





2019-20 PRODUCT GUIDE FOR PROFESSIONALS

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200 SERIES WINDOWS & PATIO DOORS

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For warranty information, visit andersenwindows.com/warranty.

Sustainability64



The MOST RECOGNIZED, TRUSTED and RECOMMENDED brand of windows and patio doors^{*}.



Hanley Wood Builder Brand Use Study 1998-2018 Windows – Wood & Clad-Wood Category



Hanley Wood Remodeling Brand Use Study 2006, 2010, 2013, 2015, 2017 Windows – Wood & Clad-Wood Category



Awarded Most Environmentally Friendly Windows 7 years running 2011-2018



Andersen Corporation, including its subsidiaries, has been named a 2019 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.



When you choose Andersen, you not only get the quality, style and performance that we've built our reputation on, but also exceptional service and support. Our exclusive Owner-2-Owner[®] limited warranties offer homeowners peace of mind, plus real added value.

200 SERIES PRODUCTS THE WARMTH OF WOOD AT AN UNCOMMON VALUE

This streamlined selection of windows and patio doors delivers Andersen quality at an uncommon value while still offering ample choices. The 200 Series product line concentrates on our most popular sizes and options for a value that's unmatched.





ENERGY-SAVING GLASS FOR ANY CLIMATE

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

Visit andersenwindows.com/energystar

for more information and to verify that the product with your glass option is ENERGY STAR certified in your area.



LOW MAINTENANCE, NEVER NEEDS PAINTING

The Perma-Shield[®] exteriors on Andersen[®] 200 Series windows and patio doors offer superior weather resistance and are virtually maintenance free.

BUILT FOR YEARS TO COME^{*}

Our products are built strong to last long: We use the right materials in the right places, giving our windows and doors superior strength, stability and long-term beauty.

QUALITY SO SOLID, THE WARRANTY IS TRANSFERABLE^{*}

Many other window and door warranties end when a home is sold, but our coverage — 20 years on glass, 10 years on non-glass parts — transfers from each owner to the next. And, because it is not prorated, the coverage offers full benefits, year after year, owner after owner. So it can add real value when you decide to sell your home.

OWNER2OWNER[®]

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

PRODUCT OVERVIEW



TILT-WASH DOUBLE-HUNG WINDOWS

200 Series tilt-wash double-hung windows are available in our most popular sizes and feature low-maintenance exteriors and real wood interiors. Their tilt-wash design makes them easy to clean from inside the home.

Half circle windows are available in sizes to match our tilt-wash double-hung windows.





GLIDING WINDOWS

200 Series gliding windows feature low-maintenance exteriors and real wood interiors. They have a single sash that glides horizontally to allow for full top to bottom ventilation and are an excellent choice for rooms that face walkways, porches or decks because the sash do not open outward.

To learn more about other Andersen[®] window options, visit **andersenwindows.com/windows**.





NARROLINE[®] & PERMA-SHIELD[®] GLIDING PATIO DOORS

200 Series Narroline gliding doors combine the beauty of natural wood with sleek contemporary profiles to maximize views. Available in two- and four-panel configurations to fit virtually any size requirement.

200 Series Perma-Shield gliding doors are protected inside and out with rigid vinyl cladding to give homes a contemporary look while keeping maintenance to a minimum. They are available with convenient blindsbetween-the-glass on select sizes and are available in two-panel configurations.





200 Series hinged inswing patio doors are built with fiberglass panel construction, traditional styling and white interiors and are available in three exterior colors. Their hook deadbolt lock provides extra strength, a more weathertight seal and added security compared to ordinary deadbolt locks. They are available in oneand two-panel configurations.





EXTERIOR & INTERIOR OPTIONS

Our Perma-Shield® exterior cladding system offers low maintenance and durability while providing an attractive appearance.



INTERIOR OPTIONS



PATIO DOORS EXTERIOR COLORS

White	Canvas	Sandtone	Terratone	Dark Bronze	Black

Hinged inswing patio doors are only available with white, Sandtone or Terratone exteriors.

INTERIOR OPTIONS



Hinged inswing patio doors are only available with white interiors. Perma-Shield gliding patio door interiors match the exterior color selected.

EXTERIOR TRIM SYSTEM

Add curb appeal with Andersen[®] exterior trim. Our trim is made with Fibrex[®] composite material, an environmentally smart composite that contains 40% pre-consumer reclaimed wood fiber by weight. For details, see page 45.



TRIM COLORS



WINDOW HARDWARE

Window hardware enhances the overall design of a window and harmonizes with a home's décor.

TILT-WASH DOUBLE-HUNG WINDOWS



Lock & Keeper Standard: Stone | White Optional: Antique Brass | Black | Bright Brass Gold Dust | Oil Rubbed Bronze | Satin Nickel



CLASSIC SERIES[™] Optional Lift^{*} Stone | White



For all windows, stone finish is standard for pine interiors. White finish is standard for white interiors. For gliding windows, additional lock and keeper finishes are available, contact your Andersen supplier.

Bold names denote finish shown.

WIRELESS OPEN/CLOSED SENSORS

These wireless sensors provide the peace of mind of knowing whether windows and patio doors are open or closed.^{**}



No tools for easy installation No drilling to maintain warranties Compact design



VERILOCK® SECURITY SENSORS

Available for 200 Series gliding patio doors, VeriLock security sensors not only indicate whether your patio doors are open, they even tell you if they are locked or unlocked.^{**} No other sensor can do that.

Helps maximize energy efficiency No drilling to maintain warranties Preserves beauty



Hardware is sold separately.

** When properly configured and maintained with a professionally installed security system and/or self-monitoring system compatible with Honeywell[®] 5800 controls. See your Andersen supplier for more information.

Oil rubbed bronze is a "living" finish that will change with time and use.

PATIO DOOR HARDWARE*

200 Series patio door hardware is available in a variety of different designs to match any style.



HARDWARE FINISHES



FSB® HINGED PATIO DOOR HARDWARE

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



* Hardware sold separately.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use. Bright brass and satin nickel finishes on patio door hardware feature a 10-year limited warranty. Matching hinges available in antique brass, bright brass, oild rubbed bronze, satin nickel and white for inswing patio doors. Printing limitations prevent exact finish replication. See your Andersen supplier for actual finish samples. "FSB" is a registered trademark of Franz Schneider Brakel GmbH & Co.

GLASS OPTIONS

Andersen has the glass you need to get the performance you want. From SmartSun[™] glass with HeatLock[®] coating that is ENERGY STAR[®] certified in all climate zones^{*} to Low-E glass with HeatLock coating that helps reflect heat back into the home and improves U-Factors. Check with your supplier for the selections that meet ENERGY STAR requirements in your area.

	ENE	RGY	LIGHT			
	U-FACTOR	SOLAR HEAT GAIN COEFFICIENT	VISIBLE LIGHT TRANSMITTANCE	UV PROTECTION		
GLASS	How well a product prevents heat from escaping.	How well a product blocks heat caused by sunlight.	How much visible light comes through a product.	How well a product blocks ultraviolet rays.		
SmartSun Thermal control similar to tinted glass, with visible light transmittance similar to Low-E glass.	★★★☆	****	★★★☆☆	****		
SmartSun with HeatLock Coating Applied to the room-side surface, it reflects heat back into the home and improves U-Factors.	****	****	★★ ☆☆	****		
Low-E Outstanding overall performance for climates where both heating and cooling costs are a concern.	★★★☆	★★★☆	★★★☆	★★★☆		
Low-E with HeatLock Coating Applied to the room-side surface, it reflects heat back into the home and improves U-Factors.	****	★★★☆	★★☆☆	★★★☆		
Sun* Outstanding thermal control in southern climates where less solar heat gain is desired.	★★★☆	****	****	★★★☆		
PassiveSun® Ideal for northern, passive solar construction applications where solar heat gain is desired.	★★☆☆	****	***☆	★★★☆		
PassiveSun with HeatLock Coating Ideal for northern, passive solar construction applications where solar heat gain is desired.	★★★☆	****	★★★☆☆	★★★☆		
Clear Dual-Pane High visibility with basic thermal performance.	****	****	****	****		

Center of glass performance only. Ratings based on glass options available as of March 2019. Visit and ersenwindows.com/energystar for ENERGY STAR map and NFRC total unit performance data.

TIME-SAVING FILM



We help protect our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the jobsite, then peels away for a virtually spotless window.

ADDITIONAL GLASS OPTIONS

TEMPERED safety glass (standard on patio doors).

OBSCURE patterned glass to let in light while obscuring vision.



GRILLE OPTIONS

Grille patterns are available in widths and configurations to fit any architectural style or the taste of any customer. We can match virtually any existing grille pattern, and we'll even work with you and your customers to create custom patterns.

GRILLE CONFIGURATIONS

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.

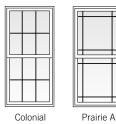


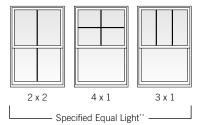


Removable interior

Permanent exterior Permanent interior

GRILLE PATTERNS





CONVENIENT CLEANING OPTIONS

Removable interior grilles come off for easy cleaning. Finelight[™] grilles-betweenthe-glass are installed between the glass panes and feature a contoured profile in 1" (25) and 3/4" (19) widths.





Removable interior

Finelight Grilles-Between-the-Glass*

GRILLE BAR WIDTHS Actual size shown.



To see all of the standard patterns available for a specific window or door, refer to the detailed sections in this book for each product or contact your Andersen supplier.

INSECT SCREEN OPTIONS

Conventional and TruScene® insect screens are available for tilt-wash double-hung and gliding windows. For patio doors, conventional insect screens come in the configurations shown below.

DOUBLE-HUNG WINDOWS



FULL OR HALF **INSECT SCREEN**

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

GLIDING PATIO DOORS

GLIDING

INSECT SCREEN

Gliding insect screens

are available for two-

and four-panel doors.



RETRACTABLE INSECT SCREEN

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. Available for two-panel doors.

HINGED INSWING PATIO DOORS



HINGED **INSECT SCREEN**







GLIDING INSECT SCREEN

Available on singlepanel active doors.

* $\frac{7}{8}$ " (22) and 1 $\frac{1}{8}$ " (29) not available in Finelight grilles-between-the-glass. ** Specify number of same-size rectangles across or down. Dimensions in parentheses are in millimeters.

DOUBLE-HINGED **INSECT SCREEN**

Available for two-panel active-

passive doors.

COMPARISON CHART

Use the quick reference chart below to decide which Andersen® 200 Series products best fit your project needs.

		WINE	ows		PATIO DOORS	
FEATURES		TILT-WASH DOUBLE-HUNG	SNIDING	NARROLINE®	PERMA-SHIELD®	HINGED INSWING
LOW-MAINTENANCE	EXTERIORS					
White	9	•		•		•
Canv	as			•		
Sand	tone			•		
Terra	tone			•		
Dark	Bronze			•		
Blac	(•		
INTERIORS						
Pine						
White	9					
Same as Exterior						
GRILLES & BLINDS					·	
Simulated Divided Lig	ht			•		
Finelight [™] Grilles-Betv	veen-the-Glass					
Removable Interior Gr	illes					
Blinds-Between-the-G	ass (Select sizes only)					
EASY CLEANING						
Tilt-to-Clean Sash						
HIGH-PERFORMANC	E GLASS Additional	glass options are available.	See page 8 for details. For	or patio doors, all glass op	tions are tempered.	
Low-E						
Low-E SmartSun [™]						
Low-E Sun						
HeatLock [®] Coating				•		
Clear Dual-Pane				•		
PERFORMANCE OPT	ON					
Stormwatch [®] Protection	on				PG Upgrade	
STANDARD SIZES						
Minimum Width		1'-7 1/2"	2'-11 1/2"	4'-11 1/4"	4'-11 1/4"	2'-61/8"
Maximum Width		3'-3 1/2"	5'-11 1/2"	15'-9"	8'-0"	5'-11 1/4"
Minimum Height		2'-11 1/2"	1'-5 1/2"	6'-71/2"	6'-71/2"	6'-71/2"
Maximum Height		5'-11 1/2"	4'-11 1/2"	7'-11 1/2"	7'-11 1/2"	7'-11 1/2"

200 SERIES

TILT-WASH DOUBLE-HUNG WINDOWS

SECTION REFERENCE

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TILT-WASH DOUBLE-HUNG WINDOWS

FEATURES

Frame

A Exterior outer frame members are treated with water-repellent preservative and covered with a rigid vinyl cover, minimizing maintenance and providing an attractive appearance.

B Interior surfaces are unfinished pine. Low-maintenance prefinished white interiors are available.

• Full-perimeter installation flange makes installation easy and fast with little or no adjustment. It's fixed, seamless and integrated with the exterior frame.

• Flexible weatherstrip around all four sides is factory-installed and provides a tight seal between the sash and frame.

Glass

G Choose Low-E, Low-E HeatLock® Low-E SmartSun[™], Low-E SmartSun HeatLock or dual-pane glass. Tempered glass 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 jobsite.

• A rigid vinyl glazing bead, combined with high-grade silicone glazing bed, keeps the glass bonded firmly to the sash and helps minimize water and air infiltration.









Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless prefinished white is specified. Oil rubbed bronze is a "living" finish that will change with time and use.

DOUBLE-HUNG HARDWARE



Stone finish is standard for pine interiors. White finish is standard for white interiors. Bold name denotes finish shown.

* Visit andersenwindows.com/warranty for details.

** Hardware sold separately.

Dimensions in parentheses are in millimeters.

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



Sash



A convenient tilt-wash design makes it easy to clean the window from the inside. An in-sash balancer minimizes the view of the jamb liner, maximizing the amount of wood in the frame. Window can be secured through the side jambs to stud walls without hitting balancer.

ACCESSORIES Sold Separately Frame

Extension Jambs

Standard jamb depth is 3 1/4" (83). Extension jambs are available in unfinished pine or prefinished white. Some sizes may be veneered.

Factory-applied and non-applied extension jambs are available in 1/16" (1.5) increments between 4 %16" (114) and 7 1/8" (181). Extension jambs can be factory-applied to either three sides (stool and apron) or four sides (picture frame casing).

Drywall Return

The 200 Series double-hung window is available with a narrow 3" (76) jamb depth with a flat interior surface for easy drywall return. Available in pine or prefinished white.

Two-Tone Option

200 Series tilt-wash double-hung windows are available with a two-tone color configuration, featuring a prefinished white interior and a Sandtone exterior. Some exterior components are visible from the interior. Corresponding picture and transom units, as well as grilles, are available to match.

Window Opening Control Device



A recessed window opening control device is available factory applied. It limits the sash travel to less than 4" (102) when the window is first opened. Available in stone and white. A field-applied window opening control device is also available.

Security Sensors

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 6 for details.

Insect Screens **Insect Screen Frames**



Choose full insect screen or half insect screen. Half insect screen (shown above) allows ventilation without affecting the view from the upper sash. Frames are available in colors to match product exteriors

TruScene® Insect Screen

Exclusive Andersen® TruScene insect screens provide over 50% more clarity than our conventional insect screens for a beautiful unobstructed view. They allow more fresh air and sunlight in, while doing a better job of keeping out small insects.

Conventional Insect Screen

Conventional insect screens have a longlasting* fiberglass screen mesh with a charcoal finish.

Exterior Trim

This product is available with Andersen exterior trim. See pages 45-50 for details.

CAUTION

- · Painting and staining may cause damage to rigid vinyl and is not recommended.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- 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.

For more information about glass, grilles and insect screens, see pages 8-9.

For more information about combination designs, product performance, installation instructions and accessories, see pages 51-63 or visit andersenwindows.com.



Table of Tilt-Wash Double-Hung & Transom Window Sizes

Scale ¹/₈" (3) = 1'-0" (305) - 1:96

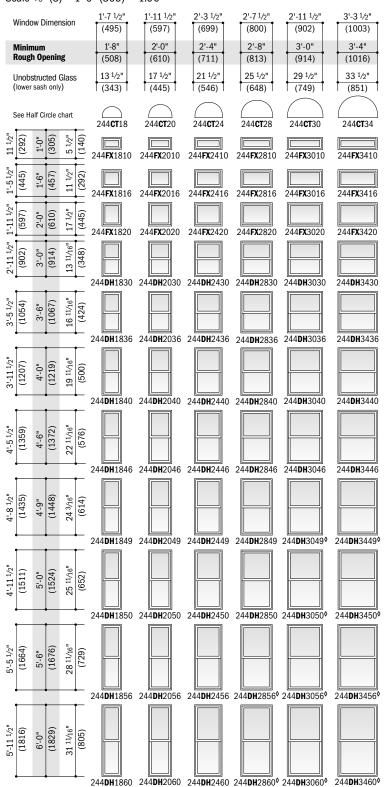
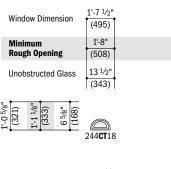
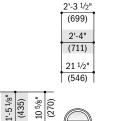


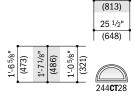
Table of Tilt-Wash Half Circle Window Sizes Scale ¹/₈" (3) = 1'-0" (305) - 1:96





244**CT**24

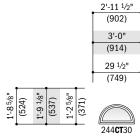
1'-10 5/8"

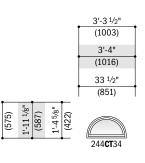


1'-3 1/8" (384)

8 ^{5/8}" (219)

1'-2 5/8' (371)





Grille patterns shown

on page 15.

-4 5/8" (422)

· "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 62-63 for more details. • Dimensions in parentheses are in millimeters.

Office of exceed 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 table on page 15.

1'-11 1/2"

(597)

2'-0"

(610)

17 1/2"

(445)

C

244**CT**20

2'-7 1/2"

(800)

2'-8"

Double-Hung

TILT-WASH DOUBLE-HUNG WINDOWS

Table of Tilt-Wash Picture Window Sizes

Scale ¹/₈" (3) = 1'-0" (305) - 1:96 2'-11 ¹/2" 3'-11 ¹/2" 4'-5 1/2" 4'-8 1/2" 4'-11 ¹/2" 5'-5 ¹/2" 5'-11 ¹/2" Window Dimension (1359) (902) (1207) (1435) (1511)(1663) (1816) 3'-0" 4'-0" 4'-6" 4'-9" 5'-0" 5'-6" 6'-0" Minimum **Rough Opening** (914) (1219) (1372) (1448) (1524) (1676) (1829) 29 ¹/2" 41 ¹/2" 47 1/2" 50 ¹/2" 53 ¹/2" 59 ¹/2" 65 ¹/2" Unobstructed Glass (1359) (749) (1054) (1207) (1283) (1511) (1664) 2'-11 1/2' 29 1/2" (902) 3'-0" (914) (749) Grille patterns shown 244**FX**3030 244**FX**4030 244**FX**4630 244**FX**4930 244**FX**5030 244**FX**5630 244**FX**6030 on page 15. 3'-11 1/2' 41 1/2" (1207)(1219)(1054)4'-0" 244**FX**3040 244**FX**4040 244**FX**4640 244**FX**4940 244**FX**5040 244**FX**5640 244**FX**6040 (1359)4'-6" (1372) 4'-5 1/2" 47^{1/2"} (1207) 244**FX**3046 244**FX**4046 244**FX**4646 244**FX**4946 244**FX**5046 244**FX**5646 244**FX**6046 (1435)(1448)50^{1/2}" (1283) 4'-8 1/2' 4'-9" 244**FX**3049 244**FX**4049 244**FX**4649 244**FX**4949 244**FX**5049 244**FX**5649 244**FX**6049 5'-0" (1524) 53 1/2" (1359) 4'-11 1/2' (1511)244**FX**3050 244**FX**4050 244**FX**4650 244**FX**4950 244**FX**5050 244**FX**5650 244**FX**6050 59 1/2" (1511) 5'-5 1/2" (1664)5'-6" (1676) 244**FX**3056 244**FX**4056 244**FX**4656 244**FX**4956 244**FX**5056 • "Window Dimension" always refers to outside frame to frame dimension. • "Minimum Rough Opening" dimensions 5'-11 1/2" (1816) 6'-0" (1829) 65 1/2" (1664) may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 62-63 for more details. · Dimensions in parentheses are in millimeters. 244**FX**3060 244**FX**4060 244**FX**4660 244**FX**4960 244**FX**5060

Tilt-Wash Picture Window Area Specifications

Window Number	Ar	ass 'ea t./(m²)	Overall Window Area Sq. Ft./(m²)		
244 FX 3030	6.04	(0.56)	8.75	(0.81)	
244 FX 3040	8.50	(0.79)	11.71	(1.09)	
244 FX 3046	9.73	(0.90)	13.19	(1.23)	
244 FX 3049	10.35	(0.96)	13.93	(1.29)	
244 FX 3050	10.96	(1.02)	14.67	(1.36)	
244 FX 3056	12.19	(1.13)	16.15	(1.50)	
244 FX 3060	13.42	(1.25)	17.63	(1.64)	
244 FX 4030	8.50	(0.79)	11.71	(1.09)	
244 FX 4040	11.96	(1.11)	15.67	(1.46)	
244 FX 4046	13.69	(1.27)	17.65	(1.64)	
244 FX 4049	14.55	(1.35)	18.64	(1.73)	
244 FX 4050	15.42	(1.43)	19.63	(1.82)	
244 FX 4056	17.15	(1.59)	21.61	(2.01)	
244 FX 4060	18.88	(1.75)	23.59	(2.19)	
244 FX 4630	9.73	(0.90)	13.19	(1.23)	

Window Number	Ar	ass 'ea t./(m²)	Overall Window Area Sq. Ft./(m²)		
244 FX 4640	13.69	(1.27)	17.65	(1.64)	
244 FX 4646	15.67	(1.46)	19.88	(1.85)	
244 FX 4649	16.66	(1.55)	21.00	(1.95)	
244 FX 4650	17.65	(1.64)	22.11	(2.05)	
244 FX 4656	19.63	(1.82)	24.34	(2.26)	
244 FX 4660	21.61	(2.01)	26.56	(2.47)	
244 FX 4930	10.35	(0.96)	13.93	(1.29)	
244 FX 4940	14.55	(1.35)	18.64	(1.73)	
244 FX 4946	16.66	(1.55)	21.00	(1.95)	
244 FX 4949	17.71	(1.65)	22.17	(2.06)	
244 FX 4950	18.76	(1.74)	23.35	(2.17)	
244 FX 4956	20.87	(1.94)	25.70	(2.39)	
244 FX 4960	22.97	(2.13)	28.05	(2.61)	
244 FX 5030	10.96	(1.02)	14.67	(1.36)	
244 FX 5040	15.42	(1.43)	19.63	(1.82)	

Window Number	Ar	ass ea t./(m²)	Overall Window Area Sq. Ft./(m²)		
244 FX 5046	17.65	(1.64)	22.11	(2.05)	
244 FX 5049	18.76	(1.74)	23.35	(2.17)	
244 FX 5050	19.88	(1.85)	24.59	(2.28)	
244 FX 5056	22.11	(2.05)	27.06	(2.51)	
244 FX 5060	24.34	(2.26)	29.54	(2.75)	
244 FX 5630	12.19	(1.13)	16.15	(1.50)	
244 FX 5640	17.15	(1.59)	21.61	(2.01)	
244 FX 5646	19.63	(1.82)	24.34	(2.26)	
244 FX 5649	20.87	(1.94)	25.70	(2.39)	
244 FX 5650	22.11	(2.05)	27.06	(2.51)	
244 FX 6030	13.42	(1.25)	17.63	(1.64)	
244 FX 6040	18.88	(1.75)	23.59	(2.19)	
244 FX 6046	21.61	(2.01)	26.56	(2.47)	
244 FX 6049	22.97	(2.13)	28.05	(2.61)	
244 FX 6050	24.34	(2.26)	29.54	(2.75)	

• Dimensions in parentheses are in square meters.

Tilt-Wash Double-Hung Window Opening and Area Specifications

NumberArea CARSale ProveWitchHeightArea CARArea CARSile ProveSile ProveSil	int-wash i	Jouble	пипд		-	ennig		rea 5	pecili	cation	5				
2440H1830 1.72 0.10 1.65e (42) 1.45e (380) 2.5e 0.24 1.72 0.10 4.5e (108) 5.6 0.23 2440H1840 2.75 0.20 1.65e (42) 0.55e (532) 6.80 0.34 2.41 0.23 6.5e 0.72 1.5e 0.23 0.5e 0.72 <th0.71< th=""> 0.83 0.55</th0.71<>	Window Number				-	. ·				A	ea	to Top o	of Inside		
2440H1886 2.06 0.19 16.56* (421) 17.95* (450) 3.12 (0.20) 2.06 (1.08) 5.62 (0.52) 2440H1860 2.14 (0.22) 16.56* (421) 2.08* (0.83) 0.84 (2.41) (0.22) 6.56* (421) 2.58* (0.81) 2.58 (0.42) 2.33 (0.27) 7.56* (70) 7.65 (0.71) 2440H1860 3.10 (0.29) 16.56* (421) 2.58* (85) 7.76 (0.53) 7.75* (70) 7.65 (71) 8.87 (0.54) (0.33) 1.25* (31) 9.68 (0.50) 2440H2060 2.75 0.56* (22) 1.75* (55) 0.54 (0.57) 8.78 (0.41) 2.99 (0.28) 6.77 (0.53) 3.78 (0.41) 2.99 (2.5) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) (3.7) <th< th=""><th></th><th>Sq. F</th><th>t./(m²)</th><th>Inches</th><th>/(mm)</th><th>Inches</th><th>/(mm)</th><th>Sq. F</th><th>t./(m²)</th><th>Sq. F</th><th>²t./(m²)</th><th>Inches</th><th>s/(mm)</th><th>Sq. F</th><th>t./(m²)</th></th<>		Sq. F	t./(m²)	Inches	/(mm)	Inches	/(mm)	Sq. F	t./(m²)	Sq. F	² t./(m²)	Inches	s/(mm)	Sq. F	t./(m²)
2440H1840 2.41 0.22 16.56* (421) 20.95* (532) 3.89 (0.40) 2.41 (0.22) 26.56* (92) 6.43 (0.50) 2440H1846 2.75 (2.26) 16.56* (421) 2.35* (608) 4.25 (0.40) 2.75 (2.60) 7.24 (6.7) 2440H1845 3.10 (0.29) 16.56* (421) 2.95* (635) 4.81 (0.45) 3.10 (0.29) 4.56* (624) 8.68 (0.5) 2440H1860 3.44 (0.32) 16.56* (421) 2.95* (33) 4.44 (0.20) 4.56* (1.23) 5.79 (0.54) 2440H2060 2.56 (2.4) 0.56* (522) 2.95* (35) 3.48 (0.42) 3.42* (0.32) 6.77 (0.51) 2440H2040 3.63 (3.4) 0.56* (522) 2.95* (68) 5.10 5.11 3.42 0.32* 6.76* 6.77 6.53	244 DH 1830	_													
2440H1846 2.75 0.20 16.56* (421) 23.95 (600) 4.25 (0.40) 2.75 (0.20) 35.5* (776) 7.24 (0.87) 2440H1850 3.10 (0.20) 16.56* (421) 25.45* (647) 6.537 (0.45) 3.10 (0.20) 25.6* (624) 8.06 (0.75) 2440H1850 3.14 (0.32) 16.56* (421) 3.25* (0.37) 5.44 (0.32) 15.6* (421) 3.25* (0.31) 2.14 (0.20) 4.55* (522) 1.95* (450) 4.05 0.24 4.55* (1.83) 5.77 (0.53) 24400203 2.55 (0.24) 0.56* 622) 2.95* (635) 4.48 (0.44) 2.96 (2.83) 5.77 (0.73) 24400204 3.33 (0.34) 2.56* (2.41) 2.55* (761) 5.77 (0.73) 4.25* (1.83) 5.77 (0.73) 4.25* (1.30) 1.16*	244 DH 1836	2.06	(0.19)	16.56"	(421)	17.95"	(456)	3.12	(0.29)	2.06	(0.19)	42.56"	(1081)	5.62	(0.52)
2440H1849 2.93 0.27 16.56* (421) 25.45* (647) 4.53 (0.42) 2.93 (0.27) 27.56* (700) 7.65 (0.11) 2440H1850 3.10 (0.29) 16.56* (421) 29.95* (761) 5.37 (0.45) 3.44 (0.32) 16.56* (421) 29.95* (761) 5.37 (0.45) 3.44 (0.32) 15.66* (421) 29.95* (761) 5.37 (0.45) 3.44 (0.32) 15.66* (421) 29.95* (33) 7.48 (0.44) (0.24) 45.56* (133) 5.79 (0.54) 244002000 2.14 (0.20) 0.56* (522) 2.95* (635) 5.51 (0.51) 3.42 (0.32) 0.56* (22) 4.55* (471) (0.80) 2.2 (0.40) 2.2 (0.40) 2.45* (10.81) 4.28 (0.40) 1.6.5* 4.28 (0.40) 1.6.5* (471) 1.6.9* (0.21) 2.5* (241)	244 DH 1840	2.41	(0.22)		(421)	20.95"	(532)	3.69	(0.34)	2.41	(0.22)	36.56"	(929)	6.43	(0.60)
2440H1850 3.10 0.29 16.56* (421) 28.95* (683) 4.81 0.45 3.10 0.29 28.56* (624) 8.86* (675) 2440H1860 3.74 0.30 15.56* (421) 29.95* (615) 5.37 (0.45) 3.44 (0.32) 18.56* (123) 5.73 (0.53) 2440H2030 2.14 0.201 0.55* (522) 1.95* (455) 4.05 (0.38) 2.56 (123) 5.73 (0.31) 2440H2040 2.99 (0.28) 0.56* (522) 2.95* (632) 4.78 (0.41) 2.76* (700) 9.22 (0.82) 2440H2040 3.63 (0.36) 0.256* (522) 2.85* (645) 3.83 (0.36) 2.56* (776) 8.73 (0.57) 3.84 (3.6) 8.6* (131) 1.6* (109) 2.4400206 4.71 (0.44) 2.56* (322) 2.85* (637) (5.5) 3.85 <t< td=""><td>244DH1846</td><td>2.75</td><td>(0.26)</td><td>16.56"</td><td>(421)</td><td>23.95"</td><td>(608)</td><td>4.25</td><td>(0.40)</td><td>2.75</td><td>(0.26)</td><td>30.56"</td><td>(776)</td><td>7.24</td><td>(0.67)</td></t<>	244 DH 1846	2.75	(0.26)	16.56"	(421)	23.95"	(608)	4.25	(0.40)	2.75	(0.26)	30.56"	(776)	7.24	(0.67)
2440H1866 3.44 (0.32) 16.56* (421) 29.95* (761) 5.37 (0.45) 3.44 (0.32) 18.56* (471) 8.87 (0.82) 2440H2030 2.14 (0.20) 20.56* (522) 1.495* (380) 3.32 (0.31) 2.14 (0.20) 45.5* (123) 5.79 (0.54) 2440H2030 2.14 (0.20) 20.56* (522) 20.95* (532) 4.78 (0.44) 2.99 (0.28) 36.56* (929) 7.75 (0.72) 2440H2040 2.99 (0.28) 20.56* (522) 2.95* (631) 5.81 (0.51) 3.42 (0.32) 0.56* (700) 9.77 (0.72) 2440H2060 4.28 (0.40) 2.56* (522) 2.95* (71) 6.81 4.86 (1.25* (319) 1.6.6* (1.63) 2440H2460 3.57 (0.33) 2.45* (624) 2.95* (761) 5.70 (3.3) 6.56*	244 DH 1849	2.93	(0.27)	16.56"	(421)	25.45"	(647)	4.53	(0.42)	2.93	(0.27)	27.56"	(700)	7.65	(0.71)
2440H1860 3.79 0.35 16.56* (421) 32.95* (837) 6.94 0.55 3.79 0.35 12.56* (319) 9.68 0.90 2440H2030 2.14 0.20 20.56* (522) 17.95* (466) 4.05 0.38 2.56 0.24 42.56* (1081) 6.77 (0.53) 2440H2040 3.42 0.32 20.56* (522) 2.99* (324) 42.56* (1081) 6.77 (0.53) 2440H2040 3.42 0.32 20.56* (522) 2.99* (683) 6.36 0.34 2.76* (709) 9.22 (0.84) 2440H2050 4.71 (0.44) 2.056* (522) 2.99* (681) 4.48 0.40 1.76* (109) 1.64* 4.28* (141) 1.66* (411) 1.66* (411) 1.66* (411) 1.66* (421) (104) 2.45* (104) 2.45* (104) 2.45* (102) 1.65* 1.70*	244 DH 1850	3.10	(0.29)	16.56"	(421)	26.95"	(685)	4.81	(0.45)	3.10	(0.29)	24.56"	(624)	8.06	(0.75)
2440 214 0.20 20.56* (522) 14.95* (380) 3.32 (0.31) 2.14 (0.20) 48.56* (123) 5.79 (0.54) 2440H2060 2.56 (0.24) 20.56* (522) 17.95* (455) 4.78 (0.44) 2.99 (0.28) 36.56* (193) (7.7) (0.7) 2440H2060 3.83 (0.34) 20.56* (522) 2.945* (685) 5.51 (0.51) 3.83 (0.34) 2.76* (700) 9.22 (0.80) 2440H2060 3.85 (0.31) 2.55* (522) 2.95* (68) 6.24 (0.53) 3.83 (0.34) 2.76* (700) 9.22 (0.80) 2440H2060 4.71 (0.44) 2.55* (0.24) 2.55* (0.24) 2.55* (0.33) 2.55* (0.33) 3.65* (711) (0.60) (0.44) (2.56* (1031) 7.3 (0.7) (0.7) (0.7) (0.7) (0.7) (0.7)	244 DH 1856	3.44	(0.32)	16.56"	(421)	29.95"	(761)	5.37	(0.45)	3.44	(0.32)	18.56"	(471)	8.87	(0.82)
2440H2036 2.56 (0.24) 20.56* (522) 17.95* (456) 4.05 (0.38) 2.56 (0.24) 42.56* (10.81) 6.77 (0.73) 2440H2040 2.99 (0.28) 20.56* (522) 23.95* (608) 5.51 (0.51) 3.42 (0.32) 30.55* (929) 7.75 (0.72) 2440H2040 3.85 (0.30) 20.56* (522) 25.45* (67) 5.88 (0.36) 24.55* (671) 6.87 (0.68) 3.85 (0.36) 24.56* (624) 9.75 (0.52) 22.95* (681) 6.24 (0.58) 3.85 (0.36) 24.56* (11.9) (1.9) (1.9) (2.9) (2.6) (1.9) (1.9) (2.6) (1.9) (1.8) (2.44) (1.9) (2.6) (1.9) (1.8) (2.44) (1.9) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2.6) (2	244 DH 1860	3.79	(0.35)	16.56"	(421)	32.95"	(837)	5.94	(0.55)	3.79	(0.35)	12.56"	(319)	9.68	(0.90)
2440H2040 2.99 0.28 0.286 (522) 20.95* (532) 4.78 (0.44) 2.99 (0.28) 36.56* (929) 7.75 (0.72) 2440H2046 3.42 (0.32) 0.056* (522) 25.55* (647) 5.88 (0.55) 3.63 (0.34) 27.56* (700) 9.22 (0.86) 2440H2050 4.71 (0.44) 20.56* (522) 22.95* (635) 4.88 (0.45) 4.28 (311) 1.66 (1.99) (2.99) (2.10)	244 DH 2030	2.14	(0.20)	20.56"	(522)	14.95"	(380)	3.32	(0.31)	2.14	(0.20)	48.56"	(1233)	5.79	(0.54)
2440H2046 3.42 0.322 20.56* (522) 23.95* (660) 5.51 (0.51) 3.42 (0.32) 30.56* (776) 8.73 (0.81) 2440H2060 3.65 (0.34) 20.56* (522) 25.45* (647) 5.58 (0.55) 3.63 (0.34) 27.56* (700) 9.22 (0.86) 2440H2060 4.71 (0.44) 20.56* (522) 29.95* (61) 6.97 (0.55) 4.28 (0.40) 18.56* (471) 10.44 12.56* (131) 11.67 (1.080) 2440H2400 4.71 (0.44) 24.56* (624) 14.95* (456) 4.98 (0.46) 3.06 (0.28) 42.56* (1081) 7.33 (0.74) 2440H2440 4.09 (0.38) 24.56* (624) 29.95* (685) 7.67 (0.71) 4.60 (0.43) 24.56* (24) 12.54* (1.64) 2440H2460 5.62 (0.52) 24.56* <td< td=""><td>244DH2036</td><td>2.56</td><td>(0.24)</td><td>20.56"</td><td>(522)</td><td>17.95"</td><td>(456)</td><td>4.05</td><td>(0.38)</td><td>2.56</td><td>(0.24)</td><td>42.56"</td><td>(1081)</td><td>6.77</td><td>(0.63)</td></td<>	244 DH 2036	2.56	(0.24)	20.56"	(522)	17.95"	(456)	4.05	(0.38)	2.56	(0.24)	42.56"	(1081)	6.77	(0.63)
2440H2049 3.63 (0.34) 20.56* (52) 25.45* (647) 5.88 (0.55) 3.63 (0.34) 27.56* (700) 9.22 (0.86) 2440H2050 3.85 (0.40) 20.56* (522) 29.95* (710) (6.57) (4.28) (0.44) 12.56* (110) (1.69) (0.49) 2440H2060 4.71 (0.44) 20.56* (522) 32.95* (380) 4.08 (0.38) 2.55* (121) (1.67) (1.68) 2440H2040 2.55 (0.24) 24.56* (624) 11.95* (458) (0.46) 3.06 (0.28) 42.56* (123) 6.78 (0.53) 2440H2440 3.57 (0.33) 24.56* (624) 23.95* (685) 7.67 (0.71) 4.60 (0.43) 24.56* (624) 23.95* (685) 7.67 (0.71) 4.60 (0.43) 24.56* (123) (1.63) 4.49# (0.41) 12.5* (1.16) (1.64)	244 DH 2040	2.99	(0.28)	20.56"	(522)	20.95"	(532)	4.78	(0.44)	2.99	(0.28)	36.56"	(929)	7.75	(0.72)
244DH2050 3.85 0.36 20.56* (52) 20.59* (68) 6.24 0.58 3.85 0.36 24.56* (624) 9.71 (0.90) 244DH2056 4.28 (0.40) 20.56* (522) 23.95* (71) 6.97 (0.65) 4.28 (0.40) 18.56* (471) 10.69 (0.99) 244DH2060 4.11 (0.44) 20.56* (522) 23.95* (637) 7.70 (0.72) 4.71 (0.44) 12.56* (198) 11.67 (10.8) 244DH2305 5.0 (0.23) 24.56* (624) 17.5* (52) 5.88 (0.55) 3.57 (0.33) 36.56* (192) 9.07 (0.84) 244DH2446 4.99 (0.38) 24.56* (624) 23.95* (685) 7.67 (0.71) 4.40 (0.43) 24.56* (10.1) 10.36 10.22 (0.55) 24.404245 5.11 (0.44) 24.56* (624) 23.95* (761) 10.71	244 DH 2046	3.42	(0.32)	20.56"	(522)	23.95"	(608)	5.51	(0.51)	3.42	(0.32)	30.56"	(776)	8.73	(0.81)
244D#2056 4.28 0.40 2.56* (52) 29.95* (761) 6.97 0.65 4.28 0.40 18.56* (471) 10.69 (0.99) 244D#2060 4.71 (0.44) 20.56* (522) 32.95* (837) 7.70 0.72) 4.71 (0.44) 12.56* (319) 11.67 (1.68) 244D#2400 2.55 (0.24) 24.56* (624) 17.95* (456) 4.98 (0.43) 3.06 (0.28) 4.56* (181) 7.33 0.74 3.07 0.73 3.65* (760) 10.22 0.95 244D#2446 4.09 (0.38) 24.56* (624) 29.95* (680) 6.77 (0.63) 4.09 (0.38) 3.05* (776) 10.22 0.95 244D#2450 4.60 (0.43) 24.56* (624) 29.95* (637) 9.46 (0.88) 5.62 (123) 7.77 (1.27) 244D#2460 5.62 (0.52) 24.56*	244 DH 2049	3.63	(0.34)	20.56"	(522)	25.45"	(647)	5.88	(0.55)	3.63	(0.34)	27.56"	(700)	9.22	(0.86)
244DH2060 4.71 (0.44) 20.56* (522) 32.95* (837) 7.70 0.72 4.71 (0.44) 12.56* (319) 11.67 (1.6) 244DH2430 2.55 (0.24) 24.56* (624) 17.95* (456) 4.98 (0.46) 3.06 (0.28) 42.56* (1011) 7.93 (0.74) 244DH2440 3.57 (0.33) 24.56* (624) 2.95* (532) 5.88 (0.55) 3.57 (0.33) 3.6.56* (922) (0.59) 244DH2440 4.34 (0.40) 24.56* (624) 2.95* (761) 7.22 (0.57) 4.34 (0.40) 2.56* (700) 10.79 (1.00) 244DH2460 5.62 (0.52) 2.456* (624) 2.95* (761) 8.56 (0.80) 5.61 (0.43) 2.456* (313) 13.65 (1.27) 244DH2360 5.61 (0.53) 2.56* (725) 14.95* (330) 4.56 (1.3	244 DH 2050	3.85	(0.36)	20.56"	(522)	26.95"	(685)	6.24	(0.58)	3.85	(0.36)	24.56"	(624)	9.71	(0.90)
244DH2430 2.55 (0.24) 24.56* (624) 14.95* (380) 4.08 0.38 2.55 0.24 88.56* (123) 6.78 (0.63) 244DH2436 3.06 (0.28) 24.56* (624) 17.95* (456) 4.98 (0.46) 3.06 (0.28) 42.56* (1081) 7.33 (0.74) 244DH2446 4.09 (0.38) 24.56* (624) 23.95* (680) 6.77 (0.33) 4.09 (0.38) 0.56* (770) 10.07 (1.04) 244DH2449 4.40 (0.43) 24.56* (624) 25.45* (685) 7.67 (0.71) 4.60 (0.43) 24.56* (624) 11.56 (1.76) 244DH2450 5.62 (0.52) 24.56* (624) 29.95* (761) 8.56 (0.80) 5.11 (0.48) 8.56* (123) 7.77 (0.72) 244DH2460 5.62 (0.52) 24.56* (725) 24.95* (685) 6.61	244 DH 2056	4.28	(0.40)	20.56"	(522)	29.95"	(761)	6.97	(0.65)	4.28	(0.40)	18.56"	(471)	10.69	(0.99)
244DH2436 3.06 (0.28) 24.56* (624) 17.95* (456) 4.98 (0.46) 3.06 (0.28) 42.56* (1081) 7.93 (0.74) 244DH2440 3.57 (0.33) 24.56* (624) 23.95* (508) 6.77 (0.63) 4.09 (0.38) 30.56* (776) 10.22 (0.55) 244DH2440 4.34 (0.40) 24.56* (624) 25.45* (647) 7.22 (0.67) 4.34 (0.40) 27.56* (700) 10.79 (1.00) 244DH2450 4.60 (0.43) 24.56* (624) 29.95* (761) 8.56 (0.80) 5.11 (0.48) 13.56* (127) 244DH2460 5.62 (0.52) 24.56* (1081) 9.08 (0.91) 12.56* (1081) 9.08 (0.91) 244DH2361 3.16 (0.33) 28.56* (725) 29.95* (521) 6.97 (0.65) 4.16 (0.33) 36.56* (929)	244 DH 2060	4.71	(0.44)	20.56"	(522)	32.95"	(837)	7.70	(0.72)	4.71	(0.44)	12.56"	(319)	11.67	(1.08)
244DH2440 3.57 (0.3) 24.56* (624) 20.95* (532) 5.88 (0.55) 3.57 (0.33) 36.56* (929) 9.07 (0.84) 244DH2446 4.09 (0.38) 24.56* (624) 23.95* (608) 6.77 (0.63) 4.09 (0.38) 30.56* (770) 10.22 (0.95) 244DH2449 4.34 (0.40) 24.56* (624) 25.45* (647) 7.22 (0.67) 4.34 (0.40) 27.56* (700) 10.79 (1.00) 244DH2450 4.60 (0.43) 24.56* (624) 29.95* (761) 8.56 (0.80) 5.11 (0.48) 18.56* (471) 12.51 (1.16) 244DH2400 5.62 (0.52) 24.56* (725) 14.95* (380) 4.84 (0.45) 4.16 (0.39) 26.5* (1081) 9.08 (0.97) 244DH2800 4.16 (0.39) 28.56* (725) 29.55* (687) <td< td=""><td>244DH2430</td><td>2.55</td><td>(0.24)</td><td>24.56"</td><td>(624)</td><td>14.95"</td><td>(380)</td><td>4.08</td><td>(0.38)</td><td>2.55</td><td>(0.24)</td><td>48.56"</td><td>(1233)</td><td>6.78</td><td>(0.63)</td></td<>	244 DH 2430	2.55	(0.24)	24.56"	(624)	14.95"	(380)	4.08	(0.38)	2.55	(0.24)	48.56"	(1233)	6.78	(0.63)
2440H2446 4.09 0.38 24.56* (624) 23.95* (608) 6.77 (0.63) 4.09 (0.38) 30.56* (776) 10.22 (0.95) 244DH2449 4.34 (0.40) 24.56* (624) 25.45* (647) 7.22 (0.67) 4.34 (0.40) 27.56* (700) 10.79 (1.00) 244DH2450 4.60 (0.43) 24.56* (624) 29.95* (761) 8.56 (0.80) 5.11 (0.48) 18.56* (471) 12.51 (1.16) 244DH2460 5.62 (0.52) 2.456* (624) 32.95* (380) 4.84 (0.45) 2.97 (0.28) 48.56* (123) 7.77 (0.72) 244DH2840 4.16 (0.33) 28.56* (725) 14.95* (380) 4.84 (0.45) 2.97 (0.28) 48.56* (123) 7.77 (0.72) 244DH2840 4.16 (0.33) 28.56* (725) 23.95* (608)	244 DH 2436	3.06	(0.28)	24.56"	(624)	17.95"	(456)	4.98	(0.46)	3.06	(0.28)	42.56"	(1081)	7.93	(0.74)
2440H2449 4.34 0.40 24.56* 624 25.45* 6477 7.22 0.67 4.34 0.40 27.56* (70) 10.75 (1.0) 244DH2450 4.60 0.43 24.56* (624) 26.95* (685) 7.67 0.711 4.60 0.432 24.56* (624) 29.95* (761) 8.56 0.80) 5.11 (0.48) 18.56* (471) 12.51 (1.16) 244DH2450 5.62 0.52 24.56* (624) 32.95* (837) 9.46 (0.88) 5.62 (0.52) 12.56* (319) 13.65 (1.27) 244DH2860 5.56 (0.33) 28.56* (725) 23.95* (605) 4.16 (0.39) 68.6* (929) 10.39 (0.97) 244DH2840 4.16 (0.33) 28.56* (725) 23.95* (605) 8.03 (0.75) 4.75 (0.44) 30.56* (725) 23.95* (647) 8.55 (0.60) 5.55	244 DH 2440	3.57	(0.33)	24.56"	(624)	20.95"	(532)	5.88	(0.55)	3.57	(0.33)	36.56"	(929)	9.07	(0.84)
244DH2450 4.60 (0.43) 24.56* (624) 26.95* (685) 7.67 (0.71) 4.60 (0.43) 24.56* (624) 11.36 (1.6) 244DH2456 5.11 (0.48) 24.56* (624) 29.95* (761) 8.56 (0.80) 5.11 (0.48) 18.56* (471) 12.51 (1.16) 244DH2460 5.62 (0.52) 24.56* (624) 32.95* (837) 9.46 (0.88) 5.62 (0.23) 24.56* (127) 244DH2860 5.62 (0.33) 28.56* (725) 17.95* (456) 5.91 (0.55) 3.56 (0.33) 26.56* (725) 20.95* (532) 6.97 (0.65) 4.16 (0.39) 36.56* (929) 10.39 (0.57) 244DH2840 4.75 (0.44) 28.56* (725) 26.95* (680) 5.05 (0.47) 72.56* (725) 24.95* (685) 9.09 (0.84) 5.35 (0.50) <t< td=""><td>244DH2446</td><td>4.09</td><td>(0.38)</td><td>24.56"</td><td>(624)</td><td>23.95"</td><td>(608)</td><td>6.77</td><td>(0.63)</td><td>4.09</td><td>(0.38)</td><td>30.56"</td><td>(776)</td><td>10.22</td><td>(0.95)</td></t<>	244 DH 2446	4.09	(0.38)	24.56"	(624)	23.95"	(608)	6.77	(0.63)	4.09	(0.38)	30.56"	(776)	10.22	(0.95)
2440H2456 5.11 (0.48) 24.56* (624) 29.95* (761) 8.56 (0.08) 5.11 (0.48) 18.56* (471) 12.51 (1.16) 244DH2460 5.62 (0.52) 24.56* (624) 32.95* (837) 9.46 (0.88) 5.62 (0.52) 12.56* (319) 13.65 (1.27) 244DH2830 2.97 (0.28) 28.56* (725) 14.95* (380) 4.84 (0.45) 2.97 (0.28) 48.56* (10.8) 9.08 (0.91) 244DH2840 4.16 (0.39) 28.56* (725) 20.95* (532) 6.97 (0.65) 4.16 (0.39) 36.56* (929) 10.39 (0.97) 244DH2840 4.16 (0.39) 28.56* (725) 23.95* (608) 8.03 (0.75) 4.75 (0.44) 30.56* (770) 12.36 (1.15) 244DH2840 5.55 (0.51) 28.56* (725) 29.95* (681)	244 DH 2449	4.34	(0.40)	24.56"	(624)	25.45"	(647)	7.22	(0.67)	4.34	(0.40)	27.56"	(700)	10.79	(1.00)
2440H2460 5.62 0.52 24.56* 624 32.95* (837) 9.46 (0.88) 5.62 (0.52) 12.56* (319) 13.65 (1.27) 2440H2830 2.97 (0.28) 28.56* (725) 14.95* (380) 4.84 (0.45) 2.97 (0.28) 48.56* (123) 7.77 (0.72) 2440H2836 3.56 (0.33) 28.56* (725) 17.95* (456) 5.91 (0.55) 3.56 (0.33) 42.56* (1081) 9.08 (0.91) 2440H2840 4.16 (0.39) 28.56* (725) 23.95* (608) 8.03 (0.75) 4.75 (0.44) 28.56* (725) 28.55* (685) 9.09 (0.84) 5.35 (0.50) 12.56* (70) 12.36 (1.15) 2440H2860 6.54 (0.61) 28.56* (725) 29.95* (761) 10.16 (0.94) 5.94 (0.51) 3.66* (171) 14.33 (1.33)	244 DH 2450	4.60	(0.43)	24.56"	(624)	26.95"	(685)	7.67	(0.71)	4.60	(0.43)	24.56"	(624)	11.36	(1.06)
2440H2830 2.97 0.28 28.56" (725) 14.95" (380) 4.84 (0.45) 2.97 (0.28) 48.56" (123) 7.77 (0.72) 2440H2836 3.56 (0.33) 28.56" (725) 17.95" (456) 5.91 (0.55) 3.56 (0.33) 42.56" (123) (0.71) (0.97) 2440H2840 4.16 (0.39) 28.56" (725) 23.95" (608) 8.03 (0.75) 4.75 (0.44) 30.56" (720) 12.36 (1.15) 2440H2840 5.05 (0.47) 28.56" (725) 25.45" (687) 8.56 (0.80) 5.05 (0.44) 30.56" (70) 12.36 (1.15) 2440H2850 5.35 (0.50) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.51) 8.56" (471) 4.33 (1.33) 2440H2860 6.54 (0.61) 28.56" (725) 29.95" (761)	244 DH 2456	5.11	(0.48)	24.56"	(624)	29.95"	(761)	8.56	(0.80)	5.11	(0.48)	18.56"	(471)	12.51	(1.16)
2440H2836 3.56 (0.33) 28.56* (725) 17.95* (456) 5.91 (0.55) 3.56 (0.33) 42.56* (1081) 9.08 (0.91) 2440H2840 4.16 (0.39) 28.56* (725) 20.95* (532) 6.97 (0.65) 4.16 (0.39) 36.56* (929) 10.39 (0.97) 2440H2846 4.75 (0.44) 28.56* (725) 23.95* (608) 8.03 (0.75) 4.75 (0.44) 30.56* (700) 12.36 (1.15) 2440H2849 5.05 (0.47) 28.56* (725) 26.95* (685) 9.09 (0.84) 5.35 (0.50) 24.56* (624) 13.02 (1.21) 2440H28560 5.94 (0.55) 28.56* (725) 32.95* (837) 11.22 (1.04) 6.54 (0.61) 12.56* (319) 15.64 (1.45) 2440H2860 6.54 (0.61) 28.56* (725) 32.95* (837)	244 DH 2460	5.62	(0.52)	24.56"	(624)	32.95"	(837)	9.46	(0.88)	5.62	(0.52)	12.56"	(319)	13.65	(1.27)
2440H2840 4.16 (0.39) 28.56" (725) 20.95" (532) 6.97 (0.65) 4.16 (0.39) 36.56" (929) 10.39 (0.97) 2440H2846 4.75 (0.44) 28.56" (725) 23.95" (608) 8.03 (0.75) 4.75 (0.44) 30.56" (776) 11.70 (1.09) 2440H2849 5.05 (0.47) 28.56" (725) 26.45" (647) 8.56 (0.80) 5.05 (0.47) 27.56" (700) 12.36 (1.15) 2440H2856 0 5.94 (0.55) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.55) 18.56" (471) 14.33 (1.33) 2440H2860 0 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 2440H3030 3.38 (0.31) 32.56" (827) 17.95" (456)	244 DH 2830	2.97	(0.28)	28.56"	(725)	14.95"	(380)	4.84	(0.45)	2.97	(0.28)	48.56"	(1233)	7.77	(0.72)
244DH2846 4.75 0.44 28.56" (725) 23.95" (608) 8.03 0.75 4.75 0.44 30.56" (776) 11.70 (1.09) 244DH2849 5.05 (0.47) 28.56" (725) 25.45" (647) 8.56 (0.80) 5.05 (0.47) 27.56" (700) 12.36 (1.15) 244DH2850 5.35 (0.50) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.55) 18.56" (471) 14.33 (1.33) 244DH2860 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 244DH3860 6.54 (0.61) 28.56" (725) 32.95" (380) 5.60 (0.52) 3.38 (0.31) 48.56" (123) 8.75 (0.81) 244DH3030 3.38 (0.31) 32.56" (827) 29.95" (532) 8	244 DH 2836	3.56	(0.33)	28.56"	(725)	17.95"	(456)	5.91	(0.55)	3.56	(0.33)	42.56"	(1081)	9.08	(0.91)
2244DH2846 4.75 (0.44) 28.56" (725) 23.95" (608) 8.03 (0.75) 4.75 (0.44) 30.56" (776) 11.70 (1.09) 2244DH2849 5.05 (0.47) 28.56" (725) 25.45" (647) 8.56 (0.80) 5.05 (0.47) 27.56" (700) 12.36 (1.15) 2244DH2850 5.35 (0.50) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.55) 18.56" (471) 14.33 (1.32) 2244DH2860 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 2244DH3030 3.38 (0.31) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (181) 10.23 (0.95) 2244DH3030 4.74 (0.44) 32.56" (827) 23.95" (608)	244 DH 2840	4.16	(0.39)	28.56"	(725)	20.95"	(532)	6.97	(0.65)	4.16	(0.39)	36.56"	(929)	10.39	(0.97)
2440H2850 5.35 (0.50) 28.56" (725) 26.95" (685) 9.09 (0.84) 5.35 (0.50) 24.56" (624) 13.02 (1.21) 2440H2856 0 5.94 (0.55) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.55) 18.56" (471) 14.33 (1.33) 2440H2860 0 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 2440H3030 3.38 (0.31) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (1081) 10.23 (0.95) 2440H3030 4.74 (0.44) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 2440H3040 5.76 (0.54) 32.56" (827) 25.54" (647)	244 DH 2846	4.75		28.56"		23.95"		8.03		4.75		30.56"		11.70	
244DH2850 5.35 0.50 28.56" (725) 26.95" (685) 9.09 (0.84) 5.35 (0.50) 24.56" (624) 13.02 (1.21) 244DH28560 5.94 (0.55) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.55) 18.56" (471) 14.33 (1.33) 244DH2860 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 244DH3030 3.38 (0.31) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (1081) 10.23 (0.95) 244DH3040 4.74 (0.44) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.33) 244DH3040 5.76 (0.54) 32.56" (827) 25.55" (685)	244 DH 2849	5.05	(0.47)	28.56"	(725)	25.45"	(647)	8.56	(0.80)	5.05	(0.47)	27.56"	(700)	12.36	(1.15)
244DH28560 5.94 (0.55) 28.56" (725) 29.95" (761) 10.16 (0.94) 5.94 (0.55) 18.56" (471) 14.33 (1.33) 244DH28600 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 244DH3030 3.38 (0.31) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (1081) 10.23 (0.95) 244DH3036 4.06 (0.38) 32.56" (827) 20.95" (532) 8.06 (0.75) 4.74 (0.44) 36.56" (929) 11.71 (1.09) 244DH3040 5.76 (0.54) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 244DH3049 5.76 (0.54) 32.56" (827) 26.95" (685)	244 DH 2850	5.35		28.56"		26.95"		9.09		5.35		24.56"			
244DH28600 6.54 (0.61) 28.56" (725) 32.95" (837) 11.22 (1.04) 6.54 (0.61) 12.56" (319) 15.64 (1.45) 244DH3030 3.38 (0.31) 32.56" (827) 14.95" (380) 5.60 (0.52) 3.38 (0.31) 48.56" (123) 8.75 (0.81) 244DH3030 4.06 (0.38) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (1081) 10.23 (0.95) 244DH3040 4.74 (0.44) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 244DH3040 5.76 (0.54) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (621) 14.67 (1.36) 244DH30500 6.77 (0.63) 32.56" (827) 29.95" (761)	244 DH 2856 ◊	5.94		28.56"		29.95"		10.16							
244DH3030 3.38 (0.31) 32.56" (827) 14.95" (380) 5.60 (0.52) 3.38 (0.31) 48.56" (123) 8.75 (0.81) 244DH3036 4.06 (0.38) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (1081) 10.23 (0.95) 244DH3040 4.74 (0.44) 32.56" (827) 20.95" (532) 8.06 (0.75) 4.74 (0.44) 36.56" (929) 11.71 (1.09) 244DH3046 5.42 (0.50) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 244DH3050 6.09 (0.57) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (624) 14.67 (1.36) 244DH3050 6.77 (0.63) 32.56" (827) 32.95" (611)		_													
244DH3036 4.06 (0.38) 32.56" (827) 17.95" (456) 6.83 (0.64) 4.06 (0.38) 42.56" (101) 10.23 (0.95) 244DH3040 4.74 (0.44) 32.56" (827) 20.95" (532) 8.06 (0.75) 4.74 (0.44) 36.56" (929) 11.71 (1.09) 244DH3046 5.42 (0.50) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 244DH3050 0 6.09 (0.57) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (624) 14.67 (1.36) 244DH3050 0 6.09 (0.57) 32.56" (827) 29.95" (761) 11.75 (1.09) 6.77 (0.63) 18.56" (471) 16.15 (1.50) 244DH3060 0 7.45 (0.69) 32.56" (827) 32.95" (837)	244 DH 3030	_								_					
244DH3040 4.74 (0.44) 32.56" (827) 20.95" (532) 8.06 (0.75) 4.74 (0.44) 36.56" (929) 11.71 (1.09) 244DH3046 5.42 (0.50) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 244DH3049 5.76 (0.54) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (624) 14.67 (1.36) 244DH3050 6.09 (0.57) 32.56" (827) 29.95" (761) 11.75 (1.09) 6.77 (0.63) 18.56" (471) 16.15 (1.50) 244DH3060 7.45 (0.69) 32.56" (827) 32.95" (837) 12.98 (1.21) 7.45 (0.69) 17.63 (1.64) 244DH3060 7.45 (0.69) 32.56" (929) 17.95" (456) 7.76 (0.72)	244 DH 3036	_	. ,		. ,					_					
244DH3046 5.42 (0.50) 32.56" (827) 23.95" (608) 9.29 (0.86) 5.42 (0.50) 30.56" (776) 13.19 (1.23) 244DH3049 5.76 (0.54) 32.56" (827) 25.45" (647) 9.91 (0.92) 5.76 (0.54) 27.56" (700) 13.93 (1.29) 244DH3050 6.09 (0.57) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (624) 14.67 (1.36) 244DH3060 6.77 (0.63) 32.56" (827) 29.95" (761) 11.75 (1.09) 6.77 (0.63) 18.56" (471) 16.15 (1.50) 244DH3060 7.45 (0.69) 32.56" (827) 32.95" (837) 12.98 (1.21) 7.45 (0.69) 12.56" (319) 17.63 (1.64) 244DH3360 7.45 (0.69) 32.56" (929) 17.95" (456)	244 DH 3040									_					
244DH30490 5.76 (0.54) 32.56" (827) 25.45" (647) 9.91 (0.92) 5.76 (0.54) 27.56" (700) 13.93 (1.29) 244DH30500 6.09 (0.57) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (624) 14.67 (1.36) 244DH30500 6.07 (0.63) 32.56" (827) 29.95" (761) 11.75 (1.09) 6.77 (0.63) 18.56" (471) 16.15 (1.50) 244DH30600 7.45 (0.69) 32.56" (827) 32.95" (837) 12.98 (1.21) 7.45 (0.69) 12.56" (319) 17.63 (1.64) 244DH3360 3.80 (0.35) 36.56" (929) 17.95" (456) 7.76 (0.72) 4.56 (0.42) 42.56" (108) 11.38 (1.06) 244DH3440 5.32 (0.49) 36.56" (929) 23.95" (608)	244 DH 3046	_								_					
244DH3050 6.09 (0.57) 32.56" (827) 26.95" (685) 10.52 (0.98) 6.09 (0.57) 24.56" (624) 14.67 (1.36) 244DH3056 6.77 (0.63) 32.56" (827) 29.95" (761) 11.75 (1.09) 6.77 (0.63) 18.56" (471) 16.15 (1.50) 244DH3060 7.45 (0.69) 32.56" (827) 32.95" (837) 12.98 (1.21) 7.45 (0.69) 12.56" (319) 17.63 (1.64) 244DH3060 7.45 (0.69) 32.56" (929) 14.95" (380) 6.36 (0.59) 3.80 (0.35) 48.56" (1233) 9.74 (0.91) 244DH3430 3.80 (0.35) 36.56" (929) 17.95" (456) 7.76 (0.72) 4.56 (0.42) 42.56" (1081) 11.38 (1.06) 244DH3440 5.32 (0.49) 36.56" (929) 23.95" (608)	244 DH 3049 ◊	_					. ,				. ,				
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244 DH 3456♦ 7.61 (0.71) 36.56" (929) 29.95" (761) 13.34 (1.24) 7.61 (0.71) 18.56" (471) 17.97 (1.67)		_		-											
		_													
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		_													
	244 DH 3460♦	8.37	(0.78)	36.56"	(929)	32.95"	(837)	14.74	(1.37)	8.37	(0.78)	12.56"	(319)	19.61	(1.8

Tilt-Wash Transom Window Specifications

ilt-Wash Transon	n Winc	low Sp	oecific	ations	ßun
Window Number	Ar	ass ea t./(m²)	Ar	Window ea t./(m²)	s Double-H
244 FX 1810	0.52	(0.05)	1.56	(0.15)	Serie: Wash dows
244 FX 1816	1.08	(0.10)	2.37	(0.22)	in 4 S
244 FX 1820	1.64	(0.15)	3.18	(0.30)	8≣8
244 FX 2010	0.67	(0.06)	1.88	(0.17)	
244 FX 2016	1.40	(0.13)	2.86	(0.27)	
244 FX 2020	2.13	(0.20)	3.84	(0.36)	
244 FX 2410	0.82	(0.08)	2.20	(0.20)	
244 FX 2416	1.72	(0.16)	3.34	(0.31)	
244 FX 2420	2.61	(0.24)	4.49	(0.42)	
244 FX 2810	0.97	(0.09)	2.52	(0.23)	
244 FX 2816	2.04	(0.19)	3.83	(0.36)	
244 FX 2820	3.10	(0.29)	5.14	(0.48)	
244 FX 3010	1.13	(0.11)	2.84	(0.26)	
244 FX 3016	2.36	(0.22)	4.31	(0.40)	
244 FX 3020	3.59	(0.33)	5.79	(0.54)	
244 FX 3410	1.28	(0.12)	3.15	(0.29)	
244 FX 3416	2.68	(0.25)	4.80	(0.45)	
244 FX 3420	4.07	(0.38)	6.45	(0.60)	

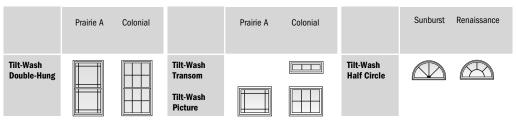
Tilt-Wash Half Circle Area Specifications

Window Number	Ar	ass ea 't./(m²)	Overall Window Area Sq. Ft./(m²)		
244 CT 18	0.50	(0.05)	1.43	(0.13)	
244 CT 20	0.84	(0.08)	1.98	(0.18)	
244 CT 24	1.26	(0.12)	2.61	(0.24)	
244 CT 28	1.77	(0.16)	3.33	(0.31)	
244 CT 30	2.37	(0.22)	4.15	(0.39)	
244 CT 34	3.06	(0.28)	5.04	(0.47)	

• Dimensions in parentheses are in square meters.

• "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. Otherstores in particulars of a particular of a second particular 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



Specified equal light and custom patterns are also available. For more information

on divided light, see page 9 or visit

andersenwindows.com/grilles.

ΥΥΥ Specified Equal Light Examples Custom Pattern Examples

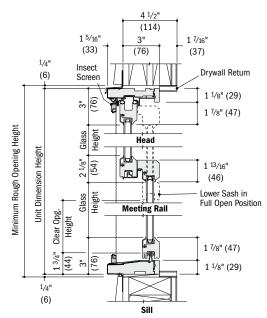
Patterns are available for all units also in upper sash only (USO). Number of lights and overall pattern varies with window size.

Patterns are not available in all configurations. Additional picture window patterns are available, contact your Andersen supplier.

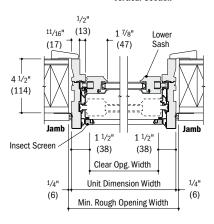
TILT-WASH DOUBLE-HUNG WINDOWS

Tilt-Wash Double-Hung Window Details

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

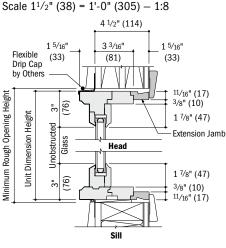






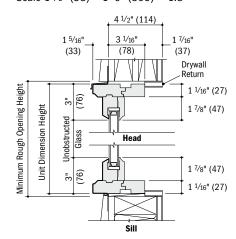
Horizontal Section

Tilt-Wash Half Circle Window Detail

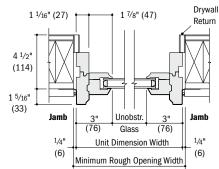


Vertical Section

Tilt-Wash Picture/Transom Window Details Scale 11/2" (38) = 1'-0" (305) - 1:8







Horizontal Section

Vertical (ribbon) Joining Detail Scale 11/2" (38) = 1'-0" (305) - 1:8

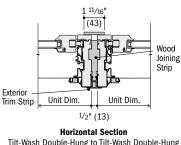
Overall Window Dimension Width

Sum of individual window widths

plus 1/2" (13) for each join.

Overall Rough Opening Width

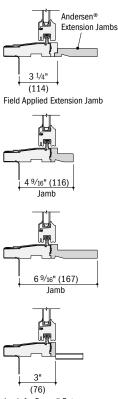
Overall window dimension width plus 1/2" (13).



Tilt-Wash Double-Hung to Tilt-Wash Double-Hung

Extension Jamb Details

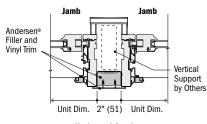
Scale 11/2" (38) = 1'-0" (305) - 1:8

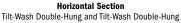


Jamb for Drywall Return

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

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.





For more joining information, see the combination designs section starting on page 51.

· Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown • 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 62-63.

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

 Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings · Dimensions in parentheses are in millimeters

200 Series Gliding Windows

GLIDING WINDOWS

SECTION REFERENCE

Tables of Sizes 19-20
Grille Patterns 20
Specifications 21
Window Details 21-22
Product Performance56

GLIDING WINDOWS

FEATURES

Frame

A The exterior of the frame is covered with a seamless rigid vinyl cover to eliminate corner joints/welds and strengthen rigidity. It provides an attractive appearance while minimizing maintenance.

B Laminated veneer lumber frame provides increased rigidity and minimizes racking during installation. It is treated with a water-repellent wood preservative for long-lasting* protection and performance.

• Full-perimeter installation flange makes installation easy and fast with little or no adjustment. It's fixed, seamless and totally integrated with the frame for weathertightness.

D Flexible weatherstrip around all four sides is factory installed and provides a tight seal between the sash and frame.

Sash

G A polyester stabilized coat with a Flexacron® finish is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous finish.

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

G Sash interior surfaces are unfinished pine. Prefinished white interiors are also available.

EXTERIOR



one of a kind. All wood interiors are unfinished unless prefinished white is specified.

HARDWARE FINISHES

Sandtone



White

Stone

GLIDING WINDOW HARDWARE

Lock & Keeper



White

Stone | White Additional lock and keeper

finishes are available, contact vour Andersen supplier.

CLASSIC SERIES[™] Pull Stone | White

Stone finish is standard for pine interiors. White finish is standard for white interiors. Bold name denotes finish shown

* Visit andersenwindows.com/warranty for details.

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



 Raised track system makes operation less sensitive to dirt build-up for continually smooth performance.

Glass

Choose Low-E, Low-E HeatLock[®] Low-E SmartSun[™], Low-E SmartSun HeatLock or dual-pane glass. Tempered glass 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



Naturally occurring variations in grain, color and texture of wood make each window

18

ACCESSORIES Sold Separately

Frame

Extension Jambs

Standard jamb depth is 2 3/4" (70). Extension jambs are available in unfinished pine or prefinished white. Some sizes may be veneered.

Factory-applied and non-applied extension jambs are available in 1/16" (1.5) increments between 4 %16" (114) and 7 1/8" (181). Extension jambs can be factory-applied to four sides (picture frame casing).

Drywall Return

The 200 Series gliding window is available with a narrow 2 3/4" (70) jamb depth with a flat interior surface for easy drywall return. Available in pine or prefinished white.

Two-Tone Option

200 Series gliding windows are available with a two-tone color configuration, featuring a prefinished white interior and a Sandtone exterior. Some exterior components are visible from the interior. Corresponding picture and transom units, as well as grilles, are available to match.

Window Opening Control Device Kit



A Window Opening Control Device Kit is available, which limits the sash travel to less than 4" (102) when the window is first opened. Available factory applied or field applied in stone and white.

Security Sensors

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 6 for details.

Insect Screens **Full Insect Screen**

Full insect screens are available in colors to match product exteriors.

TruScene® Insect Screen

Exclusive Andersen® TruScene insect screens provide over 50% more clarity than our conventional insect screens for a beautiful unobstructed view. They allow more fresh air and sunlight in, while doing a better job of keeping out small insects.

Conventional Insect Screen

Conventional insect screens have a longlasting* fiberglass screen mesh with a charcoal finish.

Exterior Trim

This product is available with Andersen exterior trim. See pages 45-50 for details.

CAUTION

- · Painting and staining may cause damage to rigid vinyl and is not recommended.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- · 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.

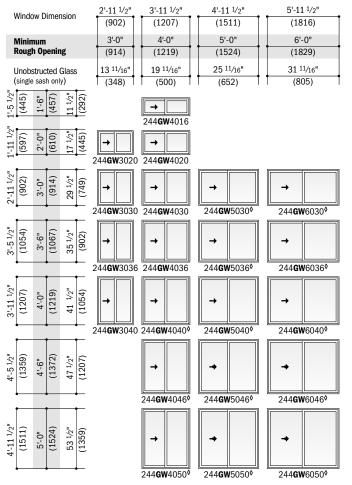
For more information about glass, grilles and insect screens, see pages 8-9.

For more information about product performance, installation instructions and accessories, see pages 56-63 or visit andersenwindows.com.

Dimensions in parentheses are in millimeters. "Flexacron" is a registered trademark of PPG Industries. Inc.

Table of Gliding Window Sizes

Scale 1/8" (3) = 1'-0" (305) - 1:96





Active Stationary

Viewed from the exterior.

Grille patterns shown on page 20.

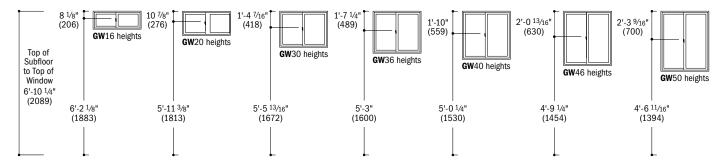
"Window Dimension" always refers to outside frame to frame dimension.

 "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 62-63 for more details.
 Dimensions in parentheses are in millimeters.

ØMeet or exceed 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 table on page 21.

Lock Location

Dimensions shown are from top of lock.



GLIDING WINDOWS

Table of Picture Window SizesScale $\frac{1}{8}$ " (3) = 1'-0" (305) - 1:96

2'-11 ¹/2" 3'-11 ¹/2" 4'-5 1/2" 4'-8 1/2" 4'-11 1/2" 5'-5 1/2" 5'-11 1/2" Window Dimension (902) (1207) (1359) (1435) (1511) (1664) (1816) 4'-6" 4'-9" 5'-0" 5'-6" 6'-0" 3'-0" 4'-0" Minimum **Rough Opening** (914) (1219) (1372) (1448) (1524) (1676) (1829) 29 ¹/2" 41 ¹/2' 47 1/2" 50 1/2" 53 1/2" 59 1/2" 65 ¹/2" Unobstructed Glass (749) (1054) (1207) (1283) (1359) (1511) (1664) 1/2"29 1/2" (914) (902) 3'-0" (749) 2'-11 244**FX**4030 244**FX**3030 244**FX**4630 244**FX**4930 244**FX**5030 244**FX**5630 244**FX**6030 3'-11 1/2" (1207) (1219)1/2"(1054)4'-0" 41 244**FX**3040 244**FX**4040 244**FX**4640 244**FX**4940 244**FX**5040 244**FX**5640 244**FX**6040 (1359)4'-6" (1372) 4'-5 1/2" 47 1/2" (1207)244**FX**3046 244**FX**4046 244**FX**4646 244**FX**4946 244**FX**5046 244**FX**5646 244**FX**6046 (1511)53 1/2" 4'-11 1/2' (1524) (1359) 5'-0" 244**FX**3050 244**FX**4050 244**FX**4650 244**FX**4950 244**FX**5050 244**FX**5650 244**FX**6050

Basic frame dimensions for gliding windows and picture windows are different. When joining, specify common extension jamb dimensions [i.e. 4 ⁹/16" (116) or 6 ⁹/16" (167)].

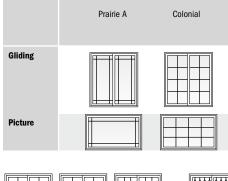
Grille patterns shown below.

• "Window Dimension" always refers to outside frame to frame dimension.

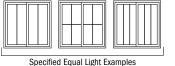
• "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 62-63 for more details.

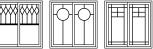
· Dimensions in parentheses are in millimeters

Grille Patterns



Number of lights and overall pattern varies with window size. Patterns are not available in all configurations. Additional picture window patterns are available, contact your Andersen supplier. Specified equal light and custom patterns are also available. For more information on divided light, see page 9 or visit **andersenwindows.com/grilles**.





Custom Pattern Examples

Gliding Window Opening and Area Specifications

			Clear	Opening F	ull Open F	osition				Subfloor		
Window Number	Clear C Ar Sq. Ft			dth s/(mm)		ight /(mm)	Ar	ass ea ./(m²)	to Top o Sill S Inches			Windov ea t./(m²)
244 GW 3020	2.10	(0.20)	15"	(381)	20 ¹ / ₈ "	(511)	3.32	(0.31)	60 ⁷ / ₁₆ "	(1535)	5.79	(0.54
244 GW 3030	3.34	(0.31)	15"	(381)	32 ¹ /8"	(816)	5.60	(0.52)	48 7/16"	(1230)	8.75	(0.81
244 GW 3036	3.97	(0.37)	15"	(381)	38 ¹ / ₈ "	(968)	6.74	(0.63)	42 7/16"	(1078)	10.23	(0.95
244 GW 3040	4.59	(0.43)	15"	(381)	44 ¹ /8"	(1121)	7.88	(0.73)	36 7/16"	(925)	11.71	(1.09
244 GW 4016	2.06	(0.19)	21"	(533)	14 ¹ / ₈ "	(359)	3.14	(0.29)	66 ⁷ / ₁₆ "	(1687)	5.77	(0.54
244 GW 4020	2.93	(0.27)	21"	(533)	20 ¹ / ₈ "	(511)	4.78	(0.44)	60 ⁷ / ₁₆ "	(1535)	7.75	(0.72
244 GW 4030	4.68	(0.44)	21"	(533)	32 ¹ /8"	(816)	8.06	(0.75)	48 7/16"	(1230)	11.71	(1.09
244 GW 4036	5.56	(0.52)	21"	(533)	38 ¹ / ₈ "	(968)	9.70	(0.90)	42 7/16"	(1078)	13.69	(1.2
244 GW 4040 ◊	6.43	(0.60)	21"	(533)	44 ¹ /8"	(1120)	11.34	(1.05)	36 7/16"	(925)	15.67	(1.4
244 GW 4046 ◊	7.31	(0.68)	21"	(533)	50 1/8"	(1273)	12.98	(1.21)	30 7/16"	(773)	17.65	(1.6
244 GW 4050 ◊	8.18	(0.76)	21"	(533)	56 ¹ / ₈ "	(1425)	14.62	(1.36)	24 7/16"	(620)	19.63	(1.8
244 GW 5030 ◊	6.02	(0.56)	27"	(686)	32 ¹ / ₈ "	(816)	10.52	(0.98)	48 7/16"	(1230)	14.69	(1.3
244 GW 5036 ◊	7.14	(0.66)	27"	(686)	38 ¹ / ₈ "	(968)	12.66	(1.18)	42 7/16"	(1078)	17.15	(1.59
244 GW 5040 ◊	8.27	(0.77)	27"	(686)	44 ¹ /8"	(1121)	14.80	(1.38)	36 7/16"	(925)	19.63	(1.8
244 GW 5046 ◊	9.39	(0.87)	27"	(686)	50 1/8"	(1273)	16.94	(1.57)	30 7/16"	(773)	22.11	(2.05
244 GW 5050 ◊	10.52	(0.98)	27"	(686)	56 ¹ / ₈ "	(1425)	19.08	(1.77)	24 7/16"	(620)	24.59	(2.28
244 GW 6030 ◊	7.36	(0.68)	33"	(838)	32 ¹ /8"	(816)	12.98	(1.21)	48 7/16"	(1230)	17.63	(1.64
244 GW 6036 ◊	8.73	(0.81)	33"	(838)	38 ¹ / ₈ "	(968)	15.62	(1.45)	42 7/16"	(1078)	20.61	(1.92
244 GW 6040 ◊	10.11	(0.94)	33"	(838)	44 ¹ /8"	(1121)	18.26	(1.70)	36 7/16"	(925)	23.59	(2.19
244 GW 6046 ◊	11.48	(1.07)	33"	(838)	50 1/8"	(1273)	20.90	(1.94)	30 7/16"	(773)	26.56	(2.4
244 GW 6050 ◊	12.86	(1.20)	33"	(838)	56 ¹ /8"	(1425)	23.54	(2.19)	24 7/16"	(620)	29.54	(2.74

"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.

Meet or exceed 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).

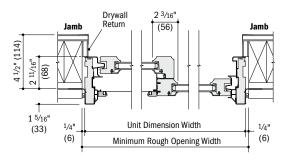
Picture Window Area Specifications

Window Number	Glass Area Sq. Ft./(m²)		Overall Window Area Sq. Ft./(m²)		
244 FX 3030	6.04	(0.56)	8.75	(0.81)	
244 FX 3040	8.50	(0.79)	11.71	(1.09)	
244 FX 3046	9.73	(0.90)	13.19	(1.23)	
244 FX 3050	10.96	(1.02)	14.67	(1.36)	
244 FX 4030	8.50	(0.79)	11.71	(1.09)	
244 FX 4040	11.96	(1.11)	15.67	(1.46)	
244 FX 4046	13.69	(1.27)	17.65	(1.64)	
244 FX 4050	15.42	(1.43)	19.63	(1.82)	
244 FX 4630	9.73	(0.90)	13.19	(1.23)	
244 FX 4640	13.69	(1.27)	17.65	(1.64)	
244 FX 4646	15.67	(1.46)	19.88	(1.85)	
244 FX 4650	17.65	(1.64)	22.11	(2.05)	
244 FX 4930	10.35	(0.96)	13.93	(1.29)	
244 FX 4940	14.55	(1.35)	18.64	(1.73)	
244 FX 4946	16.66	(1.55)	20.99	(1.95)	
244 FX 4950	18.76	(1.74)	23.35	(2.17)	
244 FX 5030	10.96	(1.02)	14.67	(1.36)	
244 FX 5040	15.42	(1.43)	19.63	(1.82)	
244 FX 5046	17.65	(1.64)	22.11	(2.05)	
244 FX 5050	19.88	(1.85)	24.59	(2.28)	
244 FX 5630	12.19	(1.13)	16.15	(1.50)	
244 FX 5640	17.15	(1.59)	21.61	(2.01)	
244 FX 5646	19.63	(1.82)	24.34	(2.26)	
244 FX 5650	22.11	(2.05)	27.06	(2.51)	
244 FX 6030	13.42	(1.25)	17.63	(1.64)	
244 FX 6040	18.88	(1.75)	23.59	(2.19)	
244 FX 6046	21.61	(2.01)	26.56	(2.47)	
244 FX 6050	24.34	(2.26)	29.54	(2.75)	

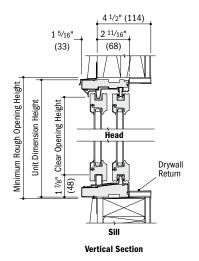
· Dimensions in parentheses are in square meters.

Gliding Window Details

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



Horizontal Section



• Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

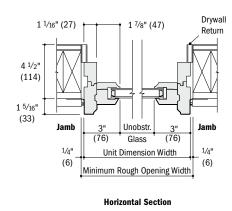
*Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 62-63. Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 Dimensions in parentheses are in millimeters.

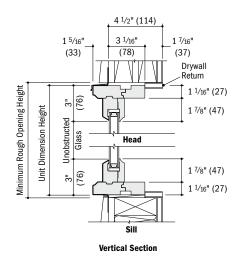
200 Series Gliding Windows

GLIDING WINDOWS

Picture Window Details

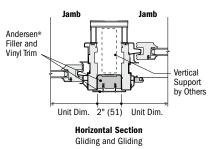
Scale 11/2" (38) = 1'-0" (305) - 1:8





Separate Rough Openings Detail Scale 1¹/2" (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, windows may be installed into separate rough openings having vertical support (by others) in combination with Andersen* exterior filler and exterior vinyl trim.



• Light-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window assembly as shown.

- * 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 62-63.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.

· Dimensions in parentheses are in millimeters.

200 SERIES

NARROLINE® GLIDING PATIO DOORS

8 ---- M



SECTION REFERENCE

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Product Performance	56

CUSTOM SIZING in ¼" (3) increments Dimensions in parentheses are in millimeters.

NARROLINE[®] GLIDING PATIO DOORS

FEATURES

Frame

A For single- or two-panel configurations, the sill has an anodized aluminum track with a stainless steel cap that resists stain. rust and denting.* On four-panel doors, sills have an attractive, water-repellent bakedon finish in a neutral gray color. A thermal barrier reduces conductive heat loss and limits condensation on the inside. The exterior portion of the sill is also anodized aluminum.

B All basic exterior frame members are covered with a rigid vinyl that maintains an attractive appearance while minimizing maintenance

• Wood frame members are treated with a water-repellent preservative for longlasting* protection and performance. Interior frame trim pieces are unfinished pine.

Factory-assembled two-panel doors are available and arrive at the jobsite ready to install. Unassembled doors are also available and require jobsite assembly.

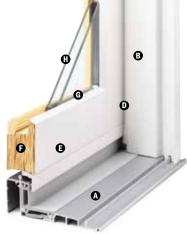
D A flexible vinyl weatherstrip on the head and side jambs provides a positive seal between the frame and panels.

Panel

G The exterior of the wood door panel is protected by a low-maintenance urethane base finish in white, canvas, Sandtone, Terratone, dark bronze or black.

• Laminated veneer lumber panels provide excellent structural stability and energy efficiency.

Panel interior surfaces are unfinished pine, ready for natural stain or paint finish.



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

Flexible Seal



A full-length combination weatherstrip/ interlock system provides a flexible seal at the meeting stile.

Sill

For single- and two-panel doors, sills can be ordered with an attractive water-repellent baked-on finish in a neutral gray color.

Glass

G Panels are silicone bed glazed and finished with an interior wood stop.

 Choose Low-E tempered. Low-E HeatLock[®] tempered, Low-E SmartSun[™] tempered, Low-E SmartSun HeatLock tempered or dual-pane 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 jobsite.

EXTERIOR



Locking System





The unique Andersen® reachout locking system pulls the door panel snugly into the jamb for weathertightness and enhanced security.





Bronze

Naturally occurring variations in grain, color and texture of wood make each door one of a kind.





Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

GLIDING PATIO DOOR HARDWARE OPTIONS" Bold name denotes finish shown.



* Visit andersenwindows.com/warranty for details

** Hardware sold separately.

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

Tribeca and Albany hardware are zinc die cast with powder-coated durable finish. Other hardware is solid forged brass. Mix-and-match interior and exterior style and finish options are available. Bright brass and satin nickel finishes feature a 10-year limited warranty.

ACCESSORIES Sold Separately

Frame

Extension Jambs

Standard jamb depth is 4 $^{9}/_{16}$ " (116). Pine, oak or maple veneer or prefinished white interior extension jambs are available in $^{1}/_{16}$ " (1.5) increments between 5 $^{1}/_{16}$ " (129) and 7 $^{1}/_{8}$ " (181).

Threshold



An oak or maple threshold is available for finishing the interior of the sill.

Ramped Sill Insert



Ramped sills in oak or maple provide smooth transition from interior to exterior and can be used with a retractable insect screen, but not a gliding insect screen. Shown with a 400 Series Frenchwood[®] gliding patio door. Check with local and federal officials to determine if product meets accessibility codes.





An aluminum sill support is designed to lock into a channel under the sill and tie back into the wall. This will offer support to the outermost sill section when needed. Available in neutral gray finish.

Hardware





A six-pin key cylinder lock is available in finishes that coordinate with hardware. This lock allows the gliding door to be locked and unlocked from the exterior.

Auxiliary Foot Lock



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.

Security Sensors

VeriLock® Sensors

VeriLock sensors are available in five colors. See page 6 for details.

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 6 for details.

Insect Screens

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

Gliding Insect Screen



Patented square corner joint construction adds considerable strength to the frame members. The insect screen is available for both two-panel doors and four-panel doors. Gliding insect screens have Delrin® injection-molded bottom rollers with selfcontained leveling adjusters, providing smooth operation. Interior and exterior pulls and latch are provided.

Retractable Insect Screen



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. The retractable insect screen canister is available for two-panel patio doors in our six standard exterior colors. Please note, retractable insect screen track reduces clear opening height by 1" (25)

Grilles

Grilles are available in a variety of configurations and widths. For grille patterns, see page 28.

Sidelights

Stationary units can also be selected for use as sidelights. See size table on page 26 for size options.

Exterior Trim

This product is available with Andersen® exterior trim. See pages 45-50 for details.

CAUTION:

- Painting and staining may cause damage to rigid vinyl and is not recommended.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factorycoated surfaces.
 Do not paint weatherstrip.
- Do not paint weathers
- 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.

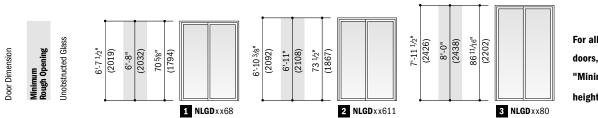
For more information about **glass**, **grilles and insect screens**, see pages 8-9.

For more information about combination designs, product performance, installation instructions and accessories, see pages 51-63 or visit andersenwindows.com.

* Visit andersenwindows.com/warranty for details.
 Andersen patio doors are not intended for use as entrance doors.
 Dimensions in parentheses are in millimeters.
 Delrin is a registered trademark of E.I. du Pont de Nemours and Company.

NARROLINE® GLIDING PATIO DOORS

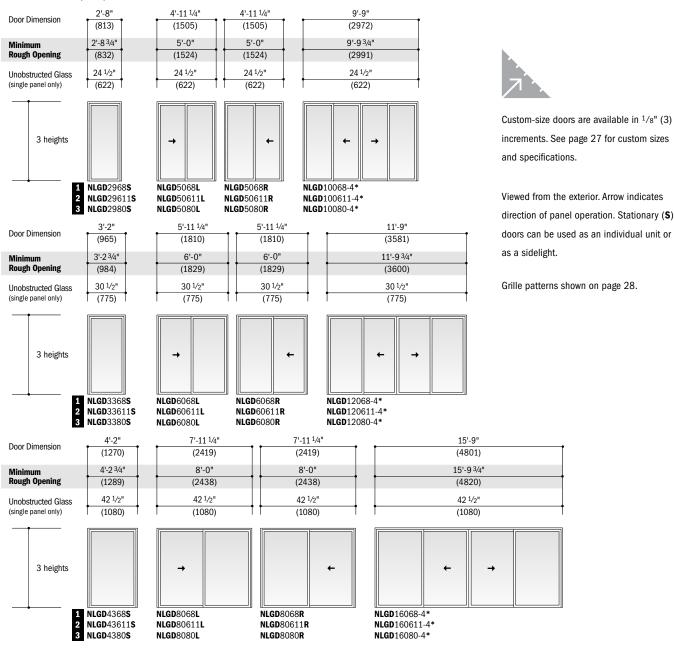
Three Patio Door Heights



For all four-panel gliding patio doors, add ¹/4" (6) to the "Minimum Rough Opening" height dimension.

Table of Narroline[®] Gliding Patio Door Sizes

Scale 1/8" = 1'-0" (1:96)

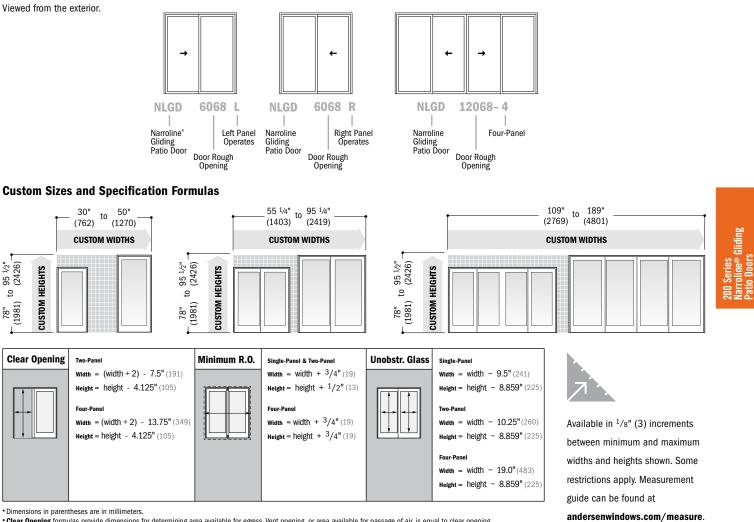


• "Door Dimension" always refers to outside frame to frame dimension.

• "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 62-63 for more details. • Dimensions in parentheses are in millimeters.

*Add $^{1}\!/^{"}$ (6) to the "Minimum Rough Opening" height dimension for four-panel doors.

Order Designation Description



• Clear Opening formulas provide dimensions for determining area available for egress. Vent opening, or area available for passage of air, is equal to clear opening. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobstr. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

Two-Panel & Four-Panel Narroline® Gliding Patio Door Opening and Area Specifications

			Clear Opening in Full Open Position									
Door Number	Clear O Ar Sq. Ft	ea		dth /(mm)		ight /(mm)	Gla Arc Sq. Ft	ea	Ve Ar Sq. Ft	ea	A	ll Door 'ea t./(m²)
NLGD5068	11.58	(1.08)	22 ¹ / ₈ "	(562)	75 ³ /8"	(1915)	24.03	(2.23)	11.58	(1.08)	32.71	(3.04)
NLGD6068	14.72	(1.37)	28 ¹ / ₈ "	(714)	75 ³ /8"	(1915)	29.92	(2.78)	14.72	(1.37)	39.34	(3.66)
NLGD8068	21.00	(1.95)	40 ¹ /8"	(1020)	75 ³ /8"	(1915)	41.69	(3.87)	21.00	(1.95)	52.59	(4.89)
NLGD10068	23.42	(2.18)	44 ³ /4"	(1137)	75 ³ /8"	(1915)	48.08	(4.47)	23.42	(2.18)	64.59	(6.00)
NLGD12068	29.70	(2.76)	56 ³ /4"	(1441)	75 ³ /8"	(1915)	59.84	(5.56)	29.71	(2.76)	77.84	(7.23)
NLGD16068	42.27	(3.93)	80 ³ /4"	(2051)	75 ³ /8"	(1915)	83.36	(7.74)	42.27	(3.93)	104.34	(9.69)
NLGD50611	12.04	(1.12)	22 ¹ /8"	(562)	78 ³ / ₁₆ "	(1986)	25.01	(2.32)	12.04	(1.12)	33.89	(3.15)
NLGD60611	15.31	(1.42)	28 ¹ /8"	(714)	78 ³ / ₁₆ "	(1986)	31.14	(2.89)	15.31	(1.42)	40.76	(3.79)
NLGD80611	21.84	(2.03)	40 ¹ /8"	(1020)	78 ³ / ₁₆ "	(1986)	43.39	(4.03)	21.84	(2.03)	54.49	(5.06)
NLGD100611	24.30	(2.26)	44 ³ /4"	(1137)	78 ³ / ₁₆ "	(1986)	50.04	(4.65)	24.30	(2.26)	66.93	(6.22)
NLGD120611	30.81	(2.86)	56 ³ /4"	(1441)	78 ³ / ₁₆ "	(1986)	62.28	(5.79)	30.81	(2.86)	80.66	(7.49)
NLGD160611	43.85	(4.07)	80 ³ /4"	(2051)	78 ³ / ₁₆ "	(1986)	86.76	(8.06)	43.84	(4.07)	108.12	(10.04)
NLGD5080	14.04	(1.30)	22 ¹ /8"	(562)	91 ³ /8"	(2321)	29.48	(2.74)	14.04	(1.30)	39.29	(3.65)
NLGD6080	17.85	(1.66)	28 ¹ /8"	(714)	91 ³ /8"	(2321)	36.70	(3.41)	17.85	(1.66)	47.25	(4.39)
NLGD8080	25.46	(2.37)	40 ¹ /8"	(1020)	91 ³ /8"	(2321)	51.14	(4.75)	25.46	(2.37)	63.17	(5.87)
NLGD10080	28.40	(2.64)	44 ³ /4"	(1137)	91 ³ /8"	(2321)	58.96	(5.48)	28.40	(2.64)	77.59	(7.21)
NLGD12080	36.01	(3.35)	56 ³ /4"	(1441)	91 ³ / ₈ "	(2321)	73.40	(6.82)	36.01	(3.35)	93.51	(8.69)
NLGD16080	51.24	(4.76)	80 ³ /4"	(2051)	91 ³ /8"	(2321)	102.28	(9.50)	51.24	(4.76)	125.34	(11.65)

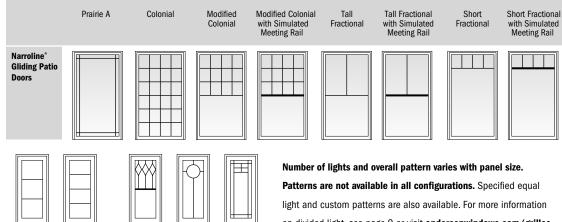
Stationary Narroline® Gliding Patio Door Area Specifications

Door Number	Gla Ari Sq. Ft	ea	Overall Door Area Sq. Ft./(m²)		
NLGD2968	12.02	(1.12)	17.67	(1.64)	
NLGD3368	14.96	(1.39)	20.98	(1.95)	
NLGD4368	20.84	(1.94)	27.60	(2.56)	
NLGD29611	12.51	(1.16)	18.31	(1.70)	
NLGD33611	15.57	(1.45)	21.74	(2.02)	
NLGD43611	21.69	(2.02)	28.60	(2.66)	
NLGD2980	14.74	(1.37)	21.22	(1.97)	
NLGD3380	18.35	(1.71)	25.20	(2.34)	
NLGD4380	25.57	(2.34)	33.16	(3.08)	

• Dimensions in parentheses are in square meters.

NARROLINE® GLIDING PATIO DOORS

Grille Patterns



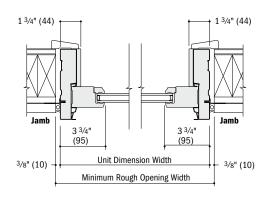
Specified Equal Light Examples

Custom Pattern Examples

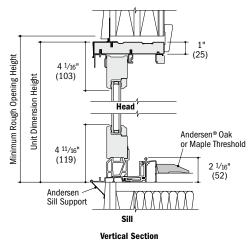
on divided light, see page 9 or visit andersenwindows.com/grilles.

Narroline[®] Gliding Patio Door Details

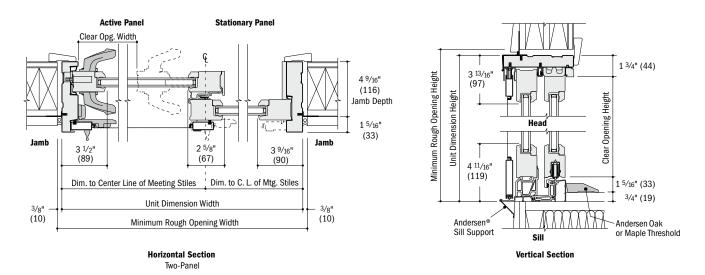
Scale 1¹/2" (38) = 1'-0" (305) - 1:8



Horizontal Section Stationary







• 4 9/16" (116) 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

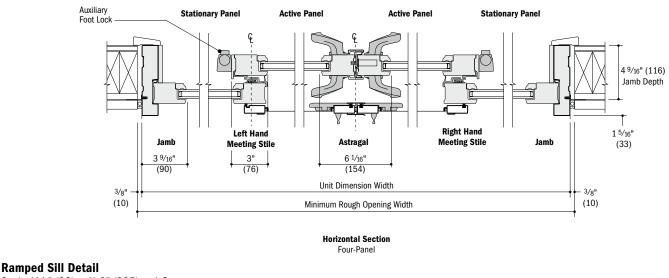
* Rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 62-63.

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

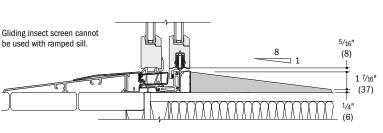
• Dimensions in parentheses are in millimeters.

Narroline[®] Gliding Patio Door Details

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



Scale 11/2" (38) = 1'-0" (305) - 1:8



Vertical Section

Vertical Joining Detail

Scale 11/2" (38) = 1'-0" (305) - 1:8

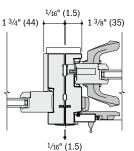
Overall Door Dimension Width

Sum of individual door widths

plus 1/16" (1.5) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).



Horizontal Section Narroline® Gliding to Narroline Gliding

Separate Rough Openings Detail

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

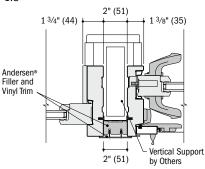
To meet structural requirements

- or to achieve a wider joined appearance, doors may be
- installed into separate rough

openings having vertical support

(by others) in combination with Andersen® exterior filler and

exterior vinvl trim.



Horizontal Section Narroline® Gliding and Narroline Gliding

Vertical Joining Detail – LVL Scale 1¹/2" (38) = 1'-0" (305) - 1:8

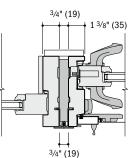
Overall Door Dimension Width

Sum of individual door widths

plus 3/4" (19) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).



Horizontal Section Narroline® Gliding to Narroline Gliding

Andersen does not recommend joining of receiver jamb to receiver jamb. For more joining information, see the combination designs section starting on page 51.

• 4 9/16" (116) 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.

• 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 62-63. • Details are for illustration only and are not intended to represent product installation methods or materials. Refer to

product installation guides at andersenwindows.com.

• Andersen recommends installation of doors into separate rough openings. Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings · Dimensions in parentheses are in millimeters.

NOTES

PERMA-SHIELD[®] GLIDING PATIO DOORS

SECTION REFERENCE

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Specifications	35
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CUSTOM SIZING in ¼" (3) increments Dimensions in parentheses are in millimeters.

PERMA-SHIELD® GLIDING PATIO DOORS

FEATURES

Frame

 The sill has an anodized aluminum track with a stainless steel cap that resists stains, rust and denting: A thermal barrier reduces conductive heat loss and limits condensation on the inside.

③ All basic exterior frame members are covered with a rigid vinyl which maintains an attractive appearance while minimizing maintenance.

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

Factory-assembled two-panel doors are available and arrive at the jobsite ready to install. Unassembled doors are also available and require jobsite assembly.

• A flexible vinyl weatherstrip on the head and side jambs provides a positive seal between the frame and panels.

Panel

G All panel surfaces are covered with a rigid vinyl which maintains an attractive appearance while minimizing maintenance.

• Laminated veneer lumber panels provide excellent structural stability and energy efficiency.

Dual-rollers on door panels provide smooth gliding operation with self-contained leveling adjusters.

Flexible Seal

A full-length combination weatherstrip/ interlock system provides a flexible seal at the meeting stile.



G

Glass

G A high-performing thermoplastic glazing bead features a flexible lip which provides superior weathertightness and long-term durability.

Glass options include:

- Low-E tempered glass
- Low-E HeatLock[®] tempered glass
- Low-E Sun tempered glass
 Low-E SmartSun[™] tempered glass
- Low-E SmartSun HeatLock tempered glass
 Dual-pane 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 jobsite.

Blinds-Between-the-Glass



Blinds-between-the-glass are available for select gliding patio door sizes when ordered with Low-E tempered glass. White ½" (13) aluminum slat blinds come mounted between two panes of insulated glass in a dust-free environment. Blinds are magnetically controlled and can be tilted or raised and lowered using low profile controls. Smooth, simple operation allows for customized light and privacy control. Available in 33611, 5068, 51168 and 61611 door sizes. For more information, contact your Andersen supplier.

EXTERIOR & INTERIOR



HARDWARE FINISHES



Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

GLIDING PATIO DOOR HARDWARE OPTIONS" Bold name denotes finish shown.

NEWBURY®

Polished Chrome Satin Nickel





YUMA[®] Distressed Bronze Distressed Nickel

ENCINO[®] Distressed Bronze Distressed Nickel

Bronze Antique Brass Nickel Bright Brass Brushed Chrome Oil Rubbed Bronze



ANVERS[®] Bright Brass Oil Rubbed Bronze Satin Nickel



COVINGTON[™] Antique Brass Bright Brass Oil Rubbed Bronze



WHITMORE® Antique Brass Bright Brass Oil Rubbed Bronze Satin Nickel

Ì

ALBANY

Black

Gold Dust

Stone

White



TRIBECA[®] Stone White

* Visit andersenwindows.com/warranty for details

** Hardware sold separately.

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

Tribeca and Albany hardware are zinc die cast with powder-coated durable finish. Other hardware is solid forged brass. Mix-and-match interior and exterior style and finish options are available. Bright brass and satin nickel finishes feature a 10-year limited warranty.

Locking System Reachout Locking Hardware



The unique Andersen[®] reachout locking system pulls the door panel snugly into the jamb for weathertightness and enhanced security.

Stormwatch

Performance Grade (PG) Upgrade

Select Perma-Shield® gliding patio doors sizes are available with PG upgrades. Heavy-duty rollers and reinforced frame and panel components allow standard glass units to achieve higher performance ratings. Performance Grade (PG) Ratings are more comprehensive than Design Pressure (DP) Ratings for measuring product performance. For more information, contact your Andersen supplier. For up-to-date performance information of individual products, visit **andersenwindows.com**.

Visit andersenwindows.com/coastal for more information on Stormwatch Protection.

For more information about glass, grilles and insect screens, see pages 8-9.

For more information about combination designs, product performance, installation instructions and accessories, see pages 51-63 or visit andersenwindows.com.

ACCESSORIES Sold Separately

Frame

Extension Jambs

Standard jamb depth is 4 $9{\rm fs}^{\rm m}$ (116). Pine, oak or maple veneer or prefinished white interior extension jambs are available in $1{\rm M}{\rm 6}^{\rm m}$ (1.5) increments between 5 ${\rm M}{\rm 6}^{\rm m}$ (129) and 7 ${\rm M}{\rm m}$ (181).

Threshold



An oak or maple threshold is available for finishing the interior of the sill.

Ramped Sill Insert



Ramped sills in oak or maple provide smooth transition from interior to exterior and can be used with a retractable insect screen, but not a gliding insect screen. Shown with a 400 Series Frenchwood® gliding patio door. Check with local and federal officials to determine if product meets accessibility codes.

Sill Support



An aluminum sill support is designed to lock into a channel under the sill and tie back into the wall. This will offer support to the outermost sill section when needed. Available in neutral gray finish.

Hardware Exterior Keyed Lock



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

Auxiliary Foot Lock



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.

Security Sensors

VeriLock® Sensors

VeriLock sensors are available in five colors. See page 6 for details.

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 6 for details.

Insect Screens

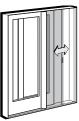
All insect screens have a long-lasting* fiberglass screen mesh with a charcoal finish and are color-matched to the exterior of the door unless otherwise specified.

Gliding Insect Screen



Patented square corner joint construction adds considerable strength to the frame members. The insect screen is available for both two-panel doors and four-panel doors. Gliding insect screens have Delrin[®] injection-molded bottom rollers with selfcontained leveling adjusters, providing smooth operation. Interior and exterior pulls and latch are provided.

Retractable Insect Screen



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. The retractable insect screen canister is available for two-panel patio doors in white, canvas, Sandtone, Terratone, dark bronze and black. Please note, retractable insect screen track reduces clear opening height by 1" (25).

Grilles

Grilles are available in a variety of configurations and widths. For grille patterns, see page 35.

Sidelights

Stationary units can also be selected for use as sidelights. See size table on page 34 for size options.

Exterior Trim

This product is available with Andersen exterior trim. See pages 45-50 for details.

CAUTION:

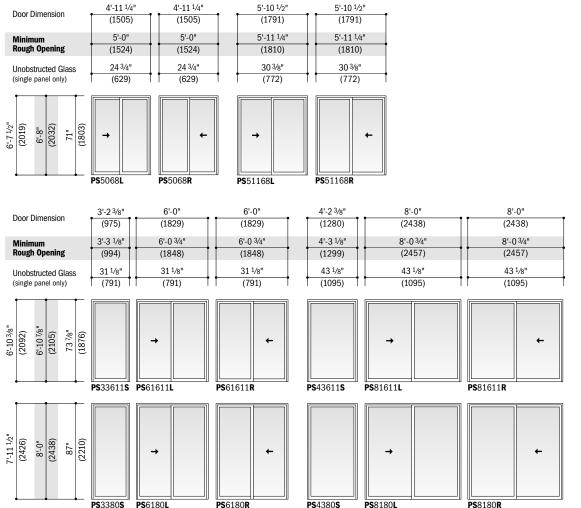
- Painting and staining may cause damage to rigid vinyl and is not recommended.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

*Visit andersenwindows.com/warranty for details. Andersen patio doors are not intended for use as entrance doors. Dimensions in parentheses are in millimeters. "Delrin" is a registered trademark of E.I. du Pont de Nemours and Company.

PERMA-SHIELD® GLIDING PATIO DOORS

Table of Perma-Shield® Gliding Patio Door Sizes

Scale 1/8" = 1'-0" (1:96)

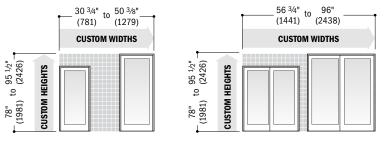


Custom-size doors are available in ¹/s" (3) increments. See below for custom sizes and specifications.

Viewed from the exterior. Arrow indicates direction of panel operation. Stationary (**S**) doors can be used as an individual unit or as a sidelight. Grille patterns shown on page 35.

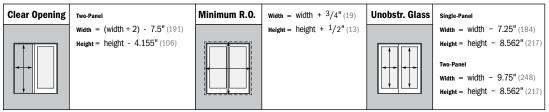
 "Door Dimension" always refers to outside frame to frame dimension.
 "Minimum Rough Opening" dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See pages 62-63 for more details.
 "Dimensions in parentheses are in millimeters.
 "For doors with blinds between the glass, unobstructed glass width dimension is reduced.

Custom Sizes and Specification Formulas



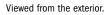


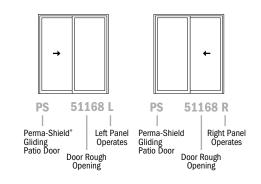
Available in 1/8" (3) increments between minimum and maximum widths and heights shown. Some restrictions apply. Measurement guide can be found at **andersenwindows.com/measure**.



 Dimensions in parentheses are in millimeters.
 Clear Opening formulas provide dimensions for determining area available for egress. Vent opening, or area available for passage of air, is equal to clear opening. Minimum R.0. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobstr. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

Order Designation Description



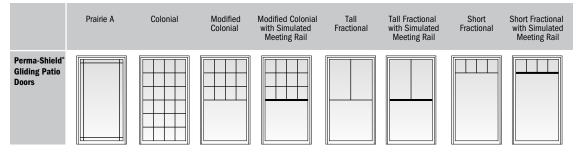


Two-Panel Perma-Shield[®] Gliding Patio Door Opening and Area Specifications

			Clear C	Opening in	Full Open I	Position						
Door Number	Clear O Are Sq. Ft.	ea 🖉		dth ;/ (mm)		ight s/(mm)	Gla Ar Sq. Ft	ea	Ve Are Sq. Ft		Overall Door Area Sq. Ft./(m²)	
PS 5068	11.64	(1.08)	22 ¹ /8"	(562)	75 ³ / ₄ "	(1924)	24.90	(2.31)	11.64	(1.08)	32.71	(3.04)
PS 51168	14.60	(1.36)	27 ³ / ₄ "	(705)	75 ³ / ₄ "	(1924)	30.40	(2.82)	14.60	(1.36)	38.92	(3.62)
PS 61611	15.56	(1.45)	28 1/2"	(724)	78 ⁵ / ₈ "	(1997)	32.40	(3.01)	15.56	(1.45)	41.19	(3.83)
PS 81611	22.11	(2.05)	40 ¹ / ₂ "	(1029)	78 ⁵ / ₈ "	(1997)	44.20	(4.11)	22.11	(2.05)	54.92	(5.10)
PS 6180	18.16	(1.69)	28 ¹ / ₂ "	(724)	91 ³ / ₄ "	(2330)	37.60	(3.49)	18.16	(1.69)	47.75	(4.44)
PS 8180	25.80	(2.40)	40 ¹ / ₂ "	(1029)	91 ³ /4"	(2330)	52.10	(4.84)	25.80	(2.40)	63.67	(5.92)

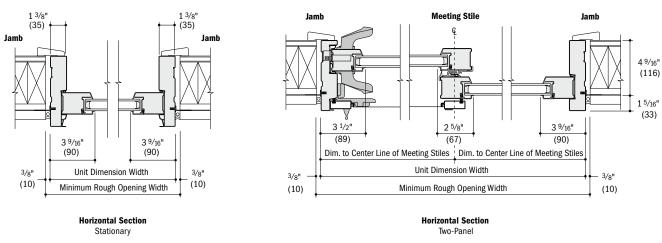
• Dimensions in parentheses are in millimeters or square meters.

Grille Patterns



Perma-Shield® Gliding Patio Door 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.
 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 62-63.
 Details are for illustration on pages are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 Dimensions in parentheses are in millimeters.

Stationary Perma-Shield® Gliding Patio Door Area Specifications

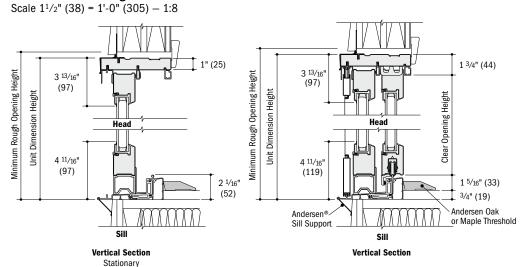
Door Number	Gla Ar Sq. Ft	ea	Overal Ar Sq. Ft	ea
PS 33611	16.00	(1.49)	21.95	(2.04)
PS 43611	22.10	(2.05)	28.82	(2.68)

Dimensions in parentheses are in square meters.

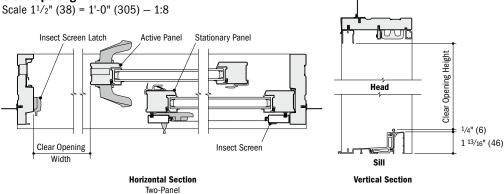
light, see page 9 or visit andersenwindows.com/grilles.

PERMA-SHIELD® GLIDING PATIO DOORS

Perma-Shield® Gliding Patio Door Details

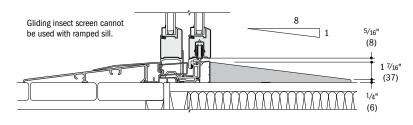


Clear Opening Details



Ramped Sill Detail

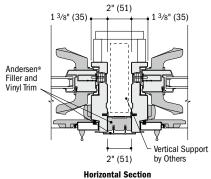
Scale 11/2" (38) = 1'-0" (305) - 1:8



Vertical Section

Separate Rough Openings Detail

Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8 To meet structural requirements or to achieve a wider joined appearance, doors may be installed into separate rough openings having vertical support (by others) in combination with Andersen* exterior filler and exterior vinyl trim.



Perma-Shield[®] Gliding and Perma-Shield Gliding

Vertical Joining Detail Scale 1¹/₂" (38) = 1'-0" (305) - 1:8

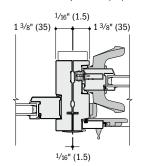
Overall Door Dimension Width

Sum of individual door widths

plus 1/16" (1.5) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).



Horizontal Section Perma-Shield[®] Gliding to Perma-Shield Gliding

Vertical Joining Detail – LVL

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

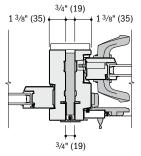
Overall Door Dimension Width

Sum of individual door widths

plus 3/4" (19) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).



Horizontal Section Perma-Shield[®] Gliding to Perma-Shield Gliding

Andersen does not recommend joining of receiver jamb to receiver jamb. For more joining information, see the combination designs section starting on page 51.

• Light-colored areas are parts included with door. Darkcolored areas are additional Andersen* parts required to complete door assembly as shown.

• 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 62-63. • Details are for illustration only and are not intended to

 Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.
 Andersen recommends installation of doors into separate rough openings. Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.
 Dimensions in parentheses are in millimeters.

200 SERIES

HINGED INSWING PATIO DOORS



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HINGED INSWING PATIO DOORS

FEATURES

Frame

(2) A unique anodized aluminum sill design controls water and helps funnel it away from the door to minimize water infiltration. Also available with optional bronze anodized sill.

 Exterior frame is clad with aluminum, which maintains an attractive appearance while minimizing maintenance. Frame is predrilled for convenient installation. Specially designed plugs cover the installation screws for a clean appearance.

A preservative-treated wood subframe with a frame end protector at the sill resists rot and provides long-lasting⁺ protection and performance.

O Durable Santoprene[®] weatherstrip on the frame provides effective protection against water and air infiltration.

G Unique sweep/sill interface completes the perimeter protection and allows for easier operation of the door and limits weatherstrip friction between the sweep and sill.

Panel

 Durable low-maintenance interior and exterior resist weather and rot. Sturdy fiberglass construction provides longlasting* performance. Insulated bottom rail enhances energy efficiency.

G Traditional French door styling features a tall bottom rail and wide stiles. Panel is built to tolerances within $1/32^{\text{H}}$ (1) for smooth operation and maximum durability.

() Unique corner keys in the panel allow for tight, attractive corners.



Effective Weatherstrip



Durable rubberized Santoprene® gasket-type weatherstrip is applied to the frame (sides and head jamb) and engages when the door panel is closed. The panel has a sweep system at the sill that completes the perimeter protection.

Adjustable Hinges

Adjustable hinges help provide a weathertight seal and smooth operation. Available in

antique brass, bright brass, satin nickel, oil rubbed bronze and white.

Glass

• Panels are silicone bed glazed for maximum weather resistance.

- Glass options include:
- Low-E tempered glass
- Low-E HeatLock[®] tempered glass
- Low-E Sun tempered glass
- Low-E SmartSun[™] tempered glass
- Low-E SmartSun HeatLock tempered glass
- Dual-pane tempered glass
- Duai-parie terripereu grass

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 jobsite.



HARDWARE FINISHES



Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.



* Visit andersenwindows.com/warranty for details.

** Hardware sold separately.

"Santoprene" is a registered trademark of Advanced Elastomer Systems, L.P.

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

Locking System Hook Deadbolt



Hook deadbolt lock comes pre-installed, reducing installation time. The mortised lock and hook design provides strength and added security compared to bored locks with standard deadbolts. Multi-point locks are standard on 7'-6" (2286) and 8'-0" (2438) height doors. Multi-point locks can be ordered for 6'-8" (2032) and 6'-11" (2108) doors as an option. Contact your Andersen supplier for availability.

INTE	ERI	OR
White		

Tribeca and Albany hardware are zinc die cast with powder-coated durable finish. Other hardware is solid forged brass. Mix-and-match interior and exterior style and finish options are available. Bright brass and satin nickel finishes feature a 10-year limited warranty. Dimensions in parentheses are in millimeters.

Jamb Depth

Choose either a 6 $^{9/16"}$ (167) or 4 $^{9/16"}$ (116) jamb depth. Also available with accessible door.



6 9/16" (167) Jamb Depth



4 9/16" (116) Jamb Depth

Sill

For an optional look, a bronze anodized sill is also available.

Accessible Door



Andersen offers a single-panel accessible door that is 3'-2 '/a" (968) wide and includes a low-threshold sill [1/2" (51) high]. Bottom rail height is 10 1/4" (260). Available in bronze anodized finish only. Low threshold sill is not available for other door widths.

ACCESSORIES Sold Separately

Frame

Extension Jambs

Standard jamb depth is 4 $9/_{16}$ " (116). A 6 $9/_{16}$ " (167) jamb depth is also available. Prefinished white interior extension jambs available in $\frac{1}{16}$ " (1.5) increments between 5 $\frac{1}{16}$ " (129) and 7 $\frac{1}{8}$ " (181). Interior extension jambs on inswing units will restrict the full opening of the door. These extension jambs can also be added to 6 $9/_{16}$ " (167) jambs.

Hardware

Exterior Keyed Lock



Handle Extension



Extends interior door handle an additional 1" (25) from the door panel to accommodate interior blinds or shades. 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 hardware.

Strike Plate Extensions

Bright brass, antique brass, polished chrome, oil rubbed bronze, brushed chrome and satin nickel strike plate extensions are available for the following wall thicknesses: $5 \, ^{1}/_{4}$ " (133), $6 \, ^{9}/_{16}$ " (167) and $7 \, ^{1}/_{8}$ " (181).

Construction Lock



This hardware can be used on all Andersen[®] hinged doors to help secure the jobsite during the construction phase of the project. It features an undersized escutcheon plate, which makes on-site finishing easier. Shown on a 400 Series Frenchwood[®] hinged patio door.

Security Sensors

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 6 for details.

Insect Screens

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

Gliding Insect Screen



Available for two-panel active-stationary doors. Features Delrin[®] material injection molded bottom rollers with self-contained leveling adjusters.

Hinged Insect Screens



Available for single-panel hinged doors and two-panel active-passive doors.

Grilles

Grilles are available in a variety of configurations and widths. For grille patterns, see page 43.

Exterior Trim

This product is available with Andersen exterior trim. See pages 45-50 for details.

CAUTION:

- Painting and staining may cause damage to rigid vinyl and is not recommended.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.
- 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.

For more information about **glass**, **grilles and insect screens**, see pages 8-9.

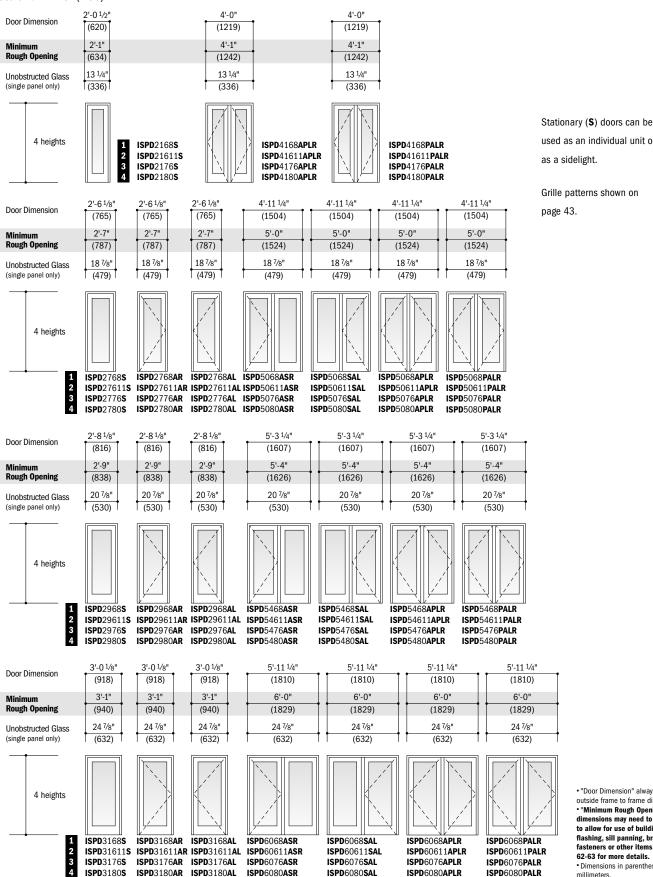
For more information about combination designs, product performance, installation instructions and accessories, see pages 51-63 or visit andersenwindows.com.

*Visit andersenwindows.com/warranty for details. Andersen patio doors are not intended for use as entrance doors. Dimensions in parentheses are in millimeters. *Delrin* is a registered trademark of E.I. du Pont de Nemours and Company.

HINGED INSWING PATIO DOORS

Table of Hinged Inswing Patio Door Sizes

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



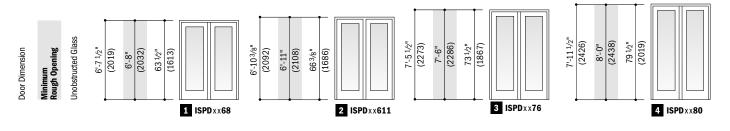
used as an individual unit or as a sidelight.

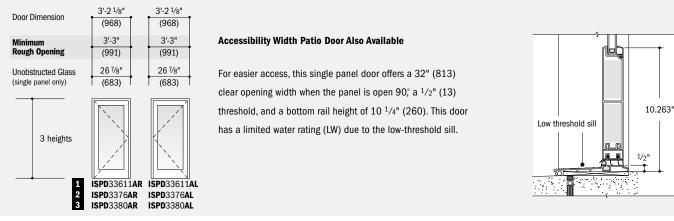
Grille patterns shown on page 43.

> "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 62-63 for more details. · Dimensions in parentheses are in millimeters.

200 SERIES

Four Patio Door Heights

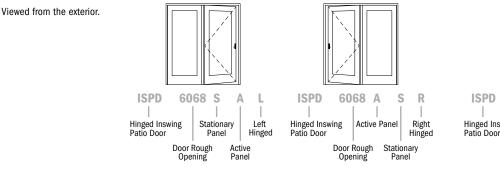


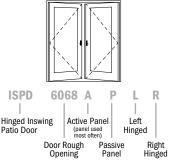


• "Door Dimension" always refers to outside frame to frame dimension.

• "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 62-63 for more details. • Dimensions in parentheses are in millimeters.

Order Designation Description





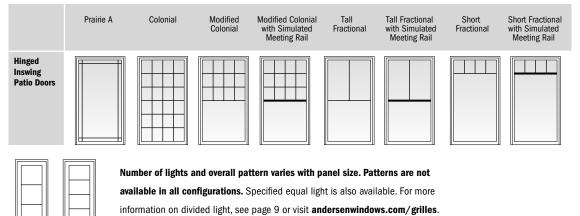
HINGED INSWING PATIO DOORS

Hinged Inswing Patio Door Opening and Area Specifications

2	Number of	~ ~		00000		ear Openin		ns							
Door Number	Panels in Open Position*	Clear O Ar	ea	Wi	n Position dth s/(mm)	Full Oper Wie	dth		ight	Gla Ar Sq. Ft	ea	Ve Are	ea	Ar	
ISPD2768	1	Sq. Ft 13.52	(1.26)	25 3/8"	(644)	Inches 27 9/16"	(701)	76 ³ / ₄ "	(1949) (1949)	8.32	./(III-) (0.77)	Sq. Ft 13.52	(1.26)	16.61	t./(m²) (1.54
SPD2968	1	14.58	(1.36)	27 ³ /8"	(695)	29 ⁹ / ₁₆ "	(752)	76 ³ / ₄ "	(1949)	9.20	(0.85)	14.58	(1.36)	17.72	(1.65
ISPD3168	1	16.71	(1.55)	31 3/8"	(797)	33 ⁹ / ₁₆ "	(853)	76 ³ / ₄ "	(1949)	10.96	(1.02)	16.71	(1.55)	19.93	(1.85
SPD4168	2	21.87	(2.03)	41"	(1042)	45 ¹ / ₂ "	(1156)	76 ³ / ₄ "	(1949)	11.67	(1.02)	21.87	(2.03)	26.50	(2.46
SPD4168	1	10.52	(0.98)	19 3/4"	(501)	43 /2 21 ¹⁵ / ₁₆ "	(558)	76 ³ / ₄ "	(1949)	11.67	(1.08)	10.52	(0.98)	26.50	(2.4
SPD5068	2	27.87	(2.59)	52 ¹ / ₄ "	(1328)	56 ³ / ₄ "	(1441)	76 ³ / ₄ "	(1949)	16.63	(1.55)	27.87	(2.59)	32.71	(3.04
SPD5068	1	13.52	(1.26)	25 ³ / ₈ "	(1020)	27 ⁹ / ₁₆ "	(701)	76 ³ / ₄ "	(1949)	16.63	(1.55)	13.52	(1.26)	32.71	(3.0
SPD5468	2	30.00	(2.79)	25 78 56 1/4"	(1430)	60 ³ / ₄ "	(1543)	76 ³ / ₄ "	(1949)	18.39	(1.71)	30.00	(2.79)	34.92	(3.2
SPD5468	1	14.58	(1.36)	27 ³ / ₈ "	(695)	29 ⁹ / ₁₆ "	(752)	76 ³ / ₄ "	(1949)	18.39	(1.71)	14.58	(1.36)	34.92	(3.2
SPD6068	2	34.26	(3.18)	64 1/4"	(1633)	68 ³ / ₄ "	(1746)	76 ³ / ₄ "	(1949)	21.92	(2.04)	34.26	(3.18)	39.34	(3.6
SPD6068	1	16.71	(1.55)	31 ³ / ₈ "	(1000)	33 ⁹ / ₁₆ "	(853)	76 ³ / ₄ "	(1949)	21.92	(2.04)	16.71	(1.55)	39.34	(3.6
SPD27611	1	14.02	(1.30)	25 ³ / ₈ "	(644)	27 ⁹ / ₁₆ "	(701)	79 5/8"	(2022)	8.69	(0.81)	14.02	(1.30)	17.21	(1.6
SPD29611	1	15.13	(1.41)	27 ³ / ₈ "	(695)	29 ⁹ / ₁₆ "	(752)	79 5/8"	(2022)	9.61	(0.89)	15.13	(1.41)	18.36	(1.0
SPD31611	1	17.34	(1.61)	31 ³ / ₈ "	(797)	33 ⁹ / ₁₆ "	(853)	79 5/8"	(2022)	11.45	(1.06)	17.34	(1.61)	20.65	(1.9
SPD33611**	1	18.68	(1.74)	33 3/8"	(847)	35 ⁹ / ₁₆ "	(904)	80 5/8"	(2022)	11.45	(1.00)	18.68	(1.74)	21.79	(2.0
SPD41611	2	22.69	(2.11)	41"	(1042)	45 ¹ / ₅ "	(1156)	79 5/8"	(2022)	12.20	(1.13)	22.69	(2.11)	27.46	(2.5
SPD41611	1	10.91	(2.01)	19 ³ / ₄ "	(501)	21 ¹⁵ / ₁₆ "	(558)	79 5/8"	(2022)	12.20	(1.13)	10.91	(1.01)	27.46	(2.5
SPD50611	2	28.90	(2.69)	52 ¹ / ₄ "	(1328)	56 ³ / ₄ "	(1441)	79 5/8"	(2022)	17.38	(1.62)	28.91	(2.69)	33.89	(3.1
SPD50611	1	14.02	(1.30)	25 ³ / ₈ "	(1020)	27 ⁹ / ₁₆ "	(701)	79 5/8"	(2022)	17.38	(1.62)	14.02	(1.30)	33.89	(3.1
SPD54611	2	31.12	(2.89)	56 ¹ / ₄ "	(1430)	60 ³ / ₄ "	(1543)	79 5/8"	(2022)	19.23	(1.79)	31.12	(2.89)	36.18	(3.3
SPD54611	1	15.13	(1.41)	27 ³ / ₈ "	(695)	29 ⁹ / ₁₆ "	(752)	79 5/8"	(2022)	19.23	(1.79)	15.13	(1.41)	36.18	(3.3
SPD60611	2	35.55	(3.30)	64 ¹ / ₄ "	(1633)	68 ³ / ₄ "	(1746)	79 5/8"	(2022)	22.91	(2.13)	35.55	(3.30)	40.76	(3.7
SPD60611	1	17.34	(1.61)	31 ³ / ₈ "	(797)	33 ⁹ / ₁₆ "	(853)	79 5/8"	(2022)	22.91	(2.13)	17.34	(1.61)	40.76	(3.7
SPD2776	1	15.28	(1.42)	25 ³ / ₈ "	(644)	27 ⁹ / ₁₆ "	(701)	86 3/4"	(2203)	9.63	(0.89)	15.28	(1.42)	18.70	(1.7
SPD2976	1	16.48	(1.53)	27 3/8	(695)	29 9/ ₁₆ "	(752)	86 ³ / ₄ "	(2203)	10.65	(0.99)	16.48	(1.53)	19.95	(1.8
SPD3176	1	18.89	(1.76)	31 3/8"	(797)	33 ⁹ / ₁₆ "	(853)	86 ³ / ₄ "	(2203)	12.69	(1.18)	18.89	(1.76)	22.43	(2.0
SPD3376**	1	20.33	(1.89)	33 ³ /8"	(847)	35 ⁹ / ₁₆ "	(904)	87 ³ / ₄ "	(2229)	12.69	(1.18)	20.33	(1.89)	23.68	(2.2
SPD4176	2	24.72	(2.29)	41"	(1042)	45 ¹ / ₅ "	(1156)	86 ³ / ₄ "	(2203)	13.51	(1.26)	24.72	(2.30)	29.83	(2.7
SPD4176	1	11.89	(1.11)	19 ³ / ₄ "	(501)	21 15/16"	(558)	86 ³ / ₄ "	(2203)	13.51	(1.26)	11.89	(1.11)	29.83	(2.7
SPD5076	2	31.50	(2.93)	52 1/4"	(1328)	56 ³ / ₄ "	(1441)	86 ³ / ₄ "	(2203)	19.25	(1.79)	31.50	(2.93)	36.83	(3.4
SPD5076	1	15.28	(1.42)	25 ³ / ₈ "	(1020)	27 ⁹ / ₁₆ "	(701)	86 ³ / ₄ "	(2203)	19.25	(1.79)	15.28	(1.42)	36.83	(3.4
SPD5476	2	33.91	(3.15)	56 ¹ / ₄ "	(1430)	60 ³ / ₄ "	(1543)	86 ³ / ₄ "	(2203)	21.29	(1.98)	33.91	(3.15)	39.31	(3.6
SPD5476	1	16.48	(1.53)	27 ³ / ₈ "	(695)	29 ⁹ / ₁₆ "	(752)	86 ³ / ₄ "	(2203)	21.29	(1.98)	16.48	(1.53)	39.31	(3.6
SPD6076	2	38.73	(3.60)	64 ³ / ₈ "	(1633)	68 ³ / ₄ "	(1746)	86 ³ / ₄ "	(2203)	25.37	(2.36)	38.73	(3.60)	44.28	(4.1
SPD6076	1	18.89	(1.76)	31 3/8"	(1000)	33 ⁹ / ₁₆ "	(853)	86 ³ / ₄ "	(2203)	25.37	(2.36)	18.90	(1.76)	44.28	(4.1
SPD2780	1	16.33	(1.52)	25 ³ / ₈ "	(644)	27 ⁹ / ₁₆ "	(701)	92 ³ / ₄ "	(2356)	10.41	(0.97)	16.33	(1.52)	19.96	(1.8
SPD2980	1	17.62	(1.64)	27 ³ / ₈ "	(695)	29 ⁹ / ₁₆ "	(752)	92 ³ / ₄ "	(2356)	11.52	(1.07)	17.62	(1.64)	21.29	(1.9
SPD3180	1	20.20	(1.88)	31 3/8"	(797)	33 ⁹ / ₁₆ "	(853)	92 ³ / ₄ "	(2356)	13.72	(1.28)	20.20	(1.88)	23.94	(2.2
SPD3380**	1	21.72	(2.02)	33 ³ /8"	(847)	35 ⁹ / ₁₆ "	(904)	93 ³ / ₄ "	(2381)	13.72	(1.28)	21.72	(2.02)	25.26	(2.3
SPD4180	2	26.43	(2.46)	41"	(1042)	45 1/5"	(1156)	92 ³ / ₄ "	(2356)	14.62	(1.36)	26.43	(2.46)	31.83	(2.9
SPD4180	1	12.71	(1.18)	19 ³ / ₄ "	(501)	21 15/16"	(558)	92 ³ / ₄ "	(2356)	14.62	(1.36)	12.71	(1.81)	31.83	(2.9
SPD5080	2	33.68	(3.13)	52 ¹ / ₄ "	(1328)	56 ³ / ₄ "	(1441)	92 ³ / ₄ "	(2356)	20.82	(1.94)	33.68	(3.13)	39.29	(3.6
SPD5080	1	16.33	(1.52)	25 ³ / ₈ "	(1320)	27 ⁹ / ₁₆ "	(701)	92 ³ / ₄ "	(2356)	20.82	(1.94)	16.33	(1.52)	39.29	(3.6
SPD5480	2	36.25	(3.37)	56 ¹ / ₄ "	(1430)	60 ³ / ₄ "	(1543)	92 ³ / ₄ "	(2356)	23.03	(2.14)	36.25	(3.37)	41.95	(3.9
SPD5480	1	17.62	(1.64)	27 ³ / ₈ "	(695)	29 ⁹ / ₁₆ "	(752)	92 ³ / ₄ "	(2356)	23.03	(2.14)	17.62	(1.64)	41.95	(3.9
SPD6080	2	41.40	(3.85)	64 ¹ / ₄ "	(1633)	68 ³ / ₄ "	(1746)	92 ³ / ₄ "	(2356)	27.44	(2.55)	41.40	(3.85)	47.25	(4.3
SPD6080	1	20.20	(1.88)	31 ³ / ₈ "	(1033)	33 ⁹ / ₁₆ "	(853)	92 ³ / ₄ "	(2356)	27.44	(2.55)	20.20	(1.88)	47.25	(4.3

Dimensions in parentheses are in millimeters or square meters.
*For two-panel active-passive or passive-active doors with only one panel open, clear opening is based on the active panel open and the passive panel closed.
*For easier access, a special option is available that offers a 32" (813) clear opening width at 90° and a 1/2" (13) threshold. Contact your Andersen' supplier for availability.

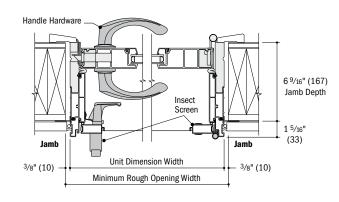
Grille Patterns



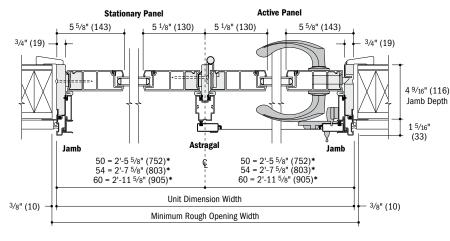
Specified Equal Light Examples

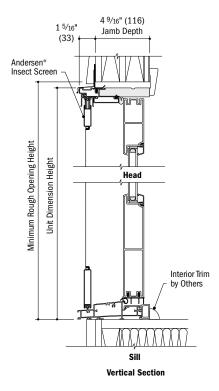
Hinged Inswing Patio Door Details - 4 9/16" (116) and 6 9/16" (167) Jamb Depth

Scale 1¹/2" (38) = 1'-0" (305) - 1:8









Horizontal Section



• 4 9/16" (116) and 6 9/16" (167) 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

• 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 62-63.

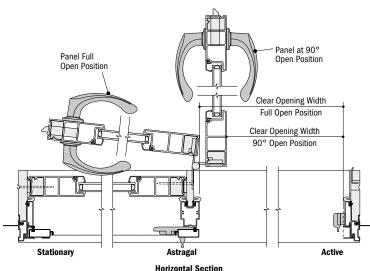
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

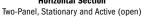
· Dimensions in parentheses are in millimeters. *Dimensions indicate location of astragal centerline

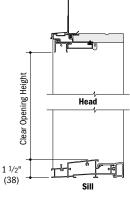
HINGED INSWING PATIO DOORS

Clear Opening Details

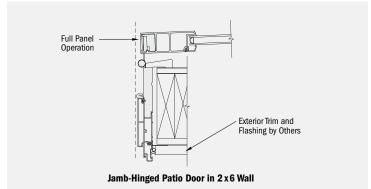
Scale $1^{1/2}$ " (38) = 1'-0" (305) - 1:8







Vertical Section



Vertical Joining Detail – LVL Scale 1¹/2" (38) = 1'-0" (305) - 1:8

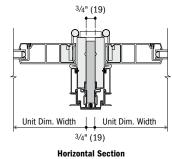
Overall Door Dimension Width

Sum of individual door widths

plus 3/4" (19) for each join.

Overall Rough Opening Width

Overall door width plus 3/4" (19).

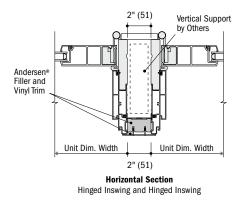


Hinged Inswing to Hinged Inswing

For more joining information, see the combination designs section starting on page 51.

Separate Rough Openings Detail Scale 11/2" (38) = 1'-0" (305) - 1:8

To meet structural requirements or to achieve a wider joined appearance, doors may be installed into separate rough openings having vertical support (by others) in combination with Andersen® exterior filler and exterior vinyl trim.



· Light-colored areas are parts included with door. Dark-colored areas are additional Andersen* parts required to complete door assembly as shown.

* 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 62-63.

• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com • Andersen recommends installation of doors into separate rough openings. Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings. • Dimensions in parentheses are in millimeters.

WINDOW & DOOR EXTERIOR TRIM

SECTION REFERENCE

Exterior Tri

3 ½" & 4 ½" Flat Casing Details	48
Brick Mould Detail	49
Sill Nose Detail	49
Decorative Drip Cap Detail	50
2" & 3 %" Cornice Details	50
Mull Cover Detail	50

EXTERIOR TRIM

FEATURES



White trim with Terratone window

PROFILES



2" (51) BRICK MOULD Dove gray trim with Terratone window



3 1/2" (89) Flat Casing Dark bronze trim with white window



DER

NNOVATION

A For exceptional long-lasting^{*} performance,

exterior trim is made from Fibrex® material or

high-density urethane with low-maintenance

B Sill nose profile, made from Fibrex material,

• Rigid vinyl exterior trim attachment strips

Our Fibrex material is an environmentally smart

composite that contains 40% pre-consumer

reclaimed wood fiber by weight.

An online trim visualizer, installation

andersenwindows.com/exteriortrim.

guides and videos are available at

Visualizer & Video

(field-applied) allow the trim to be securely

D Trim surrounds are assembled with corner keys and stainless steel fasteners

is placed at the sill for a traditional look.

exterior finishes.

fastened to the home.

for stability and strength.

4 ¹/2" **(114) Flat Casing** Canvas trim with forest green window

Exterior Trim System

Easier Installation

- Installs independently of water management system
- No nail holes to fill
- No visible fasteners
- No painting

Profiles

Exterior trim is available in four profiles made from our Fibrex material. Profiles include $3 \frac{1}{2}$ " (89) flat casing, $4 \frac{1}{2}$ " (114) flat casing, 2" (51) brick mould and sill nose for the bottom trim piece.

Thick trim profiles overlap the window frame (as shown to the left) 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.

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 $\frac{5}{2}$ " (92) cornice are made from highly durable urethane material. See head trim options on next page.

Specialty Trim



Made of highly durable factory-finished urethane material for selected shapes. Contact your Andersen supplier for availability.



Trim can match or complement your window and door colors to create a wide range of combinations.



* Visit andersenwindows.com/warranty for details

Dimensions in parentheses are in millimeters.

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

Installation Options

Preassembled Trim Surrounds

Factory-assembled surrounds install quickly and eliminate measuring, cutting, mitering and filling nail holes.



Precut Kits

Knock down kits include precut and predrilled trim with all the necessary components for on-site assembly for windows.



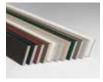
Individual Trim Components

13' (3962) factoryfinished trim lineals, end caps, corner keys, fasteners, metal drip caps and field attachment strips allow for field fabrication and assembly.



ACCESSORIES Sold Separately

Fibrex® Trim Board



Andersen offers a 3 $\frac{1}{2}$ " (89) wide by $\frac{3}{4}$ " (19) thick cellular Fibrex trim board in 10' (3048) lengths. Available in the same 11 colors as the exterior trim system, this solid trim board can be ripped to size and can be fastened using nails or screws.

Coil Stock



Factory-finished in any of our 11 exterior trim colors, our aluminum coil stock allows you to form your own profiles in the field. Made from .018" thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Color-matched stainless steel trim nails are also available and can be ordered in 1 lb/.454 kg boxes.

HEAD TRIM OPTIONS



DECORATIVE DRIP CAP Shown with 3 ¹/2" (89) flat casing in red rock trim with Sandtone window



2" (51) CORNICE Shown with $3^{1/2}$ " (89) flat casing in red rock trim with Sandtone window

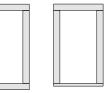


35/6" (92) CORNICE Shown with $3 \frac{1}{2}$ " (89) flat casing in red rock trim with Sandtone window

Not all trim options and/or combinations are shown. Contact your Andersen supplier for more information.

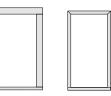
3 $^{1\!/_2}$ " (89) or 4 $^{1\!/_2}$ " (114) Flat Casing

TRIM COMBINATIONS



Flat casing can be used on all four sides flush at the head and sill. Combine 3 $\frac{1}{2}$ " (89) and 4 $\frac{1}{2}$ " (114) flat casing or use with a flush sill nose.

Sill Nose



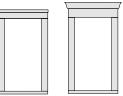
Sill nose can be used with flat casing or brick mould.

Brick Mould



Brick mould can be used on all four sides or with a flush sill nose.

Decorative Drip Cap and Cornices



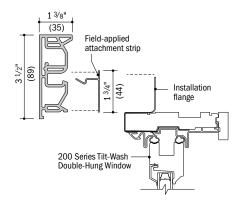
Decorative drip cap or cornices can be used above flat casing at the head.

EXTERIOR TRIM

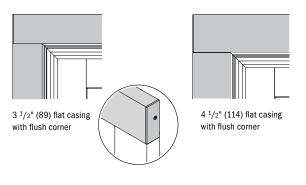
Window and Patio Door Attachment

Field-Applied Attachment Strip

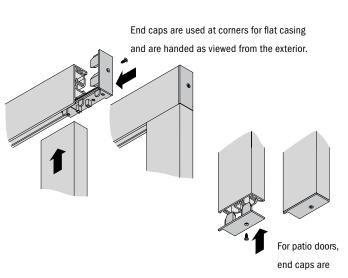
Field-applied attachment strip fastens to framing through window or patio door installation flange and flashing tape with screws. Exterior trim connects securely to the field-applied attachment strip. Follow window and patio door installation guides for flashing instructions.



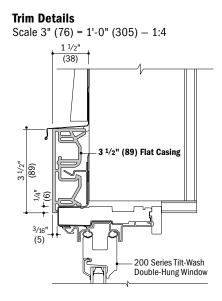
3 1/2" and 4 1/2" Flat Casing



Formula for dimension of window/door plus exterior trim: Add 4 ¹/4" (108) per side for 4 ¹/2" (114) flat casing Add 3 ¹/4" (83) per side for 3 ¹/2" (89) flat casing

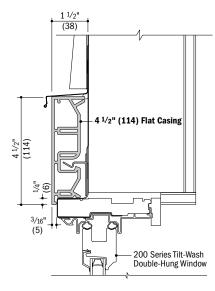


used at the sill.



Vertical Section

200 Series Tilt-Wash Double-Hung Window with 3 $^{1\!/\!2"}$ (89) Flat Casing



 $\label{eq:Vertical Section} $$200 Series Tilt-Wash Double-Hung Window with 4 $$^{1}\!/_{2}"$ (114) Flat Casing $$$

• 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 guides at andersenwindows.com.

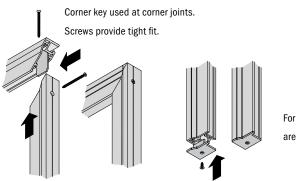
[•] Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information contact your Andersen supplier.

Brick Mould



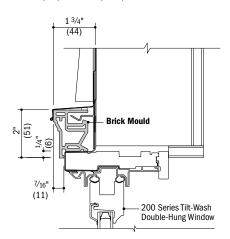
Brick mould with mitered corners

Formula for dimension of window/door plus exterior trim: Add 1 3/4" (44) per side for brick mould

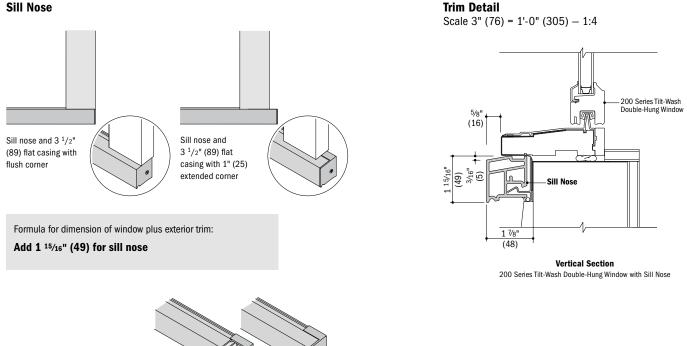


For patio doors, end caps are used at the sill.

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



Vertical Section 200 Series Tilt-Wash Double-Hung Window with Brick Mould



Exterior Trim

End caps are handed as viewed from the exterior.

Dimensions in parentheses are in millimeters.
 Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information contact your Andersen supplier.

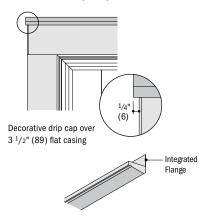
• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com.

EXTERIOR TRIM

Decorative Drip Cap

Details

^{15/16} (24)



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

Decorative Drip Cap

200 Series Tilt-Wash

Double-Hung Window

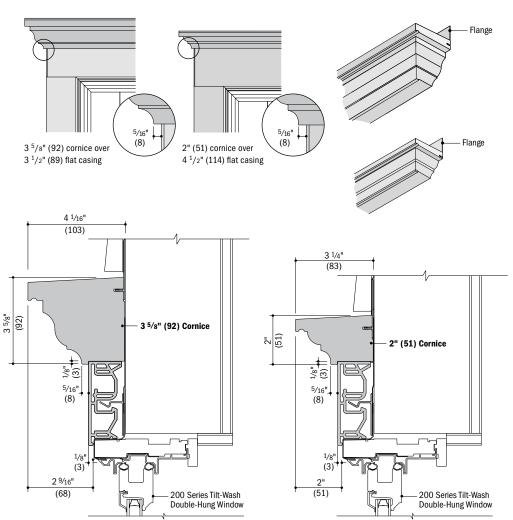
Vertical Section

200 Series Tilt-Wash Double-Hung Window

with 3 1/2" (89) Flat Casing and Decorative Drip Cap

2 ^{1/4}"

Cornices



Vertical Section 200 Series Tilt-Wash Double-Hung Window with 3 $\frac{1}{2}$ " (89) Flat Casing and 3 $\frac{5}{6}$ " (92) Cornice Vertical Section 200 Series Tilt-Wash Double-Hung Window with 3 ¹/2" (89) Flat Casing and 2" (51) Cornice

Mull Cover

3/4"

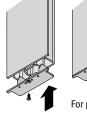
(19)

15/16"

(24)

3 ³/4" (95) mull cover is available for installations where windows or patio doors have been installed into separate rough

openings to obtain a joined appearance.

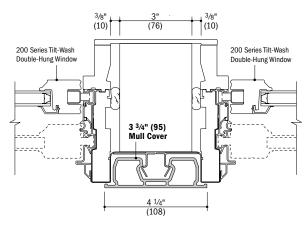


For patio doors, end caps are used at the sill.

• Dimensions in parentheses are in millimeters.

 Typical trim combinations shown. Additional combinations may also be used. Some restrictions apply. For more information contact your Andersen supplier. Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at andersenwindows.com. Consult with an architect or structural engineer regarding minimum requirements for structural support members between adjacent rough openings.

Separate Rough Opening Detail Scale 3" (76) = 1'-0" (305) - 1:4



Horizontal Section 200 Series Tilt-Wash Double-Hung Windows and 3 ³/4" (95) Mull Cover

50

Andersen[®] windows and patio doors make it easy to create a wide variety of combination designs.

Combination Types

Ribbons

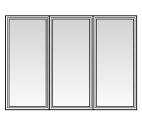
Ribbons are horizontal window combinations (vertical joins) where opposite ends (head and sill) of individual windows are fastened to the building structure.

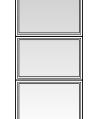
Stacks

Stacks are vertical window combinations (horizontal joins) where opposite sides (both side jambs) of individual windows are fastened to the building structure.

Two basic configurations are used in combination designs: One-way configurations or two-way configurations.

One-Way

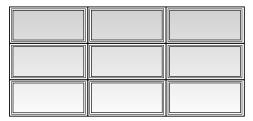




Ribbon Combination

Stack Combination

Two-Way



Multiple Ribbon/Stack Combination

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).

Determining Design Wind Load Performance

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 that 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 (LVL, steel or wood), 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.

COMBINATION DESIGNS

Andersen[®] Joining Materials and Installation Accessories

For a successful installation, designed to provide the required design pressure, it is important that Andersen joining materials and installation accessories be specified by a project architect or contractor. Andersen offers various types of joining materials. All joining systems maintain the look of Andersen products. Choose the type appropriate for your combination design. Components used with each joining system will vary depending on products being joined. Check with your Andersen supplier for more information.

The addition of joining materials will affect the overall rough opening dimension, see page 62. Instruction guides are available at andersenwindows.com. Read and follow instruction guides in their entirety.

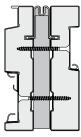
Andersen Exterior Trim Strips – A variety of trim strips for finishing the space between joined products are available in colors to match Andersen windows and doors.

Andersen Interior Wood Casing – Available in several wood types, pre-finished options, sizes and style options, including laminated arch casings, decorative plinths and key blocks.

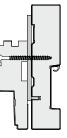
Materials vary depending on type of units being joined and wind load requirements. Non-reinforced joining materials are used to create alignment and positive joining between windows. Joining materials are not connected to the rough opening structure. Non-reinforced joins can also be achieved using accessory items such as v-notch gusset plates. Please contact your Andersen supplier for specific performance and product recommendations.

Reinforced joining materials are used to create product alignment, positive joining and load transfer between the Andersen windows and doors and the rough opening. They provide added strength capable of withstanding a variety of wind load pressures. 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.

LVL Joining Material



Laminated Veneer Lumber (LVL) joining material is available for gliding patio doors. Both 4 $^{9}/_{16}$ " (116) x $^{3}/_{4}$ " (19) LVL and 6 $^{9}/_{16}$ " (167) x $^{3}/_{4}$ " (19) LVL are available and include an aluminum exterior trim strip retainer. LVL materials are available in a variety of lengths up to 10' (3048). **Steel Joining Material**

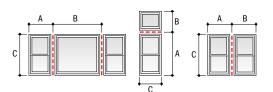


Available in 8'-0 ¹/4" (2445), 9'-6" (2896) and 12'-6" (3810) lengths. Treated for corrosion resistance, the material has a 4" (102) depth that provides strength and rigidity. Adjacent windows attach to the steel joining with screws provided in the kit. Use with windows and patio doors. 200 Series Perma-Shield[®] gliding patio door is shown above with a 400 Series casement window.

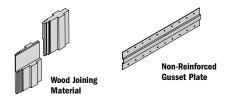
Double-Hung Windows

One-Way Wood Joining with Non-Reinforced Gusset Plates 200 Series Tilt-Wash Double-Hung, Picture & Transom Windows

	(A + B) ÷ 2 = 6'-0" (1829)	50	50	50	41	31	24
ion	(A + B) ÷ 2 = 5'-6'' (1676)	50	50	50	41	31	24
Adjacent Window Dimension	(A + B) ÷ 2 = 5'-0'' (1524)	50	50	50	41	31	25
ow Di	(A + B) ÷ 2 = 4'-6'' (1372)	50	50	50	42	32	26
Ninde	(A + B) ÷ 2 = 4'-0'' (1219)	50	50	50	44	-34	28
cent \	(A + B) ÷ 2 = 3'-6'' (1067)	50	50	50	47	37	31
Adja	(A + B) ÷ 2 = 3'-0" (914)	50	50	50	50	42	35
Average	(A + B) ÷ 2 = 2'-6" (762)	50	50	50	50	49	40
Ave	(A + B) ÷ 2 = 2'-0'' (610)	50	50	50	50	50	50
	(A + B) ÷ 2 = 1'-6'' (457)	50	50	50	50	50	50
	C = (length of join)	3'-6" (1067)	4'-0" (1219)	4'-6" (1372)	5'-0" (1524)	5'-6" (1676)	6'-0" (1829)



Note: Only one-way combinations similar to those shown above are allowed.



Numerical values in charts represent structural pressure only
 Dimensions in parentheses are in millimeters.

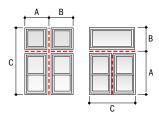
• Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

Andersen[®] products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com
Additional windload tables are available at andersenwindows.com.

Double-Hung Windows

Two-Way Wood Joining with V-Notch Gusset Plates 200 Series Tilt-Wash Double-Hung, Picture & Transom Windows

		3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"
	(A + B) ÷ 2 = 1'-6'' (457)	50	50	50	50	50	50	46	40	35
Ave	(A + B) ÷ 2 = 2'-0'' (610)	50	50	50	50	48	41	34	30	26
Average	(A + B) ÷ 2 = 2'-6" (762)	50	50	50	47	39	32	27	24	21
	(A + B) ÷ 2 = 3'-0" (914)	50	50	48	39	32	27	23	20	
Adjacent Window Dimension	(A + B) ÷ 2 = 3'-6" (1067)	50	50	41	33	27	23			No to
Vinde	(A + B) ÷ 2 = 4'-0'' (1219)	50	46	36	29	24	20			
w Di	(A + B) ÷ 2 = 4'-6'' (1372)	50	41	32	26	21				
mens	(A + B) ÷ 2 = 5'-0" (1524)	48	36	29	23					С
io	(A + B) ÷ 2 = 5'-6'' (1676)	43	33	26	21					
	(A + B) ÷ 2 = 6'-0'' (1829)	40	30	24						+



Note: Only two-way combinations similar to those shown above are allowed.

V-Notch **Gusset Plate** Wood Joining Material

Design Criteria for Two-Way Joining with V-Notch Gusset Plate:

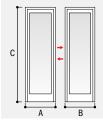
Ribbons or stacks of 5 windows or less with a maximum width/height of 12' (3658).

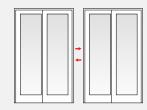
No inverted T-joins or palladian configurations are allowed.

Two-way combinations are limited to a maximum 7'-6" (2286) height and have vertical joining priority.

Patio Doors

One-Way Jamb-to-Jamb Joining 200 Series Narroline[®] Gliding & Perma-Shield[®] Gliding Patio Doors

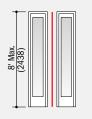


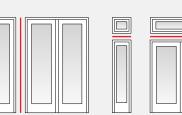


Maximum design pressure 20 PSF

One-Way LVL Joining

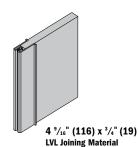
200 Series Narroline® Gliding, Perma-Shield® Gliding and Hinged Inswing Patio Doors





Maximum rating for $4 \frac{9}{16}$ " (116) LVL is equivalent to +62/-77 PSF

Note: When joining hinged inswing patio doors, do not join hinge jamb to hinge jamb.



Numerical values in charts represent structural pressure only.

· Dimensions in parentheses are in millimeters

• 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 guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com. · Additional windload tables are available at andersenwindows.com

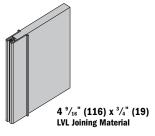
COMBINATION DESIGNS

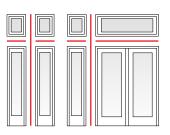
Patio Doors

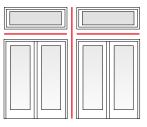
Two-Way LVL Joining

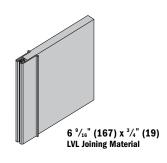
200 Series Narroline[®] Gliding & Perma-Shield[®] Gliding Patio Doors

		C = (length of join)	7'-9" (2362)	8'-0'' (2438)	8'-3" (2515)	8'-6" (2591)	8'-9" (2667)	9'-0" (2743)	9'-3" (2819)	9'-6'' (2896)	9'-9" (2972)	10'-0" (3048)
		(A + B) ÷ 2 = 3'-0" (914)	73	67	61	56	51	47	43	40	37	34
		(A + B) ÷ 2 = 3'-3'' (991)	67	62	57	52	48	44	41	37	33	32
		$\frac{(A + B)}{(A + B)} \div 2 = 3'-6'' (1067)$	63	57	53	49	45	41	38	35	32	30
	A	$\frac{(A + B)}{(A + B)} \div 2 = 3' \cdot 9'' (1143)$	59	54	50	46	42	39	35	33	30	28
	vera	$\frac{(A + B) \div 2 = 4 \cdot 3^{\circ} (1233)}{(A + B) \div 2 = 4' \cdot 0'' (1219)}$	56	51	47	43	39	37	33	31	21	23
	ge Ac	$\frac{(A + B) \div 2 = 4'-6'' (1372)}{(A + B) \div 2 = 4'-3'' (1295)}$	53	40	42	41	35	35	30	28	20	24
	ljace	$\frac{(A + B) \div 2 = 4' \cdot 9'' (1448)}{(A + B) \div 2 = 4' \cdot 6'' (1272)}$	47 50	44	40	37 39	34	31 33	29 30	27 28	25 26	23 24
	nt D($\frac{(A + B) \div 2 = 5' \cdot 0'' (1524)}{(A + B) \div 2 = 41 \cdot 0'' (1440)}$	45	42 44	39 40	35	33 34	30	27 29	25	23 25	22
	Dor/1	$\frac{(A + B) \div 2 = 5' \cdot 3'' (1600)}{(A + B) \div 2 = 5' \cdot 3'' (1500)}$	43	40	37	34	31	29	27	25	23	21
	Average Adjacent Door/Transom/Sidelight Dimension	$\frac{(A + B) \div 2 = 5' - 6'' (1676)}{(1676)}$	42	38	35	33	30	27	25	23	22	20
	s/mo	(A + B) ÷ 2 = 5'-9" (1753)	40	37	34	31	29	27	25	23	21	
	Sidell	(A + B) ÷ 2 = 6'-0'' (1829)	39	35	33	30	27	25	23	22	20	
	ght L	(A + B) ÷ 2 = 6'-3'' (1905)	37	34	31	29	27	25	23	21		
	Dimer	(A + B) ÷ 2 = 6'-6'' (1981)	36	33	31	28	26	24	22	20		
	Ision	$\frac{(A + B) \div 2 = 6' \cdot 9'' (2057)}{(A + B) \div 2 = 6' \cdot 9'' (2057)}$	35	32	29	27	25	23	21			
		$\frac{(A + B) + 2}{(A + B) + 2} = 7' \cdot 0'' (2134)$	34	31	29	23	23	22	20			
LVL		$\frac{(A + B) \div 2 = 7'-6'' (2286)}{(A + B) \div 2 = 7'-3'' (2210)}$	33	30	27	25	23	21	20]		
4 / ₁₆ (116)		$\frac{(A + B) \div 2 = 7' \cdot 9'' (2362)}{(A + B) \div 2 = 7' \cdot 6'' (2362)}$	31 32	29 29	26 27	24 25	22 23	21 21				
4 ⁹ / ₁₆ "		$(A + B) \div 2 = 8' - 0'' (2438)$	30	27	25	23	21	20				
		() -> -> -> ->							I			









• Numerical values in charts represent structural pressure only. • Dimensions in parentheses are in millimeters.

• Structural performance of any combination is 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 guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com. • Additional windload tables are available at andersenwindows.com.

6 ⁹ / ₁₆ "
(167)

LVL

	C = (length of join)	7'-9" (2362)	8'-0" (2438)	8'-3" (2515)	8'-6" (2591)	8'-9" (2667)	9'-0" (2743)	9'-3" (2819)	9'-6" (2896)	9'-9" (2972)	10'-0" (3048)
	(A + B) ÷ 2 = 3'-0" (914)	77	77	77	77	77	77	77	77	77	77
	(A + B) ÷ 2 = 3'-3" (991)	77	77	77	77	77	77	77	77	77	77
	(A + B) ÷ 2 = 3'-6'' (1067)	77	77	77	77	77	77	77	76	75	73
	$(A + B) \div 2 = 3'-9'' (1143)$	77	77	77	77	77	77	73	72	70	69
Avera	$(A + B) \div 2 = 4'-0'' (1219)$	77	77	77	77	75	73	69	67	66	65
age /	$\frac{(A + B)}{(A + B)} \div 2 = 4'-3'' (1295)$	77	76	75	73	71	69	65	64	63	61
Adjac	$\frac{(A + B)}{(A + B)} \div 2 = 4'-6'' (1372)$	74	73	71	69	67	65	62	61	59	58
ent	$\frac{(A + B)}{(A + B)} \div 2 = 4'-9'' (1448)$	71	69	67	65	64	63	59	57	57	55
Door	$\frac{(A + B) + 2}{(A + B) + 2} = 5' - 0'' (1524)$	67	66	64	63	61	60	56	55	54	53
/Tra	$\frac{(A + B) + 2}{(A + B) + 2} = 5' \cdot 3'' (1600)$	65	63	61	60	59	57	53	53	51	51
nson	$\frac{(A + B) + 2}{(A + B) + 2} = 5' \cdot 6'' (1733)$	62	61	59	57	56	55	51	51	49	49
ı∕Sic	$\frac{(A + B) \div 2 = 5'-9'' (1753)}{(A + B) \div 2 = 5'-9'' (1753)}$	59	58	57	55	54	53	47	49	47	43
delig	$\frac{(A + B) \div 2 = 6' \cdot 3' (1903)}{(A + B) \div 2 = 6' \cdot 0'' (1829)}$	57	56	55	53	50	49 51	40	45	44	45
ht Di	$\frac{(A + B) \div 2 = 6'-6'' (1981)}{(A + B) \div 2 = 6'-3'' (1905)}$	53 55	52 54	51 53	50 51	49 50	47 49	44 46	43 45	42 44	41 43
Average Adjacent Door/Transom/Sidelight Dimension	$\frac{(A + B) \div 2 = 6' \cdot 9'' (2057)}{(A + B) \div 2 = 6' \cdot 9'' (4004)}$	51	51	49	48	47	46	43	42	41	40
ion	$\frac{(A + B) \div 2 = 7' \cdot 0'' (2134)}{(2134)}$	50	49	48	47	45	45	41	41	40	39
	(A + B) ÷ 2 = 7'-3'' (2210)	49	47	47	45	44	43	40	39	39	38
	(A + B) ÷ 2 = 7'-6'' (2286)	47	46	45	44	43	42	39	38	37	37
	(A + B) ÷ 2 = 7'-9'' (2362)	46	45	44	43	42	41	38	37	37	35
	(A + B) ÷ 2 = 8'-0'' (2438)	45	43	43	41	41	40	37	36	35	35

Patio Doors

One-Way Steel Joining

200 Series Narroline® Gliding, Perma-Shield® Gliding and Hinged Inswing Patio Doors

	(A + B) ÷ 2 = 12'-6" (3810)	40	37	33	25	22										
	(A + B) ÷ 2 = 12'-0'' (3658)	40	37	34	26	23					В					use with p
	(A + B) ÷ 2 = 11'-6" (3505)	40	38	35	27	24							с			ow joins on
	(A + B) ÷ 2 = 11'-0" (3353)	40	39	36	29	25					А					o patio doo her informa
	(A + B) ÷ 2 = 10'-6'' (3200)	40	40	37	30	27	21						╝ <u></u> ↓ ╋ _┣ ┿			ictural supp
	(A + B) ÷ 2 = 10'-0'' (3048)	40	40	37	32	28	22				_]_↓	A	В		veen door	
<u>0</u>	(A + B) ÷ 2 = 9'-6'' (2896)	40	40	39	34	30	23	20		C C						
nens	(A + B) ÷ 2 = 9'-0'' (2743)	40	40	40	36	32	25	21								
li Di	(A + B) ÷ 2 = 8'-6'' (2591)	40	40	40	37	34	27	22								
Average Adjacent Window/Door Dimension	(A + B) ÷ 2 = 8'-0'' (2438)	40	40	40	39	36	28	24				• 3/ "/	_			
/vob	(A + B) ÷ 2 = 7'-6'' (2286)	40	40	40	40	37	31	27	21			2) x ³ / ₁₆ " (ing Mater	-			
Ă	(A + B) ÷ 2 = 7'-0'' (2134)	40	40	40	40	40	32	28	22							
cent	(A + B) ÷ 2 = 6'-6'' (1981)	40	40	40	40	40	36	31	25	23				ŕ		
Adja	(A + B) ÷ 2 = 6'-0'' (1829)	40	40	40	40	40	39	36	27	24	20			V-Notch	••••	••••
age	(A + B) ÷ 2 = 5'-6'' (1676)	40	40	40	40	40	40	37	30	25	24			Gusset P	ate ,	$\langle \cdot \rangle$
Aver	(A + B) ÷ 2 = 5'-0" (1524)	40	40	40	40	40	40	40	36	28	25			_		·)
	(A + B) ÷ 2 = 4'-6'' (1372)	40	40	40	40	40	40	40	37	31	27	23	20			
	(A + B) ÷ 2 = 4'-0'' (1219)	40	40	40	40	-40	40	40	40	37	30	26	25	21		
	(A + B) ÷ 2 = 3'-6'' (1067)	40	40	40	40	40	40	40	40	40	36	27	26	25		_
	(A + B) ÷ 2 = 3'-0" (914)	40	40	40	40	40	40	40	40	40	40	36	30	26	23	
	(A + B) ÷ 2 = 2'-6'' (762)	40	40	40	40	40	40	40	40	40	40	40	38	34	26	20
	(A + B) ÷ 2 = 2'-0'' (610)	40	40	40	40	40	40	40	40	40	40	40	40	40	34	28
	C = (length of join)	5'-6" (1676) or less	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)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3810)

Figure 1

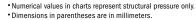
Andersen recommends use of a separating structural header between the door head and sill of any transom unit(s). If you choose not to use a header, and a single row of transom units is desired above the door, make sure the units are securely fastened to the adjacent framing and securely "hung" by screwing through the transom unit frame(s) into the header above. Steel joining may be required. IMPORTANT: HEADER SAG MAY ADVERSELY AFFECT THE PROPER FUNCTIONING AND PERFORMANCE OF THE DOOR AND/OR WINDOW. No weight from the transom unit(s) may be transferred to the door head if proper operation of the door is to be achieved.

Figure 2

Any transom combination made up of more than a single row of windows must have a separating header (by others).

Figure 1





• 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 guides to meet rated structural performance. Refer to product joining and installation guides at andersenwindows.com.

· Additional windload tables are available at andersenwindows.com.

PRODUCT PERFORMANCE

Andersen® 200 Series Window and Patio Door Altitude Limits

The chart below gives the altitude limit in feet for most 200 Series products in this catalog. 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 without capillary breather tubes at altitudes higher than its rating will result in severe glass distortion, increased glass breakage potential and a risk for 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 a smaller window is therefore greater, increasing the chance for seal failure.

Product	2,000	3,000	4	000	5	000	6	000	7	.000	8	000	9	000		10,000	
Tioudot	2,000	0,000	ч,		5,000		0,	6,000		,	000	8,000	3,	000		10,000	
				DH1830	DH1850	DH2830	DH2036	DH2056	DH3036	DH2446	DH3046	DH2849	DH2850	DH2856	DH3056	DH3456	
				DH1836	DH1856	DH3030	DH2430	DH2060	DH2050	DH2449	DH2456	DH3049	DH2860	DH3450	DH3060	DH3460	
Tilt-Wash Double-Hung				DH1840	DH1860	DH3430	DH2046	DH2436	DH3040	DH2450	DH2460	DH3449	DH3050				
Window				DH1846	DH2030		DH2049	DH2440	DH2040	DH2846	DH3436						
				DH1849	DH2430		DH2836	DH2840		DH3446							
							DH3436	DH3440							10	,000	
			FX5010								FX3056	FX3049		FX5056	FX6040	FX4656	FX5040
			FX4610								FX3050	FX4930		FX5050	FX4046	FX4940	FX5046
											FX3030	FX5030		FX4650	FX4049	FX4946	FX5049
Tilt-Wash Picture Window											FX3040	FX5630		FX4649	FX4050	FX4949	FX5060
											FX3046	FX4030		FX4660	FX4056	FX4950	FX5640
	_										FX3060	FX4630		FX4040	FX4640	FX4956	FX5646
	FX3410	4, FX3016	000 FX2416	FX3010	FX3420	FX2420						FX6030		FX4060 FX5650	FX4646 FX6046	FX4960 FX6049	FX5649 FX6050
	FA3410	FX1816	FX2410	FX1810	FX3020	FX2420								FA3030	FA0040	FX0049	FA0000
Tilt-Wash Transom Window		FX2410	FX2810	FX2816	FX2820	172020											
		FX2016	FX3416	FX1820	1/2020												
		CT20	CT24	CT30	CT34												
Tilt-Wash Half Circle Window			CT28	CT18													
					GW3030		GW4046	GW4040					GW5050	GW5046	GW6050	GW6040	GW6036
Olidia e Window					GW3020		GW4036	GW4030					GW5040	GW5036	GW6046	GW6030	
Gliding Window					GW4016		GW4020	GW3040					GW5030				
							GW4050	GW3036									
Narroline [®] Gliding Patio Door													NLGD5068	NLGD5080	NLGD6068	NLGD6080	NLGD80611
													NLGD50611	L	NLGD60611	L NLGD8068	NLGD8080
Perma-Shield [®] Gliding Patio Door													PS5068		PS51168	PS61611	PS81611
rauv 2001															PS6180	PS8180	
Hinged Inswing Patio Door				ISPD4176						ISPD5076		ISPD5476				ISPD6076	
			ISPD41611	ISPD4180		_			ISPD5061	1 ISPD5080	ISPD54611	L ISPD5480			ISPD60611	I ISPD6080	

• 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 one or multiple panel configurations.

• Contact your Andersen supplier for altitude limits for custom sized windows and patio doors.

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/I.S.2/A440, which is how the International Code Council (ICC) lists this standard in the 2012 and 2015 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 jobsite 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 Gra	des (PG) & Corres	nonding Test	Pressures	(nsf)
renormance dia	ucs (r u) & comes	ponunig iest	FICSSUICS	(par)

· · · · · · · · · · · · · · · · · · ·											
Cla Perfo	erformance Class/ erformance Grade		Air Infiltration Test Pressure		Maximum Allowable Air Infiltration/ Exfiltration Rate		Water Penetration Resistance Test Pressure		Design Pressure		ıral Test ssure
R	LC	Ра	psf	L/s⋅m²	cfm/ft ²	Pa	psf	Ра	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	580	12.11	4080	85.21	6120	127.82
90	90	75	1.57	1.5	0.30	580	12.11	4320	90.23	6480	135.34
95	95	75	1.57	1.5	0.30	580	12.11	4560	95.24	6840	142.86
100	100	75	1.57	1.5	0.30	580	12.11	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 3-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.

Hallmark Certified	Andersen Corporation 200 SERIES TILT-WASH DOUBLE-HUNG WINDOW Manufacturer stipulates certification as indicated below.
STANDARD	RATING
AAMA/WDMA/CSA 101/I.S.2/A440-11	CLASS LC ⁽¹⁾ - PG30 ⁽²⁾ - SIZE TESTED 39.5 X 71.5 in. ⁽³⁾ DP+30/-30 ⁽⁴⁾
AAMA/WDMA/CSA 101/I.S.2/A440-08	CLASS LC $^{(1)}$ – PG30 $^{(2)}$ – SIZE TESTED 39.5 X 71.5 in. $^{(3)}$ DP+30/-30 $^{(4)}$

- (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 30 pounds per square foot (psf) and the size tested is 39.5" x 71.5". 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 4.5 psf, the product tested successfully withstood a laboratory positive test pressure of 45 psf and a laboratory negative test pressure of 45 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, jobsite exposure, etc.). Design pressures derived from Performance Grade (PG) test requirements should be used to determine compliance to building code required design pressures. <u>Structural test pressures, which are tested at 1.5 times the design pressure</u>, should **not** be used for determining design pressure code compliance. In the example above, a PG 30 performance grade rating, which passes a 30 psf design pressure, should be used for determining code compliance, not the structural test pressure of 45 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, 330 N. Wabash Avenue Suite 2000, Chicago, IL 60611 Phone: 312-321-6802 Web: 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.

PRODUCT PERFORMANCE

Performance Grade & Air Infiltration Ratings for 200 Series Windows & Patio Doors

For current performance information, please visit andersenwindows.com.

Andersen [®] Product	AAMA/WDMA/CSA 101/I.S.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT ²
Tilt-Wash Windows			
Double-Hung	Class LC-PG30 Size Tested 39" x 71"	30/30	< 0.2
Half Circle	Class LC-PG50 Size Tested 75" x 40"	50/50	< 0.2
Picture	Class LC-PG50 Size Tested 71" x 59"	50/50	< 0.2
Gliding Windows	Class R-PG20 Size Tested 71" x 59"	20/20	< 0.2
Narroline [*] Gliding Patio Doors			
Single Stationary	Class LC-PG40 Size Tested 50" x 95"	40/40	< 0.2
Two-Panel (6068)	Class LC-PG35 Size Tested 71" x 79"	35/35	< 0.2
Two-Panel (60611)	Class LC-PG40 Size Tested 71" x 82"	40/40	< 0.2
Two-Panel (8080)	Class LC-PG25 Size Tested 95" x 95"	25/25	< 0.2
Two-Panel (6080)	Class LC-PG30 Size Tested 71" x 95"	30/30	< 0.2
Four-Panel	Class LC-PG25 Size Tested 189" x 95"	25/25	< 0.2
Perma-Shield" Gliding Patio Doors			
Single Stationary	Class LC-PG45 Size Tested 50" x 95"	45/45	< 0.2
Two-Panel	Class LC-PG25 Size Tested 96" x 95"	25/25	< 0.2
Perma-Shield Gliding Patio Doors, PG Upgrade (60611, 6068)	Class LC-PG40 Size Tested 96" x 82"	40/40	< 0.2
Hinged Inswing Patio Doors			
Single Active	Class LC-PG30 Size Tested 38" x 95"	30/30	< 0.2
Two-Panel	Class LC-PG30 Size Tested 71" x 95"	30/30	< 0.2

For sound transmission ratings, see chart below.

• "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 March 2019. 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.

Sound Transmission Ratings for 200 Series Windows & Patio Doors

For current performance information, please visit andersenwindows.com.

Andersen° Product	Test Size	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
Tilt-Wash Double-Hung Windows			
Double-hung	36" x 60"	27	22
Picture	60" x 57"	29	24
Gliding Windows	60" x 36"	27	22
Narroline* Gliding Patio Doors			
Single Stationary	50" x 80"	30	24
Two-Panel	72" x 80"	30	24
Four-Panel		-	-
Perma-Shield" Gliding Patio Doors			
Single Stationary	50" x 82"	30	24
Single Stationary with Blinds-Between-the-Glass	38" x 82"	31	24
Two-Panel	72" x 82"	29	23
Two-Panel with Blinds-Between-the-Glass	72" x 82"	30	24
Hinged Inswing Patio Doors			
Single Active	36" x 80"	32	27
Two-Panel	72" x 80"	30	24

 "Sound Transmission Class (STC)" & "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.
 This data is accurate as of March 2019. 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.

Center of Glass Performance Data for 200 Series Windows & Patio Doors

For current performance information, please visit andersenwindows.com.

					Fad	ing		
Andersen [®] Product & Glass Type	VL ¹	SC ²	SHGC ³	RHG ^₄	Tuv ⁵	Tdw ⁶	%RH @ Center ⁷	IGST ⁸
Low-E SmartSun [™] Glass								
Tilt-Wash Double-Hung & Gliding Windows	66%	0.32	0.28	66	5%	21%	61%	56°F
Fixed Windows	65%	0.31	0.27	65	5%	21%	61%	56°F
Narroline [®] Gilding, Perma-Shield [®] Gilding & Hinged Inswing Patio Doors	64%	0.32	0.27	66	5%	21%	61%	56°F
Low-E Glass								
Tilt-Wash Double-Hung & Gliding Windows	73%	0.48	0.42	100	17%	34%	61%	56°F
Fixed Windows	72%	0.47	0.41	98	16%	33%	61%	56°F
Narroline Gliding, Perma-Shield Gliding & Hinged Inswing Patio Doors	71%	0.47	0.41	98	16%	33%	61%	56°F
Low-E Sun Glass								
Tilt-Wash Double-Hung & Gliding Windows	40%	0.30	0.26	62	17%	25%	61%	56°F
Fixed Windows	40%	0.29	0.25	61	16%	24%	59%	55°F
Narroline Gliding, Perma-Shield Gliding & Hinged Inswing Patio Doors	39%	0.29	0.25	61	15%	23%	61%	56°F

• 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 1/8" (3) glass.

3) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass both directly transmitted and absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the glass.

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 March 2019. 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 or visit andersenwindows.com/nfrc for total unit performance data on windows and patio doors (including units with patterned glass, patterned glass, tempered glass and capillary breather tubes).

Andersen[®] Products Total Unit Recycled Content Percentages

For current product certificates, please visit andersenwindows.com.

Andersen* Product	% Pre-Consumer Recycled Content
200 Series Windows	
Tilt-Wash Double-Hung Window	4%
Tilt-Wash Picture Window	10%
Gliding Window	5%
200 Series Patio Doors	
Narroline Gliding Patio Door	6%
Perma-Shield Gliding Patio Door	4%
Hinged Inswing Patio Door	3%

• "% Pre-Consumer Recycled Content" is verified by SCS Global Services (SCS) to meet ISO 14021 standards based on NFRC sizing. Actual recycled content dependent on product size.

PRODUCT PERFORMANCE

Andersen® NFRC Certified Total Unit Performance

For current performance information, please visit **andersenwindows.com**.

Andersen [®] Product	Hig	gh Performance Glass Type	U-Factor ¹	SHGC ²	VT ³
		Without Grilles	0.29	0.32	0.54
	Low-E	Simulated Divided Light Grilles	0.29	0.29	0.48
		Finelight [™] Grilles	0.29	0.29	0.48
	ck.	Without Grilles	0.26	0.31	0.53
	Low-E Heatlock [*]	Simulated Divided Light Grilles	0.26	0.28	0.47
	×⊓	Finelight Grilles	0.26	0.28	0.47
200 Series Tilt-Wash		Without Grilles	0.30	0.20	0.30
Double-Hung Windows AND-N-59	Low-E Sun	Simulated Divided Light Grilles	0.30	0.18	0.27
AND-N-39	<u> </u>	Finelight Grilles	0.30	0.18	0.27
	2	Without Grilles	0.29	0.21	0.49
	Low-E SmartSun ^w	Simulated Divided Light Grilles	0.29	0.19	0.44
	Sme	Finelight Grilles	0.29	0.19	0.44
	드것	Without Grilles	0.25	0.21	0.48
	Low-E SmartSun w/Heatlock	Simulated Divided Light Grilles	0.25	0.19	0.43
	Sm Sm	Finelight Grilles	0.25	0.19	0.43
		Without Grilles	0.30	0.32	0.55
	Low-E	Simulated Divided Light Grilles	0.30	0.29	0.49
	-	- Finelight [™] Grilles	0.30	0.29	0.49
	**	Without Grilles	0.26	0.31	0.53
	Low-E Heatlock	Simulated Divided Light Grilles	0.26	0.28	0.48
	w/He	Finelight Grilles	0.26	0.28	0.48
200 Series Gliding Windows	Low-E Sun	Without Grilles	0.30	0.20	0.30
AND-N-63		Simulated Divided Light Grilles	0.30	0.18	0.27
		Finelight Grilles	0.30	0.18	0.27
	2_	Without Grilles	0.29	0.21	0.49
	w-E rtSur	Simulated Divided Light Grilles	0.29	0.19	0.44
	Low-E SmartSun ^w	Finelight Grilles	0.29	0.19	0.44
		Without Grilles	0.25	0.21	0.48
	Low-E SmartSun k/ Heatlock	Simulated Divided Light Grilles	0.25	0.19	0.43
	Sme Sme	Finelight Grilles	0.25	0.19	0.43
		Without Grilles	0.28	0.33	0.56
	DW-E	Simulated Divided Light Grilles	0.28	0.30	0.50
	9	Finelight [™] Grilles	0.28	0.30	0.50
	*	Without Grilles	0.24	0.32	0.55
	Low-E w/Heatlock	Simulated Divided Light Grilles	0.24	0.29	0.49
	w/He	Finelight Grilles	0.24	0.29	0.49
200 Series		Without Grilles	0.28	0.20	0.31
Half Circle, Picture & Transom Windows	Sun Sun	Simulated Divided Light Grilles	0.28	0.18	0.28
AND-N-60	30	Finelight Grilles	0.28	0.18	0.28
	2	Without Grilles	0.27	0.22	0.51
	Low-E SmartSun ^w	Simulated Divided Light Grilles	0.27	0.20	0.45
	Sma	Finelight Grilles	0.27	0.20	0.45
		Without Grilles	0.23	0.21	0.50
	Low-E SmartSun w/Heatlock	Simulated Divided Light Grilles	0.23	0.19	0.44
	Smc //He	Finelight Grilles	0.23	0.19	0.44

Andersen [®] Product	ці	gh Performance Glass Type	U-Factor ¹	SHGC ²	VT ³
Andersen Froudet			0.29		
	Low-E	Without Grilles		0.32	0.55
	- Lo	Simulated Divided Light Grilles	0.29	0.29	0.48
		Finelight [™] Grilles	0.29	0.29	0.48
	Low-E //Heatlock*	Without Grilles	0.25	0.32	0.54
200 Series	/Hea	Simulated Divided Light Grilles	0.25	0.28	0.47
Narroline [®] Gliding	Ň	Finelight Grilles	0.25	0.28	0.47
Patio Doors AND-N-61	ΨĘ	Without Grilles	0.29	0.20	0.31
AND-N-01	Low-E Sun	Simulated Divided Light Grilles	0.29	0.18	0.27
		Finelight Grilles	0.29	0.18	0.27
	" n	Without Grilles	0.28	0.21	0.50
	Low-E SmartSun [™]	Simulated Divided Light Grilles	0.28	0.19	0.44
	Sn	Finelight Grilles	0.28	0.19	0.44
	un ka	Without Grilles	0.24	0.21	0.49
	Low-E SmartSun //Heatlock	Simulated Divided Light Grilles	0.24	0.19	0.43
	S	Finelight Grilles	0.24	0.19	0.43
		Without Grilles	0.28	0.32	0.56
	Low-E	Blinds-Between-the-Glass*	0.34	0.32	0.56
	Lov	Simulated Divided Light Grilles	0.28	0.29	0.49
		Finelight [™] Grilles	0.28	0.29	0.49
	**	Without Grilles	0.24	0.32	0.54
200 Series	Low-E Heatlock [°]	Simulated Divided Light Grilles	0.24	0.28	0.48
Perma-Shield [®] Gliding	Hea	Finelight Grilles	0.24	0.28	0.48
Patio Doors AND-N-13		Without Grilles	0.29	0.20	0.31
	Low-E Sun	Simulated Divided Light Grilles	0.29	0.18	0.27
		Finelight Grilles	0.29	0.18	0.27
	Low-E SmartSun ^w	Without Grilles	0.28	0.21	0.50
		Simulated Divided Light Grilles	0.28	0.19	0.44
		Finelight Grilles	0.28	0.19	0.44
	드중	Without Grilles	0.24	0.21	0.49
	Low-E SmartSun v/Heatlock	Simulated Divided Light Grilles	0.24	0.19	0.43
	Sma Sma	Finelight Grilles	0.24	0.19	0.43
		Without Grilles	0.30	0.24	0.41
	Low-E	Simulated Divided Light Grilles	0.30	0.21	0.35
	P	Finelight [™] Grilles	0.30	0.21	0.35
	*	Without Grilles	0.27	0.24	0.40
	Low-E w/Heatlock [*]	Simulated Divided Light Grilles	0.27	0.21	0.34
200 Series	w/He	Finelight Grilles	0.27	0.21	0.34
Hinged Inswing Patio Doors		Without Grilles	0.31	0.15	0.23
AND-N-75	Low-E Sun	Simulated Divided Light Grilles	0.31	0.13	0.19
	S	Finelight Grilles	0.31	0.13	0.19
	2	Without Grilles	0.30	0.16	0.37
	Low-E SmartSun [™]	Simulated Divided Light Grilles	0.30	0.10	0.31
	Lo	Finelight Grilles	0.30	0.14	0.31
		Without Grilles	0.30	0.14	0.31
	Low-E SmartSun v/Heatlock	Simulated Divided Light Grilles	0.27		0.36
	Smar //He			0.14	
		Finelight Grilles	0.27	0.14	0.31

1) U-Factor defines the amount of heat loss through the total unit in BTU/hr/ft^{2,9}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 andersemvindows.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 both directly transmitted and 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 March 2019. 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 for high altitudes, etc.

*Available for select patio door sizes. Data based on blinds in full open position.

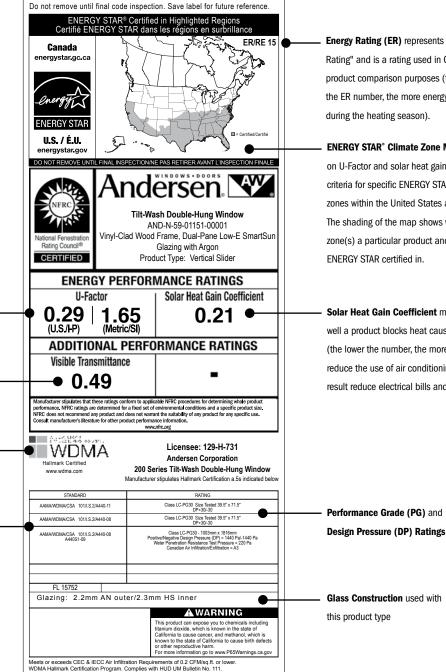
About the NFRC

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 140, Greenbelt, MD 20770, Tel: (301) 589-1776 Website: www.nfrc.org

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.



Energy Rating (ER) represents "Energy Rating" and is a rating used in Canada for product comparison purposes (the higher the ER number, the more energy saved during the heating season).

ENERGY STAR° Climate Zone Map is based on U-Factor and solar heat gain coefficient criteria for specific ENERGY STAR climate zones within the United States and Canada. The shading of the map shows which climate zone(s) a particular product and glass type is ENERGY STAR certified in.

Solar Heat Gain Coefficient measures how well a product blocks heat caused by sunlight (the lower the number, the more it will help reduce the use of air conditioning and as a result reduce electrical bills and energy use).

U-Factor indicates how well a product prevents heat from escaping (the lower the number, the better).

Visible Transmittance refers to how much visible light comes through a product (the closer to 1.0, the more light is transmitted).

WDMA Hallmark Certification verifies the performance ratings of this product were tested by an independent testing laboratory and verified by a third-party certification program.

Test Standards

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

INSTALLATION ACCESSORIES

Listed are optional accessories available for the installation of Andersen[®] windows and doors. You'll also find key considerations regarding the use and installation of every Andersen product. Keep the instruction guidelines and safety information in mind when considering the installation and use of any Andersen product. Should you have any questions, contact your local Andersen supplier. Thank you for considering and using Andersen products.

COIL STOCK

Andersen aluminum coil stock can be ordered to match any of our 11 trim colors. Made from .018" thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Colormatched 1 $^{1}/_{4}$ " (32) stainless steel trim nails are also available and can be ordered in 1 lb/.454 kg boxes.



olor-	1000	can be cut or ripped to size and
teel		can be fastened using nails
can		or screws.
s.	100	

FIBREX[®] TRIM BOARD

Andersen offers a 3 1/2" (89)

wide by 3/4" (19) thick cellular

Fibrex trim board in 10' (3048)

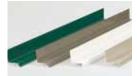
lengths. Available in the same

11 colors as the exterior trim

system, this solid trim board

COLOR	LENGTH	DEPTH	WIDTH
11 colors	120" (3048)	³ /4" (19)	3 ¹ /2" (89)
6 colors	150" (3810)	1 ³ /16" (30)	1 3/16" (30)
W	84" (2134) & 150" (3810)	³ /4" (19)	1" (25)
S,T	84" (2134) & 150" (3810)	³ /4" (19)	³ /4" (19)
W,S,T	150" (3810)	¹ /2" (13)	1" (25)
W,S,T	150" (3810)	¹ /2" (13)	³ /4" (19)
	11 colors 6 colors W S,T W,S,T	11 colors 120" (3048) 6 colors 150" (3810) W 84" (2134) & 150" (3810) S,T 84" (2134) & 150" (3810) W,S,T 150" (3810)	11 colors 120" (3048) 3/4" (19) 6 colors 150" (3810) 1 3/16" (30) W 84" (2134) & 150" (3810) 3/4" (19) S,T 84" (2134) & 150" (3810) 3/4" (19) W,S,T 150" (3810) 1/2" (13)

CONTINUOUS DRIP CAP



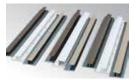
Included on 200 Series windows with vertical (ribbon) joins. Heavy 24-gauge corrosion-resistant aluminum construction. Available in 6' (1829), 10' (3048) and 12'-7 $^{1/8"}$ (3848) lengths and in any of the 11 trim colors.

AUXILIARY CASING



Auxiliary casing is made of cellular Fibrex material. Available in white, canvas, Sandtone, Terratone, forest green, dark bronze and black. Dimensions are $1 \sqrt[3]{16"}$ (30) by $1 \sqrt[13]{16"}$ (30) in 150" (3810) lengths.

VINYL CHANNELS



Rigid vinyl "J," "h" and "H" channels are available in white, Sandtone and Terratone.

EXTENSION JAMBS



Available for most Andersen products. See individual sections for details.

COLOR-MATCHED SEALANT

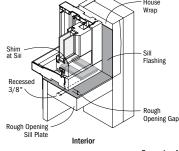
Color-matched sealant is available in Andersen exterior colors. This high-quality sealant can be used during the installation of all Andersen products.

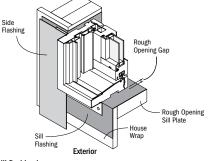
INSTALLATION INFORMATION

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 Energy and Environmental Building Association's (EEBA) Water Management Guide (www.eeba.org).





Pan Head

Screws

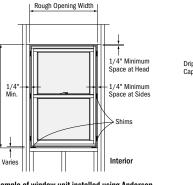
3/16" Top of

of Gusset Plate

Unit 1

Unit 2

Example of window sill flashing in a membrane drainage system.



Example of window unit installed using Andersen published minimum rough opening dimensions.

Opening Height

(gno

Example of two units joined together with the use of gusset plates and pan head screws that will require additional rough opening space.

Interio

IMPORTANCE OF PROPER INSTALLATION

Proper installation and maintenance of Andersen products are essential to attain optimum performance and operation. Installation instructions are 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 are 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.

· Dimensions in parentheses are in millimeters.

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 56-61. 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 that is 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 often 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 sill. 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 tilting 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 $\frac{1}{4}$ " (6) or more than $\frac{1}{2}$ " (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.
- 2. 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.
- 3. 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).
- 9. 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 window as directed with appropriate fasteners.
- 12. Integrate the window or 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 1/4" (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 unit operation before application of interior trim.
- 16. 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. Please refer to the individual product sections for details on painting Andersen product exteriors.

CAUTIONS

1. 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 patio 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.

3. 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.

5. 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 51 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 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: 1-800-313-8889 Email: lofk@andersencorp.com

for kids

Andersen[®] windows and doors can make significant contributions to the success of sustainable design strategies.

As a charter member of the U.S. Green Building Council, we are 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 (901.10)
- 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's 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 commitment to sustainability and responsible stewardship of all 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's 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 Forest Stewardship Council[®] (FSC) Chain-of-Custody certification (FSC-C016636). This certification is awarded to companies that meet FSC standards for traceability in their wood supply chain.



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 was the first window manufacturer to certify our products for indoor air quality, beginning in 2008. Our Indoor Advantage[™] Gold certification by SCS Global Services (SCS) meets the rigorous high standards for healthier indoor air quality set by the California Specification 01350.



Under U.S. Green Building Council (USGBC) guidelines, Andersen is able to claim a percentage of material in its Fibrex[®] product as pre-consumer recycled content. SCS Global Services (SCS) has certified this amount for Andersen.

AWARD 2019 PARTNER OF THE YEAR Sustained Excellence

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.

51

31 200 Series Perma-Shield[®] Gliding Patio Doors

11 200 Series Titt-Wash Double-Hung Windows



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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



1

Acrobat will display the bookmarks panel when you open the PDF.

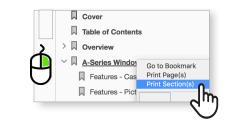
Bookmarks are the easiest way to find specific product information.

Select a topic and that page will be displayed.

Bookmarks	CASEMENT
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Navigation Tips	Table of Casement Wind Scale 1/8" (3) = 1'-0" (305)
Cover	Window Dimension
Table of Contents	Minimum Rough Opening (50
> Overview	Unobstructed Glass
✓ A-Series Windows	cus
Features - Casement, Awning	1-11 1/4 (591) (591) 2-0 (610) 15 ¹³ /16 (401) AILABLE
Features - Picture & Transom	ACW1
Options & Accessories	2:3/4* 1-11/ (109) (100
✓ ☐ Casement	2-7 1/4 (794) (813) (813) (805) (605)
Sizing	ACW1
	2'-11 !/4 (895) 3'-0" (914) 27 !3/ 16" (706)
Area & Opening Specs	ACW1
Grille Patterns	3'-3 1/4" (997) 3'-4" (1016) 31 ¹³ /16" (808)

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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

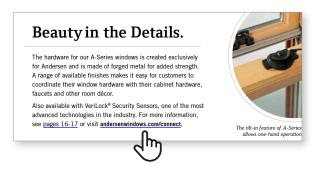
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You can also use the **embedded links** to navigate between sections. All links are underlined in blue.

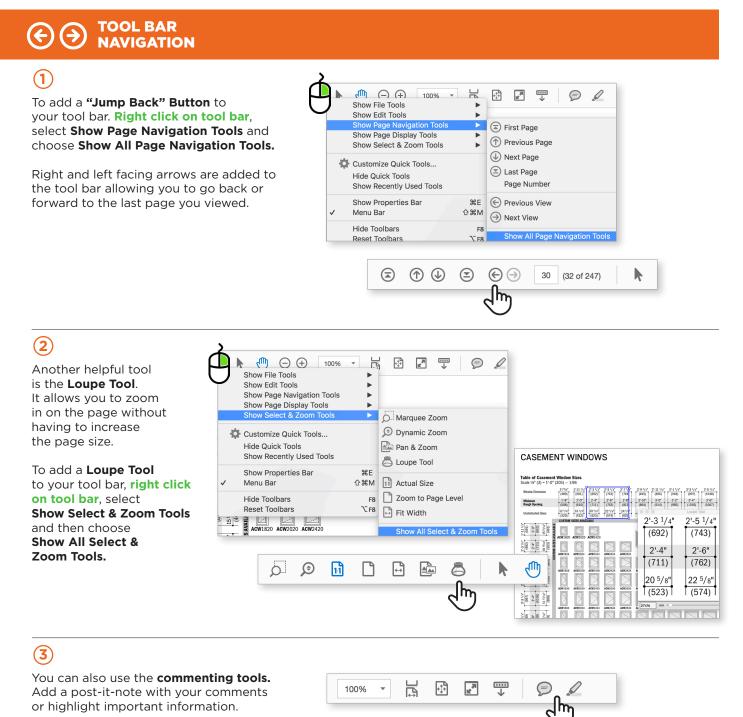


2

Website links automatically open in your web browser.



Add additional navigation tools by adjusting the default settings in Acrobat.



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**.