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 (open corner) setup available
- · Center pivot option

FRAMING:

- Aluminum or wood
- Frame widths: 3%", 27/16", and 1%" (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 ¾6" to 1%6"

PERFORMANCE:

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

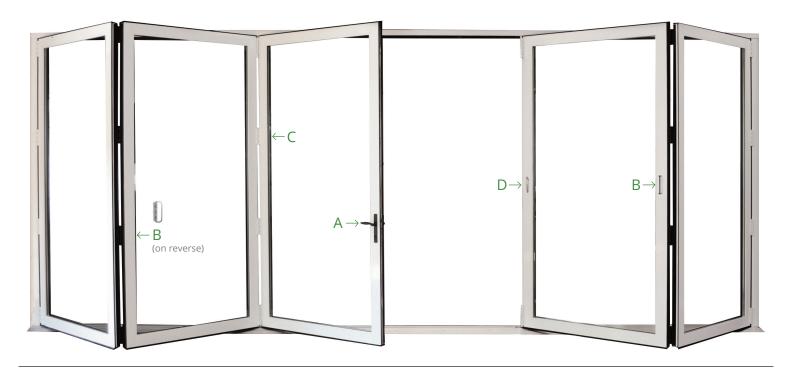
FINISHES:

- Standard AAMA 2603 paint finishes: Black, White, Sandstone, Natural Clay, Bronze and Hartford Green
- AAMA 611 Class I anodized finishes: Clear, Dark Bronze
- Standard AAMA 2605 powder coat finishes: Black, White, Sandstone, Natural Clay, Bronze and Hartford Green
- Premium AAMA powder coat finishes
- Custom finishes:
 - Fluoropolymer (50% or 70%): AAMA 2605
 - Faux wood (Decoral)
 - · Dual finish interior/exterior applications

OPTIONS:

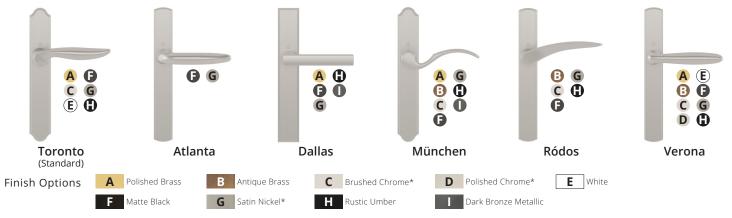
- · Wood veneer or metal cladding
- Framed and cartridge retractable screen options
- Manufacturer-installed sill drain tubes, if required
- Mullions, decorative muntins, simulated divided lites (SDLs), interior and exterior grids

HARDWARE



A: Handles

SOLID BRASS — COASTAL APPLICATIONS*



*Coastal applications are only available with select finish options.



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





Semi-Concealed Surface Mount Hinge



Hinge*



D: Locks

Two-Point Locking Handle



Two-Point **Keyed Locking** Handle**



Thumb Standard Turn Flush Bolt Lock

* Segmented Radius only.

** Additional cost. Not compatible with Extra Narrow systems.

Pull Hardware, Hinge, and Lock Finish Options

SI White

Custom color options are also available upon request.

SI Bronze

Class I Clear Anodized

Dark Bronze Anodized

Closer, Catch, & Limiter



D Series 7414 **Door Closer**

Door Closer Finishes: Aluminum Painted, Bronze, and Black



D Series TS93 **Door Closer**



C_Series PR82 **Door Closer**



Standard Adjustable Door Catch



Extended Adjustable Door Catch*



Door Limiter

Adjustable Door Catch Finishes: Clear Anodized and Dark Bronze Anodized * For Panic Bar applications

Commercial Panic Hardware Options



Exterior **Entry Trim** Square



Mortise **Panic**



Impact Panic*



Push/Pull



Push Only Wire Pulls

Passive Hardware Sets



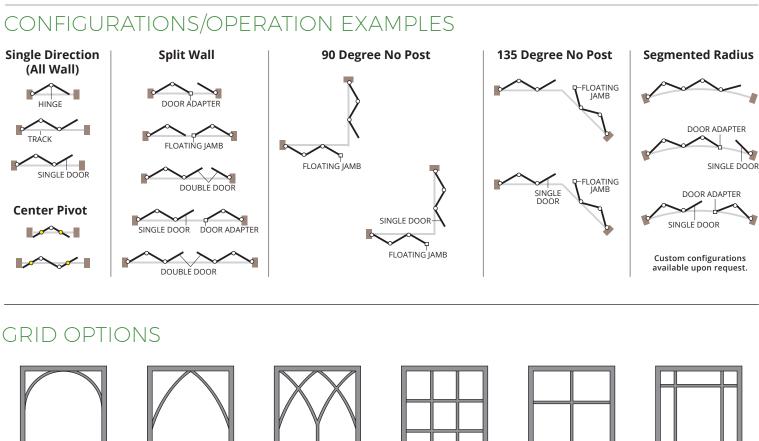
Square Commercial

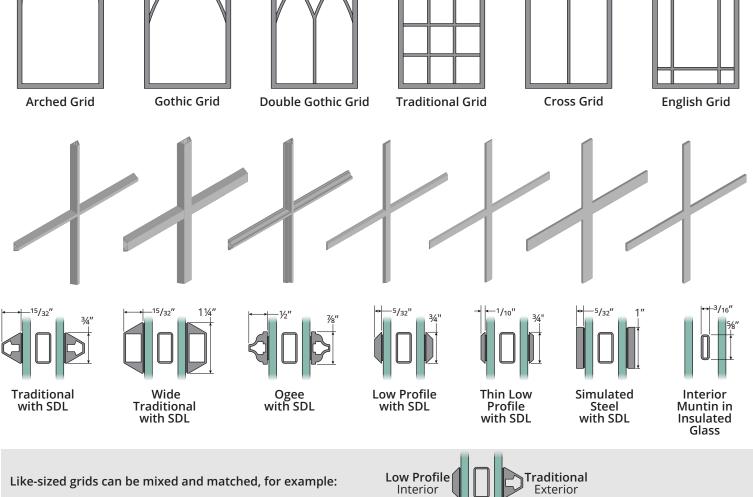


Toronto

* G2 only. Concealed vertical rod.

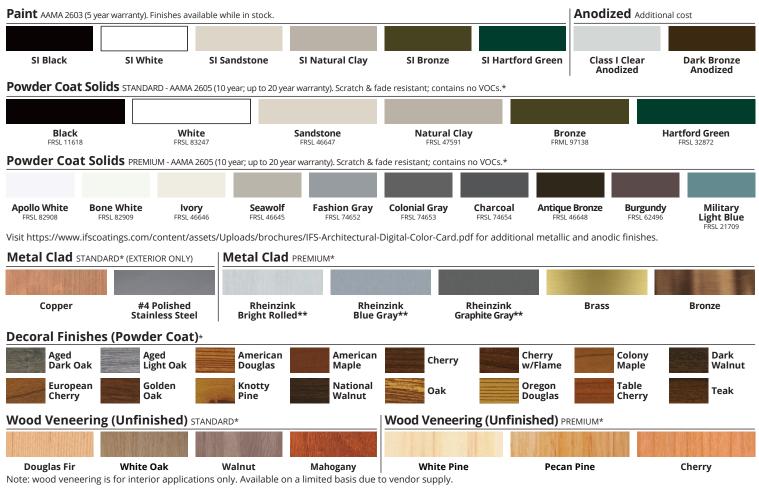
Please Note: All hardware is subject to vendor availability. Custom finishes may be available upon request at additional lead time and/or cost. Solar Innovations® reserves the right to discontinue any hardware option at any time. Please be sure to visit solarinnovations.com for additional product information.







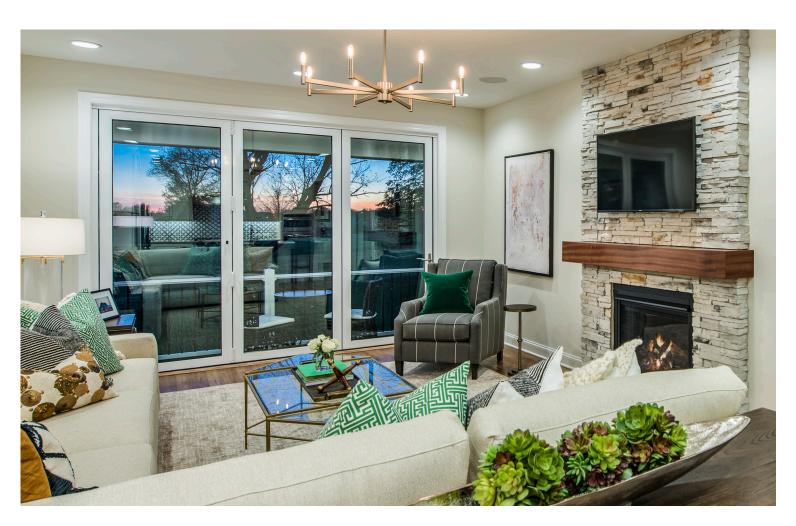
FINISH OPTIONS



*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.



GLASS SPECIFICATIONS

	Overall Unit Thickness	U-Value	R-Value	Solar Heat Gain Coefficient	Visible Light Transmission	Reflectance Out	Reflectance In	UV Transmittance
MONOLITHIC								
Clear	1⁄4"	1.02	0.91	0.82	88%	8%	8%	62%
DOUBLE GLAZED O	utside Lite/Insid	de Lite						
Clear/Clear	1"	0.46	2.17	0.78	82%	15%	15%	58%
180/Clear	1"	0.26	3.85	0.64	79%	15%	15%	29%
272/Clear	1"	0.25	4.00	0.41	72%	11%	12%	16%
366/Clear	1"	0.24	4.17	0.27	65%	11%	12%	5%
340/Clear	1"	0.25	4.00	0.18	39%	11%	13%	2%
180/i89	1"	0.21	4.76	0.62	77%	15%	14%	27%
272/i89	1"	0.20	5.00	0.41	70%	11%	11%	16%
366/i89	1"	0.20	5.00	0.27	63%	11%	11%	5%
340/i89	1"	0.20	5.00	0.17	38%	11%	12%	2%
Gray/Clear	1"	0.45	2.22	0.60	57%	9%	13%	32%
Gray/180	1"	0.26	3.85	0.49	53%	9%	14%	17%
Gray/272	1"	0.25	4.00	0.38	50%	8%	9%	10%
Bronze/Clear	1"	0.45	2.22	0.62	61%	10%	13%	31%
Bronze/180	1"	0.26	3.85	0.61	59%	10%	14%	17%
Bronze/272	1"	0.25	4.00	0.39	54%	8%	10%	10%
SolarBan 60/Clear	1"	0.24	-	0.39	70%	11%	12%	20%
SolarBan 70/Clear	1"	0.24	-	0.27	64%	14%	13%	6%
SolarBan 90/Clear	1"	0.24	-	0.23	51%	12%	19%	8%
TRIPLE GLAZED Ou	tside Lite/Middl	e Lite/Inside	Lite					
180/Clear/180	11/8"	0.15	6.67	0.56	70%	20%	20%	13%
272/Clear/180	11/8"	0.15	6.67	0.37	63%	15%	18%	8%
366/Clear/180	11/8"	0.15	6.67	0.25	57%	14%	18%	2%
340/Clear/180	11/8"	0.15	6.67	0.16	34%	13%	19%	1%

SILL COMPARISONS

	s 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 Sys	tems											
	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	1/4"

^{*}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 ³/1e" to 1¼"

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

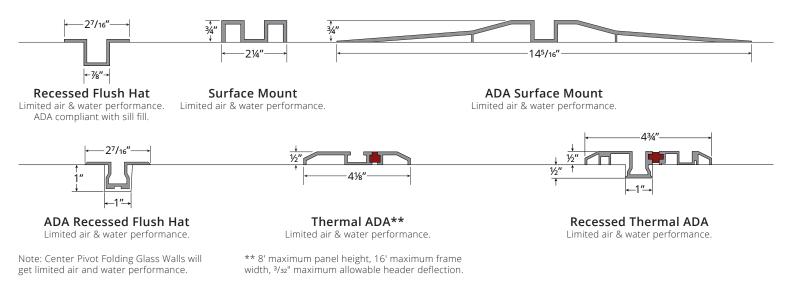
	G2 Folding Glass Wall Impact Testing										
Certification	Description	Panel Size	Number of Panels	Design Pressure	Water Penetration	Glass Selection	HVHZ Approved				
12278.3	G2 Reg Thermal Outfold (Reinforced)	36" x 96"	Unlimited	Max ±80psf	Standard Sill: 12psf Recessed Flush Sill: 9psf	1" IGU ³ /16" 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				

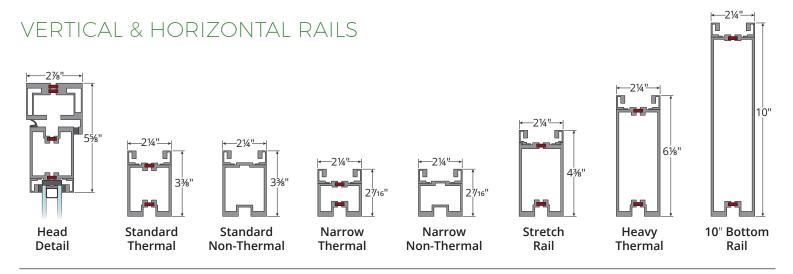
	G2 Folding Glass Wall STC & OITC Ratings											
Report	Description	Sill	Glazing Makeup	STC	OITC							
F3179.01	G2 Reg Thermal	Standard	11⁄8"	¼" Lami w/ .030 Acoustical Interlayer, ½" Air, ¾" Lami w/ .030 Acoustical Interlayer	39	32						
F3179.02	G2 Reg Thermal	Recessed Flush or Recessed Ramp	11⁄8"	¼" Lami w/ .030 Acoustical Interlayer, ½" Air, ¾" Lami w/ .030 Acoustical Interlayer	34	29						

For more testing information visit our website at solarinnovations.com/information/testing

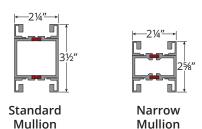
TOP & BOTTOM LOAD SILLS 2%' 3%" **FLOOR** 2%" 27/32" Recessed Flush* Standard* Recessed with Ramps* Recessed Standard* Limited air & water performance similar to Water: 9psf. Water: 12psf out-fold, Water: 12psf out-fold, commercial door because of tank. ADA compliant with sill fill. 9psf in-fold. 9psf in-fold. ADA compliant with sill fill. *Florida Impact Tested Options

TOP LOAD ONLY SILLS



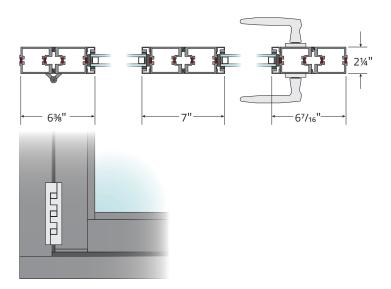


MULLIONS (True Divided Lites)

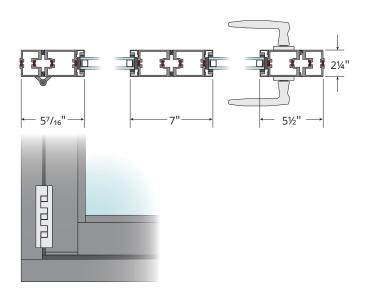


Please note: All mullions offered by Solar Innovations[®] include thermal break, regardless of the system.

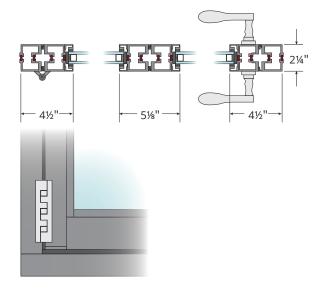
JAMB DETAILS



Standard G2 Jamb & Frame



Narrow G2 Jamb & Standard G2 Frame

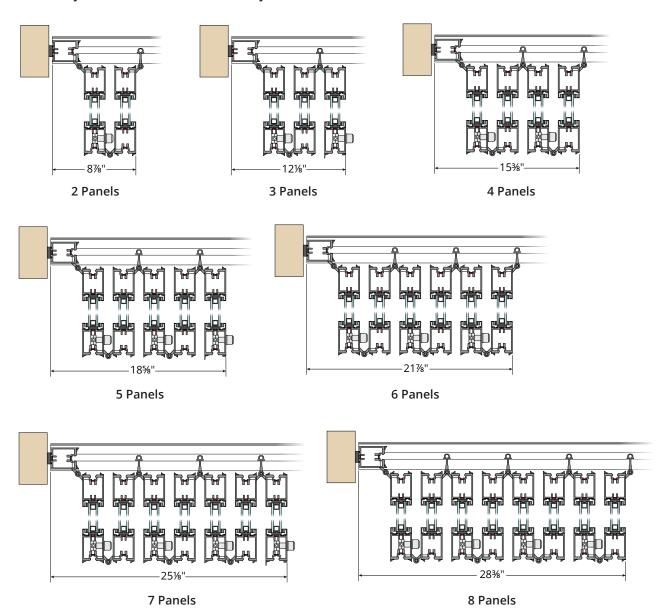


Narrow G2 Jamb & Frame

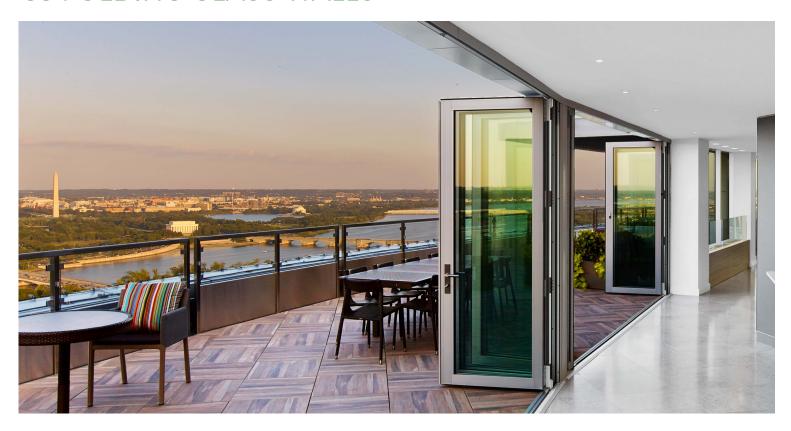
Top and bottom horizontals unable to utilize narrow framing. Options dependent upon desired size and engineering requirements.

STACKED WALL DIMENSIONS

Standard Jamb. Subtract $^{15}/_{16}$ " for Narrow Jamb.



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 1¾6"

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.

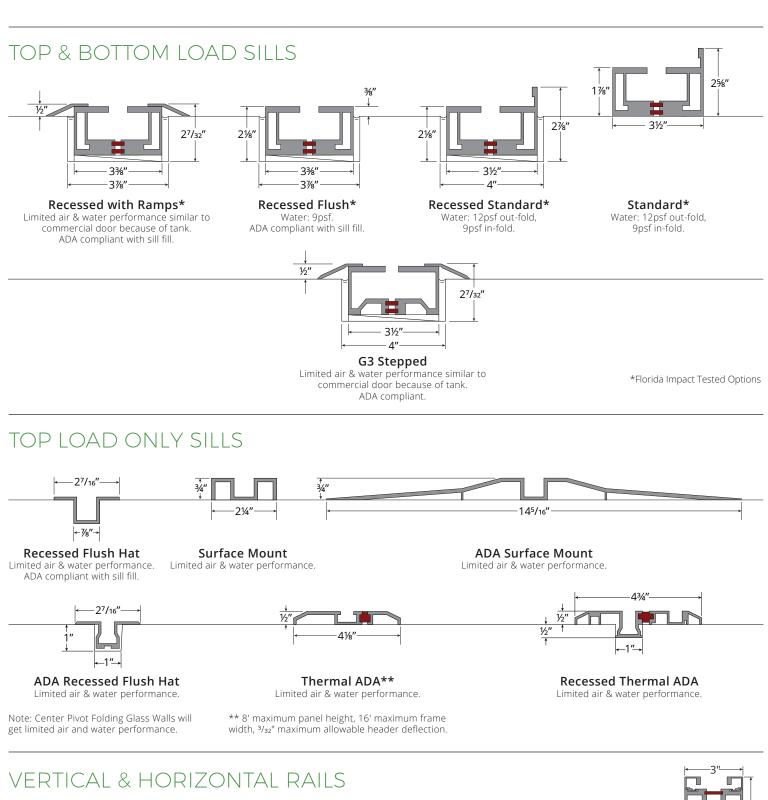


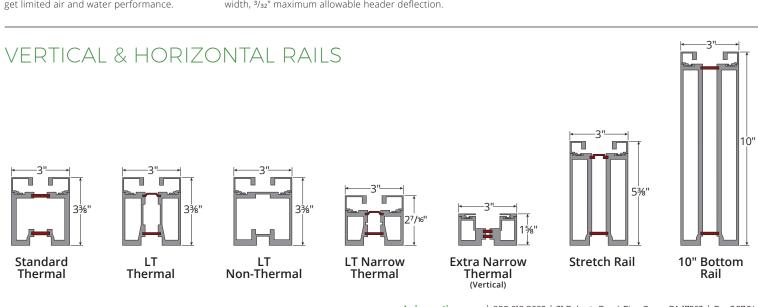
TESTING

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	1¹/16" IGU (³/16" Tempered over ²/16" Annealed Laminated (.090 SGP) Monolithic ²/16" 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 ±55psf	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 & OITC Ratings											
Report	Description	Sill	Glazing Thickness	Glazing Makeup	STC	OITC					
F3184.01	G3 LT Thermal	Standard	11⁄8"	14" Lami w/ .030 Acoustical Interlayer, ½" Air, %" Lami w/ .030 Acoustical Interlayer	39	32					
F3184.02	G3 LT Thermal	Recessed Flush or Recessed Ramp	11⁄8"	1/4" Lami w/ .030 Acoustical Interlayer, 1/2" Air, 3/8" Lami w/ .030 Acoustical Interlayer	38	31					
10249.02	G3 LT Narrow Thermal	Standard	19/16"	%" Lami w/ .030 PVB Interlayer, ¾" Air, ¾" Lami w/ .030 PVB Interlayer	45	35					
10249.04	G3 LT Narrow Thermal	Recessed Flush	19/16"	%" Lami w/ .030 PVB Interlayer, ¾" Air, %" Lami w/ .030 PVB Interlayer	44	35					

For more testing information visit our website at solar innovations. com/information/testing

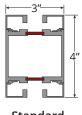




HEADS

3½" 23/8" Standard Head 1½" Dual Wheel

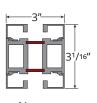
Please note: All mullions offered by Solar Innovations® include thermal break, regardless of the system.



3%"

Head

Standard Mullion



Narrow Mullion

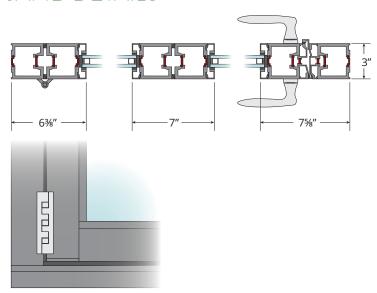
LOCK BOX

Simulated Steel look only

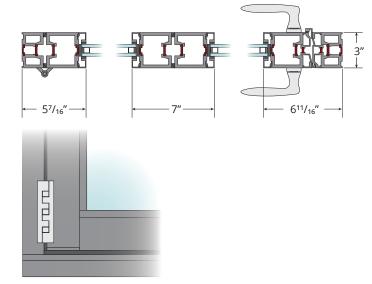


JAMB DETAILS

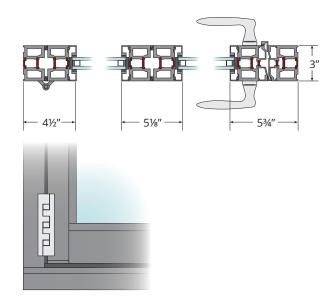
& Frame Detail



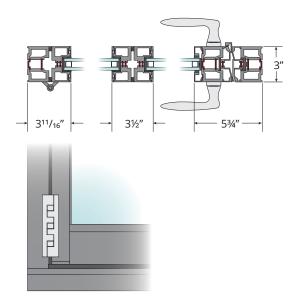
Standard G3 Jamb & Frame



Narrow G3 Jamb & Standard G3 Frame



Narrow G3 Jamb & Frame



Extra Narrow G3 Panel Vertical and G3LT Narrow Jamb Frame

STACKED WALL DIMENSIONS

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

