HSW75 — All Glass Single Track Sliding System

The HSW75 all glass single track sliding system offers cleanlined, transparent solutions with no vertical profiles for retail storefronts, shopping centers, banks, offices, and many other applications. The all glass aesthetic works well with all design styles. HSW75 creates a barrier free storefront allowing for immediate engagement between retailers and their customers. In offices, the HSW75 is well suited for flexible space management while allowing natural daylight to move throughout the interior space.

The German engineered roller system ensures quiet, smooth, and easy single-hand operation by using an "intelligent" guiding system. With the single track sliding design, stacking options and minimal parking bays can be designed with total customization. A patented 2-in-1 release system allows for easy and quick conversion of a sliding panel into a swing door or vice versa.

Exterior Capabilities:

HSW75 can be used in exterior applications (with non-conditioned interior spaces) with varying glass thicknesses to meet design wind load requirements. Tempered glass is available in up to 1". HSW75 unit with additional locking and with 1/2" (12 mm) tempered glass and unit height of 8' 8" was independently tested per ASTM E330 and achieved design pressures of +/- 30 psf.

Single Track Sliding for Limitless Layout Flexibility:

Offering complete design flexibility, the single track sliding design is able to create an unlimited span of top hung panels which are able to easily navigate with single handed operation through multiple angle changes from 90° to 180°.

Customizable Stacking Options for Space Management:

To optimize space management or to solve unique design challenges, stacking options and minimal parking bays can be designed with total customization.

3 15/16" Continuous Rail for Outstanding Aesthetics:

The HSW75 system comes standard with a 3 15/16" (100 mm) continuous top and bottom horizontal rail –even on single action sliding panels– allowing for a beautiful aesthetic and maximum glass. Customized rail options are available in increments of 3/16" (5 mm) from 5 1/4" (133 mm) to 7 13/16" (198 mm). To meet ADA requirements, two options are offered: a 10" (254 mm) bottom rail or a 4 5/8" (117 mm) chamfer bottom rail.

Intelligent Rollers for Single Hand Operation:

The unique "intelligent" rollers and guide technology ensure for easy, trouble free single hand operation. The rollers are designed using hardened steel ball bearings with glass fiber reinforced polyamide wheels with memory effect and polyamide bumpers for quiet and smooth operation.

Taller Heights and Wider Widths:

Standard HSW75 comes in sizes up to 4' 1" (1250 mm) in width and 10' 6" (3200 mm) in height for sliding panels. For all single/double action sliding panels, sizes available are up to 3' 3" (1000 mm) in width and 10' 6" (3200 mm) in height. For single/double action end panels (non-sliding), sizes available are up to 3' 7" (1100 mm) in width and 10' 6" (3200 mm) in height. (Please contact NanaWall Systems for larger sizes.)

Added Security in an All Glass System:

For projects requiring the highest level of security, HSW75 can be configured with laminated glass. There is also an option for an additional locking feature on the top rail for single/double action end panels and the quick release floor bolt with spring loaded security feature.

Increased Acoustical Buffering:

HSW75 creates a good see-through acoustical barrier. For an acoustically rated, all glass system, please see the NanaWall PrivaSee system.

Single/Double Action End Panels (Non-sliding):

End panels can be single/double action panels with pivot points or single/double action panels with offset hinges that are capable of opening 180°. Single/double action panels have passed 500,000 cycle testing per AAMA 920.

Single/Double Action Panels That Can Slide Away:

The single track sliding all glass wall offers the option of selective panels that convert from sliding to pivoting for convenient swinging entrance/egress doors almost anywhere within the span of the opening in order to meet your traffic pattern requirements. Pivot panels are available as either single action or double action sliding panels. A pair of either single or double action swing panels can be added to function similarly to French doors. Single action sliding panels have passed 500,000 cycle testing per AAMA 920.



Patented Release System Converting Single/Double Action Sliding Panels to Pivot and Vice Versa:

The HSW75 has a patented release system which combines the fixing and locking mechanism for single/double action sliding doors. This patent improves the handling of turning the single/double action door into a sliding panel in a 2-step rather than a 3-step process or vice versa.

Self-Activated Automatic Panel to Panel Interlock:

For straight units, the automatic floor bolt is self-activated by simply moving the panels on to one another. Once the first panel is positioned, the following panel activates the wheel and ramp assembly to automatically release the floor bolt, effectively locking the panel into place without the need to lock it manually. No kneeling is required.

Concealed Panel to Panel Interlock:

An additional interlock option is a concealed panel to panel interlock that is foot activated for straight units and for units with angle changes up to 12°. The panel to panel interlock provides additional security to the operator, assuring that the panels are locked firmly in place before they engage.

For units requiring more than a 12° angle change, quick release floor bolts with spring loaded security feature are available. The security feature prevents access from the outside of the unit from attempts at prying the floor bolt mechanism.

Other Locking:

All single/double action sliding and end panels are equipped with a quick release floor bolt with spring loaded security feature at the pivot point in the lower rail and can be equipped with the same quick release floor bolt or a mortise cylinder lock at the swing side. For additional security, a crank handle operated surface mounted bolt can be added at the top rail.

An additional locking option is the Tubo100 brushed stainless steel finish handle/locking system. Tubo100 integrates a locking mechanism with a profile cylinder at hand height into the tubular designed handle eliminating the need to kneel to lock the door at the bottom rail.

Where concealed interlocking between panels is not possible, then the quick release floor bolt with spring loaded security feature is used or a mortise cylinder or with SFIC adapter as desired.

Adjustable Eccentric Floor Sockets for Changes in Site Conditions:

To receive the floor bolts, standard to the HSW75 are eccentric floor sockets. The built-in adjustability helps to deal with tolerances and building settlements.

If required, a spring loaded, dust proof socket option is available.

Door Closers:

For single/double action sliding panels, an appropriate overhead door closer is provided. Optional bottom door closers for single/double action end panels are available.

Push/ Pull Handles:

HSW75 offers custom made brushed stainless steel finish door pull options with built-in bumpers to protect against metal-to-glass contact. Other material options, such as matte or polished brass, are also available. (Please contact NanaWall Systems for details.)

If requested, NanaWall Systems will also prep the glass to accept door pulls provided by others in order to match project specific designs.

True Radius Track for Curved Units:

With the HSW75, to meet the needs of specific designs and to improve smooth operation, a true curved radius track, composed of an engineered single piece of metal, is available for gentle angle changes and ease of installation.

Reduction of Glass to Glass Contact:

Standard to all sliding panels, recessed polyamide bumpers are added to the end caps at the top and bottom of one side of the panel to reduce metal-to-metal or glass-to-glass contact.

For additional protection, please contact NanaWall Systems for further options.

Matching End Caps:

For added aesthetic value, smooth end caps in coordinating colors are used. The encompassed design of the end caps eliminates any sharp edges of the horizontal rails. End caps come with bumpers on one end of the panel. For corner panels, the end caps can be mitered to match.



Finishes:

Available standard door rail finish is clear anodized. Options include: brushed anodized, dark bronze anodized, black anodized, stainless steel (polished or brushed), polished brass, and satin brass. Custom colors and standard RAL colors are also an available option. For installations in need of greater corrosion resistance, the post assembly is available in clear anodized finish.

The standard exterior surface finish for the normally recessed head track is clear anodized. However, it is also available in other anodized finishes, including brushed anodized, or powder coated.

Glazing:

Standard glass thickness supplied is 1/2" (12 mm) tempered or laminated. Other glass options of up to 1" are available and include both laminated and tempered glass. The glass thickness is determined by customer need, panel size, and local code requirements. The standard rail thicknesses of 1 7/16" (36 mm) for 1/2" (12 mm) glass will be adjusted accordingly for other glass thickness. All vertical edges of the glass panels come polished. To reduce glass stress, glass is clamp installed for equal distribution of weight.

An optional white interlayer can be added for the closed panels to be used in a similar manner as a white board. Additional glazing options include low iron or decorative glass, acrylic, wooden, or stainless steel mesh inserts.

Brush Seals:

All upper horizontal continuous door rails come standard equipped with an adjustable sealing brush on the outside of the unit. Options to add brush seals to both sides as well as spring loaded brushes to the bottom rail are available.

Optional Sidelites, Fixed Panels, All Glass Folding or Center Pivot Systems:

When required, coordinating fixed panels and sidelites are available to complete the intended design.

Frameless center pivot folding CSW75 and folding FSW75 are also available as mix and match systems.



Performance Results HSW75

(With Additional Locking - Not Standard Unit)

TYPE OF TEST	RESULTS		
	DESIGN PRESSURE		
Structural Load Deflection ASTM E-330 With 1/2" (12 mm) tempered glass and additional locking (not applicable for standard HSW75 unit) Contact NanaWall for higher structural design	Positive @ 30 psf (1436 Pa)	Negative @ 30 psf (1436 Pa)	
windloads with thicker glass. Note that the structural test pressures were 50% higher than the design pressures.	Panel Height: 8' 4" (2540 mm) Contact NanaWall for design windloads charts and other panel sizes.		
Forced Entry Resistance ^① AAMA 1304	Pass		
Cycle Testing ^① AAMA 920	Swing panels — both single / double action and swing panel and single action sliding panel — 500,000 cycles: Pass		

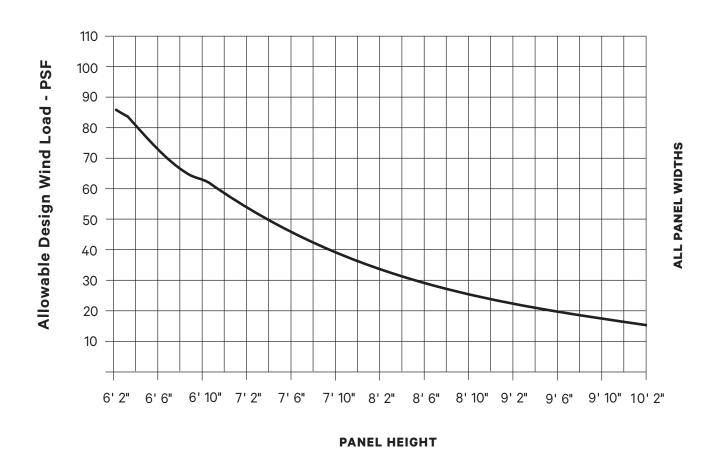
① Excerpts of results of four panel units of size 12' 0" W x 8' 8" H (3676 mm x 2642 mm) with additional locking (not standard units) with one unit being three sliding panels and an end swing panel; and one unit with two sliding panels, single action sliding panel, and an end swing panel tested by Architectural Testing, Inc., Fresno, CA, an independent testing laboratory in November 2016.



DESIGN WINDLOAD CHART - HSW75 WITH ADDITIONAL LOCKING

Applies to Both Positive and Negative Design Pressures

(In Accordance with Allowable Stress Design (ASD) Design Pressures*)



HSW75 with Additional Locking with 1/2" (12 mm) Tempered Glass

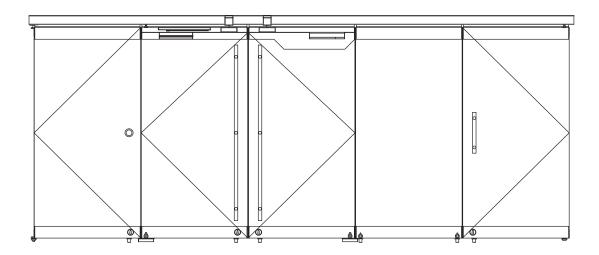
Design Windload Chart (Derived from both Glass Strength and Deflection Comparative Analysis). Both Positive and Negative Design Pressures, Test Panel Height: 8' 4"

Please note that some jurisdictions may limit the use of these charts or may not accept them at all. Design pressures and/or sizes may be restricted to what was tested. This chart is only applicable for units with referenced NanaWall supplied locking.

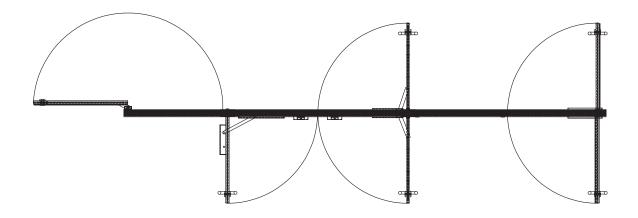
* If the project design pressures have been calculated in accordance with Ultimate Design Wind Speed (ULT), then these design pressures have to be multiplied by a factor of 0.6 to obtain the equivalent ASD design pressures shown in this chart.



Maximum Size Chart for NanaWall HSW75 system for different types of panels



Maximum panel sizes and weights with glass thickness of 1/2" (12 mm)	Single Action Hinged End Panel (Non-sliding)	Single Action Sliding Panel	Double Action Sliding Panel	Sliding Panel	Single/Double Action End Panel (Non-sliding)
Maximum Unit Height	10' 6"	10' 6"	10' 6"	10' 6"	10' 6"
	(3200 mm)	(3200 mm)	(3200 mm)	(3200 mm)	(3200 mm)
Maximum Panel Width	3' 7"	3' 3"	3' 3"	4' 1"	3' 7"
	(1100 mm)	(1000 mm)	(1000 mm)	(1250 mm)	(1100 mm)



The individual panels can also be of differing widths.

Please check with NanaWall for maximum sizes for other glass thickness.

Maximum sizes for 1/2" (12 mm) as shown is per Glass Association of North America (GANA) recommendations. Please also check applicable codes for maximum allowed height for the relevant glass thickness.

Applicable codes may limit the maximum sizes possible to be less than what NanaWall allows.



Please see referenced cross-section details. As there can be many other stacking possibilities, please submit your ideas and sketches to NanaWall Systems, Inc. for evaluation. If needed, NanaWall Systems can provide a 3D Conceptual Drawing to help in the design / development process. Please note that the number of panels in a system are unlimited.

A switch is defined as a break in the upper track at the head jamb to lead panels away from the opening to the stacking bay.

Note: In all concepts, the swing panel can be either inswing or outswing.

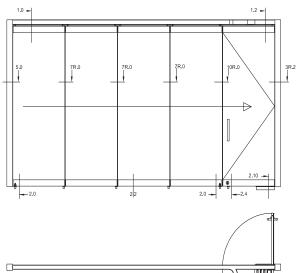
Note: Details with "R" are mirror images of the details shown on referenced drawings.

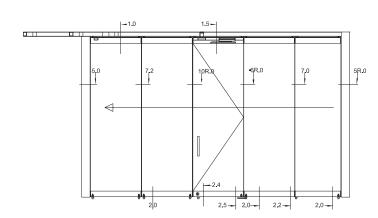
Concept 1 (A)

Perpendicular stacking in the opening with double action (swing) panel with pivot point.

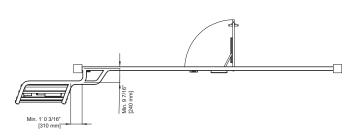
Concept 2 (B)

Parallel stacking outside the opening.



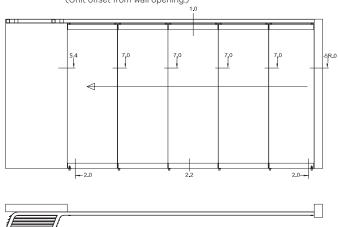






Concept 3 (C)

Parallel stacking in pocket with extended track. (Unit offset from wall opening.)



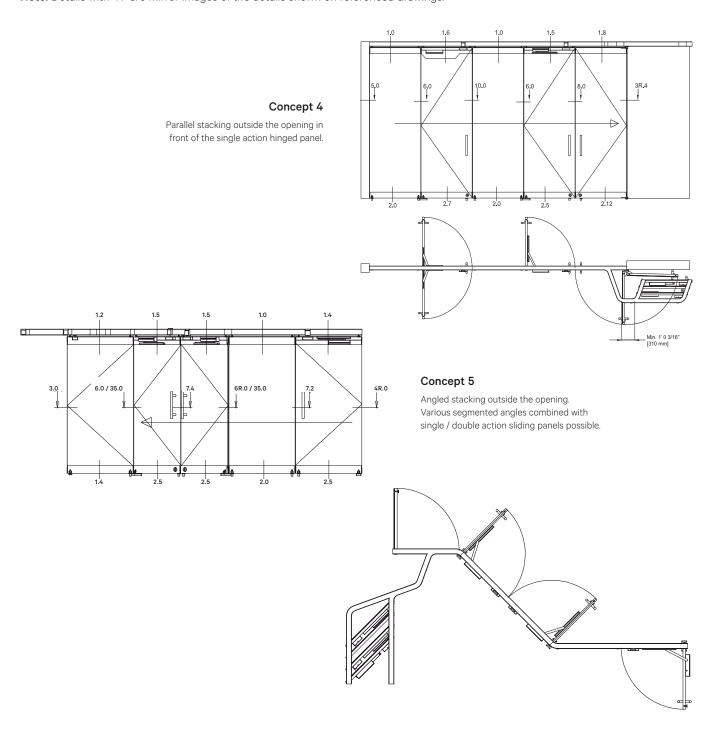


Please see referenced cross-section details. As there can be many other stacking possibilities, please submit your ideas and sketches to NanaWall Systems, Inc. for evaluation. **Please note that the number of panels in a system are unlimited.**

A switch is defined as a break in the upper track at the head jamb to lead panels away from the opening to the stacking bay.

Note: In all concepts, the swing panel can be either inswing or outswing.

Note: Details with "R" are mirror images of the details shown on referenced drawings.





Please see referenced cross-section details. As there can be many other stacking possibilities, please submit your ideas and sketches to NanaWall Systems, Inc. for evaluation. **Please note that the number of panels in a system are unlimited.**

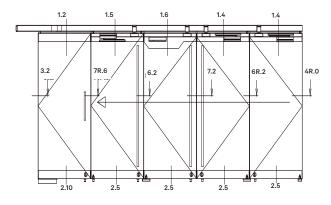
A switch is defined as a break in the upper track at the head jamb to lead panels away from the opening to the stacking bay.

Note: In all concepts, the swing panel can be either inswing or outswing.

Note: Details with "R" are mirror images of the details shown on referenced drawings.

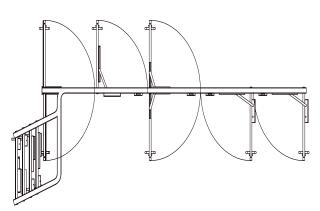
Concept 6

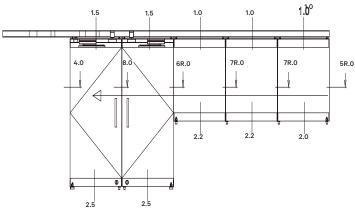
Perpendicular stacking outside the opening. Any numbers of panels in the opening can be used as swing panels, including all panels as shown.

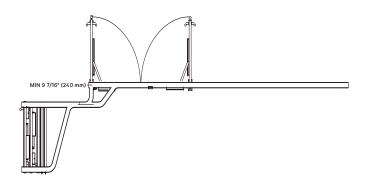


Concept 7

Perpendicular stacking outside the opening. Door / window combinations possible.









Please see referenced cross-section details. As there can be many other stacking possibilities, please submit your ideas and sketches to NanaWall Systems, Inc. for evaluation. If needed, NanaWall Systems can provide a 3D Conceptual Drawing to help in the design / development process. **Please note that the number of panels in a system are unlimited.**

A switch is defined as a break in the upper track at the head jamb to lead panels away from the opening to the stacking bay.

Note: In all concepts, the swing panel can be either inswing or outswing.

Note: Details with "R" are mirror images of the details shown on referenced drawings.

Concept 8 Concept 9 In tandem stacking of panels along adjacent wall. Parallel stacking within the opening, with single action (swing) panel with bottom door closer. 5,0 7R.0 7R.0 5R.0 Concept 10 Note: Continuous curved head Perpendicular stacking within the track possible only with gentle opening of all sliding panels. curve - otherwise it will be segmented.



Please see referenced cross-section details. As there can be many other stacking possibilities, please submit your ideas and sketches to NanaWall Systems, Inc. for evaluation. If needed, NanaWall Systems can provide a 3D Conceptual Drawing to help in the design / development process. Please note that the number of panels in a system are unlimited.

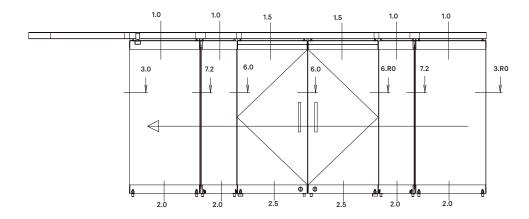
A switch is defined as a break in the upper track at the head jamb to lead panels away from the opening to the stacking bay.

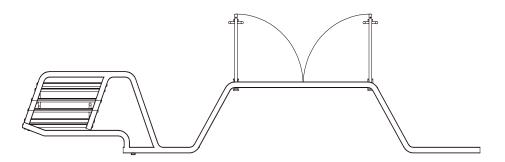
Note: In all concepts, the swing panel can be either inswing or outswing.

Note: Details with "R" are mirror images of the details shown on referenced drawings.

Concept 11

Parallel stacking outside the opening with no swing end panels. Typical storefront application.







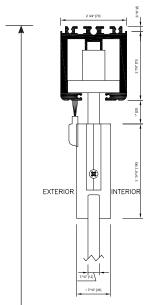
Details are shown with 1/2" (12 mm) thick glass. Also possible are 3/8" (10 mm), 5/8" (15 mm), 3/4" (20 mm) and 1" (25 mm) thick glass. Different rail heights other than shown can also be provided.

Detail 1.0 Detail 1.9 Detail 1.8 Detail 2.4 Head Profile + Bottom profile, sliding Head profile- single action Head profile- single action panel with profile cylinder (Sliding Panel) hinged end panel (outswing) hinged end panel (inswing) EXTERIOR INTERIOR EXTERIOR INTERIOR EXTERIOR INTERIOR EXTERIOR INTERIOR FRAME HEIGHT Detail 2.2 Detail 2.11 Detail 2.12 Detail 2.0 Bottom profile, sliding Bottom profile - single action Bottom profile - single action Bottom profile, sliding panel with concealed hinged end panel (outswing) hinged end panel (inswing) panel with quick release locking EXTERIOR INTERIOR EXTERIOR INTERIOR EXTERIOR INTERIOR EXTERIOR INTERIOR (8) **(38**)

Note: Standard to all sliding panels, recessed polyamide bumpers are added to the end caps at the top and bottom of one side of the panel to reduce metal to metal or glass to glass contact.

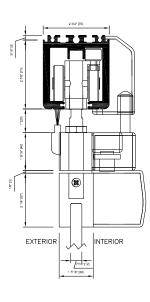


Details are shown with 1/2" (12 mm) thick glass. Also possible are 3/8" (10 mm), 5/8" (15 mm), 3/4" (20 mm) and 1" (25 mm) thick glass. Different rail heights other than shown can also be provided.



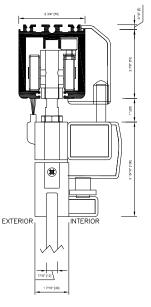
Detail 1.2

Head Profile Single / Double action end (swing) panel with pivot point.



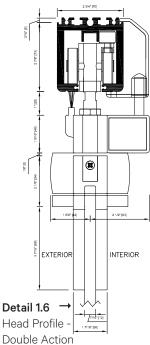
Detail 1.4

Head Profile - Single Action (swing) sliding panel (inswing with overhead door closer)



Detail 1.5

Head Profile - Single Action (swing) sliding panel (Outswing with overhead door closer)



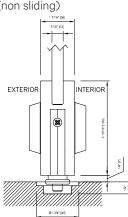
Detail 1.6 → Head Profile -

(swing) sliding panel with overhead door closer

Note: Standard to all sliding panels, recessed polyamide bumpers are added to the end caps at the top and bottom of one side of the panel to reduce metal to metal or glass to glass contact.

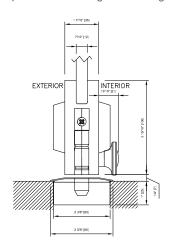
Detail 2.8

Bottom Profile - Single / Double action (swing) end panel with pivot point (non sliding)



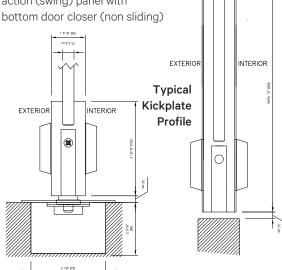
Detail 2.5

Bottom Profile - Single / Double Action (swing) sliding panel with pivot box (inswing or outswing)



Detail 2.10

Bottom Profile - Single / Double action (swing) panel with bottom door closer (non sliding)

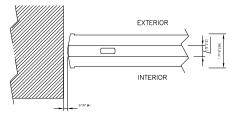




Details are shown with 1/2" (12 mm) thick glass. Also possible are 3/8" (10 mm), 5/8" (15 mm), 3/4" (20 mm) and 1" (25 mm) thick glass. Different rail heights other than shown can also be provided.

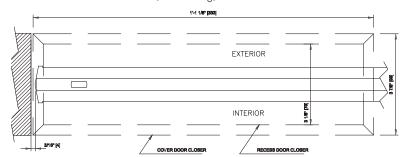
Detail 3.0

Single / Double action (swing) panel with pivot point (non sliding)



Detail 3.2

Single / Double action (swing) end panel with bottom door closer (non sliding)



EXTERIOR

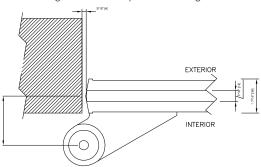
INTERIOR

Detail 3.3

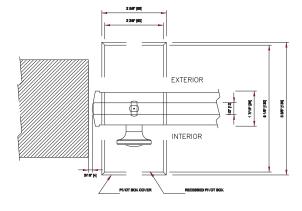
Single action hinged end panel (outswing)

Detail 3.4

Single action end panel (inswing)

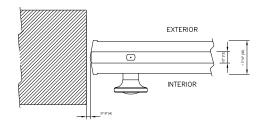


Detail 4.0 Single / Double action (Swing) sliding panel with pivot box



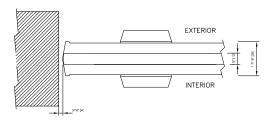
Detail 5.0

End sliding panel with quick release lock



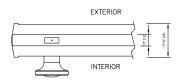
Detail 5.2

End sliding panel with profile cylinder



Detail 5.4

End sliding panel with quick release lock

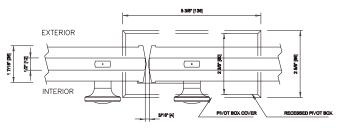




Details are shown with 1/2" (12 mm) thick glass. Also possible are 3/8" (10 mm), 5/8" (15 mm), 3/4" (20 mm) and 1" (25 mm) thick glass. Different rail heights other than shown can also be provided.

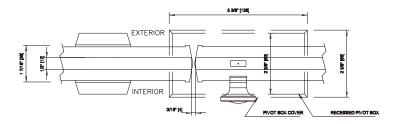
Detail 6.0

Meeting of Single / Double action (swing) panel with sliding panel with quick release lock.



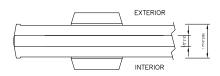
Detail 6.2

Meeting of Single / Double action (swing) sliding panel with Single / Double action (swing) sliding / non sliding panel, profile cylinder / quick release lock.



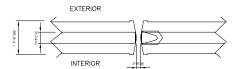
Detail 5.6

End sliding panel with profile cylinder



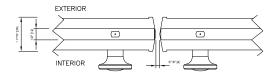
Detail 7.0

Meeting of sliding panels, concealed interlock



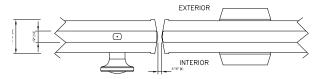
Detail 7.2

Meeting of sliding panels with quick release lock



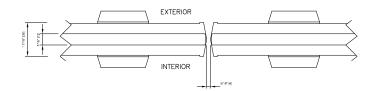
Detail 7.6

Meeting of sliding panels with quick release lock / profile cylinder



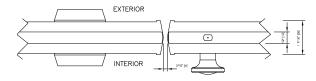
Detail 7.4

Meeting of sliding panels, profile cylinder



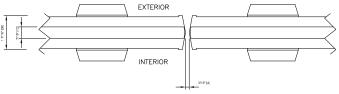
Detail 10.0

Meeting of Single / Double action (swing) sliding / non sliding panel with sliding panel profile cylinder / quick release



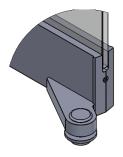
Detail 8.0

Meeting of Single / Double action (swing) sliding / non sliding panels, Single / Double action (swing) sliding / non sliding panels and profile cylinder.

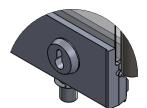


Note: Standard to all sliding panels, recessed polyamide bumpers are added to the end caps at the top and bottom of one side of the panel to reduce metal to metal or glass to glass contact.





Bottom Profile of Single Action Hinged End Panel



Bottom Profile with Profile Cylinder



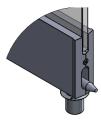
Eccentric Socket



Dust Proof Socket



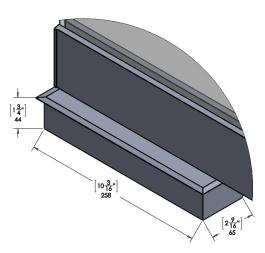
Bottom Profile - Quick Release Lock with Spring Loaded Security Feature



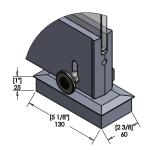
Bottom Profile - Concealed Panel to Panel Interlock



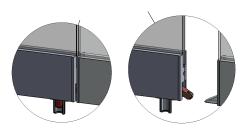
Bottom Profile - Single / Double Action end (swing) panel with Pivot Point



Bottom Profile - Single / Double Action end (swing) panel with Bottom Door Closer

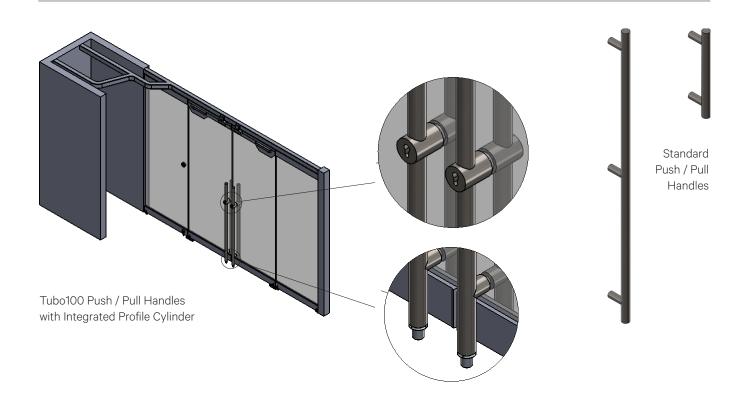


Bottom Profile - Single / Double Action (swing) sliding panel with Pivot Box

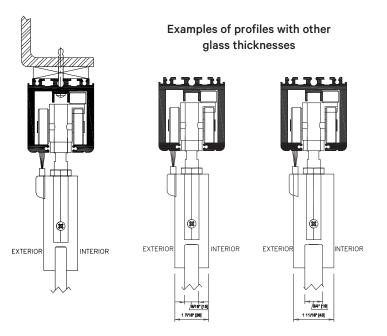


Bottom Profile of two Sliding Panels -Self-Activated Automatic Interlock





Detail A24Head Track Suggested Typical Installation



Examples of Other Rail Heights

Possible heights start at 5 1/4" (133 mm) and increase in increments of 3/16" (5 mm) to 7 13/16" (198 mm). (Other rail heights only possible with glass thickness up to 1/2" (12 mm)). 10" kickplate also available.

