

WOOD FOLDING GLASS WALLS



SOLAR INNOVATIONS®
ARCHITECTURAL GLAZING SYSTEMS

A warm, traditional solution

Wood Folding Glass Wall Systems have been part of the Solar Innovations® product line since their introduction to the industry. Folding Glass Walls, also known as bi-fold doors or accordion-style doors, can accommodate a large number of panels and configurations. Wood Folding Glass Walls can be painted, stained, sanded, and re-finished multiple times throughout the product's life cycle. To ensure product longevity, Solar Innovations® recommends using the wood system on interior applications to avoid weather-related damage to the wood. For exterior applications, an aluminum cladding option is recommended, providing a warm, wood interior with a sturdy, weather-resistant exterior.

FEATURES

OPERATION:

- Top or bottom load
- In-fold or out-fold operation
- Endless configurations possible
- Swing door integration

FRAMING:

- Wood glulam
- Up to 3' x 12' 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
- Multiple sill designs, including ADA compliant ramps

GLAZING:

- Designed to accommodate almost any glazing infill including glass, acrylic, polycarbonate and solid panels, with thicknesses of ¼", 7/16", 1", and 1¾"

PERFORMANCE:

- Air, water, and structural tested

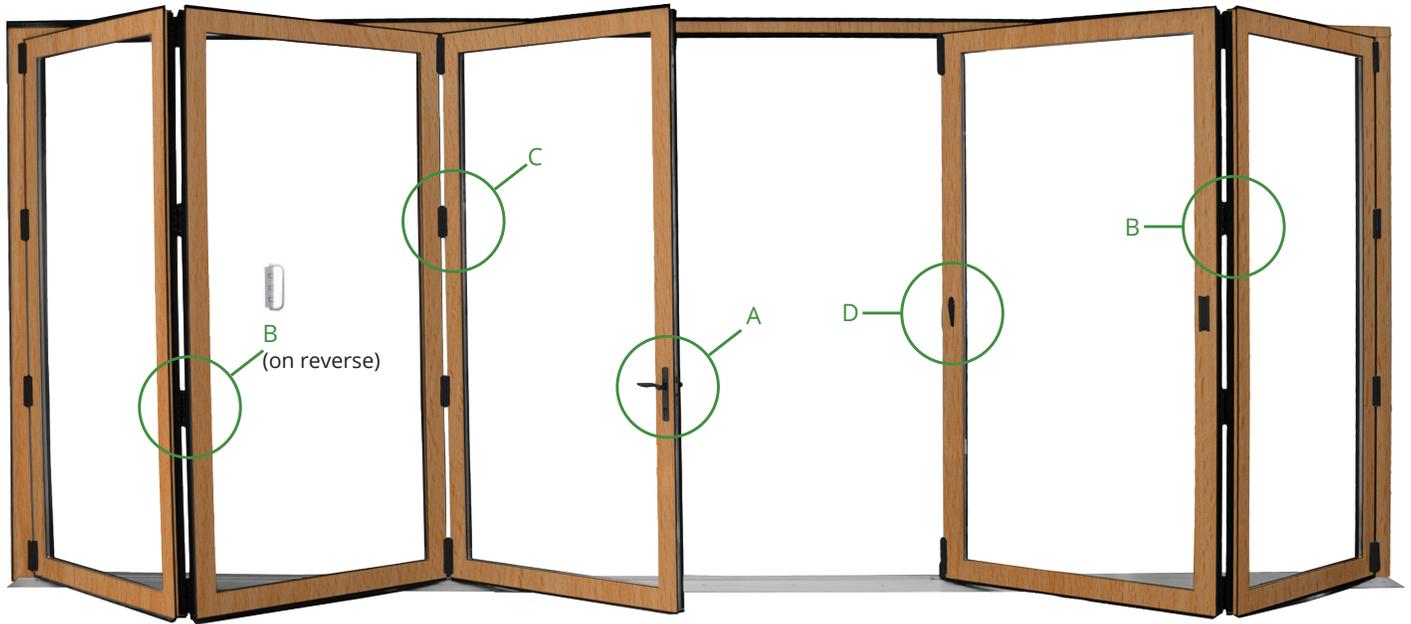
FINISHES:

- Scantling Wood Species:
 - Standard: Red Oak, White Ash, Hard Maple, White Oak
 - Premium: Douglas Fir, Cherry, Sepele Mahogany, Walnut
- Aluminum Cladding 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
- Fluoropolymer (50% or 70%): AAMA 2605
- Dual finish — interior/exterior applications

OPTIONS:

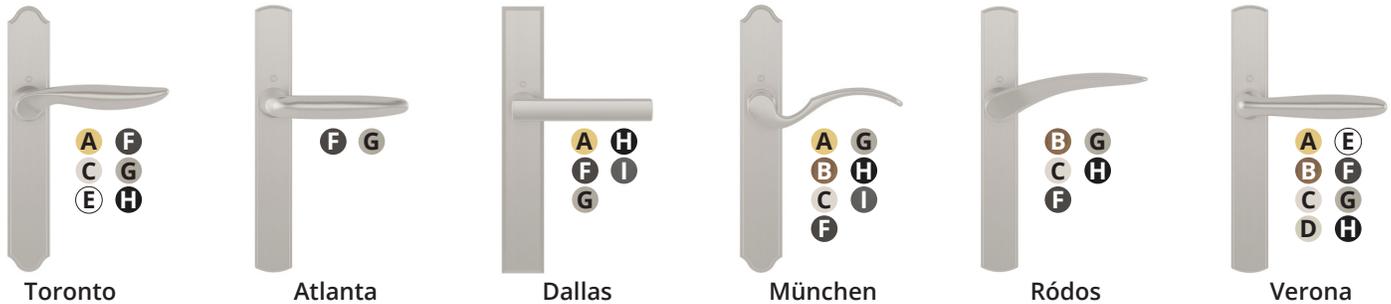
- Framed and cartridge retractable screen options
- Manufacturer-installed sill drain tubes, if required
- Mullions, decorative muntins, simulated divided lites (SDLs), interior and exterior grids

HARDWARE



A: Handles

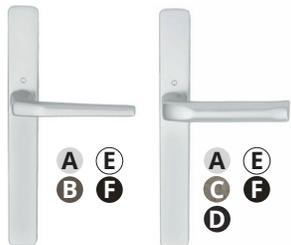
SOLID BRASS — COASTAL APPLICATIONS*



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

*Coastal applications are only available with select finish options.

ALUMINUM— INLAND APPLICATIONS



A Silver	D Grey Brown
B Chestnut	E White
C Alpine Frost	F Matte Black

ZAMAC/BRASS — INLAND APPLICATIONS (G2 ONLY)



A Satin Chrome	B Antique Brass	C Black PC	D Dark Bronze
E Polished Chrome*	F Oil Rubbed Bronze	G White PC	H Pewter
I Polished Brass	J Dark Bronze PC	K Satin Nickel	L * Not available for Torino

FOR "KEYED ALIKE" APPLICATIONS Commercial core



- 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



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

Pull Hardware, Hinge, and Lock Finish Options



Custom color options are also available upon request.

* Segmented Radius only.

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

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 and Dark Bronze Anodized

* For Panic Bar applications

Commercial Panic Hardware Options



Exterior Entry Trim Square



Mortise Panic



Push/Pull



Push Only

Wire Pulls

Passive Hardware Sets



Square Commercial



Toronto

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.

Panels

- Minimum panel width: 24"; smaller panels may be available based upon engineering
- Panel size up to 3' x 12'; larger panel options may be available depending on application and configuration

Glazing

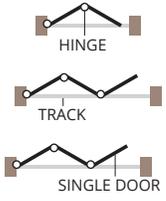
- Designed to accommodate almost any monolithic, insulated, laminated, decorative, polycarbonate, or solid panel infill with thicknesses of 1/4", 7/16", 1", and 1 3/16"

Performance

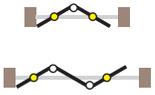
- Water performance up to 9psf, depending on sill choice and configuration
- Structural tested up to a design pressure of 65psf for panel sizes up to 3' 6" x 8'
- Higher water and structural performance available with engineering approval
- Test results available upon request

CONFIGURATIONS/OPERATION EXAMPLES

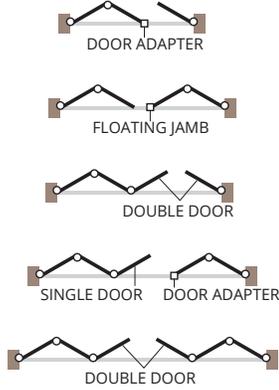
Single Direction (All Wall)



Center Pivot

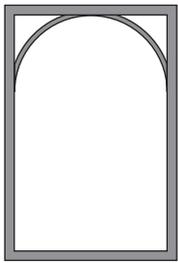


Split Wall

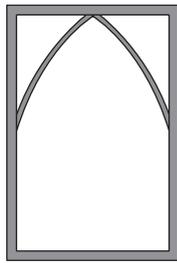


Custom configurations available upon request.

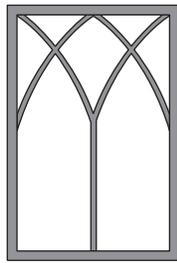
ALUMINUM & WOOD GRID OPTIONS



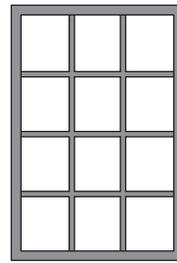
Arched Grid



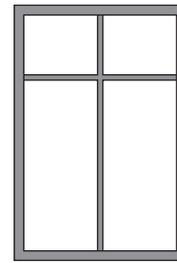
Gothic Grid



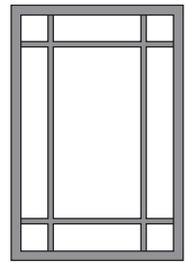
Double Gothic Grid



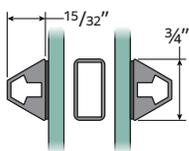
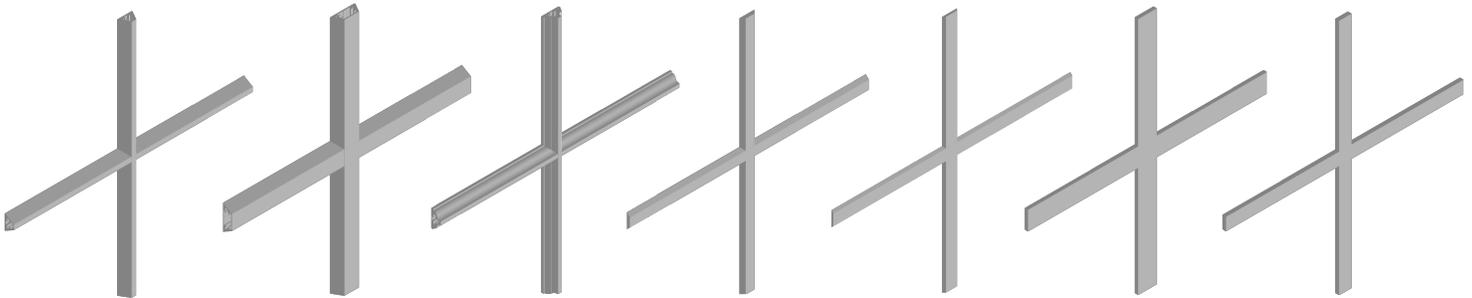
Traditional Grid



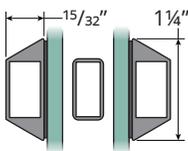
Cross Grid



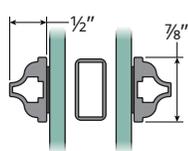
English Grid



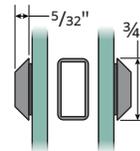
Traditional with SDL



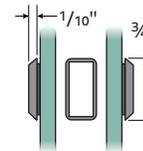
Wide Traditional with SDL



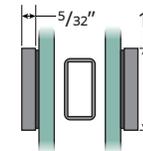
Ogee with SDL



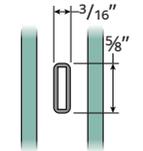
Low Profile with SDL



Thin Low Profile with SDL

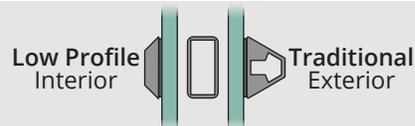


Simulated Steel with SDL



Interior Muntin in Insulated Glass

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



WOOD OPTIONS

Wood/Glulam STANDARD*



Wood/Glulam PREMIUM*



ALUMINUM CLADDING FINISHES

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



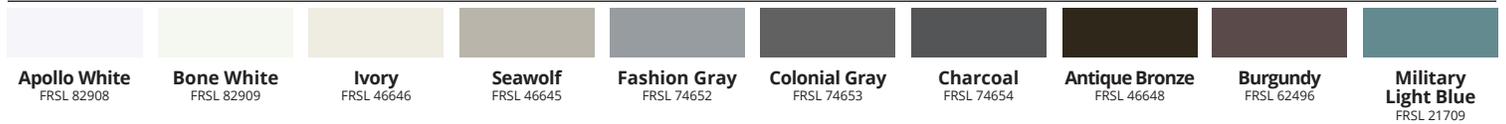
Anodized Additional cost



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



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



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

Metal Clad STANDARD* (EXTERIOR ONLY)



Metal Clad PREMIUM*



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.

TESTING

G3 Wood Folding Glass Wall STC & OITC Ratings

Report	Description	Sill	Glazing Thickness	Glazing Makeup	STC	OITC
H8180.01	G3 Wood with Aluminum Cladding	Standard	1 1/16"	¼" Temp, ½" Air, 5/16" Lami w/ .060 Acoustical Interlayer	35	30
H8180.02	G3 Wood without Aluminum Cladding	Standard	1 1/16"	¼" Temp, ½" Air, 5/16" Lami w/ .060 Acoustical Interlayer	36	31

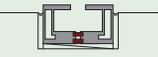
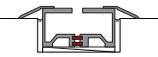
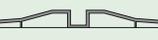
For more testing information visit our website at solarinnovations.com/information/testing



GLASS SPECIFICATIONS

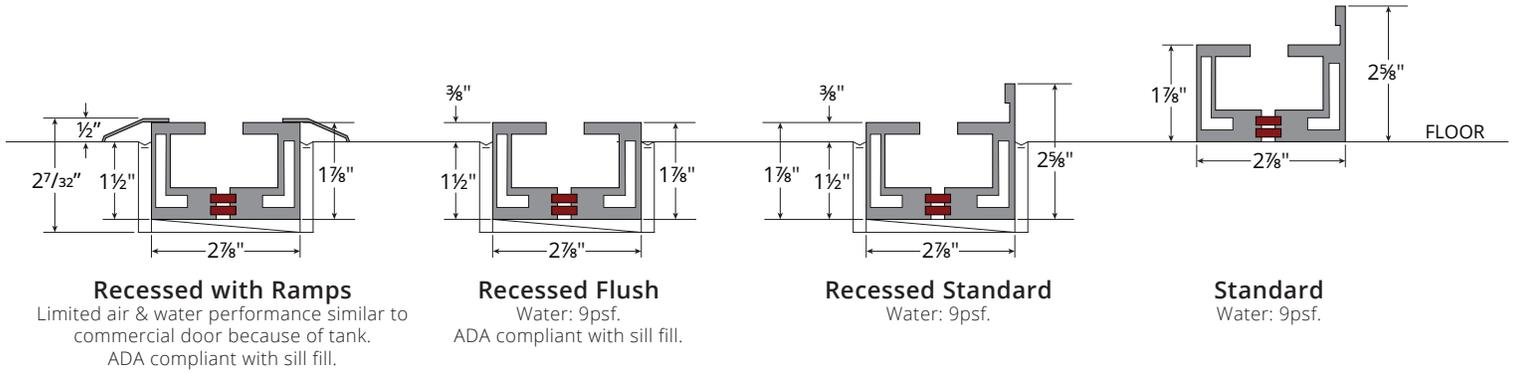
	Overall Unit Thickness	U-Value	R-Value	Solar Heat Gain Coefficient	Visible Light Transmission	Reflectance Out	Reflectance In	UV Transmittance
MONOLITHIC								
Clear	¼"	1.02	0.91	0.82	88%	8%	8%	62%
DOUBLE GLAZED Outside Lite/Inside Lite								
Clear/Clear	1"	0.46	2.17	0.78	82%	15%	15%	58%
180/Clear	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 Outside Lite/Middle Lite/Inside Lite								
180/Clear/180	1½"	0.15	6.67	0.56	70%	20%	20%	13%
272/Clear/180	1½"	0.15	6.67	0.37	63%	15%	18%	8%
366/Clear/180	1½"	0.15	6.67	0.25	57%	14%	18%	2%
340/Clear/180	1½"	0.15	6.67	0.16	34%	13%	19%	1%

SILL COMPARISONS

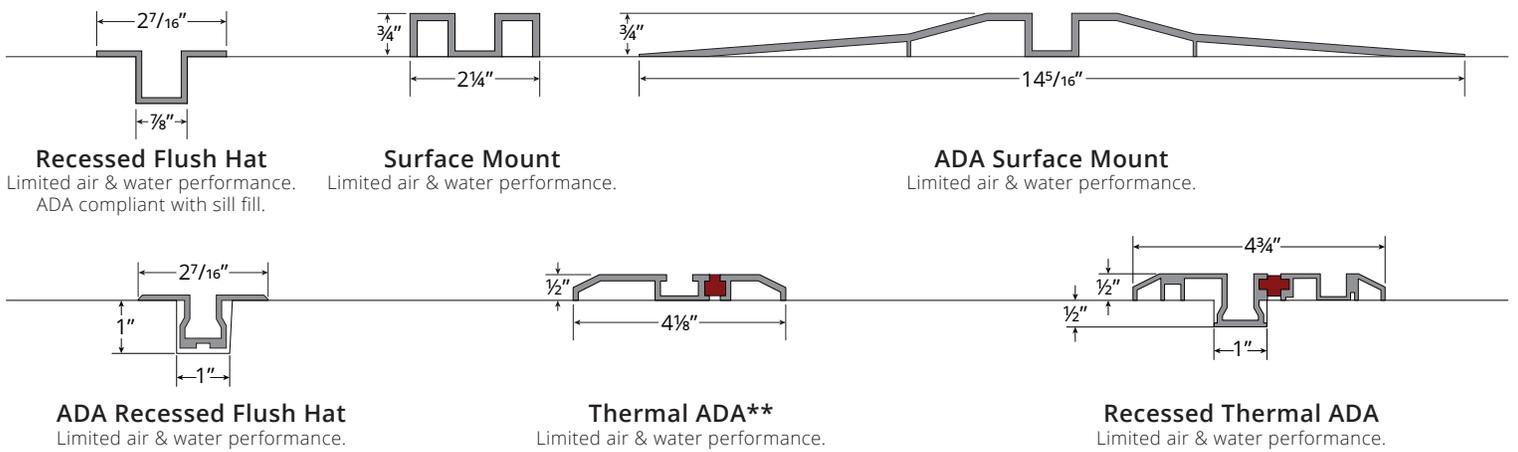
Folding Glass Wall Sill Type	Application	Top Load	Bottom Load	Recessed	Surface Mount	ADA Compliant	Florida Impact Tested	Water Performance	Max. Panel Height	Max. Frame Width	Max. Header Deflection	
G3 System												
	G3 Recessed with Ramps	Interior or Exterior	Yes	Yes	Yes	No	Yes, with Sill Fill	Yes	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	1/4"

*Limited air and water performance similar to a commercial door

TOP & BOTTOM LOAD SILLS



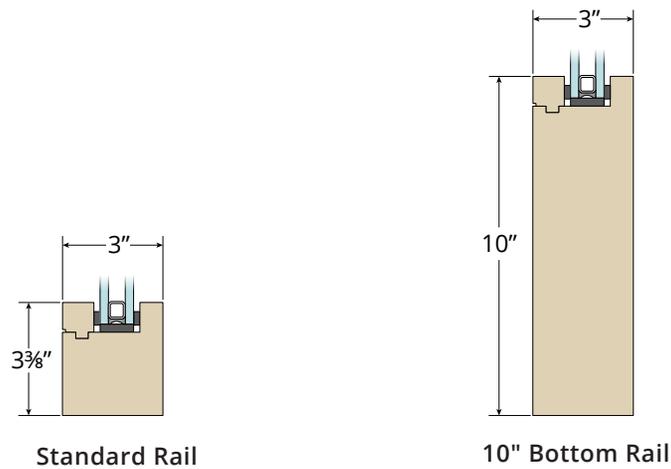
TOP LOAD ONLY SILLS



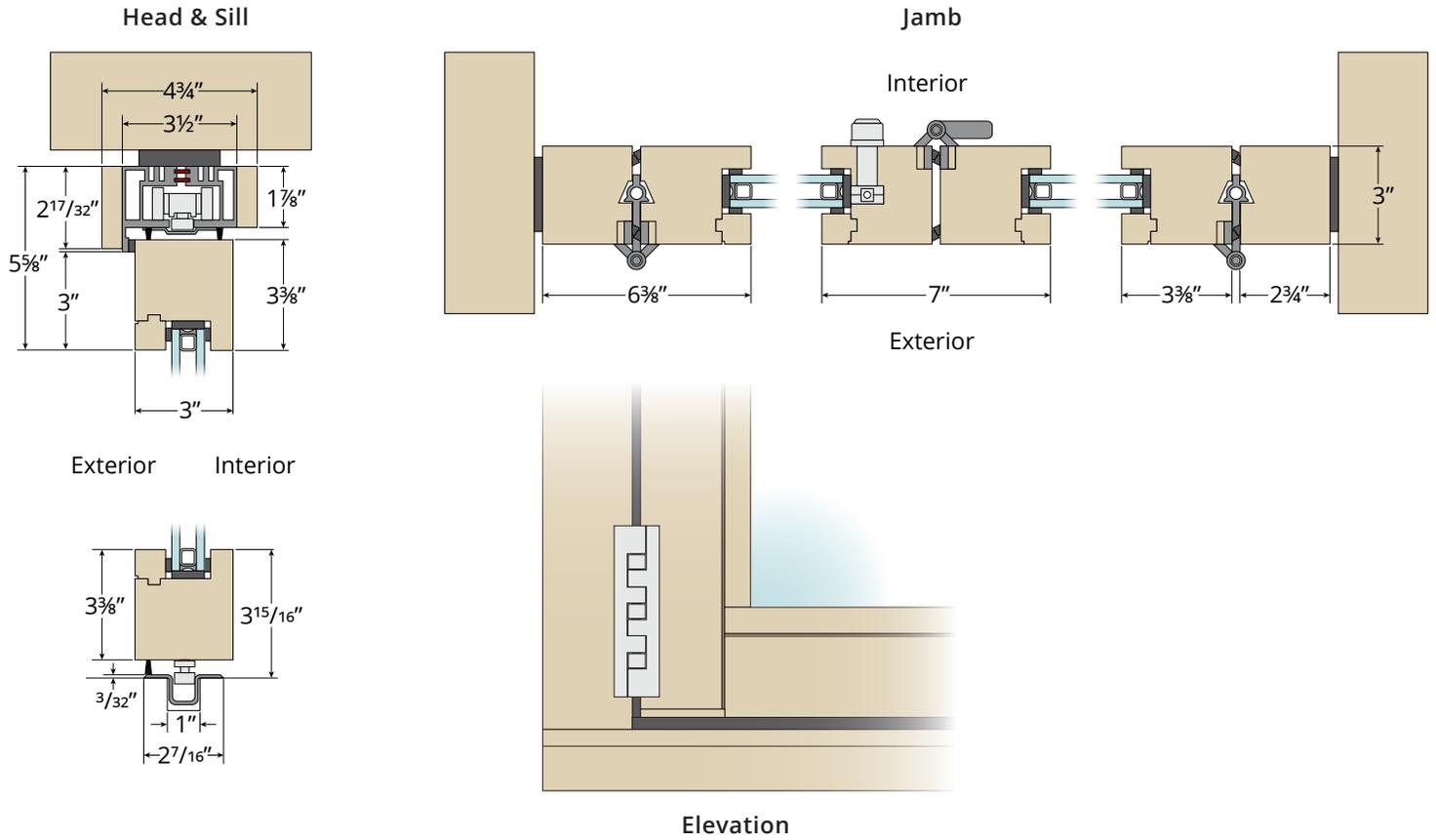
Note: Center Pivot Folding Glass Walls will get limited air and water performance.

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

VERTICAL & HORIZONTAL RAIL OPTIONS



DETAILS



ALUMINUM CLADDING

