

FOLDING GLASS WALL SYSTEMS



The most versatile doors in the industry

Folding Glass Walls, (Bi-fold Doors or Accordion-Style Doors), have been a signature product of Solar Innovations® since 2004. Designed and manufactured in the USA, our Folding Glass Walls are custom manufactured to fit virtually any rough opening and be configured to operate dozens of ways, with any number of panels. These operable walls offer a flexible and customizable opening that can be incorporated into any residential or commercial project including covered patios, living rooms, decks, enclosed porches, and pool houses. Swing doors can be integrated into the system, allowing the user to easily enter or exit a room without opening all of the panels. The endless possibilities — including custom color finishes, custom hardware, and decorative grids — coupled with the highest performance in the industry, make our Folding Glass Walls the perfect solution for any application.

FEATURES

OPERATION:

- Top or bottom load
- In-fold or out-fold operation
- Endless configurations possible
- Swing door integration
- No corner post setup available
- Center pivot option

FRAMING:

- Aluminum or wood
- Frame widths: 3 $\frac{3}{8}$ ", 2 $\frac{7}{16}$ ", and 1 $\frac{5}{8}$ " (G3 only)
- Up to 3' x 15' panels and larger
- Standard, high performance and ADA compliant sills
- Matching sidelites and transoms
- LEED friendly system including recycled content

HARDWARE:

- Multiple handle styles and finishes
- Panic hardware and closer options available
- Roller assemblies designed to minimize and simplify panel maintenance
- Zero-maintenance extruded aluminum hinges with stainless steel pins
- Custom manufactured pulls and locks
- Closers (overhead)

GLAZING:

- Designed to accommodate almost any glazing infill including glass, acrylic, polycarbonate and solid panels, from $\frac{3}{16}$ " to 1 $\frac{9}{16}$ "

PERFORMANCE:

- Air, water, structural, impact, acoustical and thermally tested options

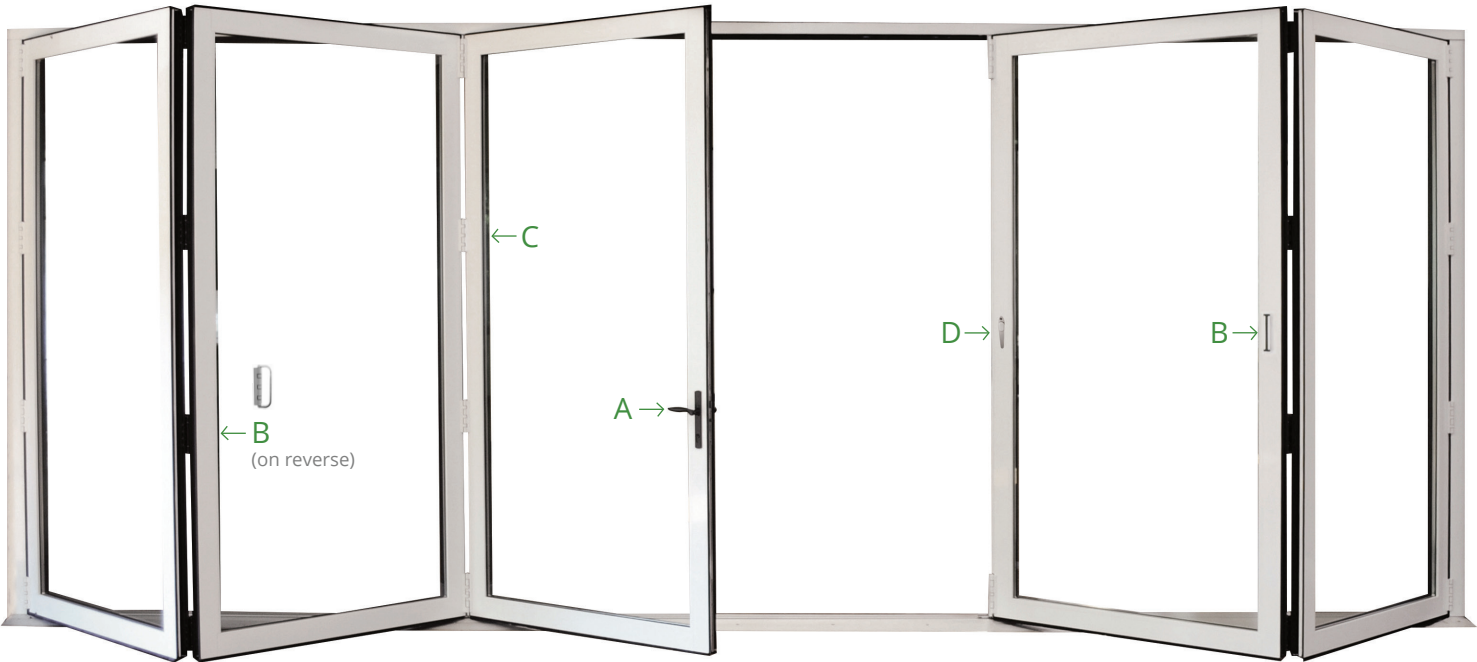
FINISHES:

- Standard finishes:
 - AAMA 2603: Black, White, Sandstone, Natural Clay, Bronze and Hartford Green
 - AAMA 611 Class I Anodized: Clear, Dark Bronze
- Designer finishes:
 - AAMA 2604: Black, White, Sandstone, Natural Clay, Bronze and Hartford Green
- Custom finishes:
 - Powder coat finish: AAMA 2604, 2605
 - Fluoropolymer (50% or 70%): AAMA 2604, 2605
 - Faux wood
 - Dual finish — interior/exterior applications

OPTIONS:


- Wood veneer or metal cladding
- Framed and cartridge retractable screen options
- Manufacturer-installed sill drain tubes, if required
- Mullions, decorative muntins, simulated divided lites (SDLs), interior and exterior grids

HARDWARE




A: Handles

SOLID BRASS — COASTAL APPLICATIONS*

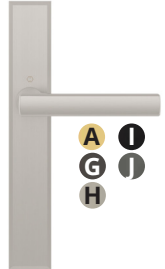


Toronto
Standard


Finish Options: A Polished Brass, B Antique Brass, C Brushed Chrome*, D Polished Chrome*, E Oil Rubbed Brass, F White, G Matte Black, H Satin Nickel*, I Rustic Umber, J Dark Bronze Metallic




Atlanta



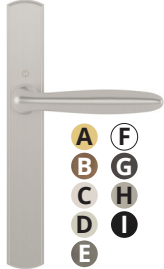
Dallas



München




Ródos



Verona

*Coastal applications are only available with select finish options.

ALUMINUM— INLAND APPLICATIONS



Frankfurt



London

• Pure White
• Pure Silver

ZAMAC/BRASS — INLAND APPLICATIONS (G2 ONLY)



Allegro



Torino



Venice

• Satin Chrome
• Polished Chrome*
• Polished Brass
• Antique Brass
• Oil Rubbed Bronze
• Dark Bronze PC
• Black PC
• White PC
• Satin Nickel
• Dark Bronze
• Pewter
* Not available for Torino

FOR "KEYED ALIKE" APPLICATIONS



AR2190

- Bright Brass
- Satin Brass
- Dark Bronze
- Bright Stainless
- Satin Stainless

Additional handle styles, colors, and back plate options available upon request. Non-standard handle options may increase lead times and/or cost. All handles available with thumbturn interior lock with lever exterior, lever interior and exterior, and thumbturn interior lock with keyed exterior options.

B: Pull Hardware



Recessed Pull
(In-Fold)



Extruded Hinge Pull
(Out-Fold)



Low Profile Handle

C: Hinges



Semi-Concealed Hinge



Surface Mount Hinge

D: Locks



Two-Point Locking Handle



Two-Point Keyed Locking Handle*



Thumb Turn Lock



Standard Flush Bolt

* Additional cost

Pull Hardware, Hinge, and Lock Finish Options



SI White



SI Bronze



Class I Clear Anodized



Dark Bronze Anodized

Custom color options are also available upon request.

Closer, Catch, & Limiter



D Series 7414 Door Closer



D Series TS93 Door Closer



C Series PR82 Door Closer



Standard Adjustable Door Catch



Extended Adjustable Door Catch



Door Limiter

Door Closer Finishes: Aluminum Painted, Bronze, and Black

Adjustable Door Catch Finishes: Clear Anodized, Dark Bronze Anodized, White Painted, and Bronze Painted.

Commercial Panic Hardware Options



Exterior Entry Trim Square



Mortise Panic



Impact Panic



Push/Pull



Wire Pulls

Push Only

Passive Hardware Sets



Square Commercial



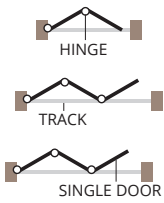
Toronto

Concealed vertical rod available.

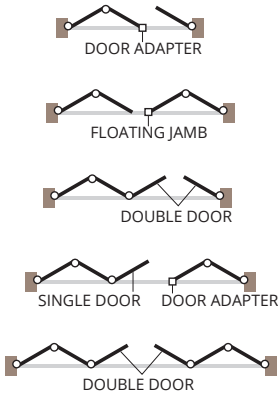
Please Note: All hardware is subject to vendor availability. Custom finishes may be available upon request at additional lead time and/or cost. Solar Innovations® reserves the right to discontinue any hardware option at any time. Please be sure to visit solarinnovations.com for additional product information.

CONFIGURATIONS/OPERATION

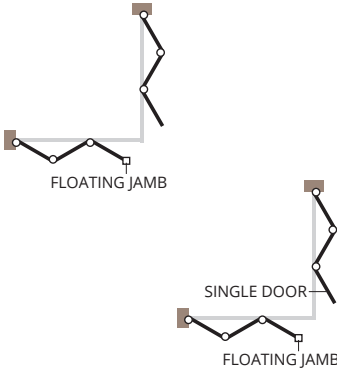
Single Direction (All Wall)



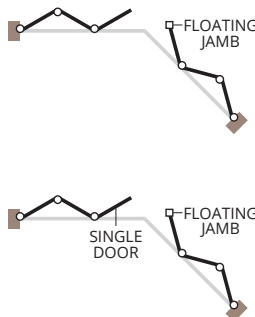
Split Wall



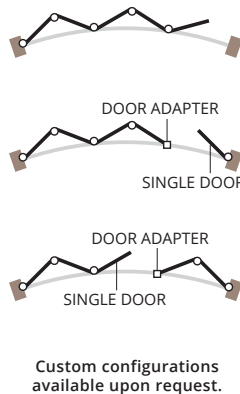
90 Degree No Post



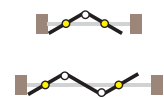
135 Degree No Post



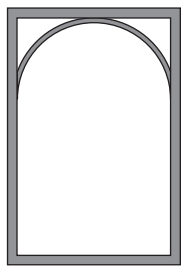
Segmented Radius



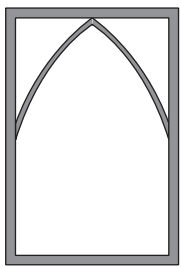
Center Pivot



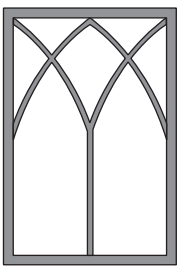
GRID OPTIONS



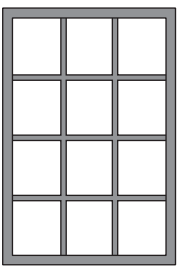
Arched Grid



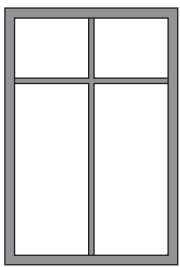
Gothic Grid



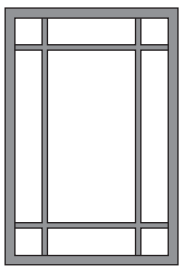
Double Gothic Grid



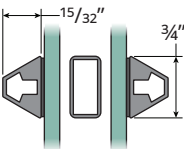
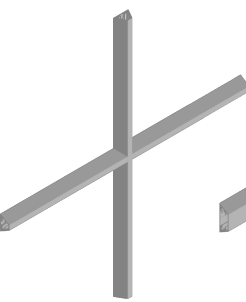
Traditional Grid



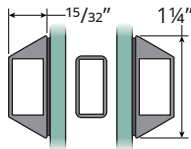
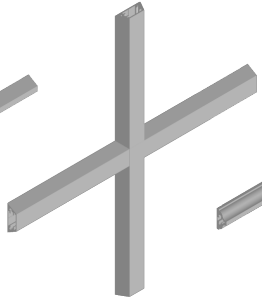
Cross Grid



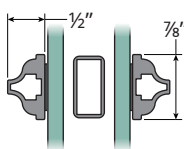
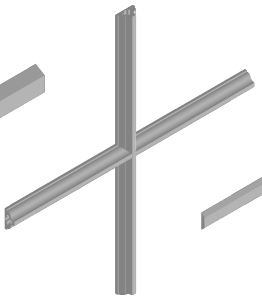
English Grid



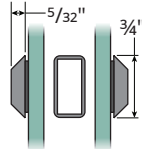
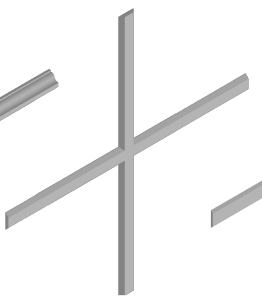
Traditional with SDL



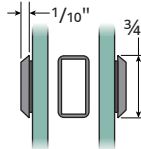
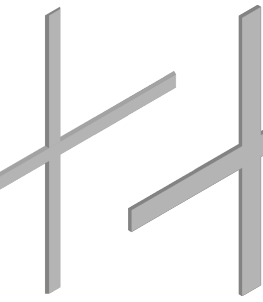
Wide Traditional with SDL



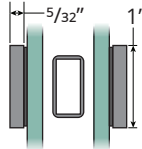
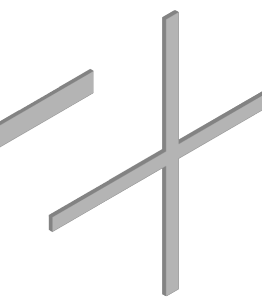
Ogee with SDL



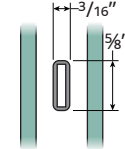
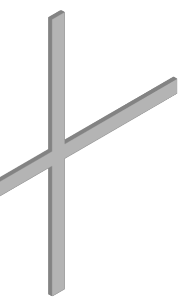
Low Profile with SDL



Thin Low Profile with SDL

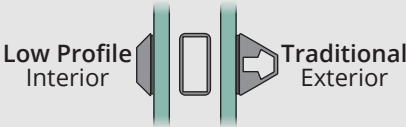


Simulated Steel with SDL



Interior Muntin in Insulated Glass

Like-sized grids can be mixed and matched, for example:


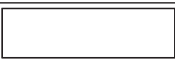






Low Profile Interior

Traditional Exterior

FINISH OPTIONS

Paint AAMA 2603 (5 year warranty). Finishes available while in stock.

					
SI Black	SI White	SI Sandstone	SI Natural Clay	SI Bronze	SI Hartford Green











Anodized Additional cost

	
Class I Clear Anodized	Dark Bronze Anodized

Powder Coat Solids STANDARD - AAMA 2605 (10 year; up to 20 year warranty). Scratch & fade resistant; contains no VOCs.*

					
Black FRSL 11618	White FRSL 83247	Sandstone FRSL 46647	Natural Clay FRSL 47591	Bronze FRML 97138	Hartford Green FRSL 32872

Powder Coat Solids PREMIUM - AAMA 2605 (10 year; up to 20 year warranty). Scratch & fade resistant; contains no VOCs.*

									
Apollo White FRSL 82908	Bone White FRSL 82909	Ivory FRSL 46646	Seawolf FRSL 46645	Fashion Gray FRSL 74652	Colonial Gray FRSL 74653	Charcoal FRSL 74654	Antique Bronze FRSL 46648	Burgundy FRSL 62496	Military Light Blue FRSL 21709

Visit <https://www.ifscoatings.com/content/assets/Uploads/brochures/IFS-Architectural-Digital-Color-Card.pdf> for additional metallic and anodic finishes.


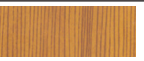




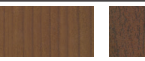



Metal Clad STANDARD*

	
Copper	#4 Polished Stainless Steel

Metal Clad PREMIUM*

				
Rheinzink Bright Rolled**	Rheinzink Blue Gray**	Rheinzink Graphite Gray**	Brass	Bronze

Decoral Finishes (Powder Coat)*

									
Knotty Pine 2103 DS 716 Textured DS 402 Smooth	Douglas Fir 1501 DS 716 Textured DS 402 Smooth	Acacia 1001 DS 716 Textured DS 402 Smooth	Cherry 1402 DS 716 Textured DS 402 Smooth	Acacia 1001 DS 733 Textured DS 403 Smooth	Oak Assi 2501 DS 733 Textured DS 403 Smooth	Cherry 1402 DS 733 Textured DS 403 Smooth	Dark Walnut 1802 DS 733 Textured DS 403 Smooth	Teak 2601 DS 706 Textured Mahogany Finish	National Walnut 1806 DS 706 Textured Mahogany Finish

Wood Veneering (Unfinished) STANDARD*

			
Douglas Fir	White Oak	Walnut	Mahogany

Note: wood veneering is for interior applications only. Available on a limited basis due to vendor supply.

Wood Veneering (Unfinished) PREMIUM*

		
White Pine	Pecan Pine	Cherry

Wood/Glulam STANDARD*

			
Red Oak	White Ash	Hard Maple	White Oak

Wood/Glulam PREMIUM*

			
Douglas Fir	Cherry	Sapele Mahogany	Walnut

*Lead times subject to availability. ** Special order.

Note: Depending upon color selection, additional charges and increased lead times may apply. Extended warranties and service plans are available for an additional charge. Examples are shown as accurate as photography and printing processes allow. Final finish selection should be made from a physical sample; contact Solar Innovations® for samples. Product and finish options are subject to vendor availability. Solar Innovations® reserves the right to discontinue any option at any time without notice. Additional options, including custom color match, are available; contact Solar Innovations® for details.

To find out more about the features and options of our folding glass walls, visit our website at solarinnovations.com/folding-glass-walls/ or contact one of our sales designers at 800 618 0669.

SILL COMPARISONS

Folding Glass Wall Sill Type	Application	Top Load	Bottom Load	Recessed	Surface Mount	ADA Compliant	Florida Impact Tested	Water Performance	Max. Panel Height	Max. Frame Width	Max. Header Deflection	
G2 System												
	G2 Recessed with Ramps	Interior or Exterior	Yes	Yes	Yes	No	Yes, with Sill Fill	Yes	Limited*	Varies	Varies	3/16"
	G2 Recessed Flush	Interior or Exterior	Yes	Yes	Yes	Yes	Yes, with Sill Fill	Yes	9psf	Varies	Varies	3/16"
	G2 Recessed Standard	Interior or Exterior	Yes	Yes	Yes	No	No	Yes	12psf Outfold 9psf Infold	Varies	Varies	3/16"
	G2 Standard	Interior or Exterior	Yes	Yes	No	Yes	No	Yes	12psf Outfold 9psf Infold	Varies	Varies	3/16"
G3 System												
	G3 Recessed with Ramps	Interior or Exterior	Yes	Yes	Yes	No	Yes, with Sill Fill	Yes	Limited*	Varies	Varies	3/16"
	G3 Recessed Flush	Interior or Exterior	Yes	Yes	Yes	Yes	Yes, with Sill Fill	Yes	9psf	Varies	Varies	3/16"
	G3 Recessed Standard	Interior or Exterior	Yes	Yes	Yes	No	No	Yes	12psf Outfold 9psf Infold	Varies	Varies	3/16"
	G3 Standard	Interior or Exterior	Yes	Yes	No	Yes	No	Yes	12psf Outfold 9psf Infold	Varies	Varies	3/16"
	G3 Stepped with Ramps	Interior or Exterior	Yes	Yes	Yes	No	Yes	No	Limited*	Varies	Varies	3/16"
Both G2 & G3 Systems												
	Recessed Flush Hat	Interior or Exterior	Yes	No	Yes	No	Yes, with Sill Fill	No	Limited*	10' 6"	Varies	3/16"
	ADA Recessed Flush Hat	Interior or Exterior	Yes	No	Yes	No	Yes	No	Limited*	10'	Varies	3/16"
	Surface Mount	Interior or Exterior	Yes	No	No	Yes	No	No	Limited*	10' 6"	Varies	3/16"
	ADA Surface Mount	Interior or Exterior	Yes	No	No	Yes	Yes	No	Limited*	10' 6"	Varies	3/16"
	Thermal ADA	Interior or Exterior	Yes	No	No	Yes	Yes	No	Limited*	8'	16'	3/32"
	Recessed Thermal ADA	Interior or Exterior	Yes	No	Yes	No	Yes	No	Limited*	10'	Varies	¼"

*Limited air and water performance similar to a commercial door

G2 FOLDING GLASS WALLS



G2 Thermal System

G2 Aluminum Folding Glass Wall Systems are a great way to open your environment to the outdoors. The frame uses a thermal strut system that separates the interior metal from the exterior metal. By including a thermal break, the temperature transfer between the outdoors and indoors is minimized.



The frames are available in two vertical stile widths: narrow and standard. The widths can be combined over multiple units for a unique style or kept consistent throughout. This flexibility allows multiple sightline and bottom rail configurations that can be retrofitted to match an existing opening or accommodate specific structural requirements.

G2 Non-Thermal System

G2 Non-Thermal Aluminum Folding Glass Wall Systems are ideal for mild climates and indoor uses. This system is popular for conference rooms, interior commercial entryways, and classrooms, as well as residential and commercial room dividers. Frames are available in two vertical stile widths: narrow and standard. These can be combined over multiple units for a unique style or kept consistent throughout.

Panels

- Minimum panel size: 18" wide; smaller panels may be available upon request
- Panel size up to 3' x 10'; larger panel options may be available depending on application

Glazing

- Designed to accommodate almost any monolithic, insulated, laminated, decorative, polycarbonate, or solid panel infill from $\frac{3}{16}$ " to $1\frac{1}{4}$ "

Performance

- Water performance up to 12psf, depending on sill choice and configuration
- Structurally tested up to a design pressure of 80psf
- Higher design pressure ratings available with engineering approval
- Test results available upon request



TESTING

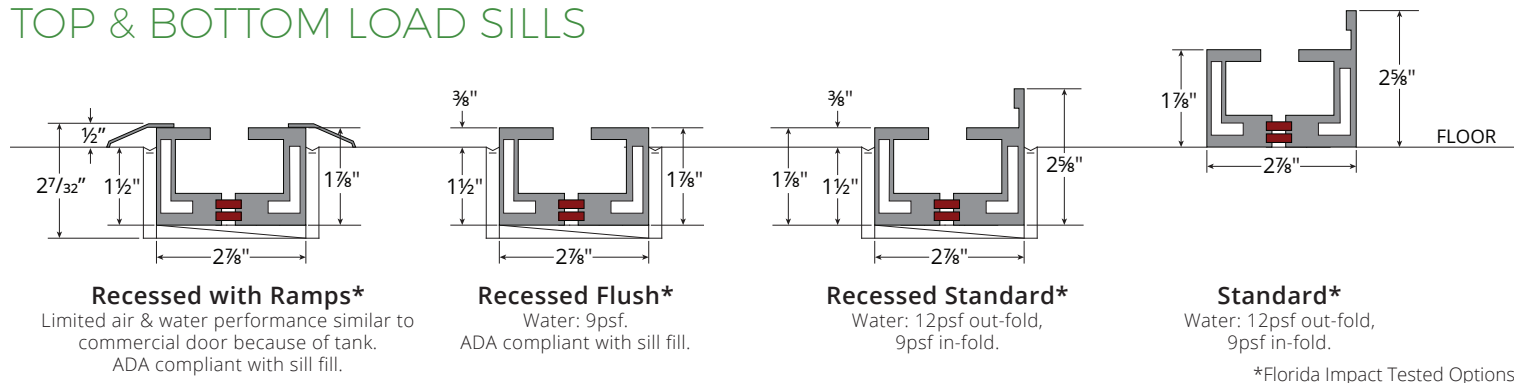
G2 Folding Glass Wall Impact Testing

Certification	Description	Panel Size	Number of Panels	Design Pressure	Water Penetration	Glass Selection	HVHZ Approved
12278.3	G2 Reg Thermal Outfold (Reinforced)	36" x 96"	Unlimited	Max ±80psf	Standard Sill: 12psf Recessed Flush Sill: 9psf	1" IGU 3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SPG)	Yes
12278.4	G2 Reg Thermal Infold (Reinforced)	36" x 96"	Unlimited	Max ±80psf	Standard Sill: 9psf Recessed Flush Sill: 9psf	1" IGU (3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SGP)	Yes
12278.5	G2 Reg Thermal Outfold (Non-Reinforced)	36" x 90"	Unlimited	Max ±55psf	Standard Sill: 12psf Recessed Flush Sill: 9psf Recessed Ramp: 4psf	1" IGU (3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SPG)	No

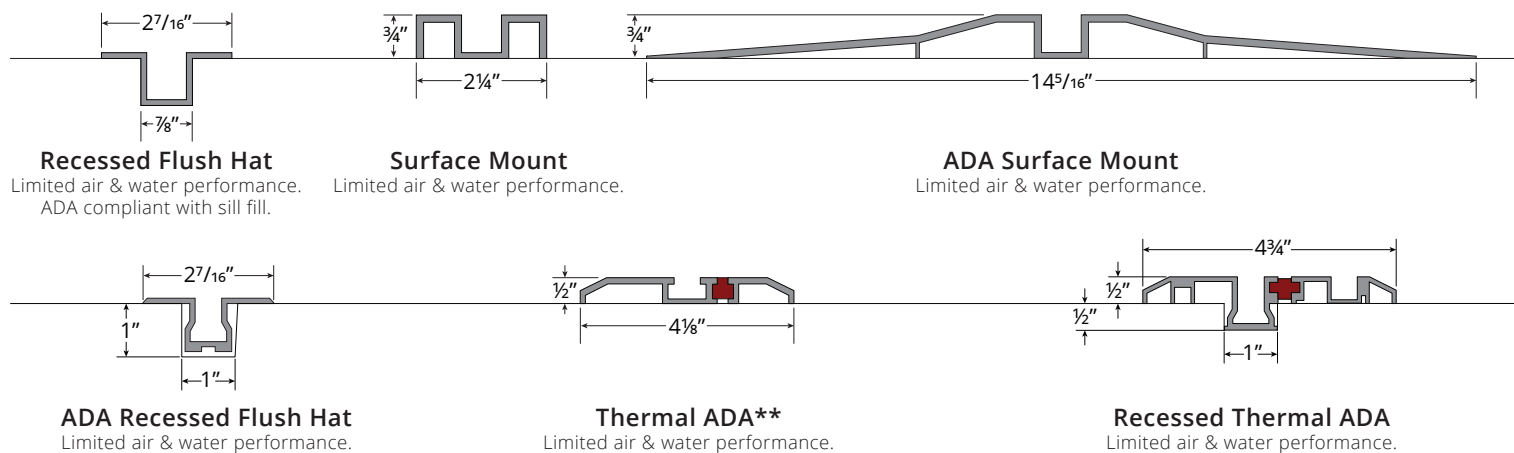
G2 Folding Glass Wall STC Ratings

Report	Description	Sill	Glazing Thickness	Glazing Makeup	STC	OITC
F3179.01	G2 Reg Thermal	Standard	1 1/8"	1/4" Lami w/ .030 Acoustical Interlayer, 1/2" Air, 3/8" Lami w/ .030 Acoustical Interlayer	39	32
F3179.02	G2 Reg Thermal	Recessed Flush or Recessed Ramp	1 1/8"	1/4" Lami w/ .030 Acoustical Interlayer, 1/2" Air, 3/8" Lami w/ .030 Acoustical Interlayer	34	29

TOP & BOTTOM LOAD SILLS



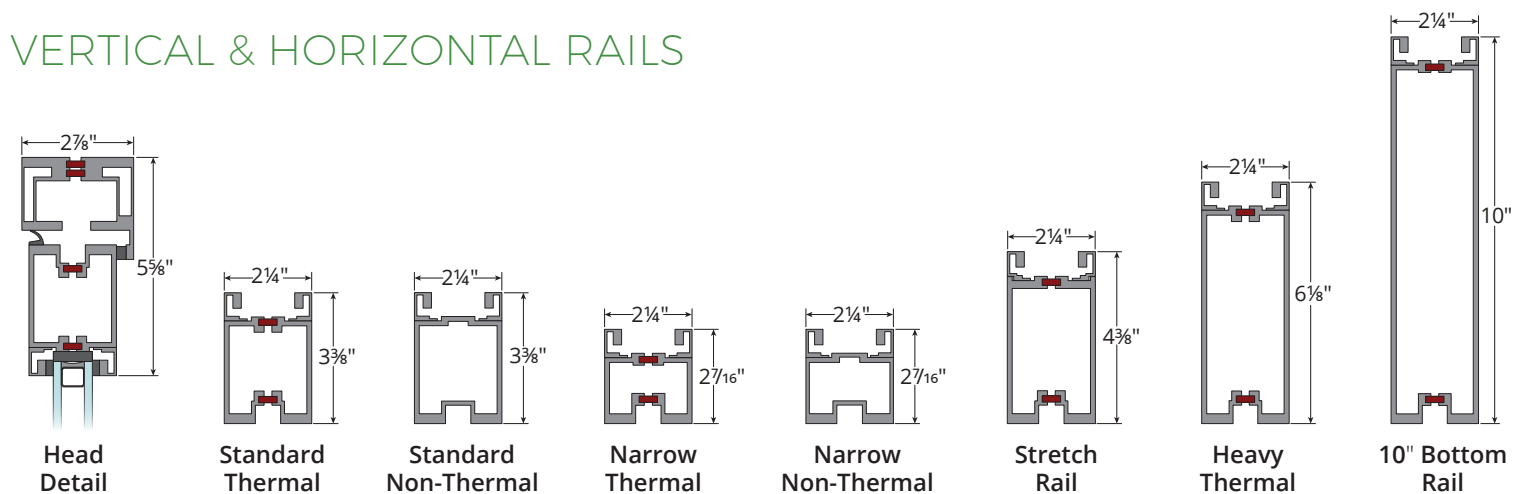
TOP LOAD ONLY SILLS



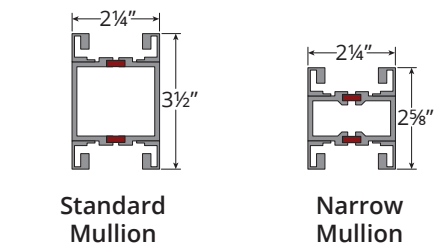
Note: Center Pivot Folding Glass Walls will get limited air and water performance.

** 8' maximum panel height, 16' maximum frame width, $\frac{3}{32}$ " maximum allowable header deflection.

VERTICAL & HORIZONTAL RAILS

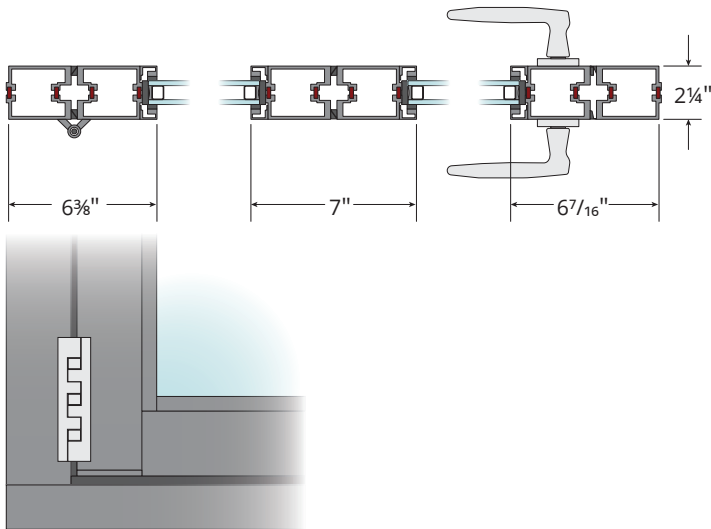


MULLIONS (True Divided Lites)

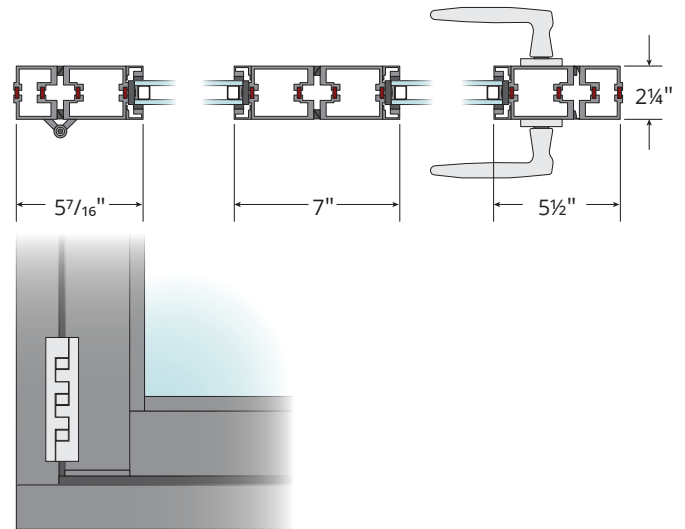


Please note: All mullions offered by Solar Innovations® include thermal break, regardless of the system.

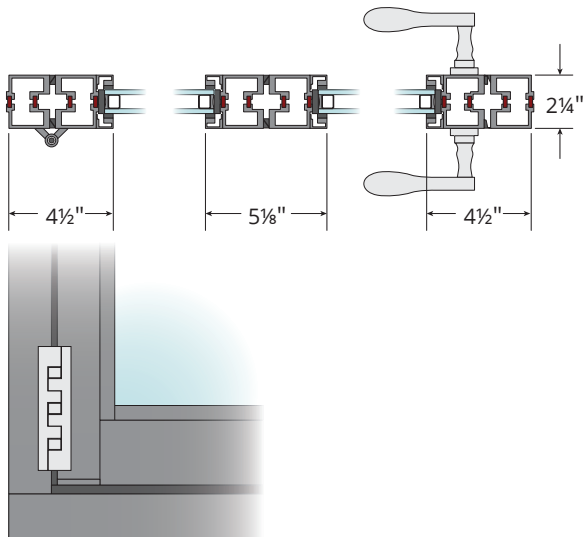
JAMB DETAILS



Standard G2 Jamb & Frame



Narrow G2 Jamb & Standard G2 Frame

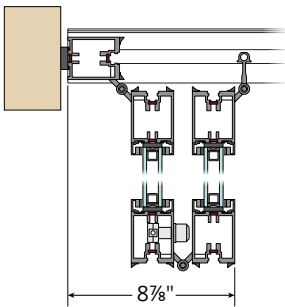


Narrow G2 Jamb & Frame

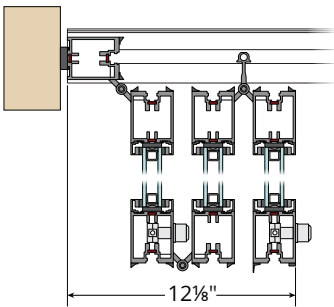
Top and bottom horizontals unable to utilize narrow framing. Options dependent upon desired size and engineering requirements.

STACKED WALL DIMENSIONS

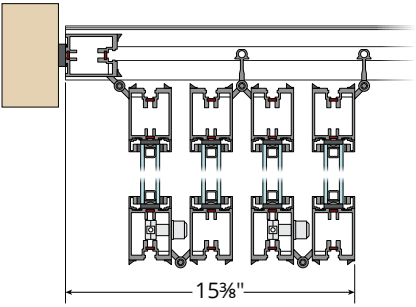
Standard Jamb. Subtract 15/16" for Narrow Jamb.



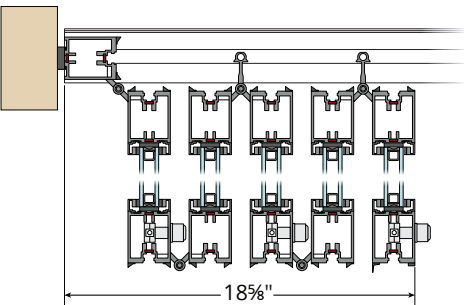
2 Panels



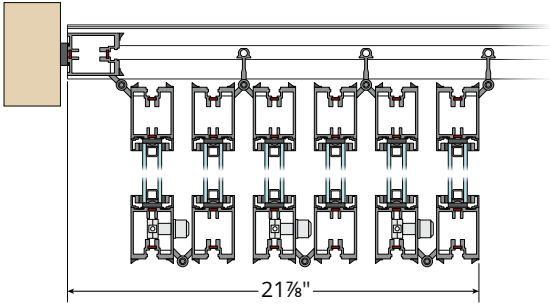
3 Panels



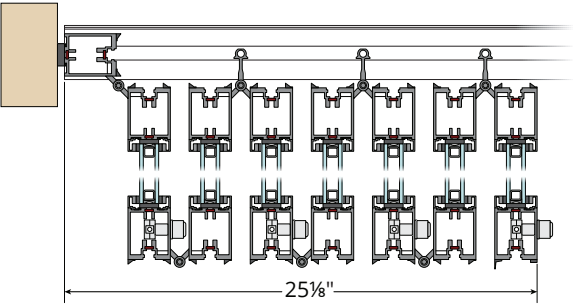
4 Panels



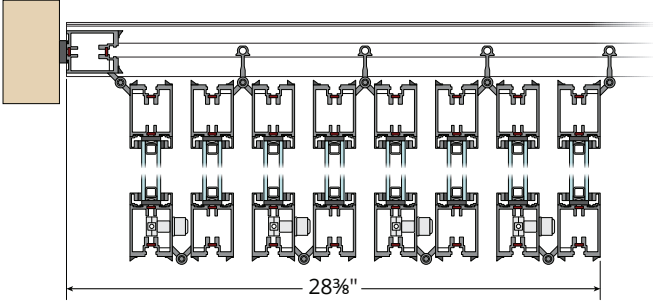
5 Panels



6 Panels



7 Panels



8 Panels

G3 FOLDING GLASS WALLS



G3 Thermal System

G3 Aluminum Folding Glass Wall Systems are designed for commercial and residential applications that require higher design pressures. This system has been designed to support larger glass sizes while maintaining the ease of operation as our G2 System. The G3 System offers exceptional air, water, structural, acoustical, and thermal performance using a thermal strut system that separates the interior metal from the exterior metal. By including this thermal break, the temperature transfer between the outdoors and indoors is minimized.

Frames are available in three vertical stile widths: standard, narrow, and xtra narrow. You can select a consistent vertical width or mix and match the three stile widths to create a truly unique design. This system was created with similar sightlines to the G2 Systems so that the two could be used together, if desired. The flexibility of both systems allows multiple sightline and bottom rail configurations that can be retrofitted to match an existing opening or accommodate specific structural requirements.

G3 Non-Thermal System

The G3 Non-Thermal System is ideal for applications that do not require thermal performance, including mild climates and indoor uses — this system is popular for interior entryways and room dividers.

G3 Marine Glazed System

Our G3 Extra Narrow Marine Glazed Folding Glass Wall System optimizes the view of the outdoors by minimizing the vertical stiles. It uses a patented design to combine vertical marine glazing with horizontal stop glazing in order to create a much narrower vertical frame than conventional stop glazed doors. The G3 Extra Narrow Marine Glazed System is the narrowest four-sided thermally broken glazed bi-fold door in the market.



Panels

- Minimum panel width: 24"; smaller panels may be available based upon request
- Panel size up to 3' x 15'; larger panel options may be available depending on application

Glazing

- Designed to accommodate almost any monolithic, insulated, laminated, decorative, polycarbonate, or solid panel infill from ¼" to 1½"

Performance

- Water performance up to 12psf, depending on sill choice and configuration
- Structural tested up to a design pressure of 100psf*
- Higher water and structural performance available with engineering approval
- Test results available upon request

*Performance does not apply to G3 Narrow or Marine Glazed System.

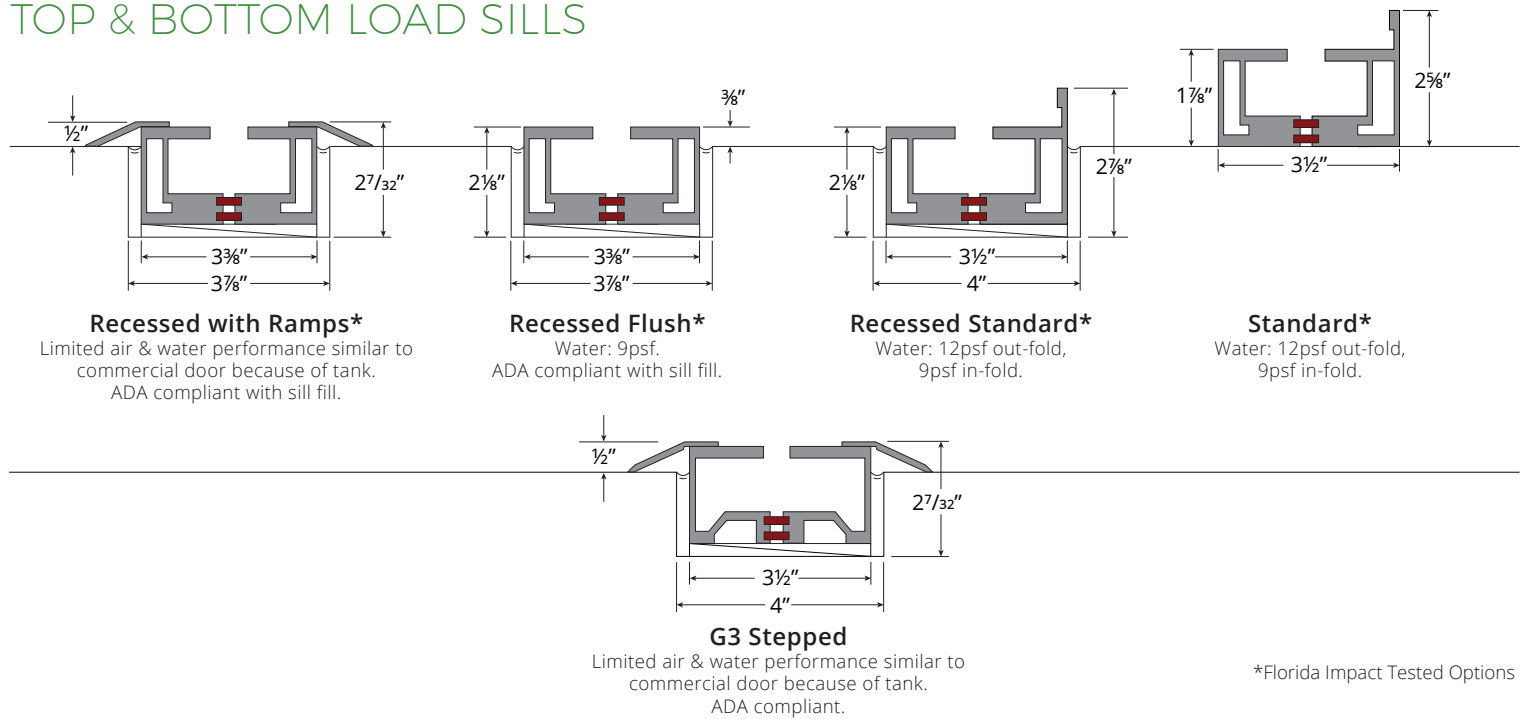


TESTING

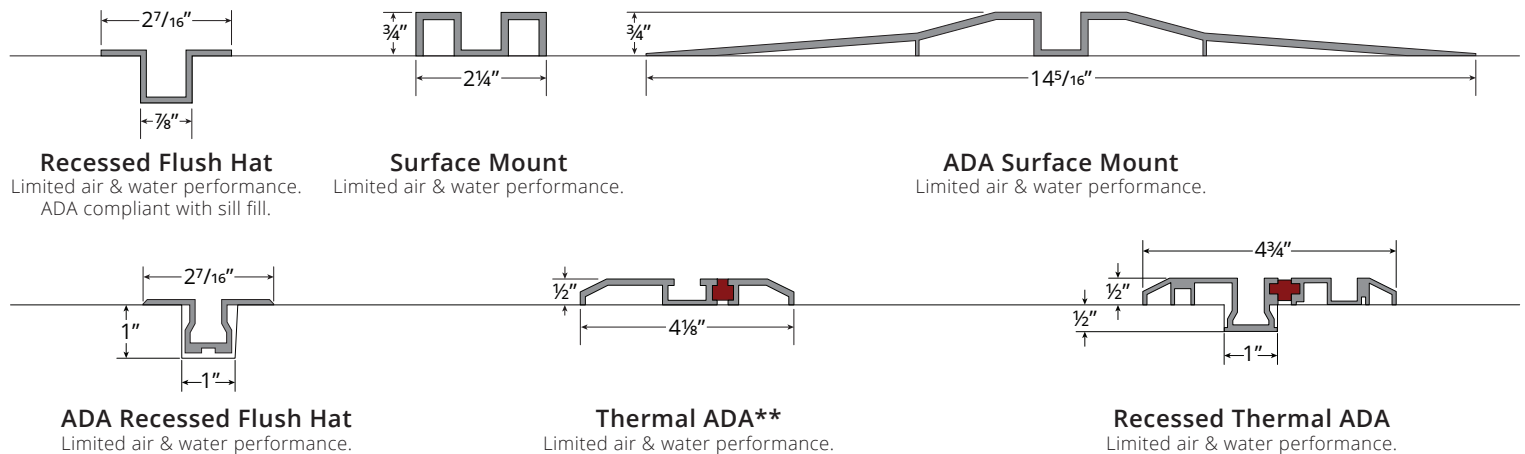
G3 Folding Glass Wall Impact Testing							
Certification	Description	Panel Size	Number of Panels	Design Pressure	Water Penetration	Glass Selection	HVHZ Approved
13407.1	G3 Reg Thermal Outfold	36" x 120"	Unlimited	Max ±70psf	Standard Sill: 12psf Recessed Flush Sill: 9psf	1 1/16" IGU (3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SPG)	No
13407.5	G3 Reg Thermal Infold	42" x 114"	Unlimited	Max ±70psf	Standard Sill: 9psf Recessed Flush Sill: 9psf	1" IGU (3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SPG)	Yes
13407.6	G3 Reg Thermal Outfold	42" x 114"	Unlimited	Max ±70psf	Standard Sill: 12psf Recessed Flush Sill: 9psf	1" IGU (3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SPG)	Yes
13407.7	G3 LT Thermal Outfold	42" x 114"	Unlimited	Max ±70psf	Standard Sill: 12psf Recessed Flush Sill: 9psf	1" IGU (3/16" Tempered over 7/16" Annealed Laminated (.090 SGP) Monolithic 7/16" Annealed Laminated (.090 SPG)	Yes

G3 Folding Glass Wall STC Ratings						
Report	Description	Sill	Glazing Thickness	Glazing Makeup	STC	OITC
F3184.01	G3 LT Thermal	Standard	1 1/8"	1/4" Lami w/ .030 Acoustical Interlayer, 1/2" Air, 3/8" Lami w/ .030 Acoustical Interlayer	39	32
F3184.02	G3 LT Thermal	Recessed Flush or Recessed Ramp	1 1/8"	1/4" Lami w/ .030 Acoustical Interlayer, 1/2" Air, 3/8" Lami w/ .030 Acoustical Interlayer	38	31
I0249.02	G3 LT Narrow Thermal	Standard	1 9/16"	3/8" Lami w/ .030 PVB Interlayer, 3/4" Air, 3/8" Lami w/ .030 PVB Interlayer	45	35
I0249.04	G3 LT Narrow Thermal	Recessed Flush	1 9/16"	3/8" Lami w/ .030 PVB Interlayer, 3/4" Air, 3/8" Lami w/ .030 PVB Interlayer	44	35

TOP & BOTTOM LOAD SILLS



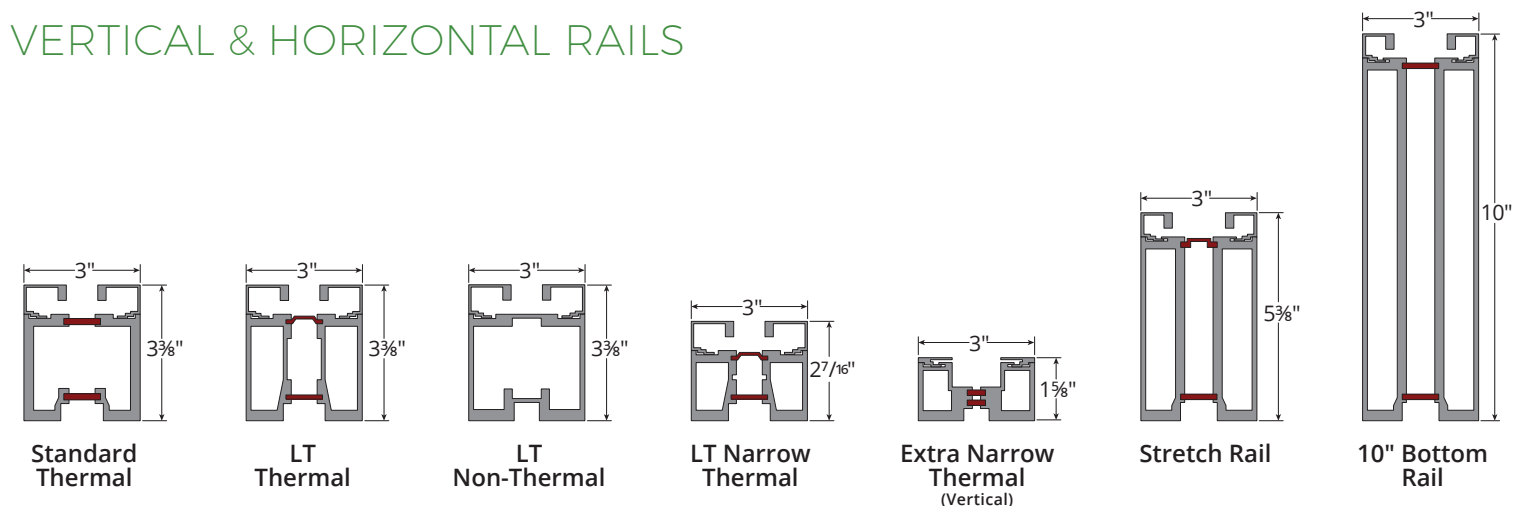
TOP LOAD ONLY SILLS



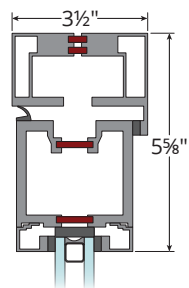
Note: Center Pivot Folding Glass Walls will get limited air and water performance.

** 8' maximum panel height, 16' maximum frame width, $\frac{3}{32}$ " maximum allowable header deflection.

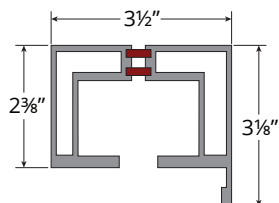
VERTICAL & HORIZONTAL RAILS



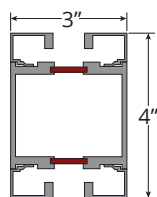
HEADS



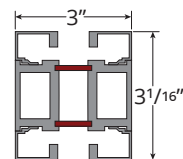
Standard Head & Frame Detail



1 1/2" Dual Wheel Head



Standard Mullion



Narrow Mullion

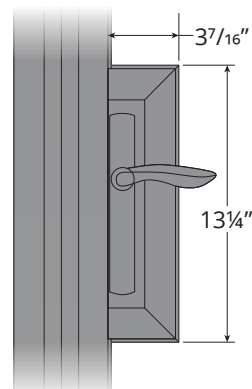
MULLIONS

(True Divided Lites)

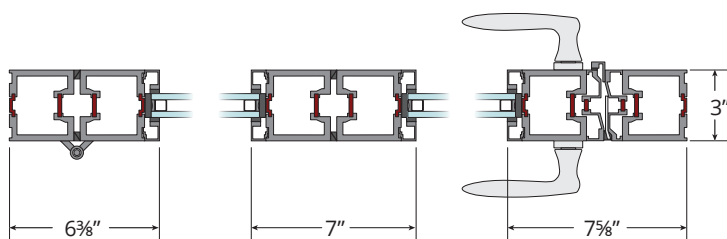
Please note: All mullions offered by Solar Innovations® include thermal break, regardless of the system.

LOCK BOX

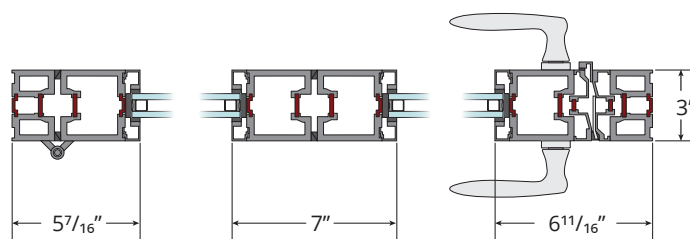
Simulated Steel look only



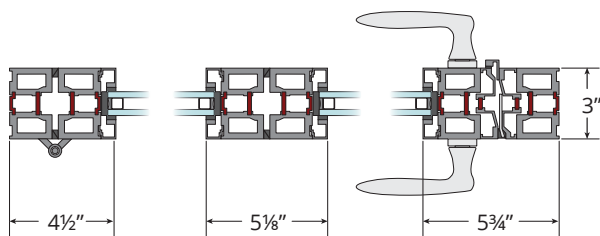
JAMB DETAILS



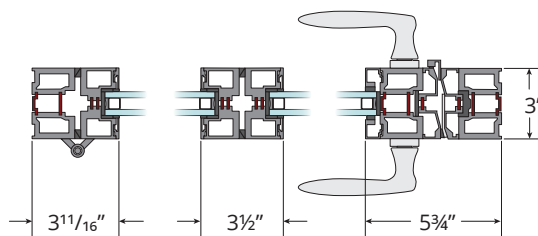
Standard G3 Jamb & Frame



Narrow G3 Jamb & Standard G3 Frame



Narrow G3 Jamb & Frame

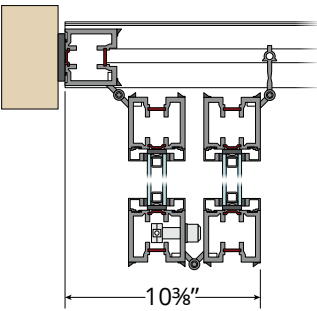


Extra Narrow G3 Panel Vertical and G3LT Narrow Jamb Frame

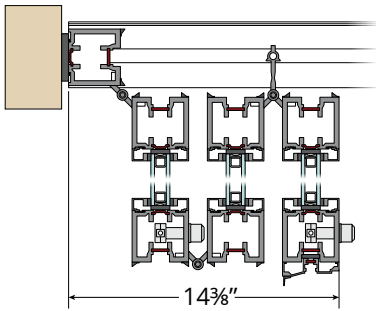
Top and bottom horizontals unable to utilize narrow or extra narrow framing. Options dependent upon desired size and engineering requirements.

STACKED WALL DIMENSIONS

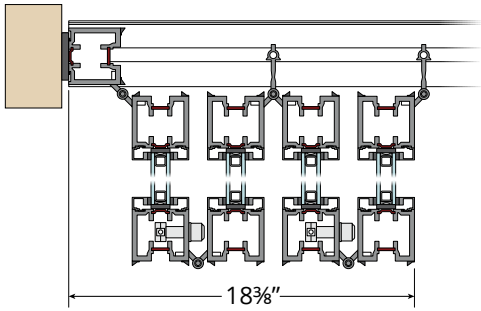
Standard Jamb. Subtract 15/16" for Narrow Jamb.



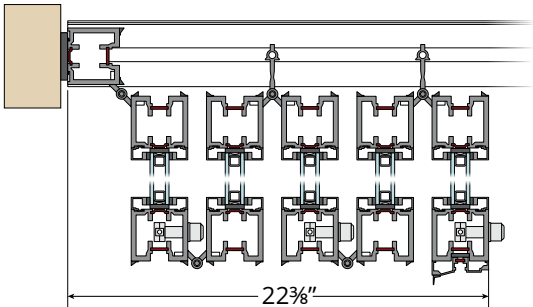
2 Panels



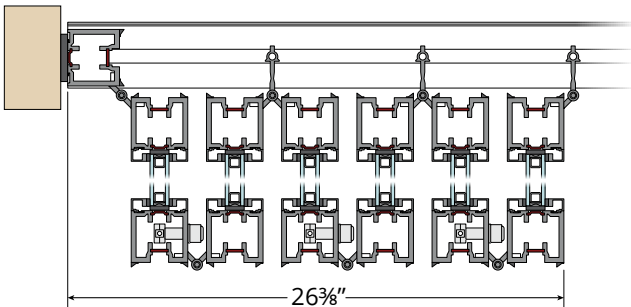
3 Panels



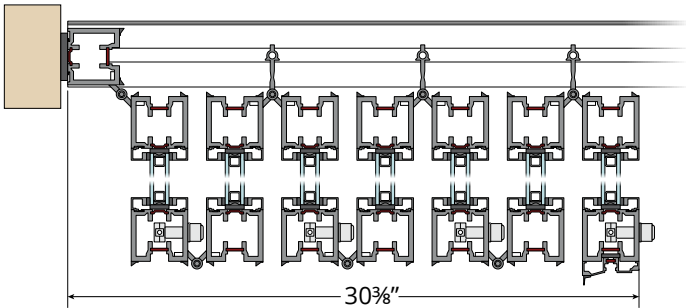
4 Panels



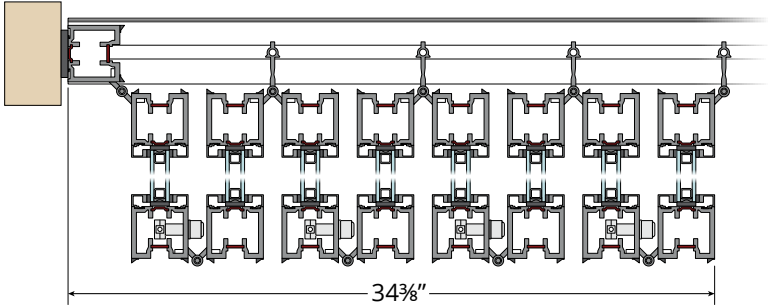
5 Panels



6 Panels



7 Panels



8 Panels