Direct-Set AND-N-96	Low-E4 SmartSun™	Simulated Divided Light Grilles	0.24	0.19	0.43
WIND-IA-AQ	Low- nart	Finelight Grilles	0.25	0.19	0.43
	Su	Full Divided Light Grilles	-	-	-
		Without Grilles	0.20	0.20	0.46
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.20	0.19	0.42
	ow- nart nhar	Finelight Grilles	0.20	0.19	0.42
	L S E	Full Divided Light Grilles	-	-	-
	×	Without Grilles	0.19	0.20	0.45
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.19	0.18	0.41
		atou birraou Elent dillico	0.10	0.10	0
	ow- nart har lea	Finelight Grilles	0.19	0.18	0.41

^{• &}quot;Low-E4;" "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft²-ºF. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.
 This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new

[•]This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

Values are for single units with given pane thickness and 3/4" (19 mm) grilles for windows and door products.

Andersen® NFRC Certified Total Unit Performance - Triple-Pane Glass (continued) For current performance information, please visit andersenwindows.com.

Andersen® Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.27	0.24	0.40
	Low-E4*	Simulated Divided Light Grilles	0.27	0.22	0.35
	Low	Finelight™ Grilles	0.27	0.22	0.35
		Full Divided Light Grilles Without Grilles	0.24	0.23	0.38
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.24	0.23	0.34
	Low-	Finelight Grilles	0.24	0.21	0.34
		Full Divided Light Grilles	-	-	-
	Low-E4 Enhanced w/HeatLock*	Without Grilles	0.22	0.22	0.37
A-Series	ow-E nanc eatL	Simulated Divided Light Grilles Finelight Grilles	0.22	0.20	0.33
Patio Door Sidelight	N H H	Full Divided Light Grilles	-	-	-
Transoms Sash-Set		Without Grilles	0.26	0.16	0.36
AND-N-95	Low-E4 SmartSun"	Simulated Divided Light Grilles	0.26	0.15	0.32
	Smar	Finelight Grilles	0.27	0.15	0.32
		Full Divided Light Grilles Without Grilles	0.24	0.16	0.34
	Sun ced	Simulated Divided Light Grilles	0.24	0.14	0.34
	Low-E4 SmartSun Enhanced	Finelight Grilles	0.24	0.14	0.31
	_ 22	Full Divided Light Grilles	-	-	-
	4 H B S	Without Grilles	0.22	0.15	0.33
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.22	0.14	0.30
	S Ent	Finelight Grilles Full Divided Light Grilles	0.22	0.14	0.30
		Without Grilles	0.25	0.31	0.53
	Low-E4*	Simulated Divided Light Grilles	0.25	0.29	0.48
	Low.	Finelight [™] Grilles	0.25	0.29	0.48
		Full Divided Light Grilles	-	-	-
	54 Se d	Without Grilles Simulated Divided Light Grilles	0.21	0.30	0.51
	Low-E4 Enhanced	Finelight Grilles	0.21	0.28	0.46
	7.5	Full Divided Light Grilles	-	-	-
	, p*3	Without Grilles	0.19	0.29	0.50
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.19	0.27	0.45
A-Series	En C	Finelight Grilles	0.19	0.27	0.45
Patio Door Transoms Direct-Set		Full Divided Light Grilles Without Grilles	0.24	0.21	0.48
AND-N-96	Low-E4 SmartSun [™]	Simulated Divided Light Grilles	0.24	0.19	0.43
	Low-	Finelight Grilles	0.25	0.19	0.43
	v.	Full Divided Light Grilles	-	-	-
	4 m b	Without Grilles	0.20	0.20	0.46
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles Finelight Grilles	0.20	0.19	0.42
	- S E	Full Divided Light Grilles	-	-	-
	- 5 - 5	Without Grilles	0.19	0.20	0.45
	Low-E4 SmartSun Enhanced w/HeatLock	Simulated Divided Light Grilles	0.19	0.18	0.41
	Sma Enha	Finelight Grilles	0.19	0.18	0.41
	>	Full Divided Light Grilles Without Grilles	0.27	0.23	0.38
	*	Simulated Divided Light Grilles	0.27	0.21	0.33
	Low-E4°	Finelight™ Grilles	0.27	0.21	0.33
		Full Divided Light Grilles	-	-	-
	4 pg	Without Grilles	0.24	0.22	0.36
	Low-E4 Enhanced	Simulated Divided Light Grilles Finelight Grilles	0.24	0.20	0.32
	고區	Full Divided Light Grilles	-	-	-
	₽. X	Without Grilles	0.23	0.21	0.35
	Low-E4 Enhanced w/HeatLock*	Simulated Divided Light Grilles	0.23	0.19	0.31
A-Series	Lov Enha	Finelight Grilles	0.23	0.19	0.31
Patio Door Transoms Sash-Set		Full Divided Light Grilles Without Grilles	0.27	0.15	0.34
AND-N-95	Low-E4 SmartSun [™]	Simulated Divided Light Grilles	0.27	0.13	0.34
	Low- nart;	Finelight Grilles	0.27	0.14	0.30
	S	Full Divided Light Grilles	-	-	-
	4 nn ed	Without Grilles	0.24	0.15	0.33
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles Finelight Grilles	0.24	0.14	0.29
	E S L	Full Divided Light Grilles	- 0.24	- 0.14	- 0.29
	*	Without Grilles	0.23	0.15	0.32
	v-E4 rrtSur ancec atLoc	Simulated Divided Light Grilles	0.23	0.13	0.28
	Low-E4 SmartSun Enhanced w/HeatLock	Finelight Grilles	0.23	0.13	0.28
	>	Full Divided Light Grilles	-	-	-

Andersen* Product	High-Perfo	rmance Triple-Pane Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.28	0.22	0.35
	*4	Simulated Divided Light Grilles	0.28	0.20	0.31
	Low-E4*	Finelight™ Grilles	0.28	0.20	0.31
	١	Full Divided Light Grilles	-	-	
		Without Grilles	0.25	0.21	0.34
	E4 ced	Simulated Divided Light Grilles	0.25	0.19	0.30
	Low-E4 Enhanced	Finelight Grilles	0.25	0.19	0.30
	7.5	Full Divided Light Grilles	-	-	-
	*.	Without Grilles	0.24	0.20	0.33
	Low-E4 Enhanced w/ HeatLock	Simulated Divided Light Grilles	0.24	0.18	0.30
A-Series	ow-F han eatl	Finelight Grilles	0.24	0.18	0.30
Patio Door Sidelights	고면추	Full Divided Light Grilles	0.24	0.10	0.00
Traditional Panels		Without Grilles	0.27	0.15	0.32
AND-N-94	4.5	Simulated Divided Light Grilles	0.27	0.13	0.32
	ow-E	Finelight Grilles	0.27	0.13	0.28
	Low-E4 SmartSun [™]	Full Divided Light Grilles	-	0.13	0.26
		Without Grilles	0.25	0.14	0.31
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.25	0.14	0.31
	arts	Finelight Grilles	0.25	0.13	0.27
	J W F	Full Divided Light Grilles	0.25	0.13	-
		Without Grilles	0.23	0.14	0.30
	4 H 9 9	Simulated Divided Light Grilles	0.23	0.14	0.30
	Low-E4 SmartSun Enhanced //HeatLock		0.23	0.13	0.27
	Low-E4 SmartSun Enhanced w/HeatLock	Finelight Grilles	0.24	0.13	0.21
		Full Divided Light Grilles	0.28		
	* t	Without Grilles	0.28	0.20	0.33
	.ow-E4	Simulated Divided Light Grilles		0.18	0.29
	2	Finelight™ Grilles	0.29	0.18	0.29
		Full Divided Light Grilles	0.26	0.20	0.32
	ed 4	Without Grilles			
	Low-E4 Enhanced	Simulated Divided Light Grilles	0.26	0.18	0.28
	크급	Finelight Grilles	0.26	0.18	0.28
		Full Divided Light Grilles	- 0.04	- 0.10	- 0.24
	ed ock	Without Grilles	0.24	0.19	0.31
	w-E anc atL	Simulated Divided Light Grilles	0.24	0.17	0.27
A-Series	Low-E4 Enhanced w/HeatLock	Finelight Grilles	0.25	0.17	0.27
Patio Door Sidelights	3	Full Divided Light Grilles	-	- 0.4.4	-
Contemporary Panels	4 =	Without Grilles	0.28	0.14	0.30
AND-N-213	w-E	Simulated Divided Light Grilles	0.28	0.13	0.26
	Low-E4 SmartSun"	Finelight Grilles	0.28	0.13	0.26
	- 0,	Full Divided Light Grilles	-	-	-
	4 m b	Without Grilles	0.26	0.13	0.29
	Low-E4 SmartSun Enhanced	Simulated Divided Light Grilles	0.26	0.12	0.25
	Sme	Finelight Grilles	0.26	0.12	0.25
		Full Divided Light Grilles	-	-	-
	_ = 5 5	Without Grilles	0.24	0.13	0.28
	v-E4 rtSt ance	Simulated Divided Light Grilles	0.24	0.12	0.25
	Low-E4 SmartSun Enhanced n/HeatLock	Finelight Grilles	0.25	0.12	0.25
	уш %	Full Divided Light Grilles	-	-	-

^{• &}quot;Low-E4"," "Low-E4" SmartSun,"" "Low-E4" Sun" and "HeatLock"" are Andersen trademarks for "Low-E" glass. 1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft 2 - $^\circ$ F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See andersenwindows.com/nfrc for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Light Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

[•] NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

• This data is accurate as of November 2022. Due to ongoing product changes, updated test results, or new

industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass with capillary breather tubes for high altitudes, etc.

• Values are for single units with given pane thickness and 3/4" (19 mm) grilles for windows and door products.



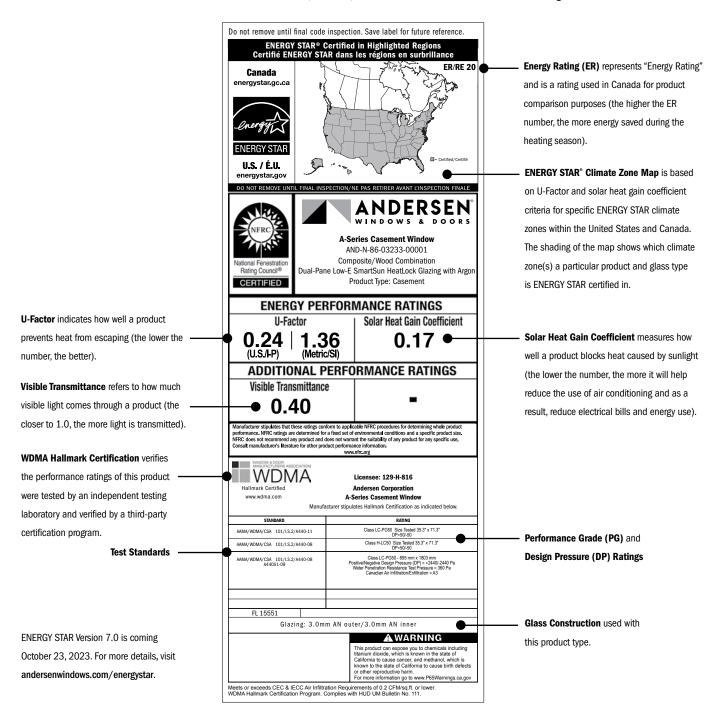
About the Label

Look for this certification label on every window and patio door you buy. The NFRC section was designed by the National Fenestration Rating Council to provide accurate information that helps you promote the energy efficiency of the homes you build. These ratings allow you – and your customers – to measure and compare the energy performance of similar products. If the product does not have this label, the NFRC has not verified its claims.

About the NFRC

The National Fenestration Rating Council (NFRC) is a nonpartisan coalition of professionals whose purpose is to provide fair, accurate and credible energy performance ratings for fenestration products. NFRC's membership includes manufacturers, suppliers, designers, specifiers, utility companies, government agencies and other building industry representatives.

Andersen Corporation is a founding member of the NFRC and continues to support its work by providing fair, accurate and credible energy performance ratings to consumers and the building industry. If you have any questions about the NFRC, its program or energy performance ratings, write them at: NFRC, 6305 lvy Lane, Suite 410, Greenbelt, MD 20770. Phone: 301-589-1776. Website: **nfrc.org**



[•] NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

^{• &}quot;ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

INSTALLATION ACCESSORIES

Optional installation accessories are available for the installation of Andersen® windows and patio doors. Keep installation instructions and safety information in mind when considering the installation and use of any Andersen product. For questions, contact your local Andersen supplier.

COIL STOCK



Andersen aluminum coil stock can be ordered to match any of our 11 exterior trim colors. Made from .018" thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Colormatched 1 $^{1}\!\!\!/\!\!\!4$ " (32)-long stainless steel trim nails are also available and can be ordered in 1 lb/454 kg boxes.

FIBREX® TRIM BOARD

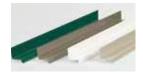


Available in the same 11 colors as our exterior trim, this solid cellular Fibrex trim board can be cut or ripped to size, and fastened using nails or screws. $3 \frac{1}{2}$ " (89) x $\frac{3}{4}$ " (19) thick in 10' (3048) lengths.

COLOR-MATCHED SEALANT

Color-matched sealant is available in Andersen exterior colors. This high-quality sealant can be used during the installation of all Andersen products.

DRIP CAP



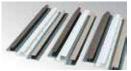
Included on A-Series windows with vertical (ribbon) joins. Heavy 24-gauge corrosion-resistant aluminum construction. Available in 6' (1829), 10' (3048) and 12'-7'/2" (3848) lengths, and in any of our 11 exterior trim colors.

EXTENSION JAMBS



Available for most Andersen products. See product sections in this guide for details.

VINYL CHANNELS



Rigid vinyl "J" and "h" channels are available in white, Sandtone and Terrotone. "J" and "h" channels are 1/2" (13) deep and come in 150" (3810) lengths. "J" channels are 3/4" (19) wide and "h" channels are 1" (25) wide. "H" channels are 3/4" (19) deep and come in 84" (2134) and 150" (3810) lengths. White "H" channels are 3/4" (19) wide. Sandtone and Terratone "H" channels are 1" (25) wide.

INSTALLATION INFORMATION

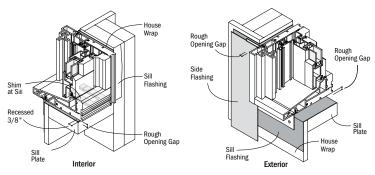
ROUGH OPENINGS

The purpose of a rough opening is to allow for proper spacing between the window or patio door unit and the building structure. The space is required for locating, leveling and squaring the unit during installation and to provide an area for insulation. A rough opening that is incorrectly sized may affect unit operation and may not allow for adequate fastening of the unit to the building structure. Andersen rough opening dimensions are provided as a guideline to help determine the minimum amount of space needed between the window or patio door and the building structure. See appropriate product sections for rough opening guidelines for each product.

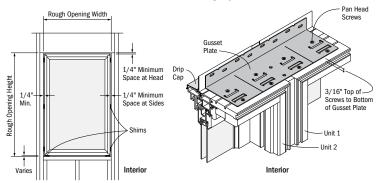
Keep in mind that rough opening dimensions may need to be altered from published guidelines, depending on installation methods, joining methods, replacement methods, etc. For example, flashing systems can reduce the amount of available rough opening space and should be factored in when calculating rough opening dimensions. The use of support or joining materials will encroach on the rough opening and may require additional rough opening space between the unit and the building structure, depending on the thickness of the flashing system and joining materials used. To facilitate drainage, the rough opening sill plate should never slope toward the interior. For challenging environments and other information, refer to EEBA's (Energy and Environmental Building Association) Water Management Guide (www.eeba.org).

IMPORTANCE OF PROPER INSTALLATION

Proper installation and maintenance of Andersen products is essential to attain optimum performance and operation. Installation instructions that provide guidelines for proper installation are typically provided with Andersen products. They are also available by visiting andersenwindows.com. Remember that every installation is different, and Andersen strongly recommends consultation with the local supplier or an experienced contractor, architect or structural engineer prior to the installation of any Andersen product. The method of attachment for Andersen products, fastener selection and code compliance is the responsibility of the architect, building owner, contractor, installer and/or consumer. For more complete installation details, visit andersenwindows.com or see your Andersen supplier.



Example of window sill flashing in a membrane drainage system.



Example of window unit installed using Andersen published minimum rough opening dimensions.

Example of two units joined together with the use of gusset plates and pan head screws that will require additional rough opening space.

GENERAL NOTES

When ordering, make certain you specify, then verify, the exact product, unit dimensions, configuration requirements, color and options you desire on each window or patio door. Before installing the product, we suggest you verify that it includes the features and options you ordered. Visit andersenwindows.com for product installation and joining guides. Printing limitations prohibit exact color duplication of products. View actual samples for building specifications. Andersen Corporation reserves the right to change details, specifications or sizes without notice. The customer assumes all risk of alterations made to Andersen products.

CODES

Appropriate selection of Andersen products that conform to all applicable laws, ordinances, building codes and safety requirements is the sole responsibility of the architect, designer, building owner and/or contractor. Check with your local building code officials for specific information. Unit wind load, performance grade and energy performance information is provided on pages 196-225. For up-to-date product performance information, visit andersenwindows.com. The performance of any building system depends on the design and construction of the building system in its entirety, which should meet building code requirements, as well as address product and material limitations, and local environment and climate.

DRIP CAPS

Drip caps are a specific type of flashing or trim used at the head of a window or door to direct water from the drainage plane out beyond the face of the unit.

FLASHING

Flashing is an important element in a building's water management system. It is used to shed and direct water to the building exterior or to the drainage plane. Flashing materials are typically applied starting from the bottom and working upward, with each successive layer overlapping the previous one in shingle fashion. Water infiltration problems in any type of building can be reduced by properly flashing and/or sealing around all building openings, including windows and doors.

USE OF SHIMS

Shims are used along the side jambs of windows and doors to center the unit in the rough opening and to position it plumb, level and square. In addition, shims are always required for windows under the sill at the side jambs to lift it off the rough opening sill plate. Shims also enable a straight frame for proper weatherstrip contact and unit operation. If not placed properly, unit performance and operation can be affected. Use waterproof shims capable of supporting the weight of the product. When using tapered shims, use them in pairs with the tapers opposing each other to avoid tillting the unit or twisting (rotating) of the jambs.

SEALANTS

Sealants are elastic materials used to block the passage of water and/or air while allowing movement between the two sides of the joint. A sealant should bond tightly, and be able to expand and contract to accommodate joint movement without cracking or tearing away from the substrate. Surfaces must be clean, dry and sound for adequate sealant adhesion. Choose a sealant that is compatible with, and that will adhere adequately to, all building materials used in the window and patio door area. Proper sealant joint design is based upon the expected movement of adjacent materials and the movement capability of the sealant. A general rule of thumb is that the depth of the sealant joint should be equal to half the width (D = W/2), but generally not less than 1/4" (6) or more than 1/2" (13). Foam-plastic backer rod can be used to limit the depth of the sealant joint, to provide a backstop for tooling the sealant without damage to the bond. It also acts as a bond breaker to help minimize stress in the sealant. Sealants should be maintained seasonally, and repaired and/or replaced as needed.

GENERAL INSTALLATION GUIDELINES

- 1. Read and follow the installation guide in its entirety.
- Decide whether you are integrating to a surface barrier or a membrane drainage system before installing the product. The appropriate method for your installation may vary based on building design, application and industry practices.
- Make certain the drainage plane is continuous (proper overlaps to shed water, taped seams, etc.).
- 4. Andersen products should be installed only in the vertical position.
- 5. Check the rough opening to make sure it is sized properly, is square and is level.
- 6. Install the window or door plumb.
- 7. Install the window or door level.
- 8. Install the window or door square. Diagonal measurements should be within 1/8" (3).
- Follow installation instructions to properly locate shims and to make sure that units are plumb, level and square. Shims are always required under the window jambs at the sill and along the jambs on the sides for windows and doors.
- 10. Check for squareness of unit before final anchoring of the product into the wall.
- 11. Anchor unit as directed with appropriate fasteners.
- 12. Integrate the window and door into the drainage plane of the wall using quality flashing and sealing materials. All flashing materials should be properly overlapped to shed water.
- 13. Allow ¼" (6) minimum space for a sealant joint around perimeter of unit between exterior finish materials and unit.
- 14. Insulate and seal the interior cavity between the window or door frame and the rough opening.
- 15. Check operation before application of interior trim.
- Stain and/or seal all unfinished wood surfaces promptly to minimize moisture absorption.

EXTERIOR PAINTING/SEALING OF ANDERSEN® PRODUCTS

The exterior of some Andersen products may be painted or stained. However, improper painting and staining may cause damage to vinyl, aluminum and other exterior materials.

CAUTIONS

- Do not apply any type of film to insulating glass.
 Thermal stress and glass damage can result.
 Andersen Corporation is not responsible for product performance when films are applied to Andersen products.
- 2. The use of removable insulating materials such as insulated window coverings, shutters and other shading devices may also cause thermal stress conditions and/or deformation of protective vinyl. In addition, excessive condensation may result, which can have a deteriorating effect on the window or door unit(s) involved. Andersen Corporation is not responsible for product performance when these kinds of materials or devices are applied to or used in conjunction with Andersen products.

- In wall construction utilizing brick facades, leave adequate clearance between sill, jambs and brick for sealing and dimensional change of framework.
- 4. Acid solutions commonly used to wash brick and other masonry materials will damage glass, fasteners, hardware and metal flashing. Protect unit and follow cleaning product instructions carefully. Damage caused by acid solution is not covered under the Andersen limited warranty.
- Andersen windows may be combined in almost unlimited ribbons or stacks if each unit is positively secured to structural elements on opposing sides and if the proper joining system is used. See page 196 for more information.

SAFETY GLASS

Unless specifically ordered, Andersen windows are not made with safety glass and, if broken, the glass could fragment, causing injury. Andersen windows may be ordered with tempered glass which may reduce the likelihood of injury when broken. All Andersen patio doors are made with tempered glass. Differences in appearance between tempered and non-tempered glass can be expected. Slight visual distortions may be noticeable and occur normally as a result of the tempering process. Building codes require safety glass in locations adjacent to or near doors and other locations.

WINDOW AND PATIO DOOR SAFETY

Windows may provide a secondary avenue of escape or rescue in an emergency, such as a fire. Every family should develop an escape plan and make sure family members know how to escape from the home in an emergency. In your plan, include two ways to escape from every room in case one way is blocked by fire or smoke, and make sure you have a designated meeting place outside. A window or a patio door is an alternate means of escape or rescue. Practice your plan until each member of the family understands it and is able to escape without assistance. Remember, you may not be able to reach children during a fire emergency. Teach children – even very young children – that they must escape from a fire in the home and never hide from the fire or from emergency personnel.

LOOKOUT FOR KIDS® PROGRAM

The Consumer Product Safety Commission has said: "Keep children away from open windows to prevent falls. Don't depend on insect screens to keep the child from falling out of the window. They are designed to keep insects out, not children in. Avoid placing furniture near windows to keep children from climbing to a window seat or sill." In an effort to educate consumers about the potential for child falls from windows, Andersen Corporation created the LookOut For Kids Program. It combines a window and door safety brochure and specific product instructions to help make window and door safety an important priority for consumers. For more information on child safety, write:

Andersen Corporation
LookOut For Kids Program
100 Fourth Avenue North
Bayport, MN 55003
Call 800-313-8889 or email
lofk@andersencorp.com



Andersen® windows and patio doors can make significant contributions to the success of sustainable design strategies

As a charter member of the U.S. Green Building Council, we're active supporters of certified green buildings. Our products can help customers in pursuing green building programs, such as Leadership in Energy and Environmental Design (LEED®), the National Green Building Standard, Green Globes, GreenStar and more. Below is an overview of how our products may assist project teams with pursuing LEED v4 or the NAHB National Green Building Standard rating systems. More detailed credit summaries, as well as information about how Andersen products can support earlier versions of LEED certification (e.g., LEED v3 or LEED 2008), are available at andersenwindows.com.

LEED V4 FOR BUILDING DESIGN AND CONSTRUCTION: NEW CONSTRUCTION AND MAJOR RENOVATIONS

Integrative Process Credit:

Energy & Atmosphere

- Minimum energy performance prerequisite
- Optimize energy performance credit
- Renewable energy production credit
- Green power and carbon offsets credit

Materials & Resources

- Construction and demolition waste management planning credit
- Building product disclosure and optimization sourcing of raw materials credit
- Construction and demolition waste management credit

Indoor Environmental Quality

- Minimum indoor air quality performance prerequisite
- Minimum acoustic performance prerequisite – schools
- Enhanced indoor air quality strategies credit
- Low-emitting materials credit
- Thermal comfort credit
- Daylight credit
- Quality views credit
- Acoustic performance credit (option 2)

LEED V4 FOR BUILDING DESIGN AND CONSTRUCTION: HOMES AND MULTI-FAMILY MIDRISES

Energy & Atmosphere

- Minimum energy performance prerequisite
- Education of the homeowner, tenant or building prerequisite
- Annual energy use credit
- Building orientation for passive solar credit
- Air infiltration credit
- Windows credit

Materials & Resources

- Durability management prerequisite
- Environmentally preferable products credit
- Construction waste management credit

Indoor Environmental Quality

- Ventilation prerequisite
- Low-emitting products credit

ANSI ICC/ASHRAE 700-2015 NATIONAL GREEN BUILDING STANDARD

NGBS section numbers are referenced in parentheses.

Resource Efficiency

- Prefinished materials (601.7)
- Flashing (602.12)
- Exterior doors, including storm doors (602.1.10)
- Recycled construction materials (605.3)
- Bio-based products (606.1)
- Wood-based products (606.2)
- Manufacturer's environmental management system concepts (611.1)

Energy Efficiency

- Mandatory requirements (701.1)
- Building thermal envelope air sealing (701.4.3.1)
- Multi-family air leakage alternative (701.4.3.3)
- Fenestration air leakage (701.4.3.4)
- ICC IECC analysis (702.2.1)
- Energy performance analysis (702.2.2)
- UA improvement (703.2.1)
- Fenestration (703.2.5)
- Sun-tempered design (703.7.1)
- Passive cooling design (703.7.3)
- Passive solar heating design (703.7.4)

Indoor Environmental Quality

- Wood materials (901.4)
- Interior architectural coatings (901.9)
- Interior adhesives & sealants (901.9)
- Operable windows & sliding glass doors (902.1.5)

Energy Efficient

- Homeowner's manual (1001.1)
- Building construction manual (1002.1)



THE ENVIRONMENT HAS A BUSINESS PARTNER

Respect for the environment is nothing new at Andersen. For more than a century, it has been part of who we are. Our commitment to recycle and reclaim materials began simply because it was good business. Now it's part of our broader commitment to sustainability and responsible stewardship of all of our resources. Andersen is committed to providing you with long-lasting,* energy-efficient windows and patio doors. Visit andersenwindows.com/sustainability for more information.

Andersen® products are certified under the National Fenestration Rating Council (NFRC) voluntary third-party certification program designed to ensure accurate energy performance ratings and labeling.



Andersen was one of the first U.S. window manufacturers to receive the Forest Stewardship Council® (FSC®) Chain-of-Custody certification (FSC CO16636). This certification is awarded to companies that meet FSC standards for traceability in their wood supply chain. Ask your sales representative about the availability of FSC certified products.



The Window & Door Manufacturers
Association (WDMA) Hallmark
Certification program includes product
testing and quality-control process audits
to verify that Andersen windows and
doors are produced in conformance
with the industry standards for air, water
resistance and structural performance.



Andersen Corporation is proud to be an ENERGY STAR® partner. For over 115 years, Andersen has built a reputation for environmental stewardship and energy-efficient products. In fact, Andersen has been part of the ENERGY STAR program since it started and was the first window manufacturer to be named an ENERGY STAR National Window Partner of the Year in 1999.



Andersen A-Series casement, awning and fixed transom products are Phius (Passive House Institute US) certified products. Phius is the smartest path to a zerocarbon built environment, certifying the majority of all passive house projects in North America with locally tailored, globally applicable passive building standards.

^{*}Visit andersenwindows.com/warranty for details.

All logos and marks are trademarks of their respective owners.

	63 A-Series Window Custom Sizes	60 A-Series Window Joining Details	52 A-Series Transom Windows	44 A-Series Picture Windows	38 A-Series Double-Hung A-Series Casement Windows & Awning Windows	26 A-Series Casement & Awning Windows	21 A-Series Window Overview 112	
- 4 i⊻	A-Series Patio Door Sidelights & Transoms	A-Series Hinged Outswing Patio Doors	A-Series Hinged Inswing Patio Doors	A-Series Gliding Patio Doors	A-Series Patio Door Overview	A-Series Complementary Casement Windows	A-Series Specialty Window Joining Details	
				196 Combination Designs,	189 Exterior Trim	177 A-Series	172 A-Series Patio Door	





PDF NAVIGATION TIPS

Welcome to an overview of the enhanced navigation tools available in this PDF. Here are some simple tips on PDF navigation. Before you begin be sure you are using the latest version of Adobe Acrobat Reader DC, available at – https://get.adobe.com/reader/

To watch a 3-minute tutorial on navigating catalog PDFs, go to: https://youtu.be/sWWnYn60N3Y

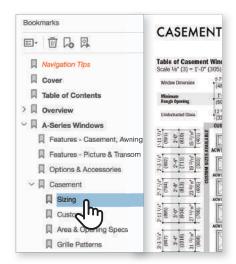
BOOKMARK NAVIGATION



Acrobat will display the bookmarks panel when you open the PDF.

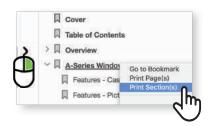
Bookmarks are the easiest way to find specific product information.

Select a topic and that page will be displayed.





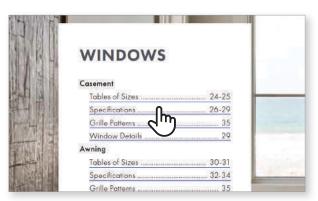
If you need to print a specific section, right click on that section within in the bookmarks panel and choose "Print Section".



LINKS AND URL NAVIGATION



You can also use the **embedded links** to navigate between sections. All links are underlined in blue.





Website links automatically open in your web browser.



PDF NAVIGATION TIPS Cont.

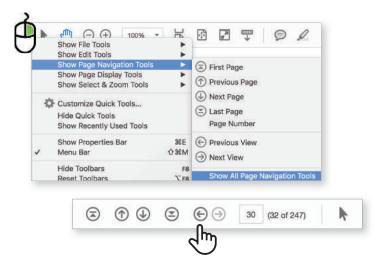
Add additional navigation tools by adjusting the default settings in Acrobat.





To add a "Jump Back" Button to your tool bar. Right click on tool bar, select Show Page Navigation Tools and choose Show All Page Navigation Tools.

Right and left facing arrows are added to the tool bar allowing you to go back or forward to the last page you viewed.





Another helpful tool is the **Loupe Tool**.

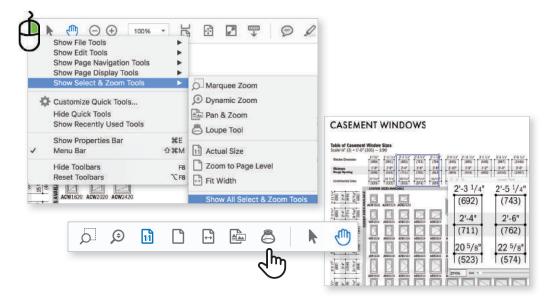
It allows you to zoom in on the page without having to increase the page size.

To add a Loupe Tool to your tool bar, right click on tool bar, select Show Select & Zoom Tools

and then choose

Show All Select &

Zoom Tools.





You can also use the **commenting tools**. Add a post-it note with your comments or highlight important information.

Be sure to save the file.



To watch a 3-minute tutorial on navigating catalog PDFs, go to: https://youtu.be/sWWnYn60N3Y

We are always looking for ways to improve.

Please send feedback to webmarketing@andersencorp.com.