



THERMALSTEEL

WINDOWS & DOORS

STRENGTH
STYLE
PERFORMANCE





Slender lines and minimal profiles give a lightness to our Thermal Steel Windows and Doors, creating a minimalist aesthetic and powerful architectural appeal.

The design places emphasis on what matters most — clean, unencumbered style.

ARCADIA CUSTOM

By coupling style with steel's robust durability, our Thermal Steel Windows and Doors make a statement that will last a lifetime while outliving the latest trends.



Arcadia Custom is part of The Arcadia Group, a leading single source supplier of architectural fenestration products, fabricated from Steel, Aluminum, and Wood. Arcadia's passion developed over 80 years ago with the desire to provide the Design community with unique window and door solutions. Our product quality and innovation are driven by the collaborative relationships we have forged with leading architects, designers, and builders.

Many of today's architectural designs incorporate a mix of materials and styles when it comes to windows and doors. Arcadia Custom is one of the few companies uniquely positioned to fulfill this "Complete Fenestrations" need. Whether it is a steel, aluminum, or wood window and door package, a custom entryway, finely crafted interior doors, or a combination of all; Arcadia Custom has the experience and capabilities to ensure your project is a success.

K N O W L E D G E

E X P E R I E N C E

P A S S I O N









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THERMALSTEEL

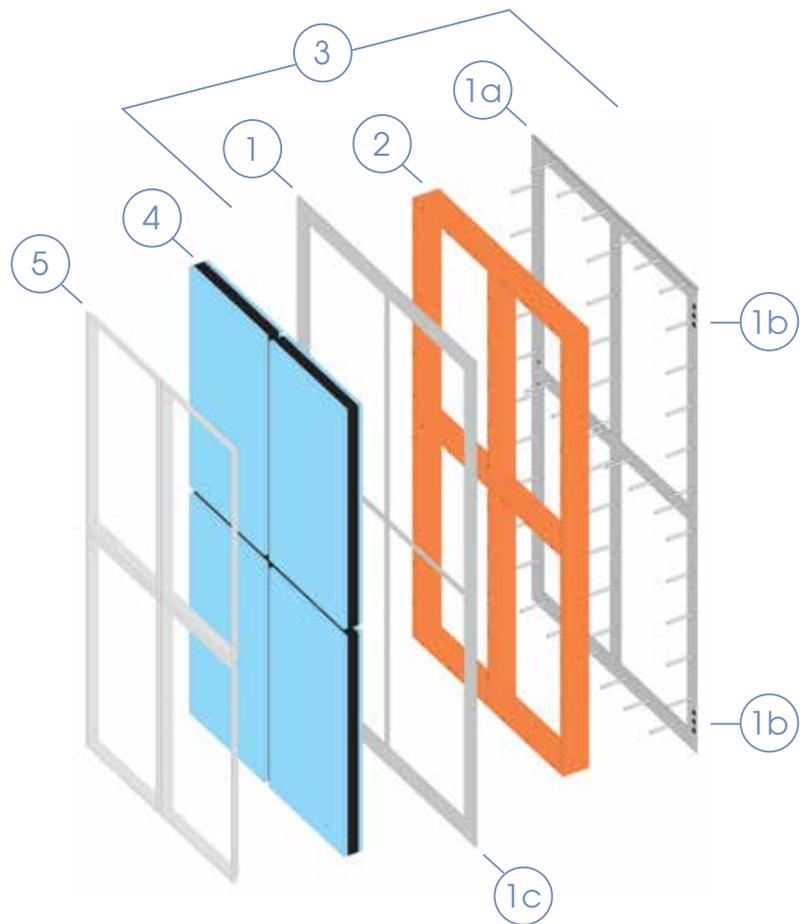
TECHNOLOGY



Arcadia Custom's Thermal Steel Technology was fueled by the need to produce a Steel Window and Door that would meet the ever increasingly stringent Energy Efficiency Building Codes of today and tomorrow, while not losing any of the "classic-timeless" aesthetics that Steel windows and Doors have become known for. Thermal Steel is a unique patented process utilizing modern materials and state-of-the-art computerized machinery that produces the most precise, energy efficient steel window and door on the market today.

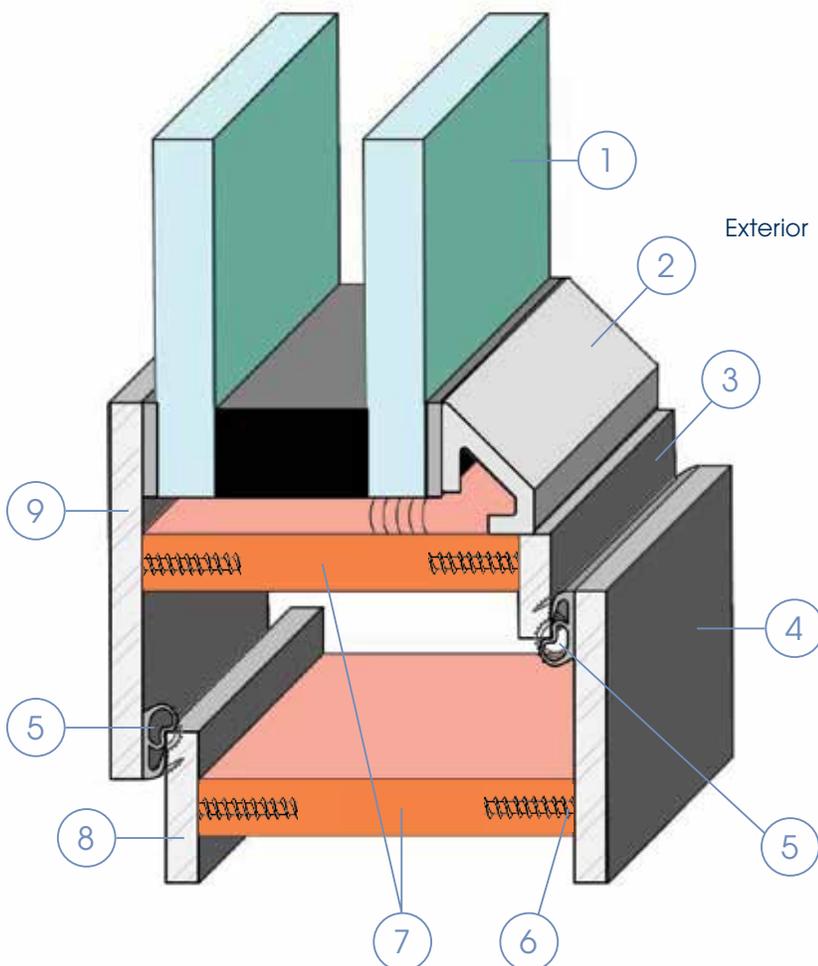
1. Window and door parts are laser cut from 10 gauge plates of 304 Stainless Steel
 - a. Computerized laser ensures a level of precision and squareness not available through traditional means of manufacturing
 - b. Laser also cuts all hardware and screw holes, ensuring accurate locations
 - c. Parts are cut from single plates of steel, there are no welds at the corners, ensuring a smooth seamless finished surface
 - d. 304 Stainless steel ensures product will not rust
2. Thermal-break material, called GRP (Glass Reinforced Pultrusion), is a specially engineered structural thermal insulator that is cut and processed using CNC equipment
3. Stainless steel plates and GRP are bonded together through a structural bonding process, called "Thermal-Mechanical-Fusion" creating the finished frame, window sash, and door panel assemblies
4. High-performance insulated glass is installed in a controlled factory environment utilizing structural glazing techniques ensuring against water penetration
5. A fully welded decorative "glazing frame" is installed in one piece providing a clean, precise finish fit with no unsightly open glazing-joints seen with typical site installations

iCORE ASSEMBLY



iCORE FEATURES:

- Stainless steel construction, composite core, and stainless or solid bronze hardware ensure "No rust ever"
- Thermal break design provides the most energy efficient Steel window and doors available
- Factory glazed glass, installed in controlled environment ensures product will be square and leaks won't occur at the glass
- Laser cut stainless steel process eliminates welded corners, producing a seamless, smooth corner surface
- Welded 1-piece glazing frames create a clean, precise, finished look at the glazing-bead-joints that isn't possible with onsite installations
- Glass installed from the factory and installation clips or nailing flange, make for a simpler and quicker installation process from traditional steel windows and doors

**iCORE SECTION DETAIL**

1. Warm Edge Technology – High Performance Insulated Glass Factory installed with structural glazing methods and materials
2. Welded Aluminum Glazing Frame Four designs available
3. 10-Gauge Laser-Cut 304 Stainless Steel Exterior Sash
4. 10-Gauge Laser-Cut 304 Stainless Steel Interior Frame
5. High-performance Silicone Gasket Weatherstrip Four points of contact ensure tight weather seal
6. Thermal Mechanical Fusion Stainless steel frame with welded stainless steel studs insert into GRP creating a mechanical bond
7. GRP-Glass Reinforced Pultrusion Structural composite thermal break material
8. 10-Gauge Laser-Cut 304 Stainless Steel Interior Frame
9. 10-Gauge Laser-Cut 304 Stainless Steel Interior Sash



THERMALSTEEL

PERFORMANCE



 	
Outswing Casement Window Stainless Steel, Double Glazed low-e366 (e=0.022), low-e189 (e=0.149) U.Factor	
ENERGY PERFORMANCE RATINGS	
U-FACTOR (U.S./I-P)	Solar Heat Gain Coefficient
0.29	0.21
ADDITIONAL PERFORMANCE RATINGS	
Visible Transmittance	--
0.47	--
<small>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product use. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information. www.nfrc.org</small>	

THERMAL PERFORMANCE

- NFRC certified
- U-values as low as .20 (see thermal performance charts for specifics)
- The best energy performance in the steel window industry, with values rivaling high-performance wood windows
- Factory glazing means products will ship with NFRC label attached to glass

CONDENSATION RESISTANCE

- Thermally broken design greatly reduces the chance of condensation seen with most steel and aluminum window construction
- Product has gone through condensation resistance "CR" testing with results similar to high-performance wood windows



STAINLESS STEEL CONSTRUCTION

- Stainless steel construction with high-performance paint finish means your doors and windows will never develop "structural rust"
- Chromium found in stainless steel prevents the migration of rust - mild steel does not have this same protection

STRONGEST WARRANTY IN THE INDUSTRY

- 20-year limited warranty on our doors and windows - longest most comprehensive in the industry
- 10-year limited warranty on glass
- Because the product ships with the glass installed from our factory, you have "complete" warranty coverage from one company, unlike the typical limited coverage where the window manufacturer only covers their steel components, the glass manufacturer only covers their glass and the "onsite" glazer typically warranties nothing
- Be assured your investment is well protected from a single company with an 80 year track record, taking sole responsibility for workmanship





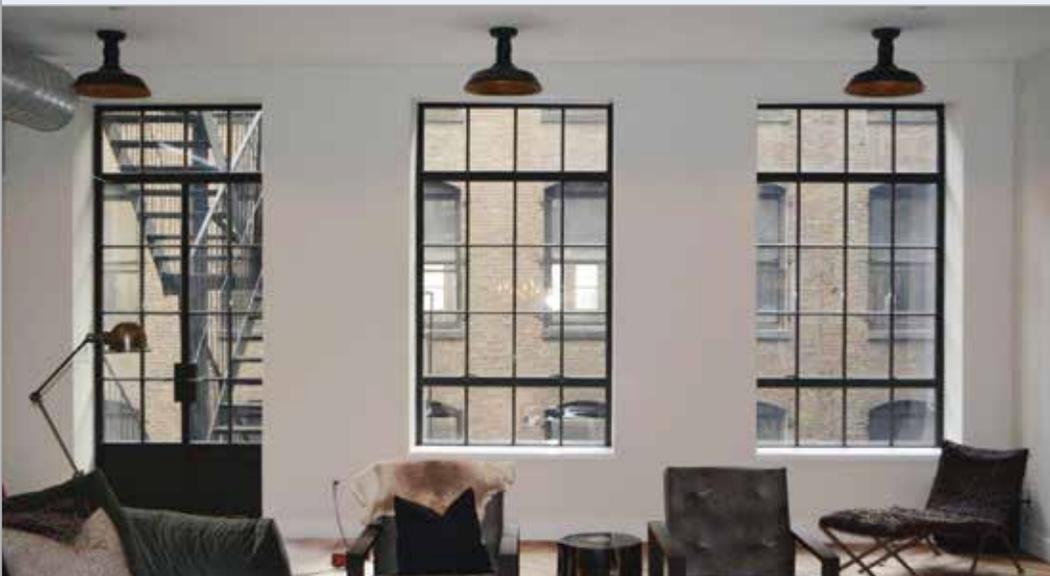
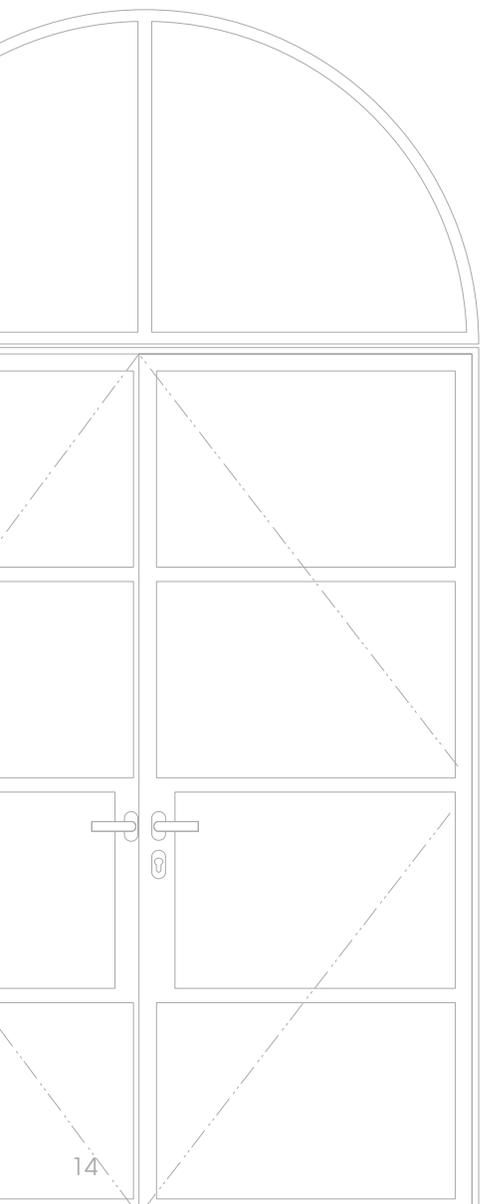
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DESIGN FLEXIBILITY



Arcadia Custom's Thermal Steel construction and manufacturing capabilities allow for a level of Design Flexibility not seen in the steel window industry.

Whether it is an irregular shaped window, unique door configuration, custom finish color, or an "architecturally correct" muntin bar detail, Arcadia Custom has the expertise and product to meet your requirements.

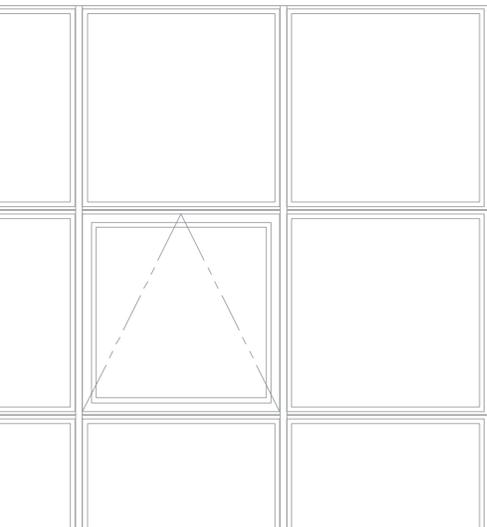


- High performance glass options
- Multiple glazing frame (bead) and muntin bar options
- Unlimited door and window configurations
- Mulling options that can create walls of glass
- Finish options: unlimited paint colors, brushed stainless surface or Cor-ten® surface
- Radius and curved-in-plane designs
- Complete product line: fixed, transoms, in-swing/out-swing casements, in-swing/out-swing doors, multi-fold door units, sliding door units, pivot doors, custom designs
- "Large format" oversize doors and windows
- Screen options: fixed, sliding, or retractable



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GLAZING OPTIONS



Arcadia Custom offers improved energy performance insulated glass utilizing warm-edge spacer technology. This glass is a dual seal system that utilizes a high-performance acrylic adhesive that helps reduce thermal conductivity.



FEATURES INCLUDE:

- Thicker: 1 1/8" overall glass thickness on dual-glaze
- High performance composite spacer, matte black finish
- Improved sound absorption
- High wind load resistance
- 10 year limited warranty
- Improved energy performance
- Available in TDL (true-divided light) or SDL (simulated divided light) options

GLASS OPTIONS INCLUDE:

- Clear tempered
- Clear laminated
- Grey and bronze tint
- Low Iron – ultra clear
- Guardian 62/27 low-E
- Guardian 70/36 low-E
- Guardian IS 20 (4th surface Low-E)
- Other glass types available upon request
- Stainless steel spacer available





- Dual glaze - 1/4" individual panes with 5/8" air space for 1 1/8" over all glass thickness (**standard product)
- Triple glaze - 1 1/2" Over all glass thickness
- Single glazed - 3/8" thick glass
- Muntins available in either simulated divided light (SDL) or true divided light (TDL)

	PERIMETER	TDL MUNTIN	SDL MUNTIN
**TSX-40 Dual Glazed			
TSX-50 Dual Glazed			
TSX-50 Triple Glazed			
TSX-30 Single Glazed			

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GLAZING FRAME & MUNTIN OPTIONS





Putty Glazing Frame



Sloped Bevel Glazing Frame



Offset Glazing Frame



Square Glazing Frame

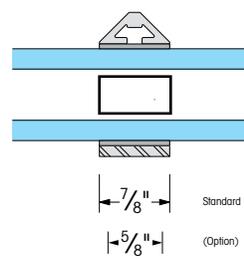
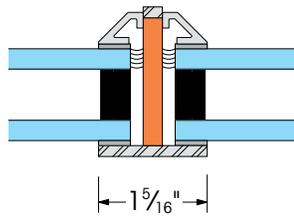
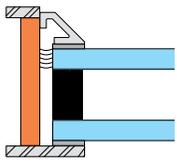
FEATURES:

- Welded one-piece glazing frames
- Glazing frames factory installed
- Four architectural design options

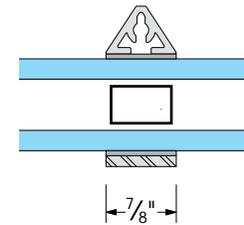
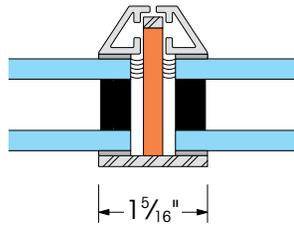
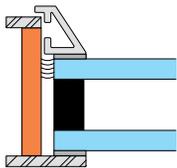
PERIMETER

TDL MUNTIN

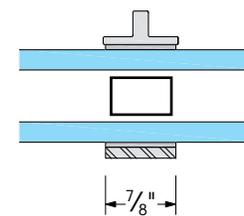
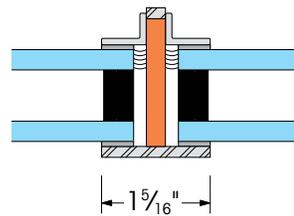
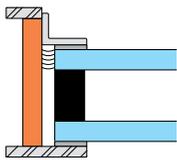
SDL MUNTIN



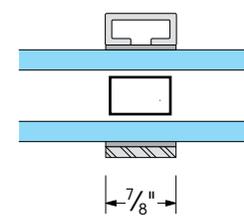
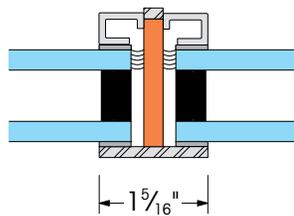
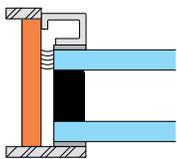
Putty



Sloped Bevel



Offset



Square



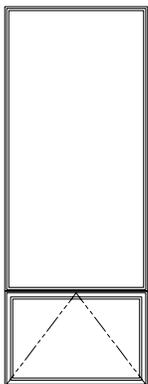
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WINDOW CONFIGURATIONS



ELEVATIONS

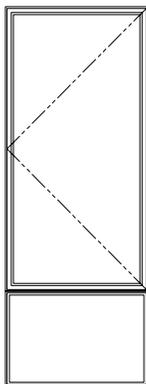
Other window configurations available.



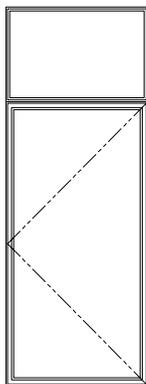
Fixed Over
Awning



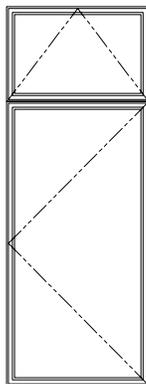
Fixed Over
Hopper



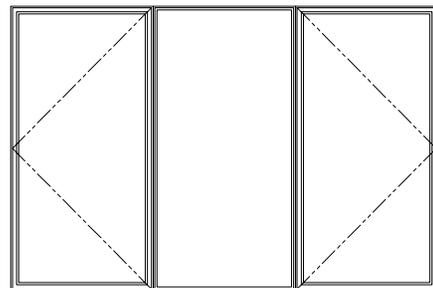
Casement
Over Fixed



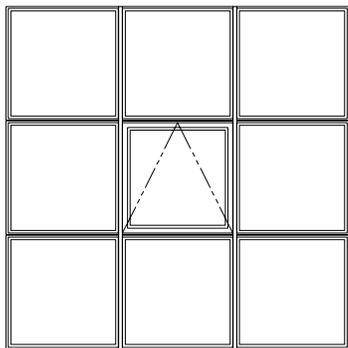
Fixed Over
Casement



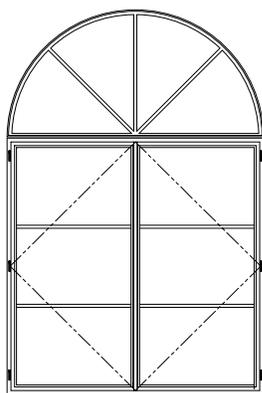
Awning
Over
Casement



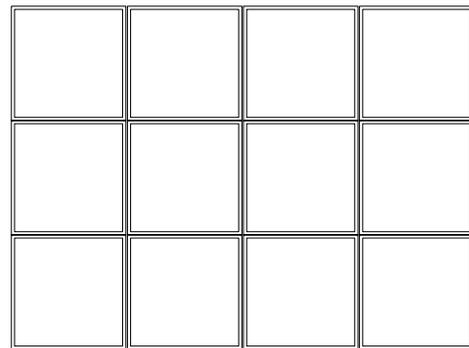
Left, Fixed, Right



Fixed/Operating
Window Wall



1/2 Round Transom
Over French Casement



Fixed Window Wall



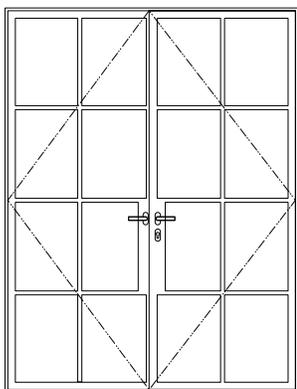
THERMALSTEEL

DOOR CONFIGURATIONS

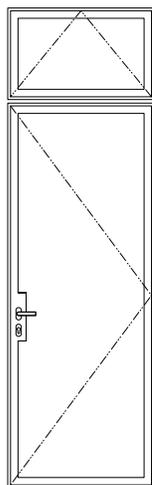


ELEVATIONS

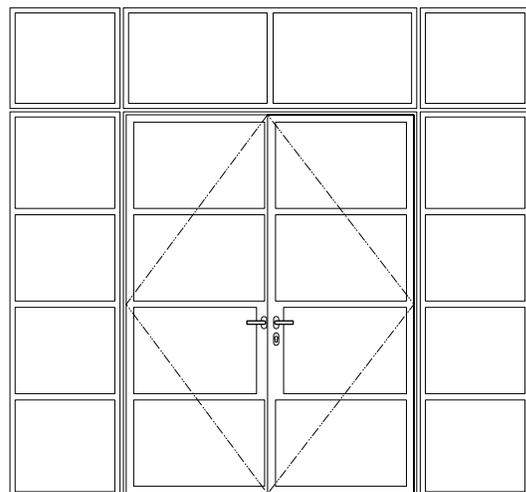
Other door configurations available.



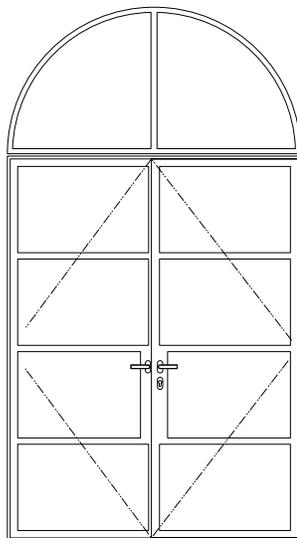
Pair



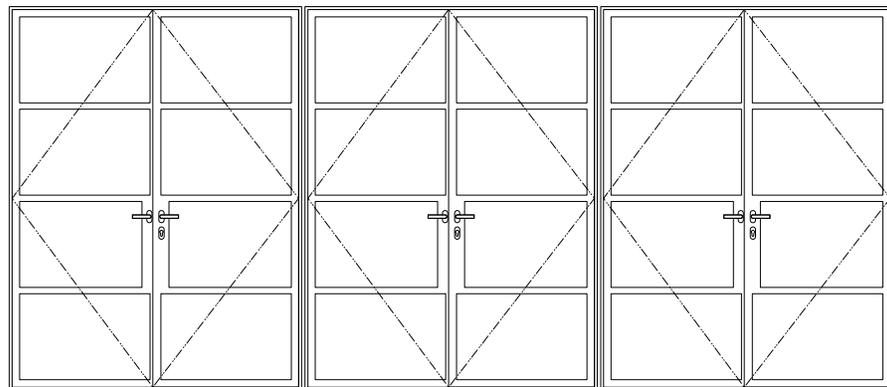
Awning Over Door



Sidelight/Transom Door System



1/2 Round Transom Over Pair



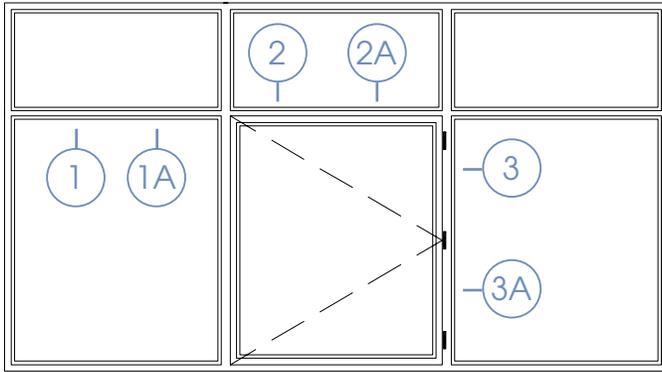
Mulled French Door System

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WINDOW MULLION OPTIONS

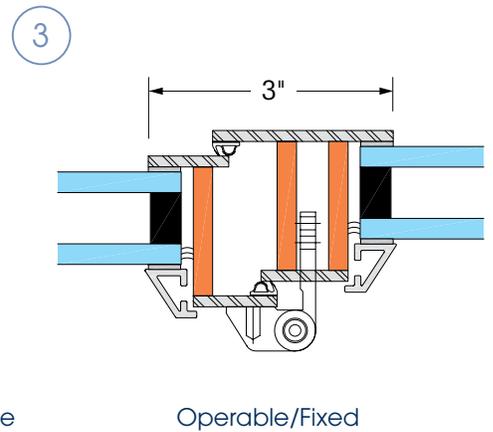
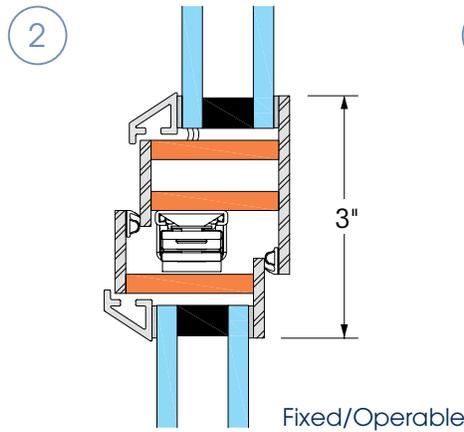
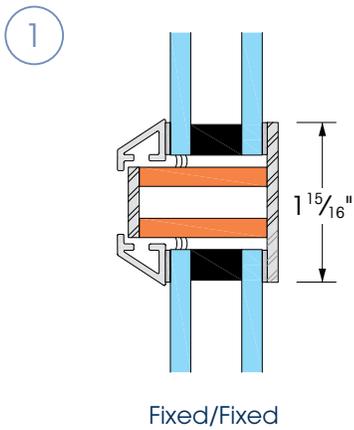


WINDOW ELEVATION



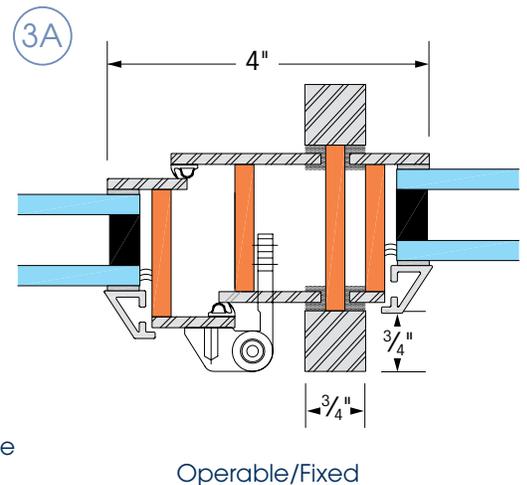
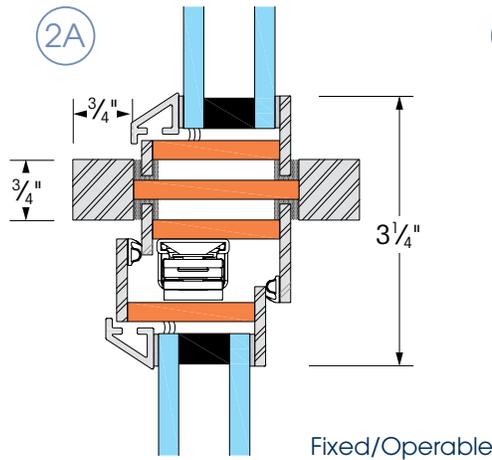
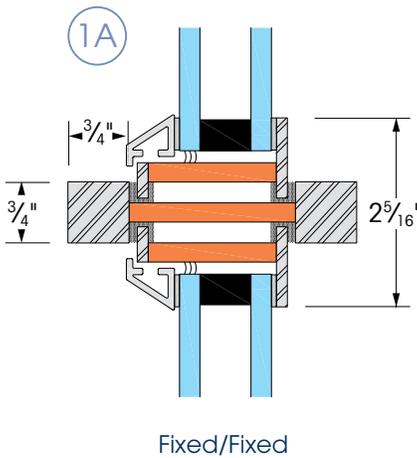
INTEGRAL MULLION DETAILS

Size limitation: 12' width, 6' height, not to exceed 72 sq ft. Larger sizes require structural mullions.



STRUCTURAL MULLION DETAILS

Structural mullions designed to support window and door systems only, not structures above unit.

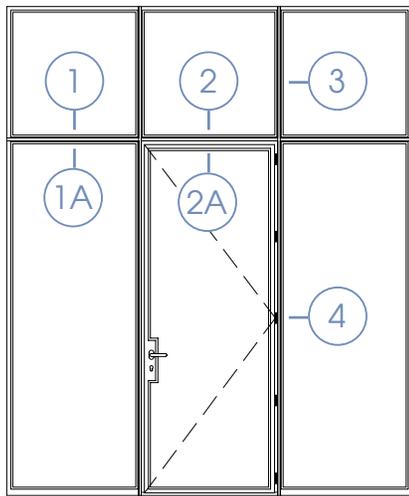


THERMALSTEEL

DOOR MULLION OPTIONS

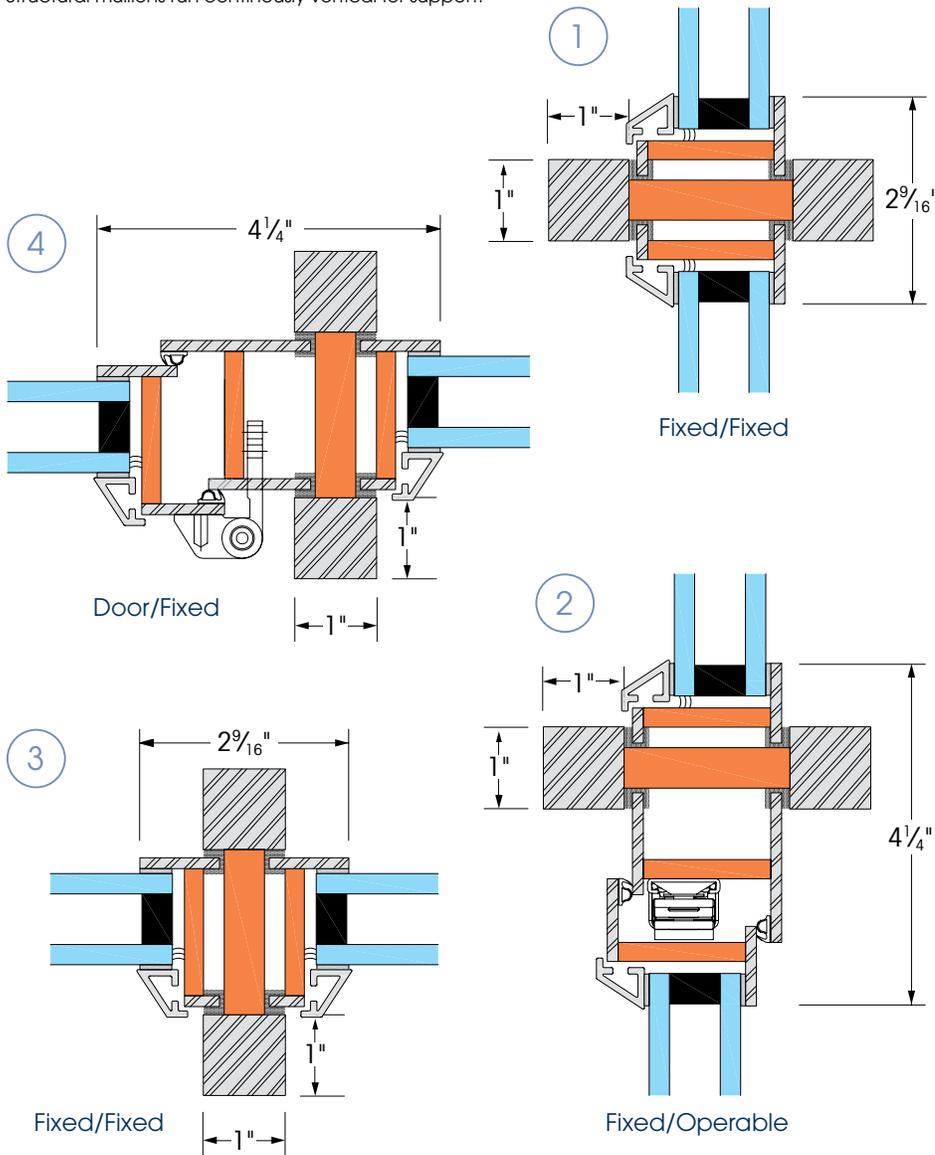


DOOR ELEVATION

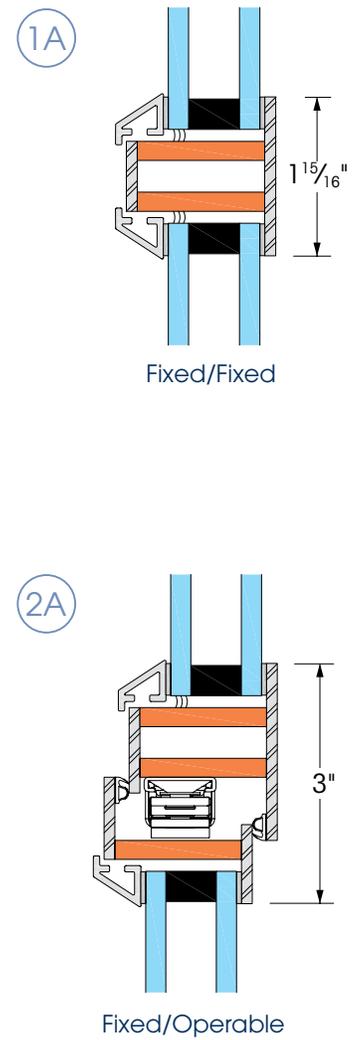


STRUCTURAL MULLION DETAILS

Structural mullion required at door sidelite transition.
Structural mullions run continuously vertical for support.



INTEGRAL MULLION





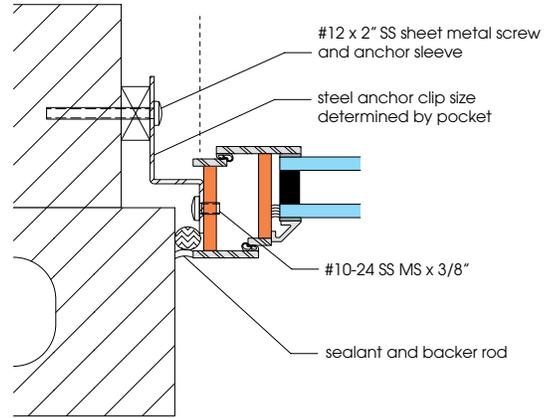


THERMALSTEEL

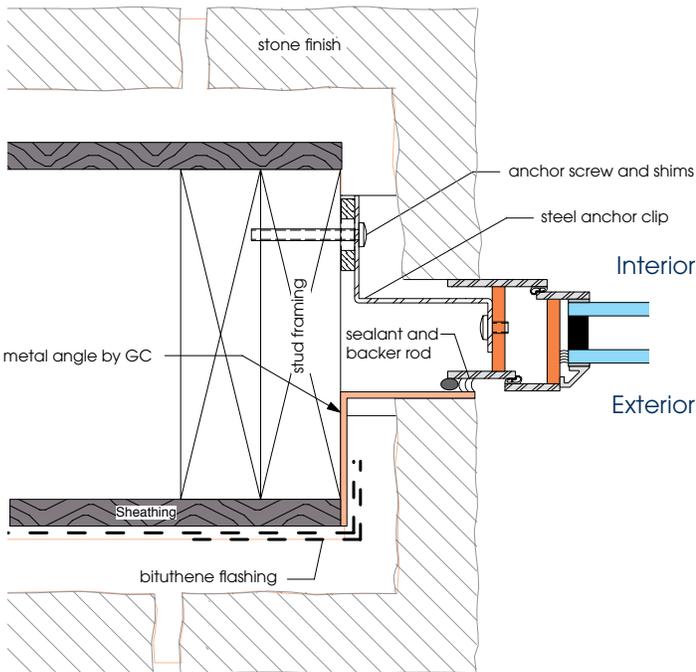
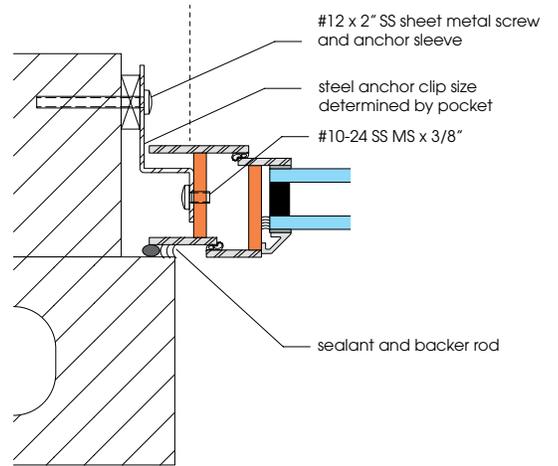
INSTALLATION DETAILS



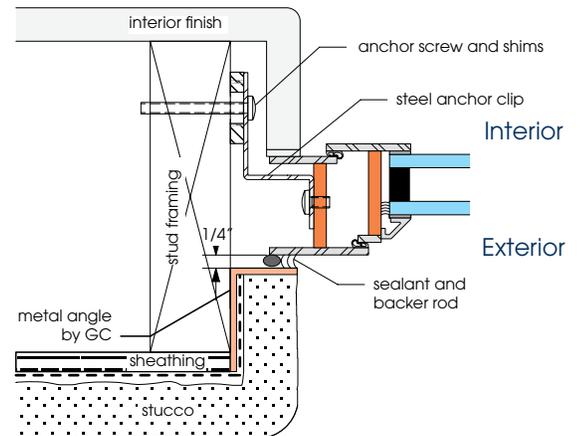
Brick -
Flush Installation



Brick -
Lap Installation
(Shown with extended frame)



Stone - Lap Installation
(Shown with extended frame)

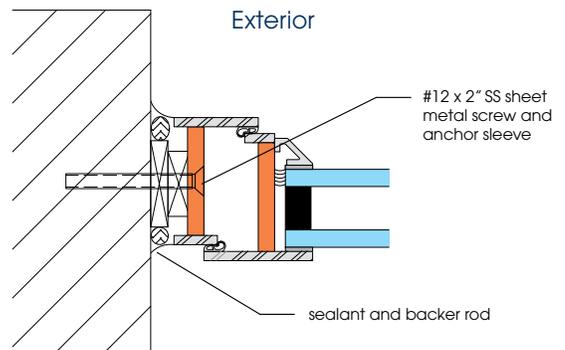
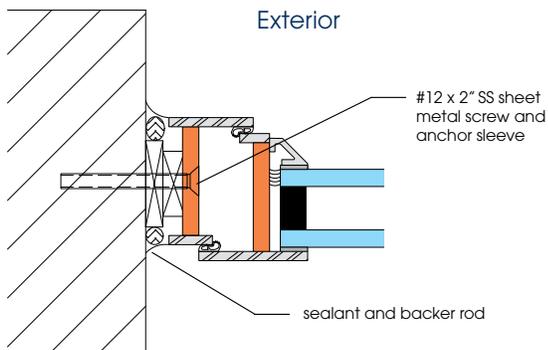
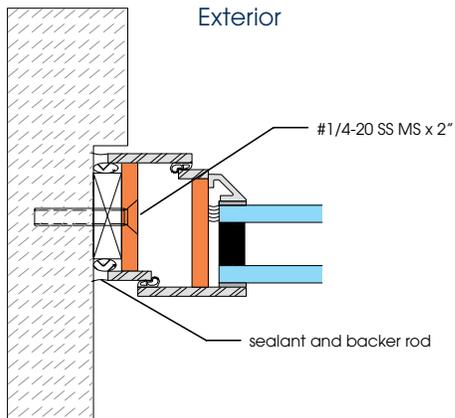


Stucco/Drywall - Lap Installation
(Shown with extended frame)

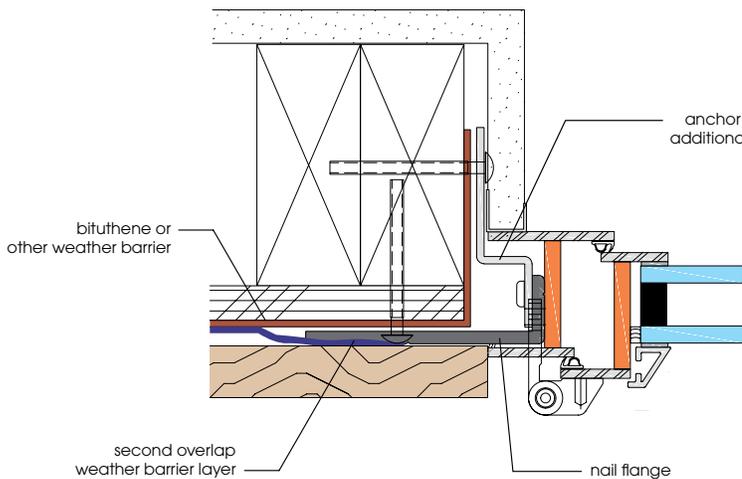
DIRECT ANCHOR

INSTALLATION DETAILS

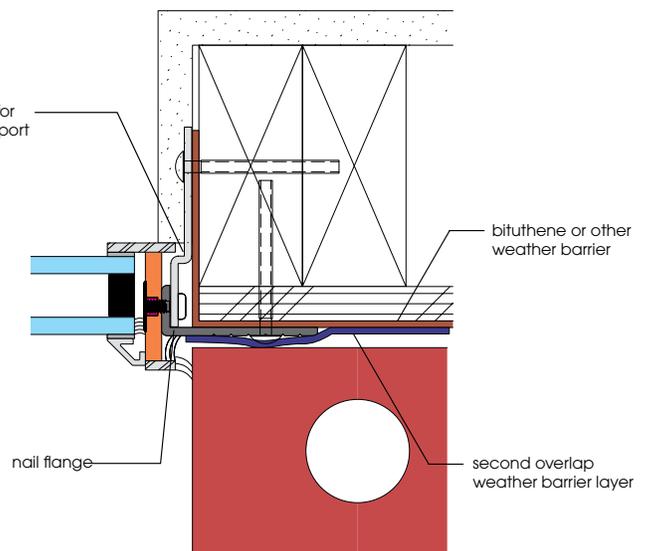
Direct anchor not available on fixed units.



ALUMINUM NAIL FLANGE



3 1/2" Nail Flange with Clip



2 1/4" Nail Flange



THERMALSTEEL

FINISH

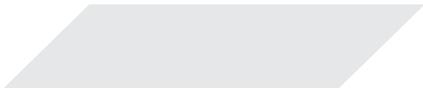




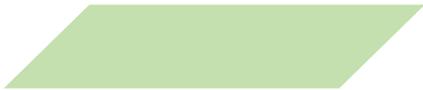
Arcadia Custom's Paint Systems is a multi-step process that combines optimum corrosion protection with the highest weatherability. Our paint process - combined with a stainless steel substrate - will out-perform all other finishes on mild steel. This durable acrylic polyurethane paint allows for unlimited color choices. Choose from any RAL, Metallic, or Exotic finish. Custom color match paint also available.



4



3



2



1



STANDARD PAINT OPTIONS

Textured or smooth paint surface available.



Sift Espresso (Texture)



Jet Black



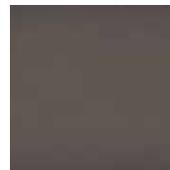
9011 Black



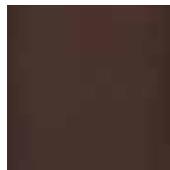
Atelier Dominique



Argento 305 Metallic



Statuary Bronze



Black Bean Soup



Brick Red



Champagne 301 Metallic



Sandstone

THE PROCESS

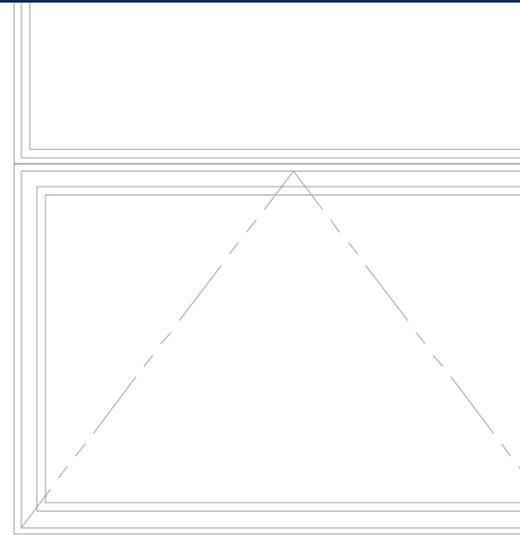
- 1: Stainless steel substrate is run through an abrasive blasting treatment producing an anchor bond for primer and paint adhesion
- 2: Acid etch primer coating
- 3: Epoxy primer coating
- 4: High-performance acrylic polyurethane paint coating

STAINLESS STEEL FINISH:

- Manufactured from 316 stainless alloy
- #4 brushed stainless surface

COR-TEN® STEEL FINISH:

- Manufactured from Cor-ten® steel
- Factory accelerated rust patina



STAINLESS STEEL FINISH



Sample Texture

COR-TEN® STEEL FINISH



Sample Texture

Living finish will continue to change in appearance, rust staining possible

THERMALSTEEL

WINDOW HARDWARE





FEATURES:

- Solid bronze hinges
- Solid bronze hardware trim available
- Stainless steel roto-crank arms for corrosion protection
- Several finish options available

WINDOW HINGE TYPE



Butt Hinge - Standard
(Solid Bronze)
*See finish options below.



Acorn Hinge - Optional
(Solid Bronze)
*See finish options below.



Concealed Friction Hinge
(Stainless Steel)
Available on Push-Out, Awning, and Hopper.
Weight limit 120lbs.

*** BRONZE HARDWARE FINISH OPTIONS**



White Light



Medium Pewter



Silicon Light



Silicon Medium



Silicon Dark



Blackened
Bronze



Dark Pewter
Antique



Simplex – Single Point

Available on push-out, in-swing.
Two locks on windows over 48".
*See finish options previous page.



Black
(Standard)

Brushed
Nickel

Multi-point Trim (Steel)

Black and nickel finish only.



Black
(Standard)

Crank-Out Operator (Steel)

Out-swing window only.
Black and nickel finish only.



Brushed
Nickel

Bronze Crank-Out Operator

Out-swing casement window only,
(not available for awning windows).
*See finish options previous page.



Bronze Multi-point Sash T-Pull

Used with multi-point trim on
push-out window.
*See finish options previous page.



Bronze Multi-point Trim

*See finish options previous page.



THERMALSTEEL

DOOR HARDWARE





Escutcheon Details



Keyed Profile Cylinder

Lever Escutcheon & interior Thumb Turn

Bronze Door Levers

*See finish options on page 37.



#016 Handle



#164 Handle



#70 Handle



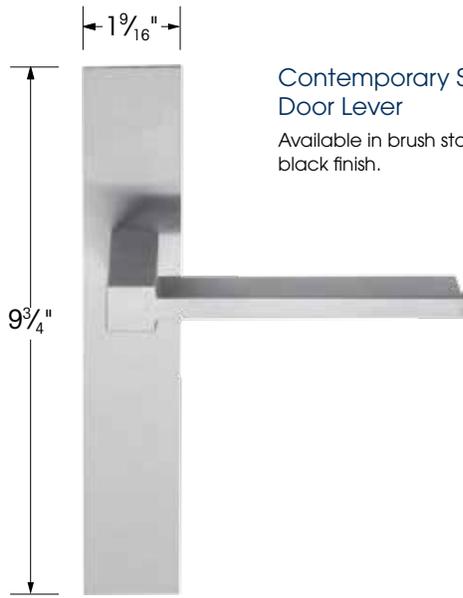
#166 Handle



#159 Handle



PREMIUM DOOR MULTI-POINT LEVER OPTIONS



Contemporary Stainless Steel Door Lever
Available in brush stainless or black finish.



Classic Bronze Door Lever
*See finish options page 37.

FLUSHBOLT



Standard on inactive doors.
Dummy door lever standard.

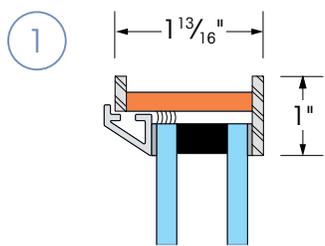
DOOR HINGE



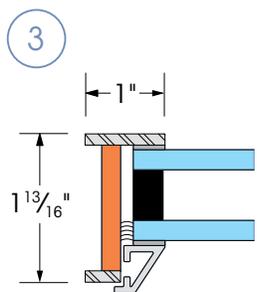
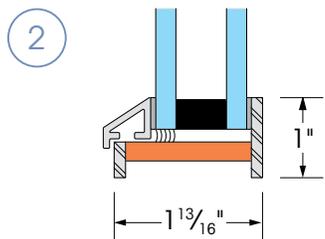
Butt Hinge - Standard (Solid Bronze)
*See finish options page 35.

THERMALSTEEL

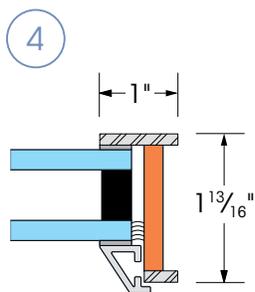
WINDOW SYSTEMS



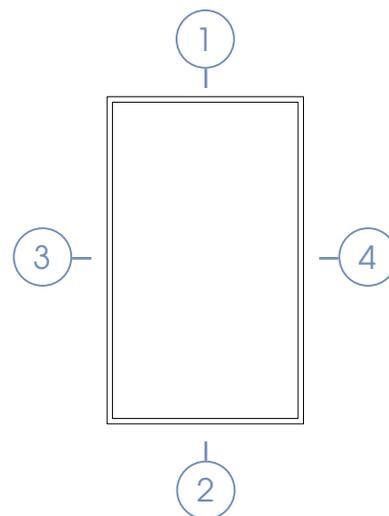
Exterior



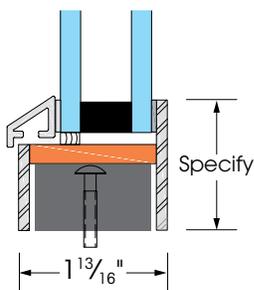
Exterior



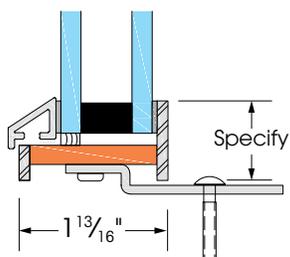
ELEVATION



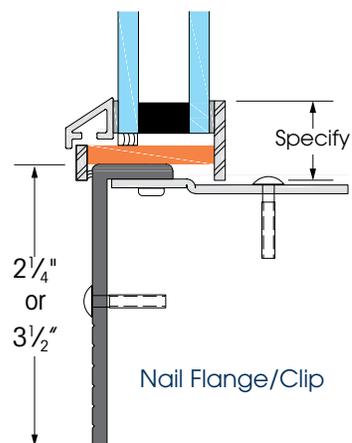
SILL ANCHORING OPTIONS



Composite Sill Block



Anchor Clip



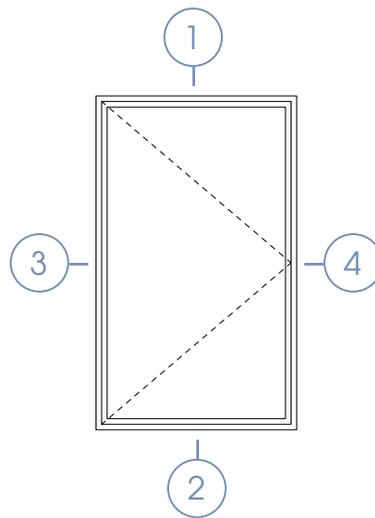
Nail Flange/Clip



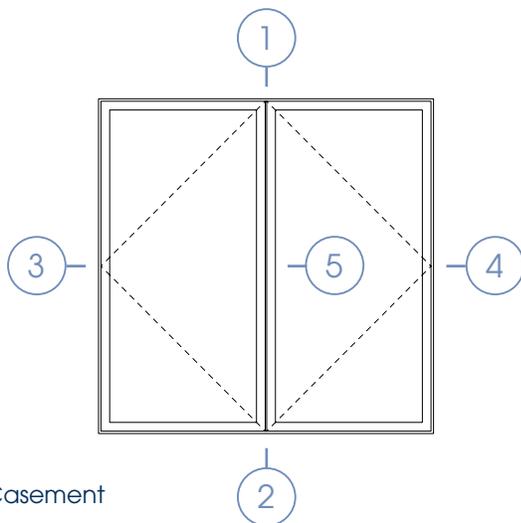
FEATURES:

- Out-swing or In-swing
- Roto-crank or push-out operation
- Removable fixed screens or roll-down screens available
- Sizes up to: 3'-6" width, 8' height

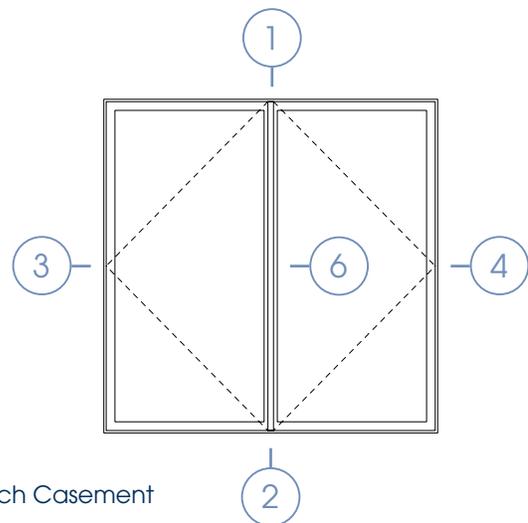
ELEVATIONS



Casement

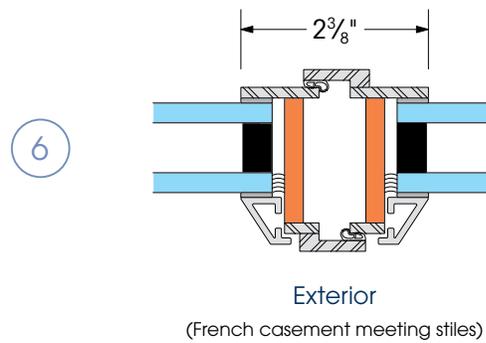
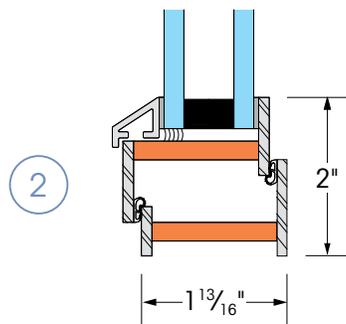
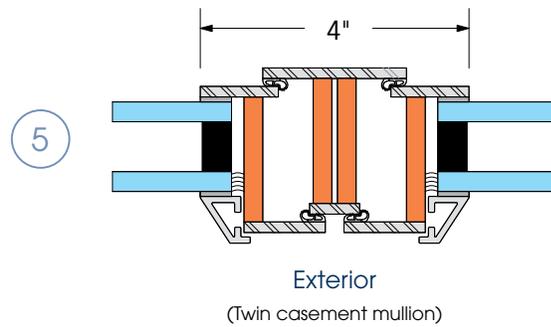
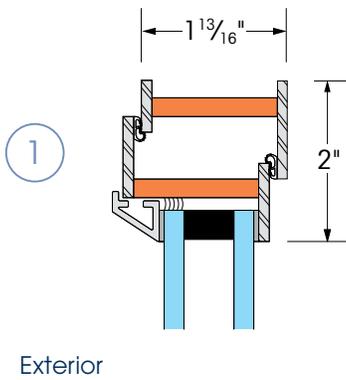
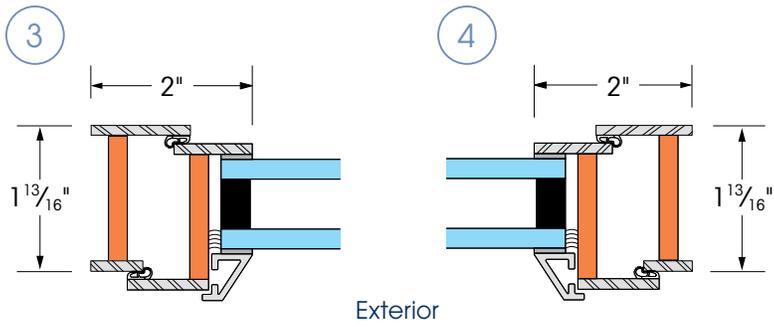


Twin Casement

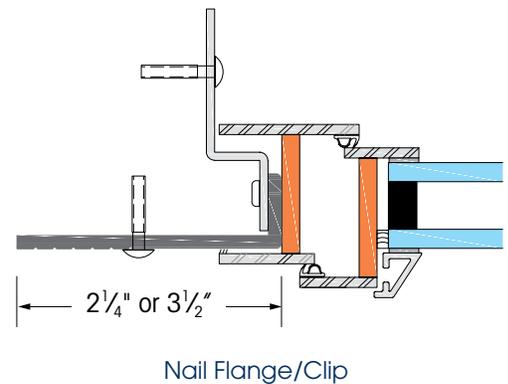
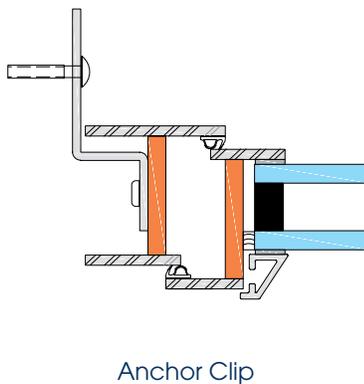
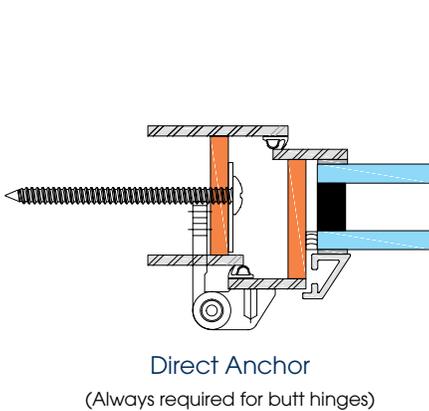


French Casement

DETAILS



ANCHORING OPTIONS





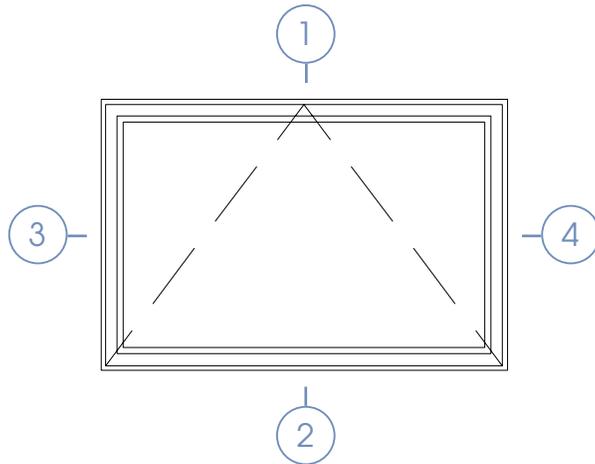
AWNING WINDOW OPTIONS:

- Butt hinge with roto-crank operation
- Concealed friction hinge, push-out operation
- Motorized operation

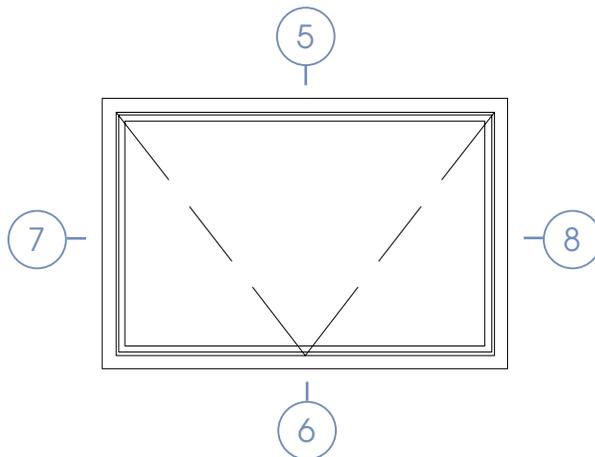
HOPPER WINDOW OPTIONS:

- Concealed friction hinge with limiter

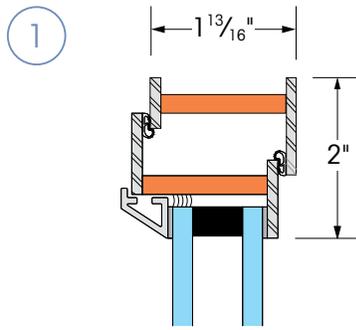
AWNING ELEVATION



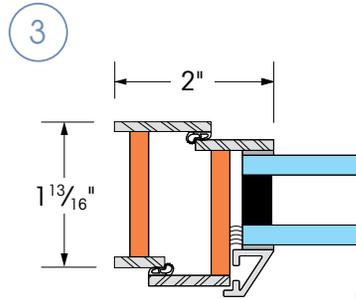
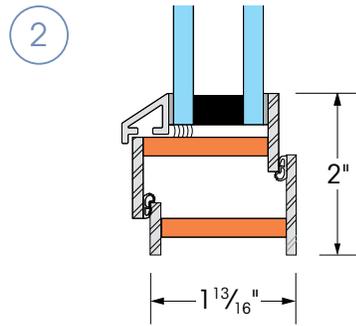
HOPPER ELEVATION



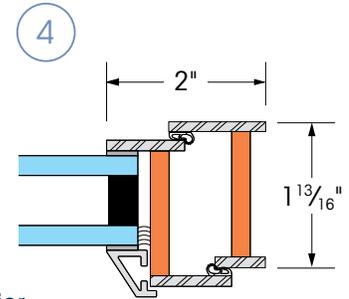
AWNING DETAILS



Exterior



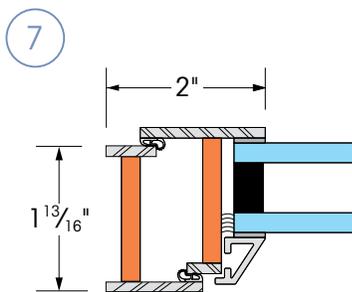
Exterior



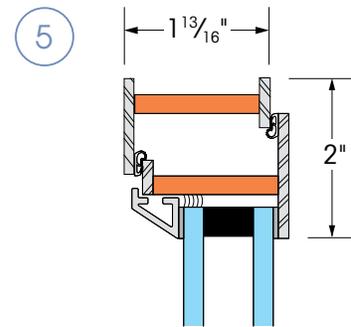
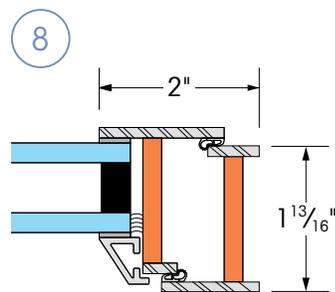
Exterior



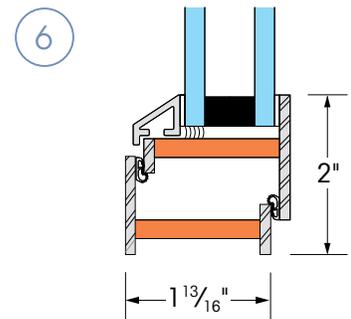
HOPPER DETAILS



Exterior



Exterior





THERMALSTEEL

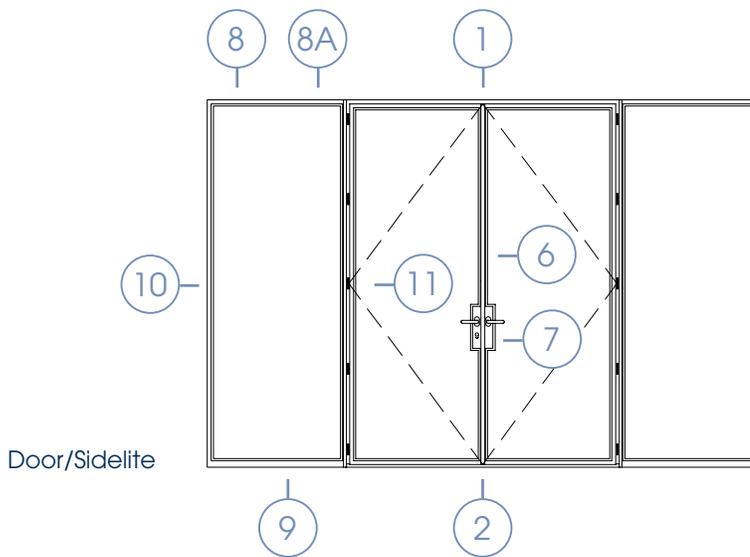
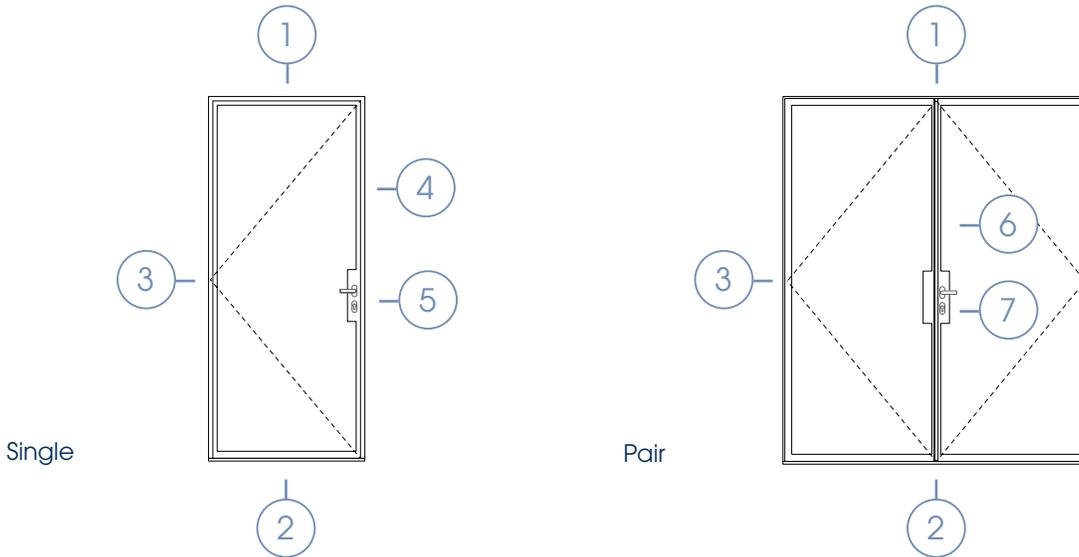
SWINGING DOOR SYSTEMS

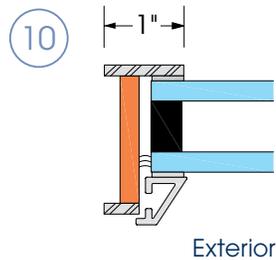
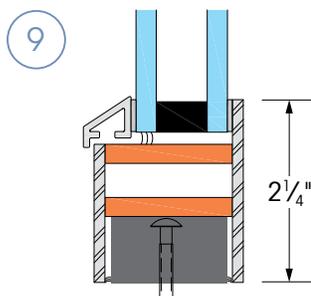
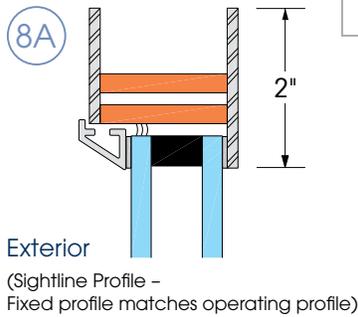
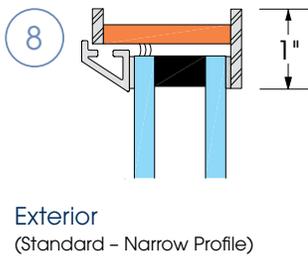
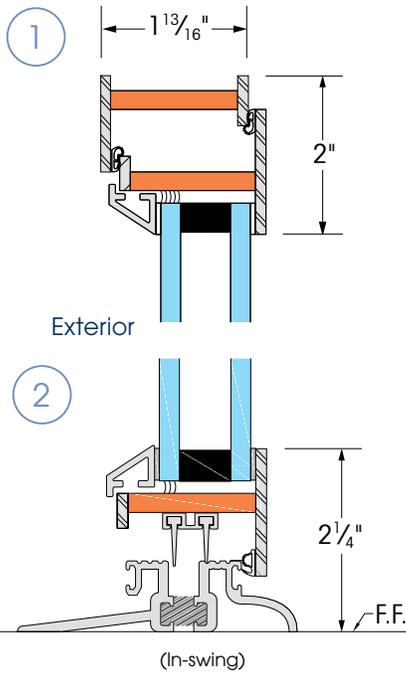
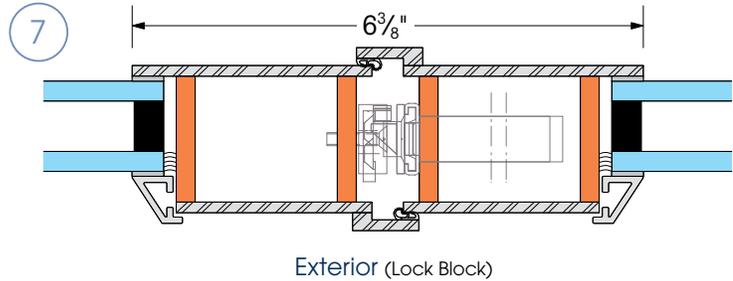
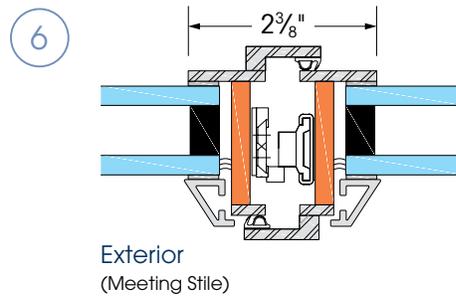
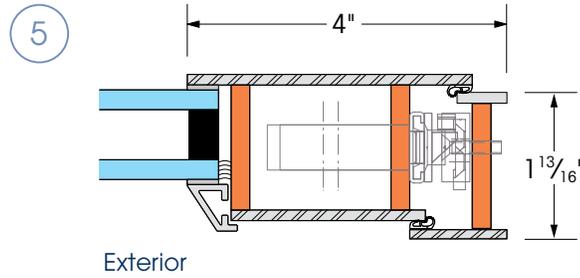
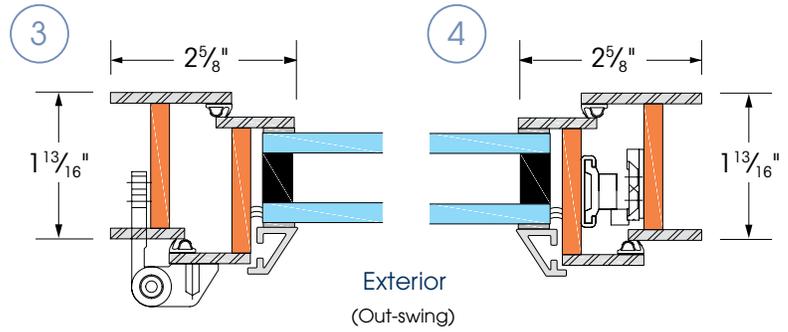


FEATURES:

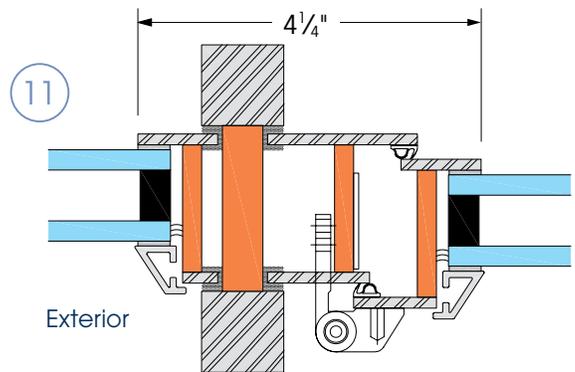
- In-swing or out-swing
- Multi-point Lock standard
- Lock-box options:
 - 12" standard
 - Stretched between muntins

ELEVATIONS

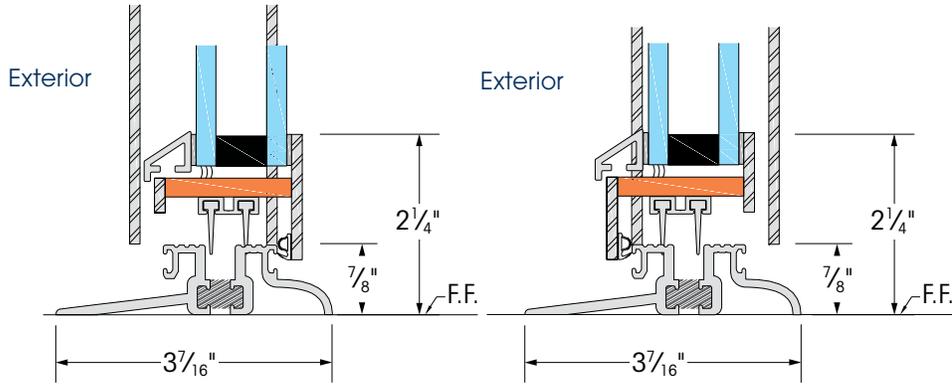




SIDELIGHT DETAILS



SILL OPTIONS

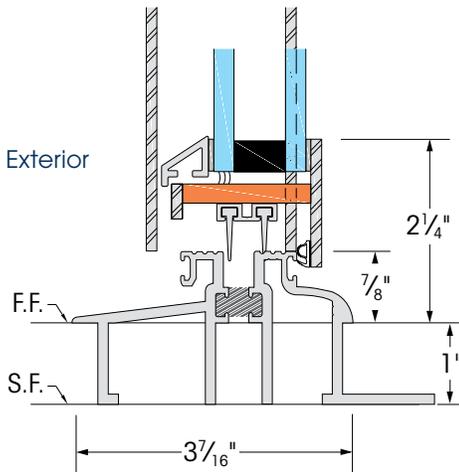


Aluminum In-Swing (standard)
Thermal Break

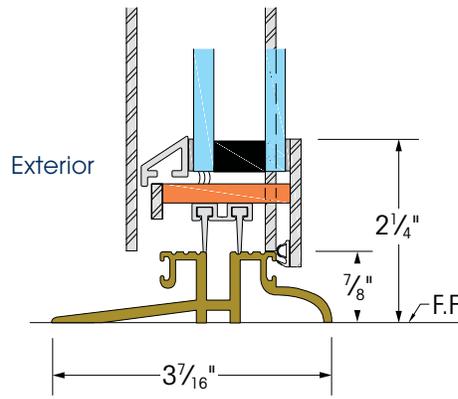
Aluminum Out-Swing (standard)
Thermal Break

FEATURES:

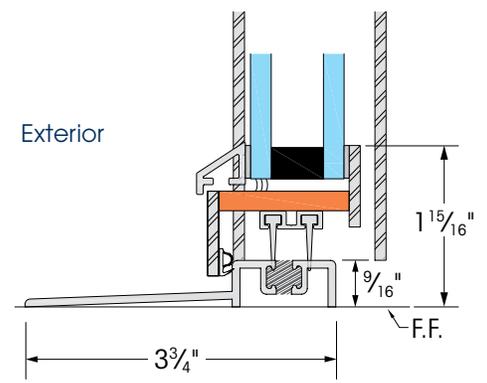
- Aluminum and solid bronze sills available
- Custom door bottom rail heights available
- Recessed flat door panels available



Subfloor Sill (In-Swing/Out-Swing)
Aluminum-Thermal Break

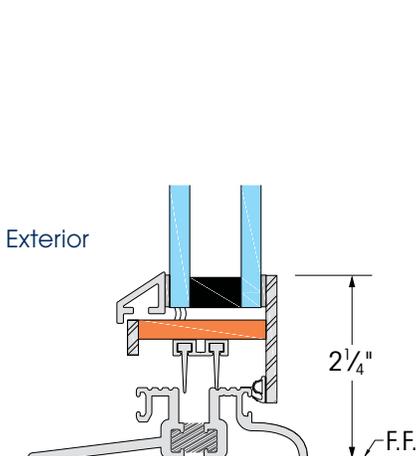


Solid Bronze (In-Swing/Out-Swing)
Non-Thermal Break

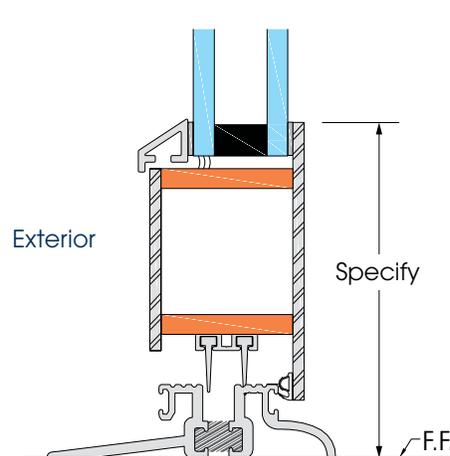


Low Profile Out-Swing
Aluminum-Thermal Break

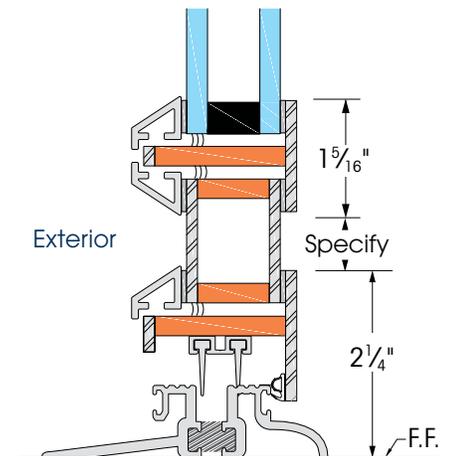
BOTTOM RAIL OPTIONS



Standard Bottom Rail



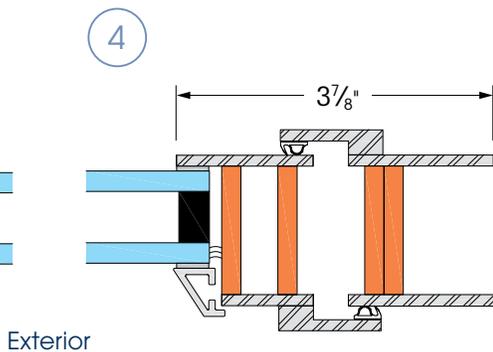
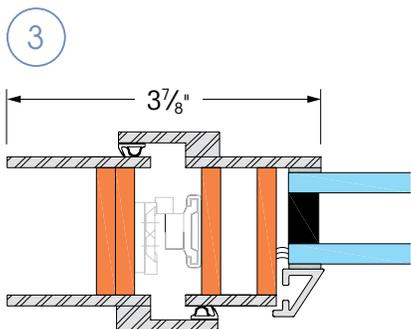
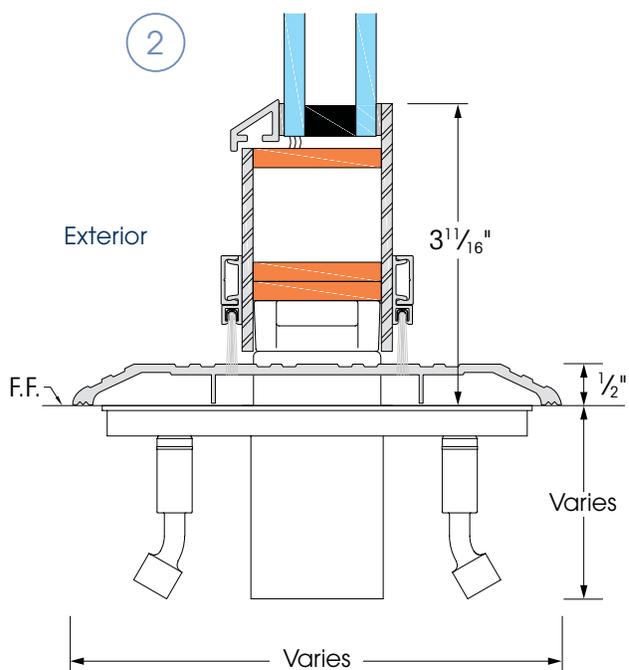
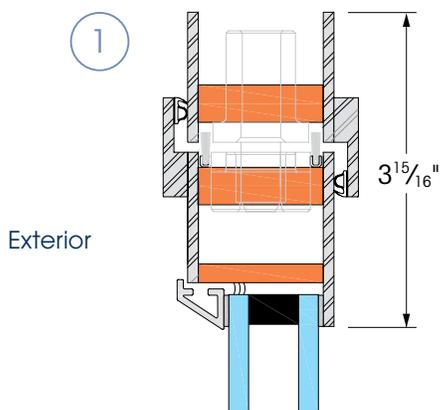
Variable Bottom Rail



Recessed Bottom Panel

THERMALSTEEL

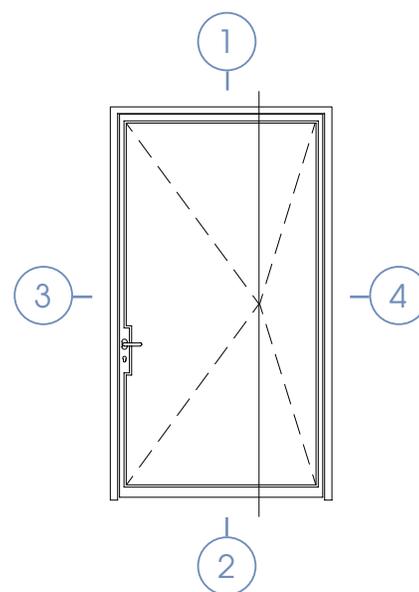
PIVOT DOOR



FEATURES:

- Rixson™ heavy-duty center hung pivot hardware standard
- Rixson™ heavy-duty floor closer option available for commercial applications
- Sizes up to: 6' width, 12' height
- Multi-point lock standard

ELEVATION



THERMALSTEEL

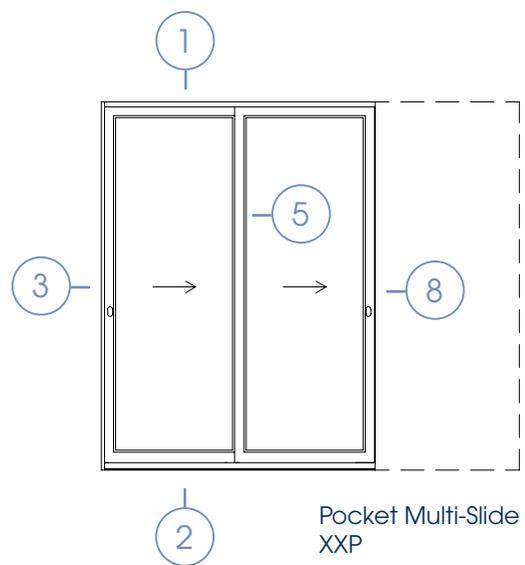
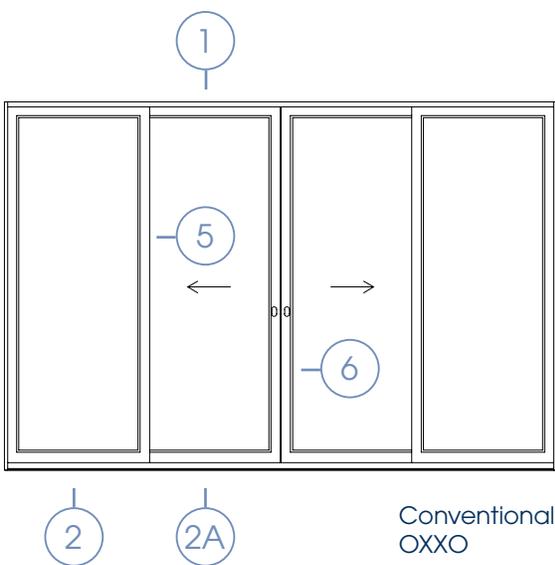
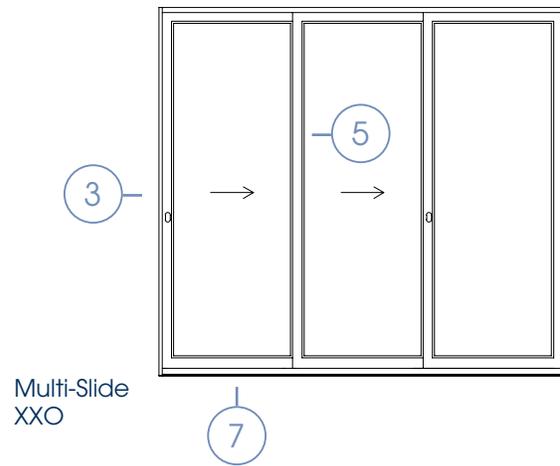
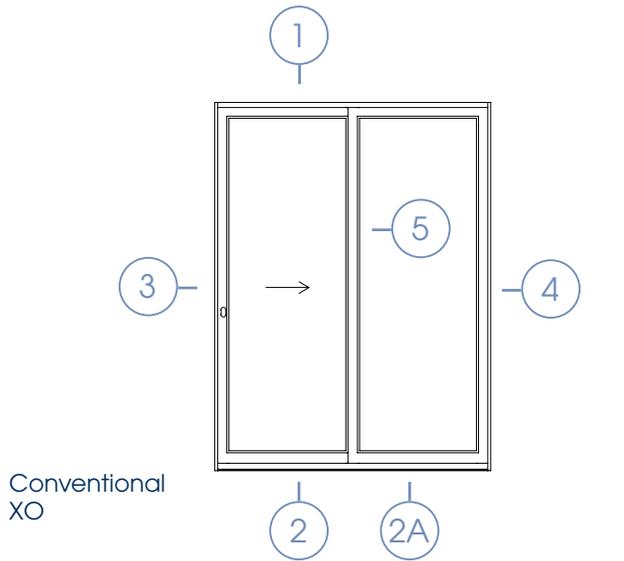
LIFT-SLIDE DOOR SYSTEMS



FEATURES:

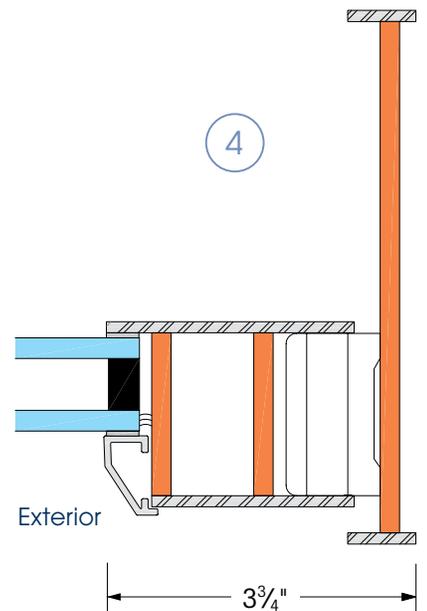
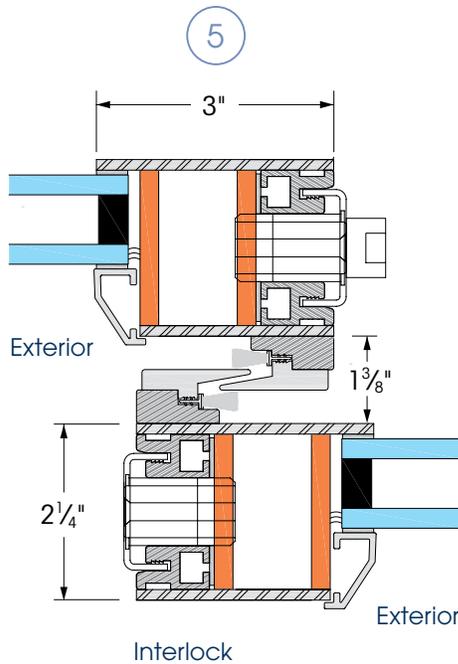
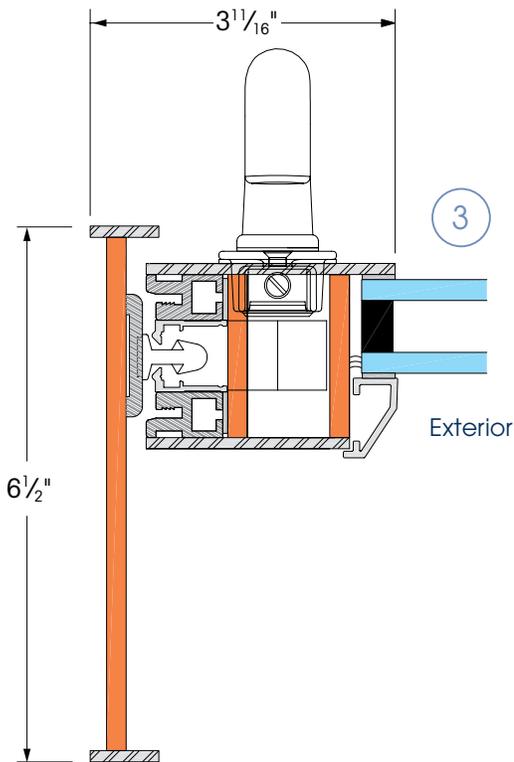
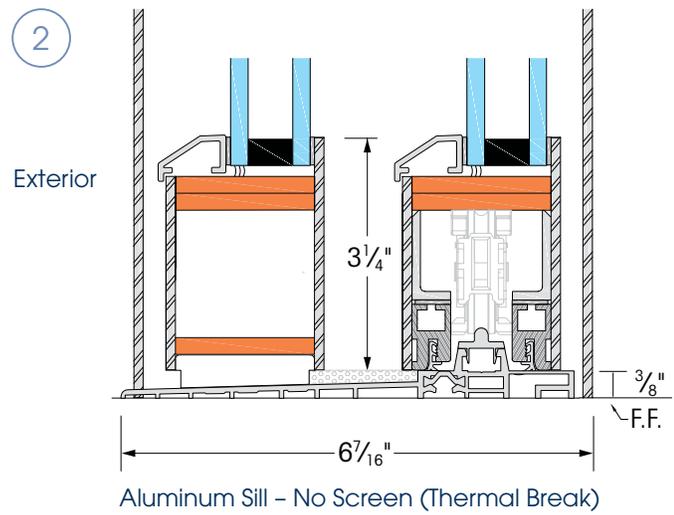
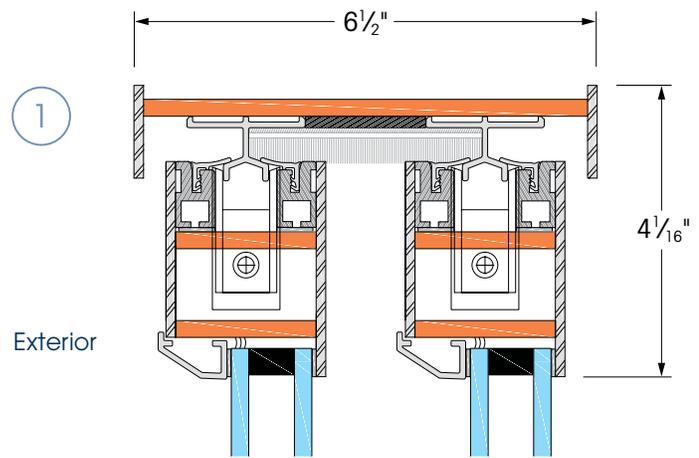
- Conventional and multi-slide configurations
- Stainless steel lift-slide hardware gear
- Door panel sizes up to: 6' width, 12' height
- Sliding screen doors available
- Dual or triple glaze glass options available

ELEVATIONS

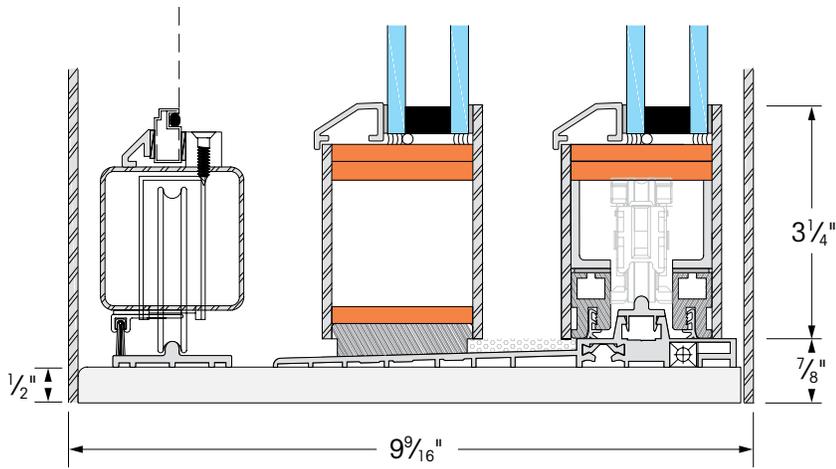


FEATURES:

- Conventional lift-slide sill options:
 - Flush track
 - Aluminum sill (thermally broken)
- Sliding screen doors available



2A

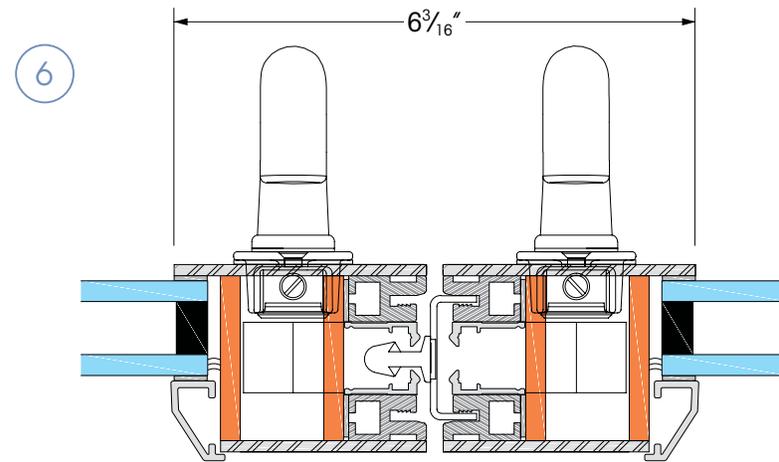


Aluminum Sill - With Screen (Thermal Break)

FEATURES:

- Multi-side sill options:
 - Flush track - unlimited number of door panels
 - Aluminum sill (thermally broken), up to 3 door panels
- Pocket lift-slide:
 - Flush track only

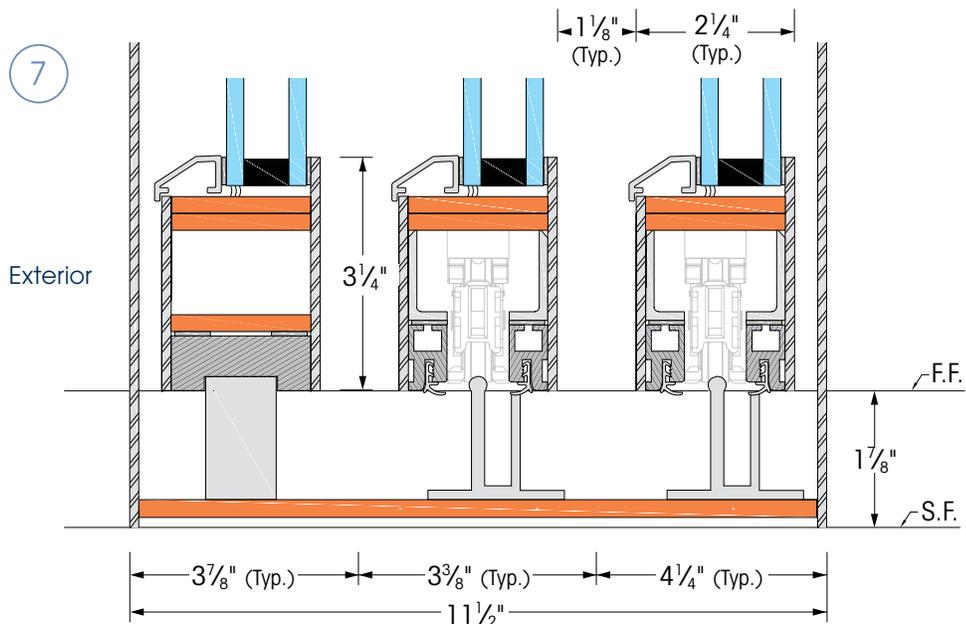
6



Exterior

Meeting Stiles

7



Exterior

Flush Track with Drain System - Multi-side

LIFT-SLIDE HARDWARE:

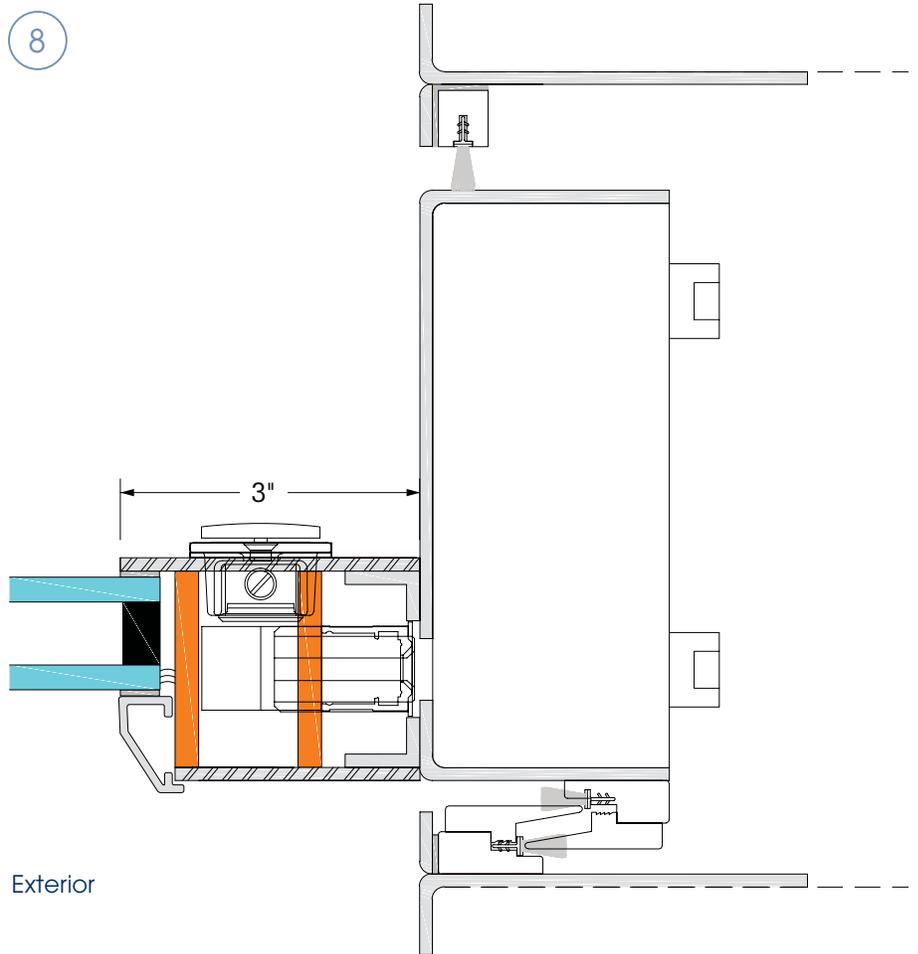
- Solid bronze lever (standard - interior)
- Removable handle for pocket doors
- Bronze flush pull (standard - exterior)
- Dark bronze finish standard



LIFT SLIDE TRIM



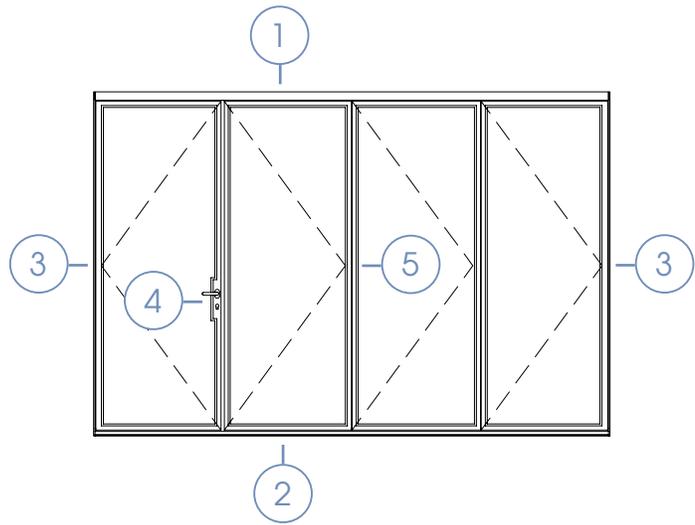
POCKET DETAIL





THERMALSTEEL

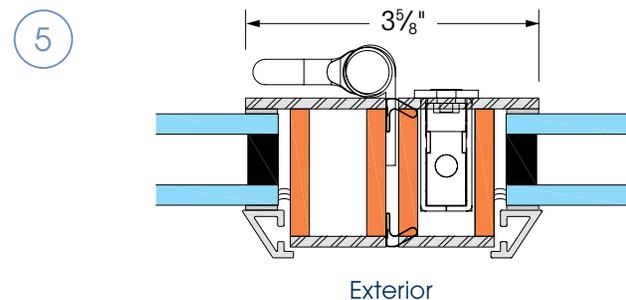
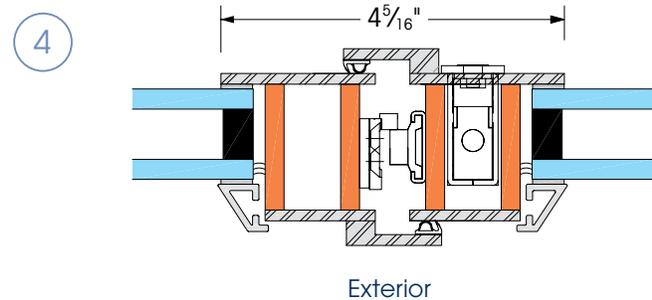
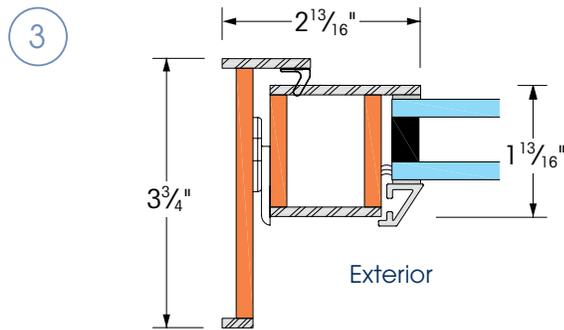
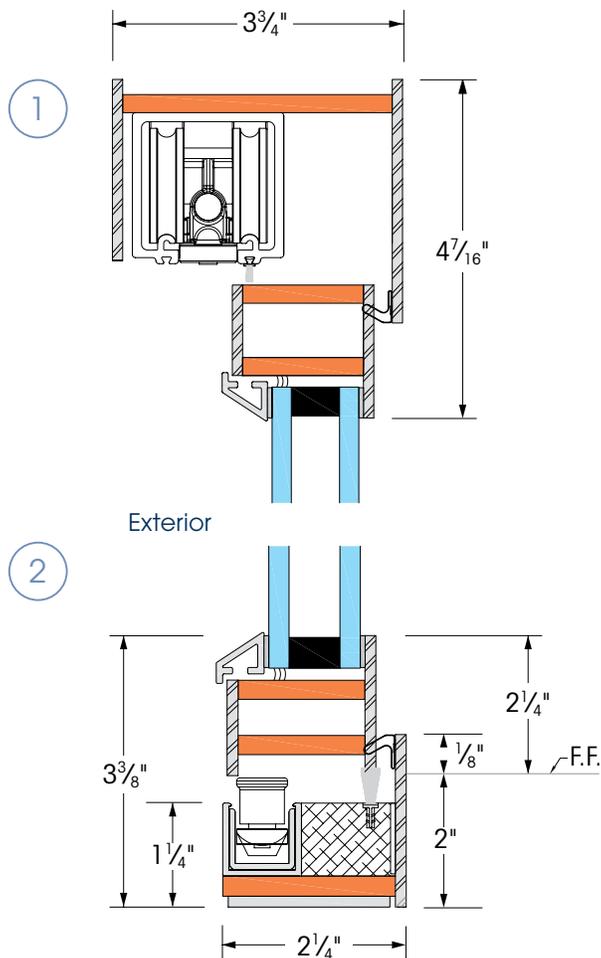
MULTI-FOLD DOOR SYSTEMS

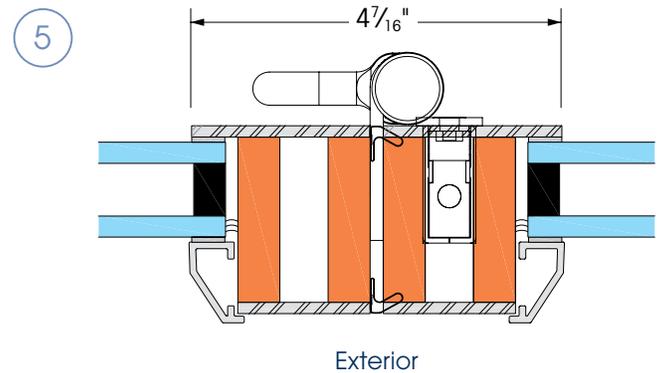
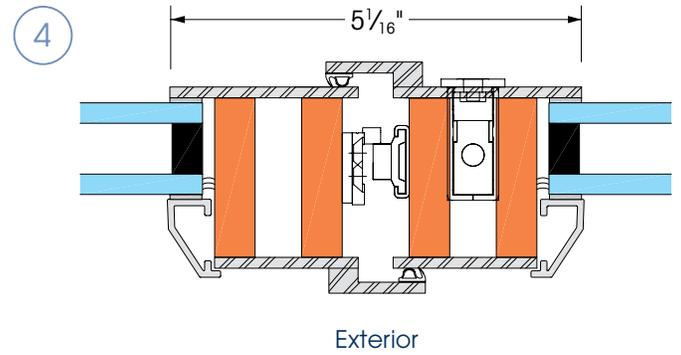
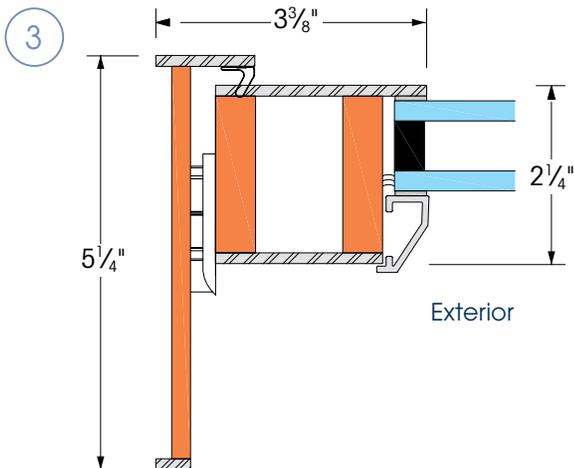
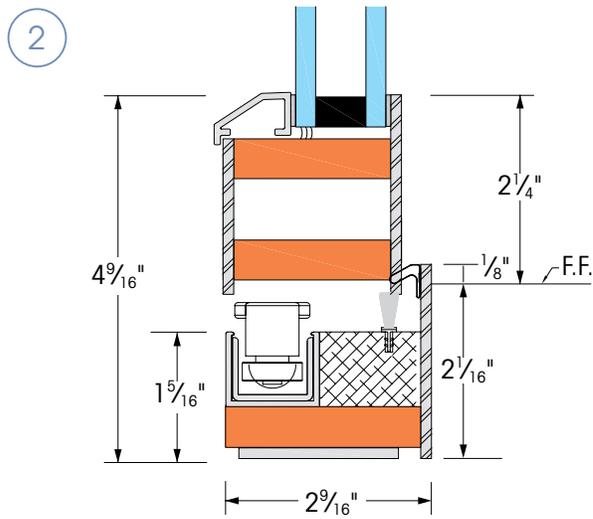
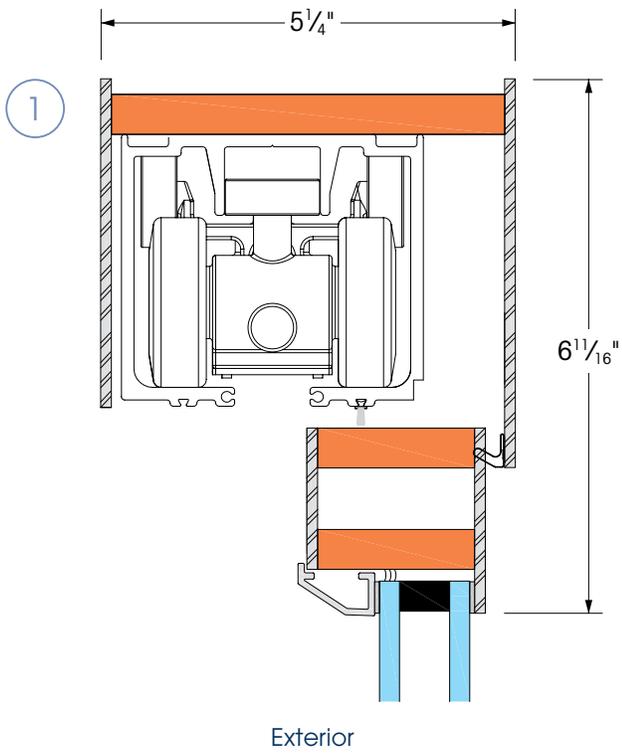


100 SYSTEM DETAILS

FEATURES:

- Door panel sizes up to: 39" width, 120" height, not to exceed 220 lbs
- Door thickness 1¹³/₁₆"
- Available from 3 to 8 door configurations





FEATURES:

- Door panel sizes up to: 42" width, 144" height, not to exceed 330 lbs
- Door thickness 2 1/4"
- Available from 3 to 8 door configurations











WINDOW AND DOOR SOLUTIONS
STEEL - ALUMINUM - WOOD



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TUCSON, ARIZONA
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