Andersen® window and patio doors make it easy to create a wide variety of combination designs

Combination Types

Ribbons

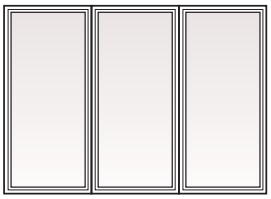
Ribbons are horizontal window combinations (vertical joins) where opposite ends (head and sill) of individual windows are fastened to the building structure.

Stacks

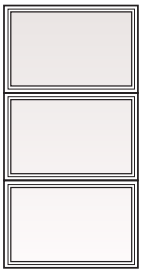
Stacks are vertical window combinations (horizontal joins) where opposite sides (both side jambs) of individual windows are fastened to the building structure.

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

One-Way

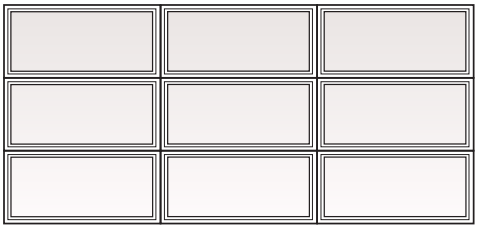


Ribbon Combination



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 you have the proper local codes and have identified specified compliance values. This calculated value (psf) will be used to determine if the combination will be acceptable (STEP 3).

STEP 2

Determine Product Performance

Compare product Design Pressure Rating data to the local building code (psf) requirement. This will show whether the individual units in a combination design are acceptable.

STEP 3

Determine Combination Performance

This step helps determine whether a given product, size, configuration and joining material type will meet the local building code design wind load requirement. To determine what joining material type to use (fiberglass, 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.

Andersen® Joining Materials

For a successful installation, one engineered to provide the required design pressure, it is important Andersen joining materials and installation accessories be specified by a project architect or contractor. For one- and two-way combinations, Andersen offers joining materials to meet specified performance requirements. Combinations are joined using either fiberglass, steel or wood material depending on the product types. Each creates a joining system that enhances the look of Andersen products without sacrificing performance.

The addition of joining materials will affect the overall rough opening dimension **For all joining methods, read and follow product joining installation instructions in their entirety. Visit andersenwindows.com for instructions.**

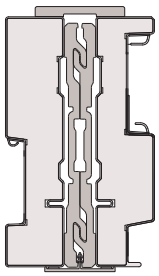
A variety of exterior trim strips for finishing the space between joined products are available in colors to match Andersen windows and patio doors. Interior casing is available in several wood types, pre-finished options, sizes and style options. Components used with each joining system will vary depending on products being joined. Contact your Andersen supplier for more information.

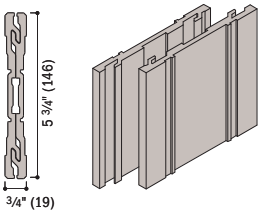
Materials vary depending on type of units being joined and wind load requirements. Non-reinforced joining material is used to create alignment and positive joining between windows. Joining materials are not connected to the rough opening structure. Non-reinforced joins can also be achieved using accessory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

Reinforced joining material is used to create product alignment, positive joining and load transfer between Andersen windows and patio doors and the rough opening. They provide added strength capable of withstanding a greater range of wind load pressures. The structural performance of any combination is only as high as the lowest structural performance rating of any individual unit or joining material in the combination.

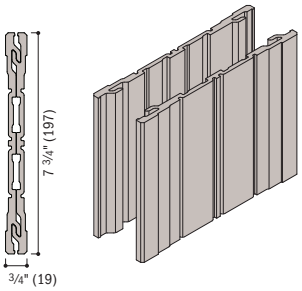
Fiberglass Joining Material

Fiberglass joining material is available for 200 Series patio door combinations. The fiberglass joining material utilizes either ¾" (19) x 5 ¾" (146) fiberglass interlocking joining plates for 4 ⁹⁄₁₆" (116) jamb depths or ¾" (19) x 7 ¾" (197) fiberglass interlocking joining plates for higher performance for one-way and two-way joining, and is required for hinged inswing patio doors with 6 ⁹⁄₁₆" (167) jambs. Joining kits are available for joining and installing patio door, sidelight and/or transom combinations at the job site. Extension jamb kits are also available. In some situations, joining material may prohibit the application of perimeter extension jambs. For more information, contact your Andersen supplier.





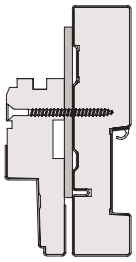
¾" (19) x 5 ¾" (146)
Fiberglass Joining Material
For 4 ⁹⁄₁₆" (116) jamb depths.



¾" (19) x 7 ¾" (197)
Fiberglass Joining Material
For higher performance for 1-way and 2-way joining. Required for hinged inswing patio doors with 6 ⁹⁄₁₆" (167) base jamb depths.

Steel Joining Material

Steel joining material is available in 8'-0 ¼" (2445), 9'-6" (2896) and 12'-6" (3810) lengths. Treated for corrosion resistance, a 4" (102) depth of material provides strength and rigidity. Intended for use with select Andersen 200 Series and 400 Series patio door to window joins. Adjacent windows attach to the steel joining material with screws.

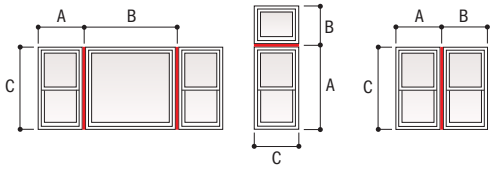


- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Dimensions in parentheses are in millimeters.

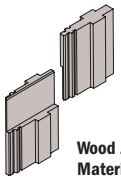
1-Way Wood Joining with Non-Reinforced Gusset Plates

200 Series Tilt-Wash Double-Hung, Picture and Transom Windows

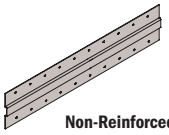
Average Adjacent Window Dimension							
	(A + B) ÷ 2 = **6'-0"** (1829)	50	50	50	41	31	24
	(A + B) ÷ 2 = **5'-6"** (1676)	50	50	50	41	31	24
	(A + B) ÷ 2 = **5'-0"** (1524)	50	50	50	41	31	25
	(A + B) ÷ 2 = **4'-6"** (1372)	50	50	50	42	32	26
	(A + B) ÷ 2 = **4'-0"** (1219)	50	50	50	44	34	28
	(A + B) ÷ 2 = **3'-6"** (1067)	50	50	50	47	37	31
	(A + B) ÷ 2 = **3'-0"** (914)	50	50	50	50	42	35
	(A + B) ÷ 2 = **2'-6"** (762)	50	50	50	50	49	40
	(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)



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



Wood Joining Material

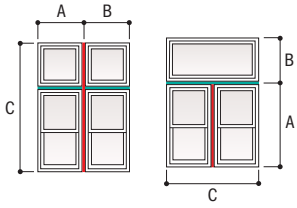


Non-Reinforced Gusset Plate

2-Way Wood Joining with V-Notch Gusset Plates

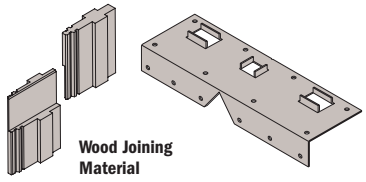
200 Series Tilt-Wash Double-Hung, Picture and Transom Windows

Average Adjacent Window Dimension									
	(A + B) ÷ 2 = **6'-0"** (1829)	40	30	24					
	(A + B) ÷ 2 = **5'-6"** (1676)	43	33	26	21				
	(A + B) ÷ 2 = **5'-0"** (1524)	48	36	29	23				
	(A + B) ÷ 2 = **4'-6"** (1372)	50	41	32	26	21			
	(A + B) ÷ 2 = **4'-0"** (1219)	50	46	36	29	24	20		
	(A + B) ÷ 2 = **3'-6"** (1067)	50	50	41	33	27	23		
	(A + B) ÷ 2 = **3'-0"** (914)	50	50	48	39	32	27	23	20
	(A + B) ÷ 2 = **2'-6"** (762)	50	50	50	47	39	32	27	24	21
	(A + B) ÷ 2 = **2'-0"** (610)	50	50	50	50	48	41	34	30	26
	(A + B) ÷ 2 = **1'-6"** (457)	50	50	50	50	50	50	46	40	35
	C = (length of join)	**3'-6"** (1067)	**4'-0"** (1219)	**4'-6"** (1372)	**5'-0"** (1524)	**5'-6"** (1676)	**6'-0"** (1829)	**6'-6"** (1981)	**7'-0"** (2134)	**7'-6"** (2286)



Red lines represent priority join (dimension C in table).

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



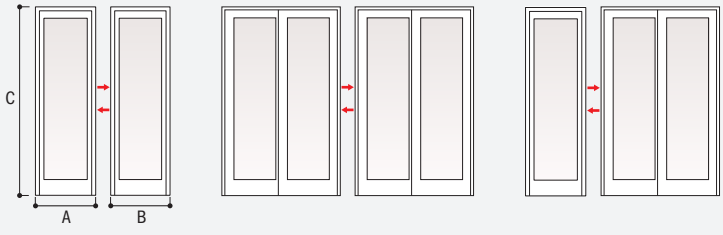
Wood Joining Material

Design Criteria for 2-Way Joining with V-Notch Gusset Plates:

- 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.

1-Way Jamb-to-Jamb Joining

200 Series Narroline® and Perma-Shield® Gliding Patio Doors



Maximum design pressure 20 psf

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- 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 instructions at andersenwindows.com.
- Additional wind load tables are available at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

1-Way Fiberglass Joining

200 Series Narroline® and Perma-Shield® Gliding Patio Doors, Hinged Inswing Patio Doors; 400 Series Frenchwood® Patio Door Sidelights and Transoms

4 9/16" (116) Minimum Wall Depth

Average Adjacent Door/Sidelight/Transom Dimension														
(A + B) ÷ 2 = **12'-0"** (3658)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **11'-6"** (3505)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **11'-0"** (3353)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **10'-6"** (3200)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **10'-0"** (3048)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **9'-6"** (2896)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **9'-0"** (2743)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **8'-6"** (2591)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **8'-0"** (2438)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **7'-6"** (2286)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **7'-0"** (2134)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **6'-6"** (1981)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **6'-0"** (1829)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **5'-6"** (1676)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **5'-0"** (1524)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **4'-6"** (1372)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **4'-0"** (1219)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **3'-6"** (1067)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **3'-0"** (914)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **2'-6"** (762)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **2'-0"** (610)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **1'-6"** (457)	45	45	45	45	45	45	45	45	45	45	45	45	45	
C = (length of join)	**2'-0"** (610)	**2'-6"** (762)	**3'-0"** (914)	**3'-6"** (1067)	**4'-0"** (1219)	**4'-6"** (1372)	**5'-0"** (1524)	**5'-6"** (1676)	**6'-0"** (1829)	**6'-6"** (1981)	**7'-0"** (2134)	**7'-6"** (2286)	**8'-0"** (2438)	

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1-Way Fiberglass Joining

200 Series Narroline® and Perma-Shield® Gliding Patio Doors, Hinged Inswing Patio Doors; 400 Series Frenchwood® Patio Door Sidelights and Transoms

6 9/16" (167) Minimum Wall Depth

Average Adjacent Door/Sidelight/Transom Dimension														
(A + B) ÷ 2 = **12'-0"** (3658)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **11'-6"** (3505)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **11'-0"** (3048)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **10'-6"** (3200)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **10'-0"** (3048)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **9'-6"** (2896)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **9'-0"** (2743)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **8'-6"** (2591)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **8'-0"** (2438)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **7'-6"** (2286)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **7'-0"** (2134)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **6'-6"** (1981)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **6'-0"** (1829)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **5'-6"** (1676)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **5'-0"** (1524)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **4'-6"** (1372)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **4'-0"** (1219)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **3'-6"** (1067)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **3'-0"** (914)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **2'-6"** (762)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **2'-0"** (610)	45	45	45	45	45	45	45	45	45	45	45	45	45	
(A + B) ÷ 2 = **1'-6"** (457)	45	45	45	45	45	45	45	45	45	45	45	45	45	
C = (length of join)	**2'-0"** (610)	**2'-6"** (762)	**3'-0"** (914)	**3'-6"** (1067)	**4'-0"** (1219)	**4'-6"** (1372)	**5'-0"** (1524)	**5'-6"** (1676)	**6'-0"** (1829)	**6'-6"** (1981)	**7'-0"** (2134)	**7'-6"** (2286)	**8'-0"** (2438)	

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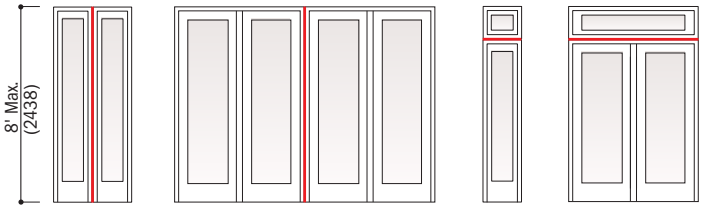
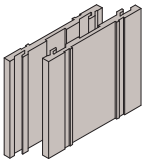
- Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- Andersen® products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- Hinged inswing patio doors with a 6 9/16" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.

1-Way Fiberglass Joining continued from previous page

45	37	30	24	20	16		
45	37	30	24	20	16		
45	37	30	24	20	16		
45	37	30	24	20	17		
45	37	30	24	20	17		
45	37	30	24	20	17		
45	37	30	25	20	17	15	
45	38	30	25	21	18	15	
45	38	31	26	21	18	16	
45	39	32	26	22	19	16	
45	40	33	27	23	20	17	15
45	41	34	29	24	21	18	15
45	43	36	30	26	22	19	16
45	45	38	32	27	24	20	18
45	45	41	35	30	26	22	19
45	45	45	38	32	28	24	21
45	45	45	42	36	31	27	24
45	45	45	45	41	35	31	27
45	45	45	45	45	41	35	31
45	45	45	45	45	45	42	37
45	45	45	45	45	45	42	45
45	45	45	45	45	45	45	45
8'-6" (2591)	**9'-0"** (2743)	**9'-6"** (2896)	**10'-0"** (3048)	**10'-6"** (3200)	**11'-0"** (3353)	**11'-6"** (3505)	**12'-0"** (3658)





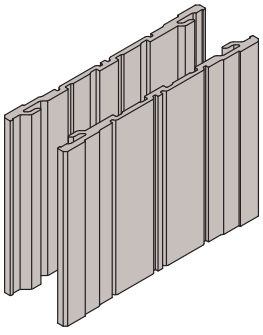
¾" (19) x 5 ¾" (146)
Fiberglass Joining Material
For 4 9/16" (116) base jamb depths.

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

Always use a structural header to separate transom windows from four-panel gliding patio doors.

1-Way Fiberglass Joining continued from previous page

45	45	45	45	45	39	32	27	23	20	17	15
45	45	45	45	45	39	32	27	23	20	17	15
45	45	45	45	45	39	32	27	23	20	18	15
45	45	45	45	45	39	33	28	24	21	18	16
45	45	45	45	45	39	33	28	24	21	18	17
45	45	45	45	45	40	34	29	25	21	19	17
45	45	45	45	45	40	34	29	25	22	19	17
45	45	45	45	45	41	35	30	26	23	20	18
45	45	45	45	45	43	36	31	27	24	21	19
45	45	45	45	45	44	38	33	29	25	22	20
45	45	45	45	45	45	40	34	30	26	23	21
45	45	45	45	45	45	42	36	32	28	25	22
45	45	45	45	45	45	44	39	34	30	26	23
45	45	45	45	45	45	45	42	36	32	28	25
45	45	45	45	45	45	45	45	40	35	31	28
45	45	45	45	45	45	45	45	43	38	34	30
45	45	45	45	45	45	45	45	45	43	38	34
45	45	45	45	45	45	45	45	45	45	43	39
45	45	45	45	45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45	45	45	43	39
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)	**13'-0"** (3962)	**13'-6"** (4114)	**14'-0"** (4267)



¾" (19) x 7 ¾" (197)
Fiberglass Joining Material
For higher performance for 1-way and 2-way joining. Required for hinged inswing patio doors with 6 9/16" (167) or greater exterior extension jamb depths.

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

Always use a structural header to separate transom windows from four-panel gliding patio doors.

- Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- 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 instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- Hinged inswing patio doors with a 6 9/16" (167) or greater exterior extension jamb depth require 7 ¾" (197) fiberglass joining material.

2-Way Fiberglass Joining

200 Series Narroline® and Perma-Shield® Gliding Patio Doors, Hinged Inswing Patio Doors; 400 Series Frenchwood® Patio Door Sidelights and Transoms

4 9/16" (116) Minimum Wall Depth

Average Adjacent Door/Sidelight/Transom Dimension													
(A + B) ÷ 2 = **12'-0"** (3658)	45	45	45	45	45	45	41	38	34	32	29	27	25
(A + B) ÷ 2 = **11'-6"** (3505)	45	45	45	45	45	45	43	39	36	33	31	29	27
(A + B) ÷ 2 = **11'-0"** (3353)	45	45	45	45	45	45	45	41	38	35	32	30	28
(A + B) ÷ 2 = **10'-6"** (3200)	45	45	45	45	45	45	45	43	39	36	34	31	29
(A + B) ÷ 2 = **10'-0"** (3048)	45	45	45	45	45	45	45	45	41	38	35	33	31
(A + B) ÷ 2 = **9'-6"** (2896)	45	45	45	45	45	45	45	45	44	40	37	35	32
(A + B) ÷ 2 = **9'-0"** (2743)	45	45	45	45	45	45	45	45	45	42	39	37	34
(A + B) ÷ 2 = **8'-6"** (2591)	45	45	45	45	45	45	45	45	45	45	42	39	36
(A + B) ÷ 2 = **8'-0"** (2438)	45	45	45	45	45	45	45	45	45	45	44	41	38
(A + B) ÷ 2 = **7'-6"** (2286)	45	45	45	45	45	45	45	45	45	45	45	44	41
(A + B) ÷ 2 = **7'-0"** (2134)	45	45	45	45	45	45	45	45	45	45	45	45	44
(A + B) ÷ 2 = **6'-6"** (1981)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **6'-0"** (1829)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **5'-6"** (1676)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **5'-0"** (1524)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **4'-6"** (1372)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **4'-0"** (1219)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **3'-6"** (1067)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **3'-0"** (914)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **2'-6"** (762)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **2'-0"** (610)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **1'-6"** (457)	45	45	45	45	45	45	45	45	45	45	45	45	45
C = (length of join)	**2'-0"** (610)	**2'-6"** (762)	**3'-0"** (914)	**3'-6"** (1067)	**4'-0"** (1219)	**4'-6"** (1372)	**5'-0"** (1524)	**5'-6"** (1676)	**6'-0"** (1829)	**6'-6"** (1981)	**7'-0"** (2134)	**7'-6"** (2286)	**8'-0"** (2438)

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2-Way Fiberglass Joining

200 Series Narroline® and Perma-Shield® Gliding Patio Doors, Hinged Inswing Patio Doors; 400 Series Frenchwood® Patio Door Sidelights and Transoms

6 9/16" (167) Minimum Wall Depth

Average Adjacent Door/Sidelight/Transom Dimension													
(A + B) ÷ 2 = **12'-0"** (3658)	45	45	45	45	45	45	45	45	41	38	35	33	31
(A + B) ÷ 2 = **11'-6"** (3505)	45	45	45	45	45	45	45	45	43	40	37	34	32
(A + B) ÷ 2 = **11'-0"** (3048)	45	45	45	45	45	45	45	45	45	41	38	36	34
(A + B) ÷ 2 = **10'-6"** (3200)	45	45	45	45	45	45	45	45	45	43	40	38	35
(A + B) ÷ 2 = **10'-0"** (3048)	45	45	45	45	45	45	45	45	45	45	42	40	37
(A + B) ÷ 2 = **9'-6"** (2896)	45	45	45	45	45	45	45	45	45	45	45	42	39
(A + B) ÷ 2 = **9'-0"** (2743)	45	45	45	45	45	45	45	45	45	45	45	44	41
(A + B) ÷ 2 = **8'-6"** (2591)	45	45	45	45	45	45	45	45	45	45	45	45	44
(A + B) ÷ 2 = **8'-0"** (2438)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **7'-6"** (2286)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **7'-0"** (2134)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **6'-6"** (1981)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **6'-0"** (1829)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **5'-6"** (1676)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **5'-0"** (1524)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **4'-6"** (1372)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **4'-0"** (1219)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **3'-6"** (1067)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **3'-0"** (914)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **2'-6"** (762)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **2'-0"** (610)	45	45	45	45	45	45	45	45	45	45	45	45	45
(A + B) ÷ 2 = **1'-6"** (457)	45	45	45	45	45	45	45	45	45	45	45	45	45
C = (length of join)	**2'-0"** (610)	**2'-6"** (762)	**3'-0"** (914)	**3'-6"** (1067)	**4'-0"** (1219)	**4'-6"** (1372)	**5'-0"** (1524)	**5'-6"** (1676)	**6'-0"** (1829)	**6'-6"** (1981)	**7'-0"** (2134)	**7'-6"** (2286)	**8'-0"** (2438)

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- Numerical values in charts represent structural pressure only.
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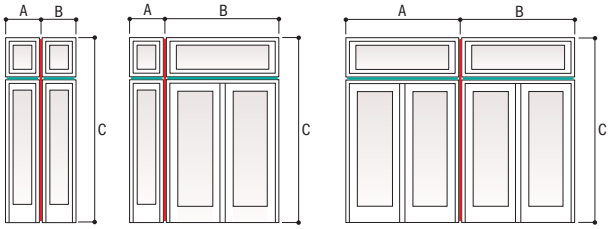
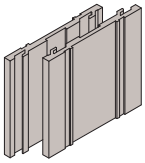
- Andersen® products must be installed and anchored properly according to joining and installation guides to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- Hinged inswing patio doors with a 6 9/16" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.

2-Way Fiberglass Joining continued from previous page

21	18	15					
22	18	16					
23	19	16					
24	20	17	15				
25	21	18	16				
27	22	19	16				
28	24	20	17	15			
30	25	21	18	16			
32	27	23	19	17			
34	29	24	21	18	15		
36	31	26	22	19	17		
39	33	28	24	21	18	16	
43	36	30	26	22	19	17	15
45	39	33	28	24	21	19	16
45	43	37	31	27	23	20	18
45	45	41	35	30	26	23	20
45	45	45	39	34	29	26	23
45	45	45	45	39	34	29	26
45	45	45	45	45	39	34	30
45	45	45	45	45	45	41	36
45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45
8'-6" (2591)	**9'-0"** (2743)	**9'-6"** (2896)	**10'-0"** (3048)	**10'-6"** (3200)	**11'-0"** (3353)	**11'-6"** (3505)	**12'-0"** (3658)



Red lines represent reinforced joins.
Blue lines represent non-reinforced joins.



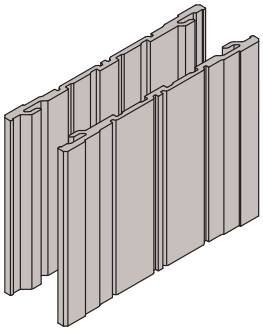
¾" (19) x 5 ¾" (146)
Fiberglass Joining Material
For 4 9/16" (116) base jamb depths.

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

Always use a structural header to separate transom windows from four-panel gliding patio doors.

2-Way Fiberglass Joining continued from previous page

29	27	26	25	22	20	19	17	16			
30	28	27	26	23	21	19	18	16	15		
32	30	28	27	25	22	20	19	17	16	15	
33	31	30	28	26	23	21	20	18	17	15	
35	33	31	30	27	25	22	21	19	17	16	15
37	35	33	31	28	26	24	22	20	18	17	16
39	37	35	33	30	27	25	23	21	19	18	17
41	39	37	35	32	29	26	24	22	21	19	18
44	41	39	37	34	31	28	26	24	22	20	19
45	44	42	40	36	33	30	28	25	23	22	20
45	45	45	42	39	35	32	30	27	25	23	22
45	45	45	45	42	38	35	32	29	27	25	23
45	45	45	45	45	41	38	35	32	29	27	25
45	45	45	45	45	45	41	38	35	32	30	28
45	45	45	45	45	45	45	42	38	35	33	30
45	45	45	45	45	45	45	45	43	39	36	34
45	45	45	45	45	45	45	45	45	44	41	38
45	45	45	45	45	45	45	45	45	45	45	44
45	45	45	45	45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45	45	45	45	45
45	45	45	45	45	45	45	45	45	45	45	45
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)	**13'-0"** (3962)	**13'-6"** (4114)	**14'-0"** (4267)



¾" (19) x 7 ¾" (197)
Fiberglass Joining Material
For higher performance for 1-way and 2-way joining. Required for hinged inswing patio doors with 6 9/16" (167) or greater exterior extension jamb depths.

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

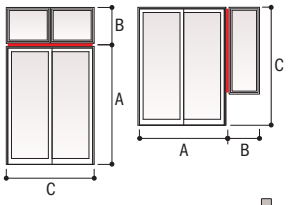
Always use a structural header to separate transom windows from four-panel gliding patio doors.

- Numerical values in charts represent structural pressure only.
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- 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 instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.
- Hinged inswing patio doors with a 6 9/16" (167) or greater exterior extension jamb depth require 7 3/4" (197) fiberglass joining material.

1-Way Steel Joining

200 Series Patio Doors & 400 Series Windows

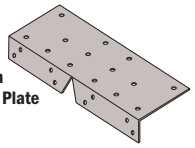
Average Adjacent Window/Door Dimension	C = (length of join)	5'-6" (1676) or less	6'-0" (1829)	6'-6" (1981)	7'-0" (2134)	7'-6" (2286)	8'-0" (2438)	8'-6" (2591)	9'-0" (2743)	9'-6" (2896)	10'-0" (3048)	10'-6" (3200)	11'-0" (3353)	11'-6" (3505)	12'-0" (3658)	12'-6" (3810)
(A + B) ÷ 2 = **12'-6"** (3810)		40	37	33	25	22										
(A + B) ÷ 2 = **12'-0"** (3658)		40	37	34	26	23										
(A + B) ÷ 2 = **11'-6"** (3505)		40	38	35	27	24										
(A + B) ÷ 2 = **11'-0"** (3353)		40	39	36	29	25										
(A + B) ÷ 2 = **10'-6"** (3200)		40	40	37	30	27	21									
(A + B) ÷ 2 = **10'-0"** (3048)		40	40	37	32	28	22									
(A + B) ÷ 2 = **9'-6"** (2896)		40	40	39	34	30	23	20								
(A + B) ÷ 2 = **9'-0"** (2743)		40	40	40	36	32	25	21								
(A + B) ÷ 2 = **8'-6"** (2591)		40	40	40	37	34	27	22								
(A + B) ÷ 2 = **8'-0"** (2438)		40	40	40	39	36	28	24								
(A + B) ÷ 2 = **7'-6"** (2286)		40	40	40	40	37	31	27	21							
(A + B) ÷ 2 = **7'-0"** (2134)		40	40	40	40	40	32	28	22							
(A + B) ÷ 2 = **6'-6"** (1981)		40	40	40	40	40	36	31	25	23						
(A + B) ÷ 2 = **6'-0"** (1829)		40	40	40	40	40	39	36	27	24	20					
(A + B) ÷ 2 = **5'-6"** (1676)		40	40	40	40	40	40	37	30	25	24					
(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



Intended for use with patio door to window joins only. Please refer to patio door tables for further information regarding structural support between doors.

Always use a structural header to separate transom windows from four-panel gliding patio doors.

4" (102) x 3/16" (5) Steel Joining Material



V-Notch Gusset Plate

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 3

Always use a structural header to separate transom windows from four-panel gliding patio doors. For all other door types, see Figure 1.

Figure 4

Steel reinforced joining is recommended whenever transom or sidelight windows are placed above or beside door units.

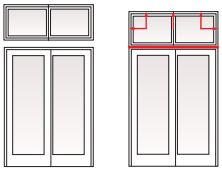


Figure 1

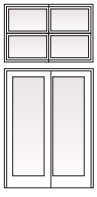


Figure 2

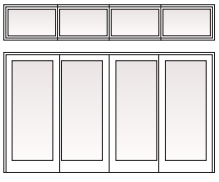


Figure 3

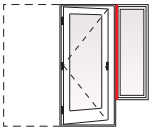


Figure 4

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