

# 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

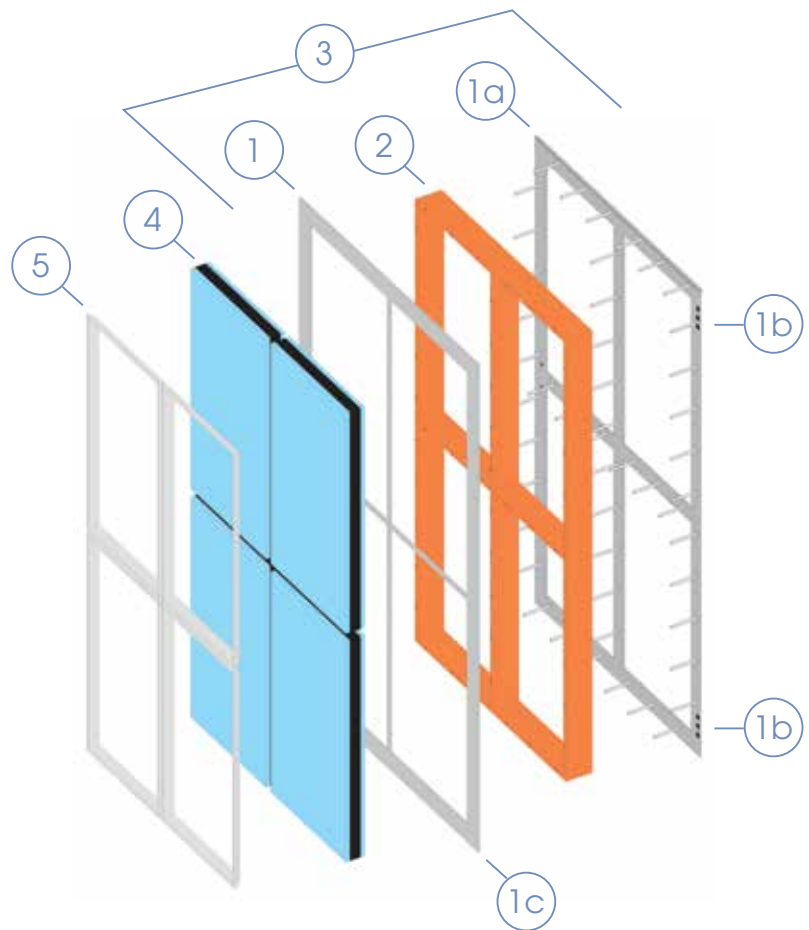
TECHNOLOGY



**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.

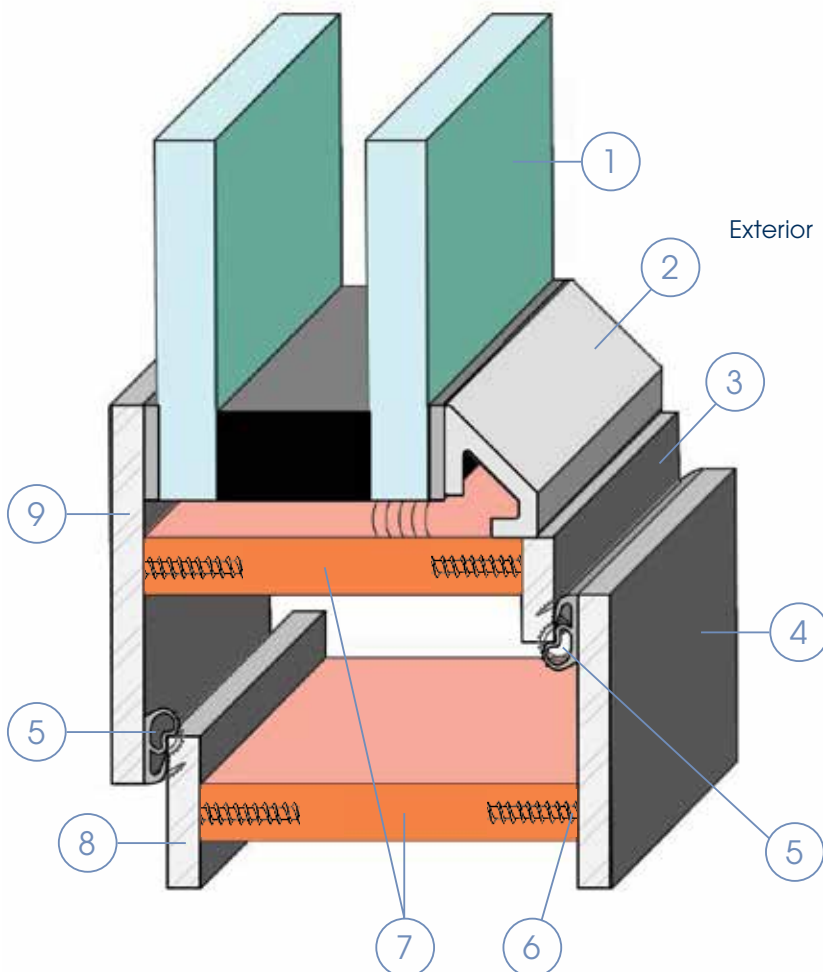
1. Window and door parts are laser cut from 10 gauge plates of 304 Stainless Steel
  - a. Computerized laser ensures a level of precision and squareness not available through traditional means of manufacturing
  - b. Laser also cuts all hardware and screw holes, ensuring accurate locations
  - c. Parts 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 Exterior 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



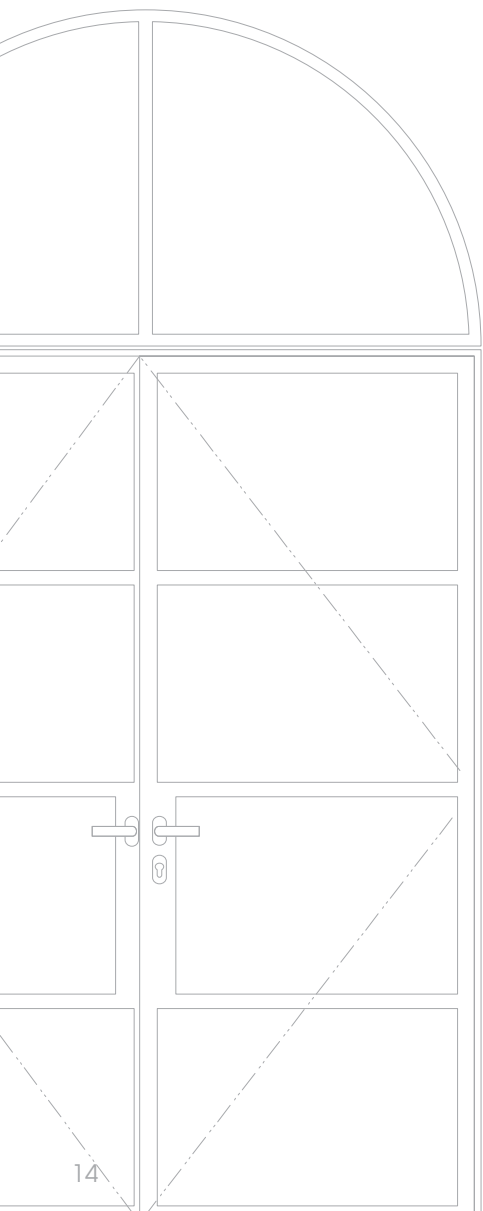
# THERMALSTEEL

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



# THERMALSTEEL

GLAZING OPTIONS



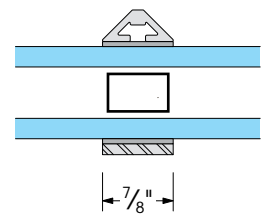
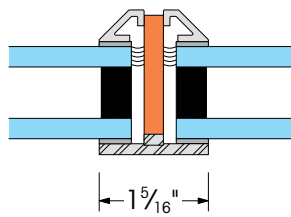
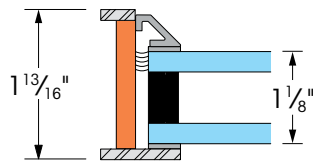
- Dual glaze - 1/4" individual panes with 5/8" air space for 1 1/8" over all glass thickness (\*\*standard product)
- Triple glaze - 1 1/2" Over all glass thickness
- Single glazed - 3/8" thick glass
- Muntins available in either simulated divided light (SDL) or true divided light (TDL)

PERIMETER

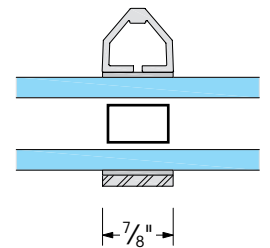
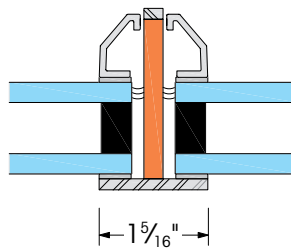
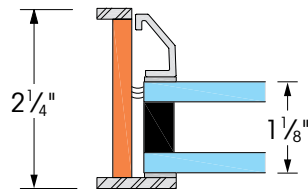
TDL MUNTIN

SDL MUNTIN

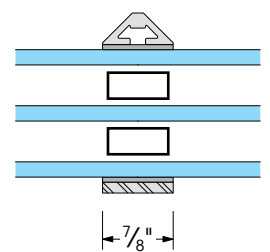
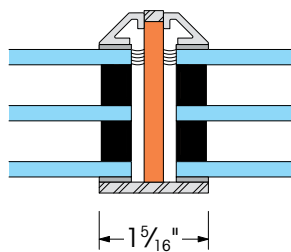
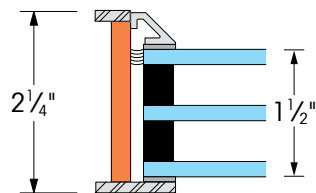
\*\*TSX-40  
Dual Glazed



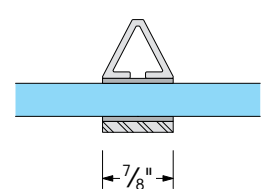
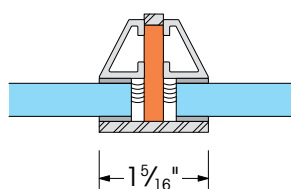
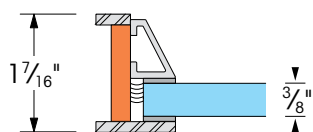
TSX-50  
Dual Glazed



TSX-50  
Triple Glazed



TSX-30  
Single Glazed





# THERMALSTEEL

GLAZING FRAME & MUNTIN OPTIONS





Putty Glazing Frame



Sloped Bevel Glazing Frame



Offset Glazing Frame



Square Glazing Frame

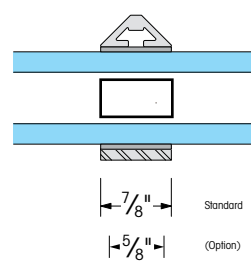
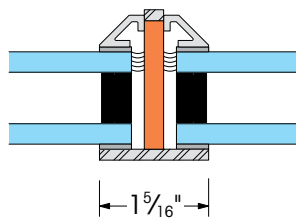
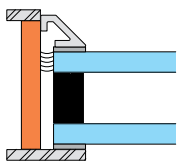
**FEATURES:**

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

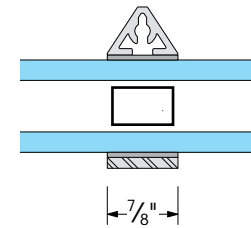
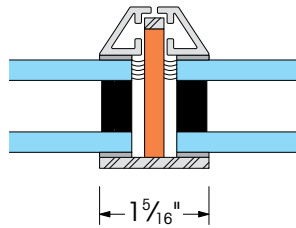
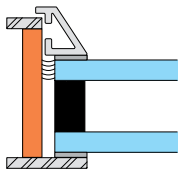
**PERIMETER**

**TDL MUNTIN**

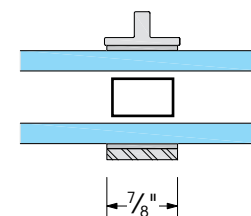
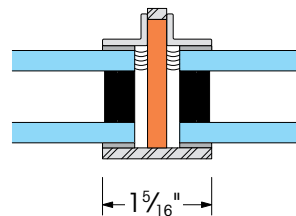
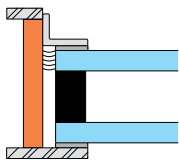
**SDL MUNTIN**



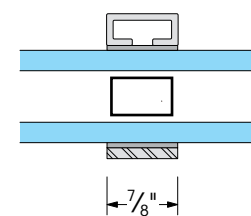
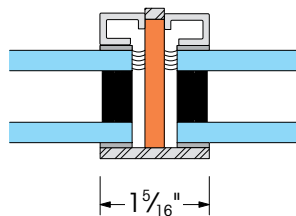
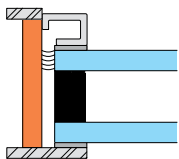
Putty



Sloped Bevel



Offset



Square



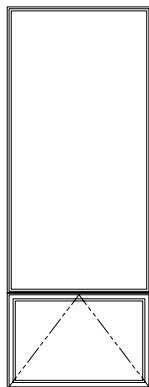
# THERMALSTEEL

WINDOW CONFIGURATIONS

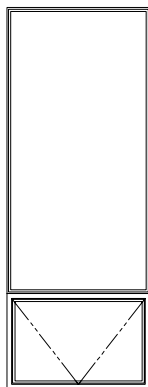


## ELEVATIONS

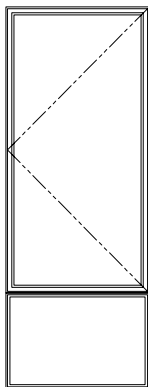
Other window configurations available.



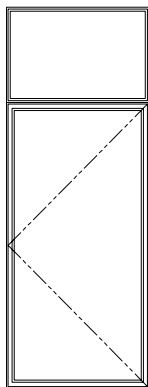
Fixed Over  
Awning



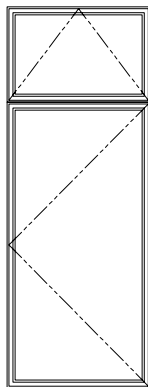
Fixed Over  
Hopper



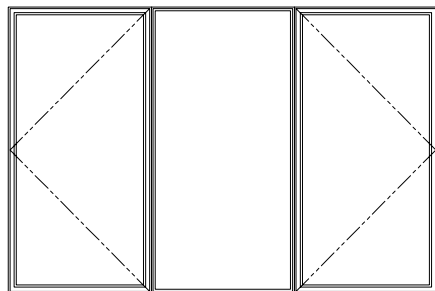
Casement  
Over Fixed



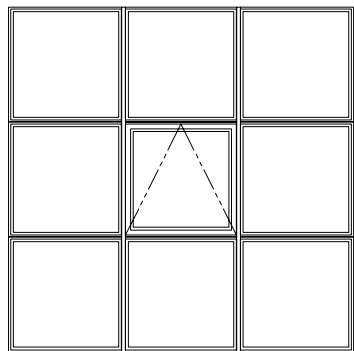
Fixed Over  
Casement



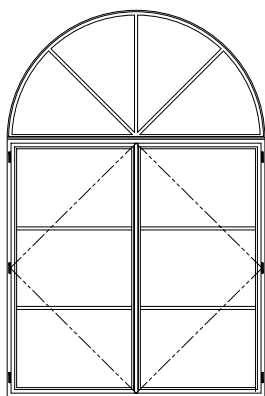
Awning  
Over  
Casement



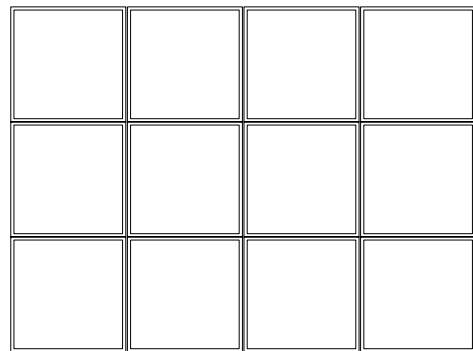
Left, Fixed, Right



Fixed/Operating  
Window Wall



1/2 Round Transom  
Over French Casement



Fixed Window Wall



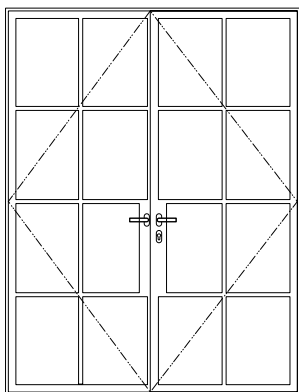
# THERMALSTEEL

DOOR CONFIGURATIONS

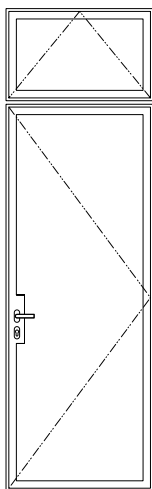


## ELEVATIONS

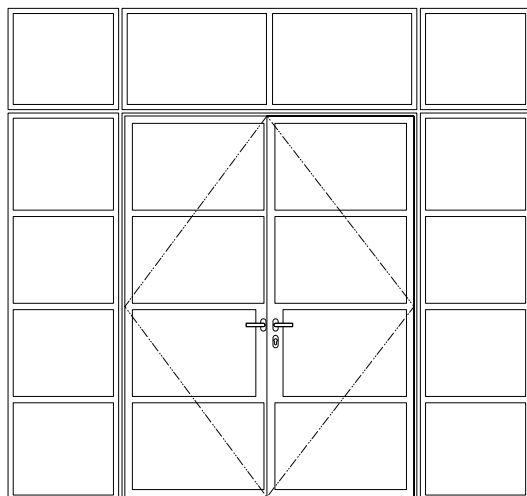
Other door configurations available.



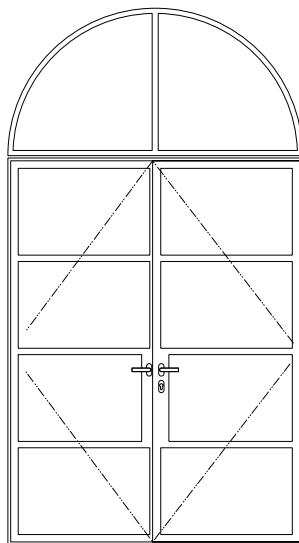
Pair



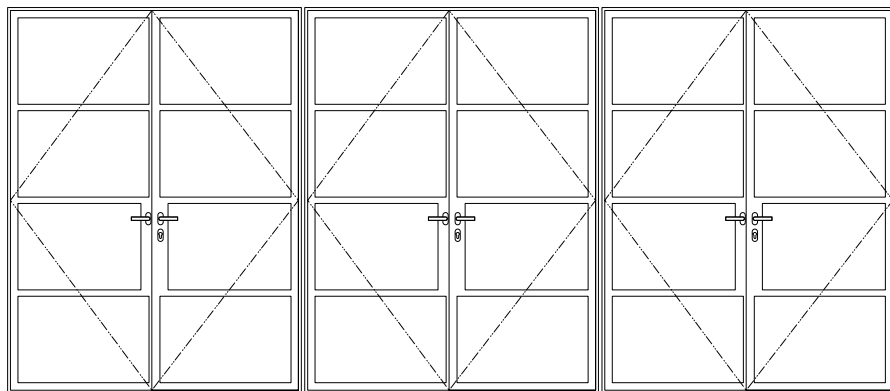
Awning Over Door



Sidelight/Transom Door System



1/2 Round Transom Over Pair



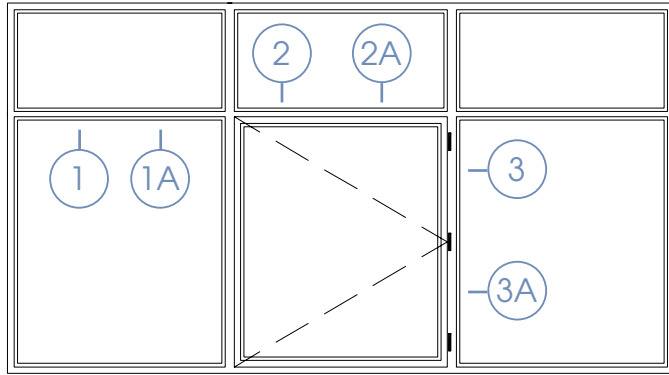
Mulled French Door System

# THERMALSTEEL

WINDOW MULLION OPTIONS

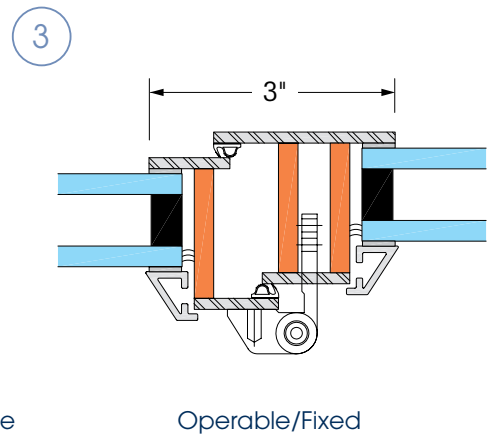
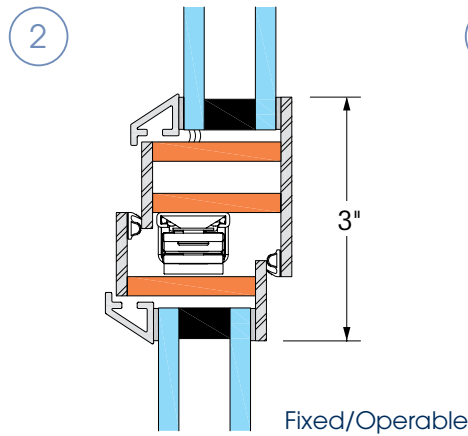
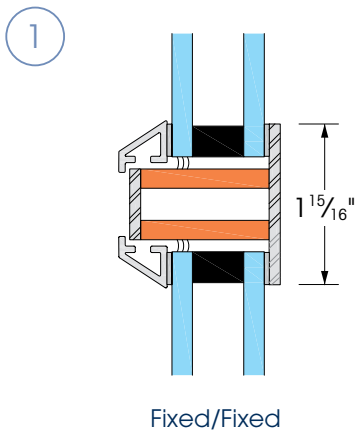


# WINDOW ELEVATION



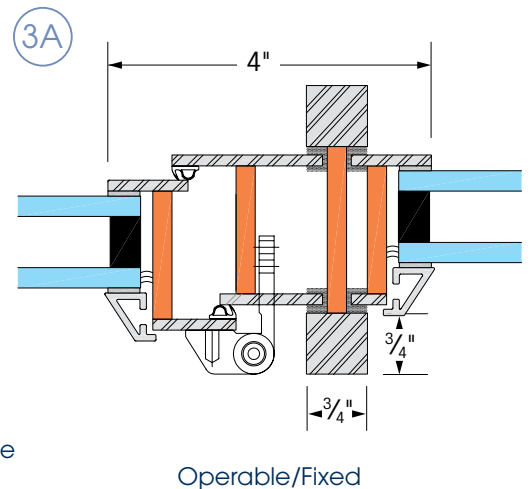
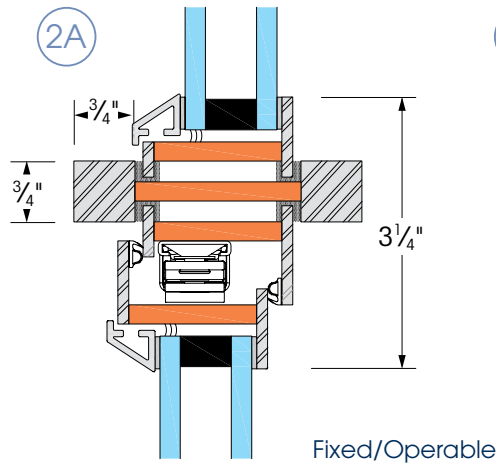
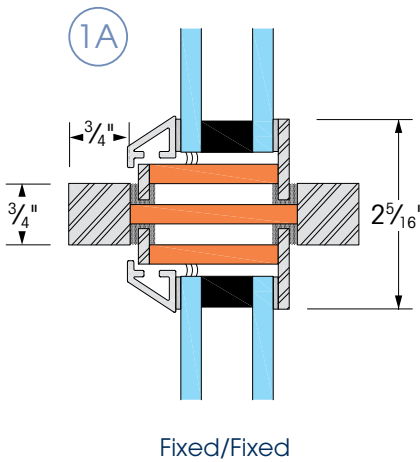
## INTEGRAL MULLION DETAILS

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.



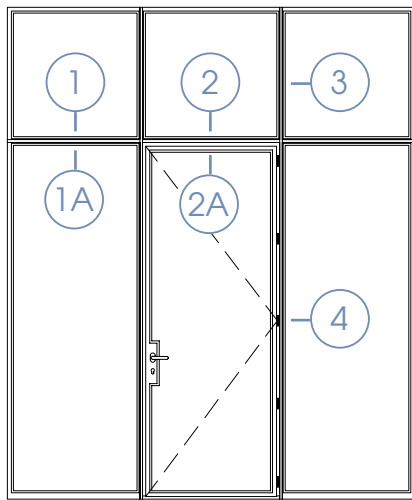


# THERMALSTEEL

DOOR MULLION OPTIONS

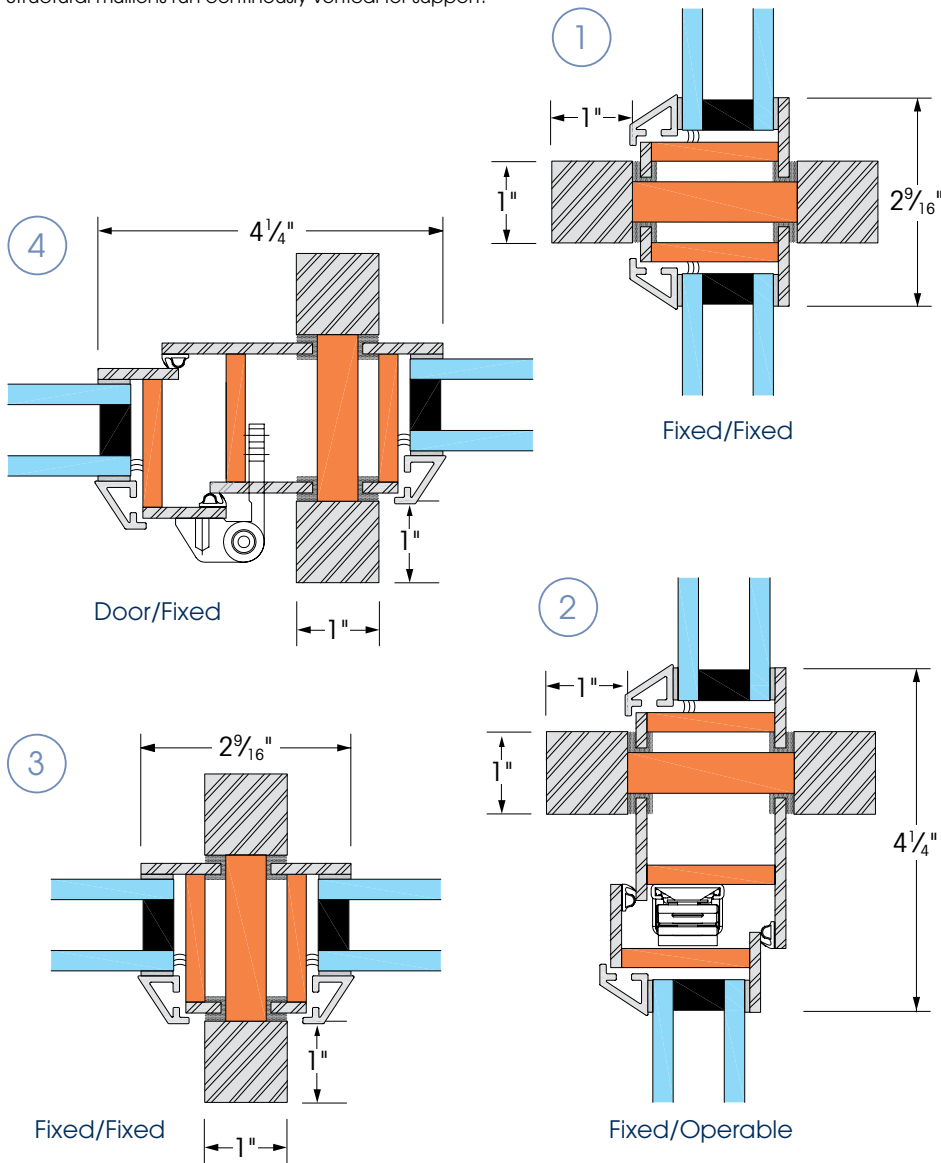


# DOOR ELEVATION

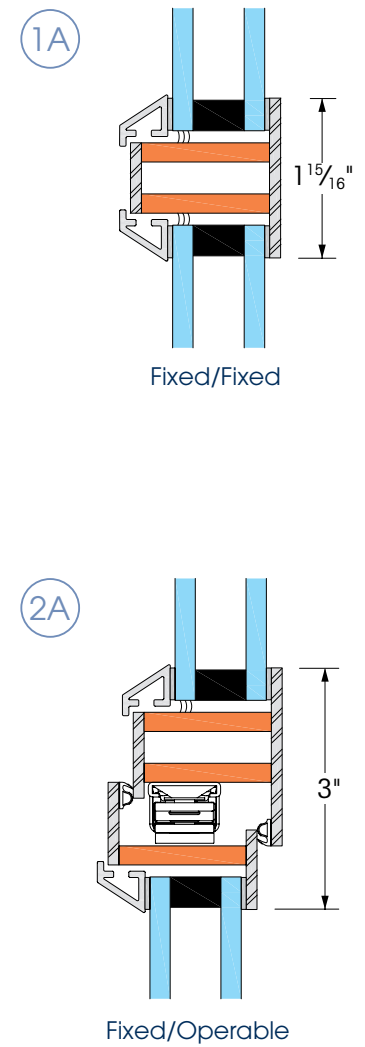


## STRUCTURAL MULLION DETAILS

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



## INTEGRAL MULLION





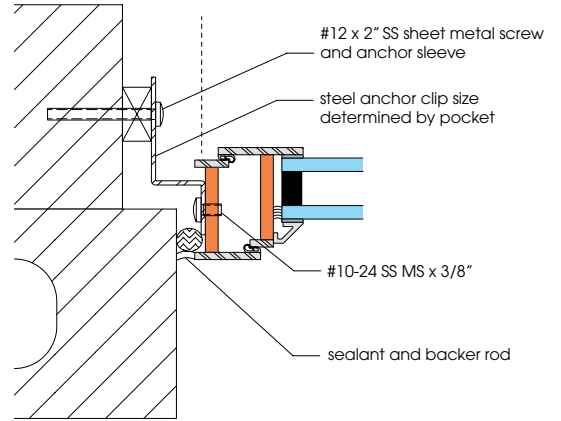


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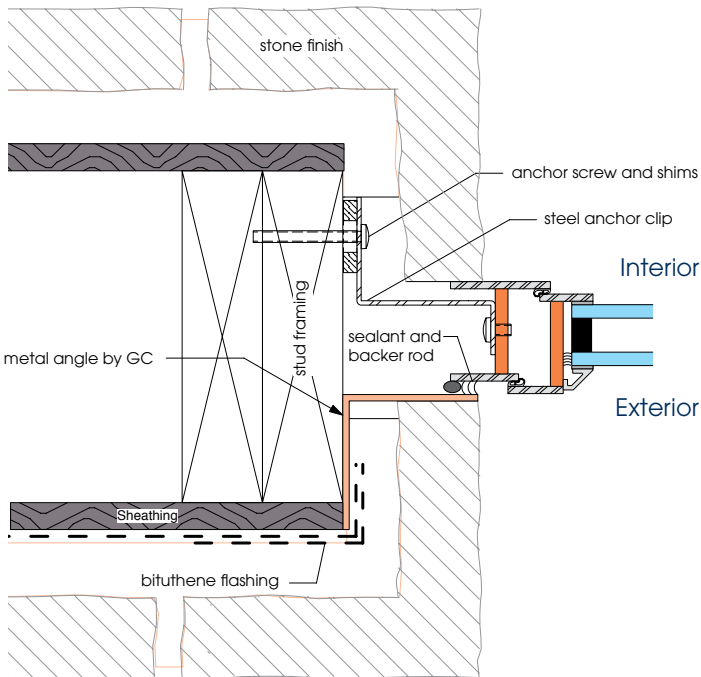
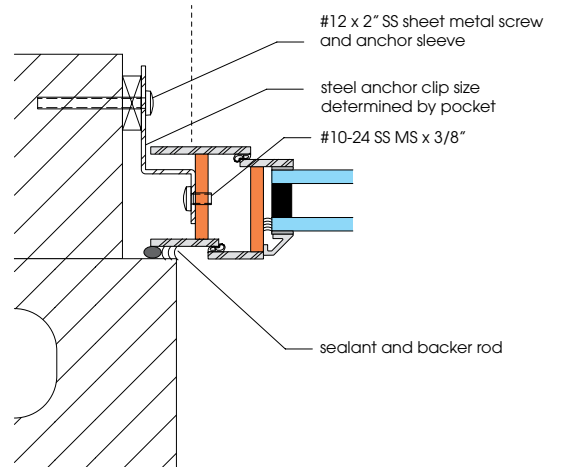
INSTALLATION DETAILS



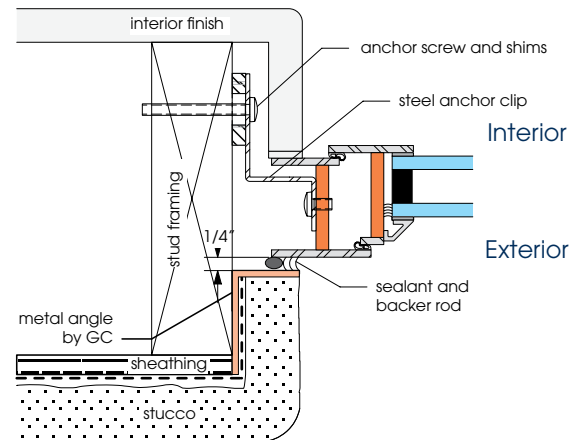
Brick -  
Flush Installation



Brick -  
Lap Installation  
(Shown with extended frame)



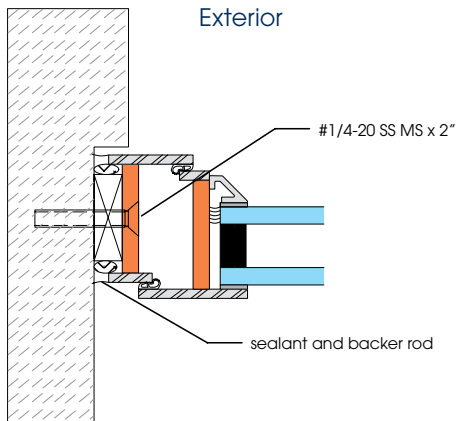
Stone - Lap Installation  
(Shown with extended frame)



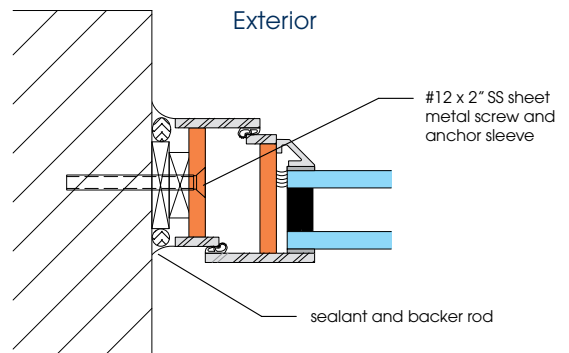
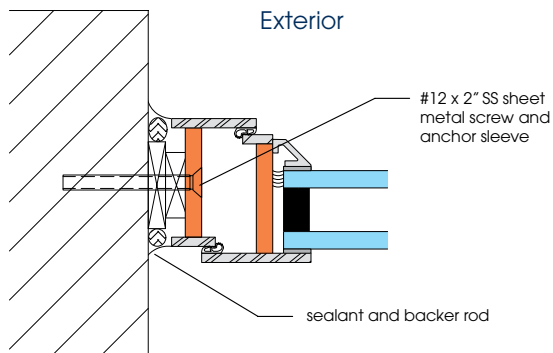
Stucco/Drywall - Lap Installation  
(Shown with extended frame)

## DIRECT ANCHOR

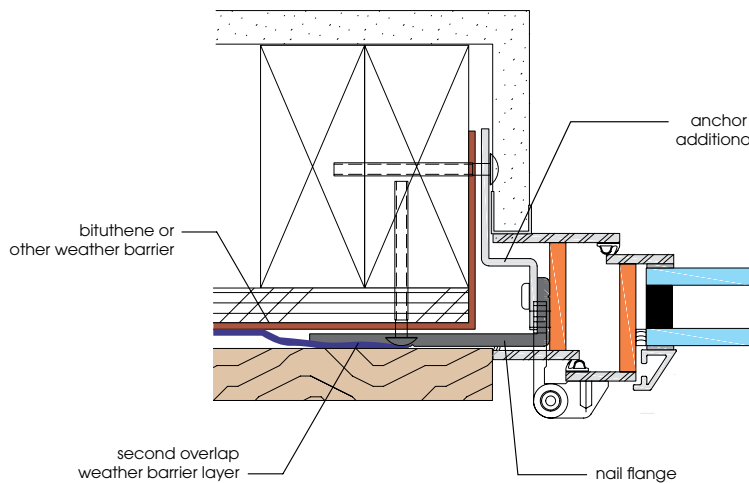
Direct anchor not available on fixed units.



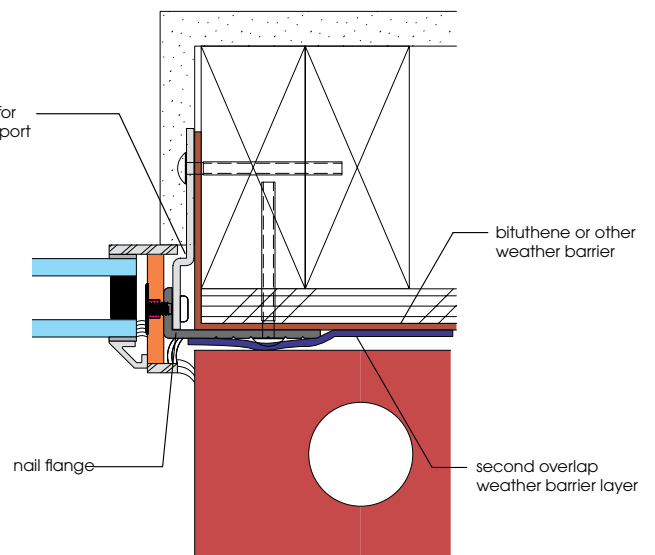
## INSTALLATION DETAILS



## ALUMINUM NAIL FLANGE



**3 1/2" Nail Flange with Clip**



**2 1/4" Nail Flange**



# THERMALSTEEL

FINISH

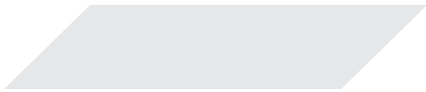




**Arcadia Custom's Paint Systems is a multi-step process that combines optimum corrosion protection with the highest weatherability.** Our paint process - combined with a stainless steel substrate - will out-perform all other finishes on mild steel. This durable acrylic polyurethane paint allows for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



4



3



2



1

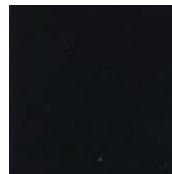


STANDARD PAINT OPTIONS

Textured or smooth paint surface available.



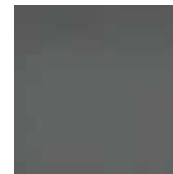
Sift Espresso (Texture)



Jet Black



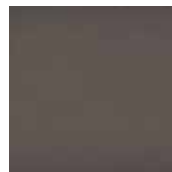
9011 Black



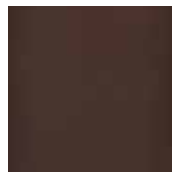
Atelier Dominique



Argento 305 Metallic



Statuary Bronze



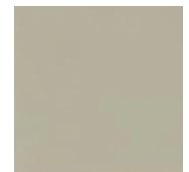
Black Bean Soup



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

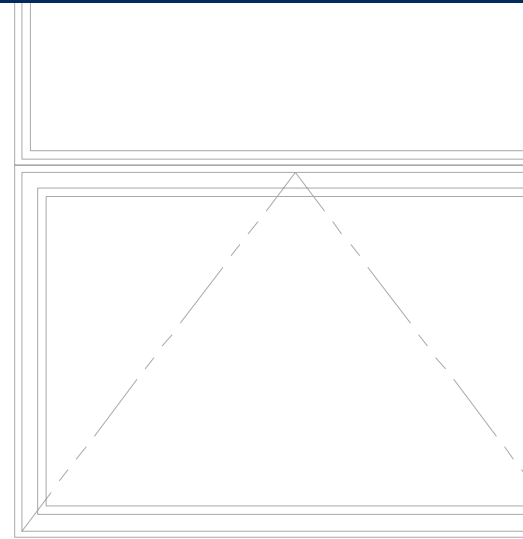


**STAINLESS STEEL FINISH:**

- 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**



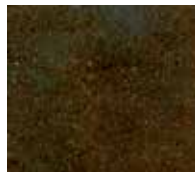
White Light



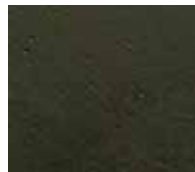
Medium Pewter



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)

Brushed  
Nickel

**Crank-Out Operator (Steel)**

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



**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.



**Bronze Crank-Out Operator**

Out-swing casement window only,  
(not available for awning windows).  
\*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



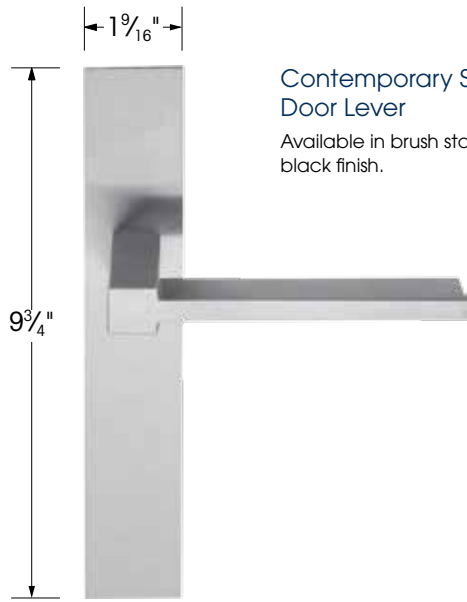
#166 Handle



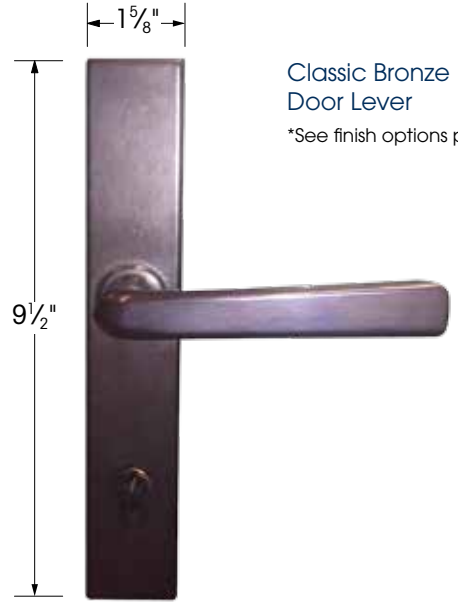
#159 Handle



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



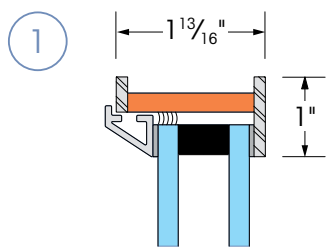
Butt Hinge - Standard (Solid Bronze)  
\*See finish options page 35.

# THERMALSTEEL

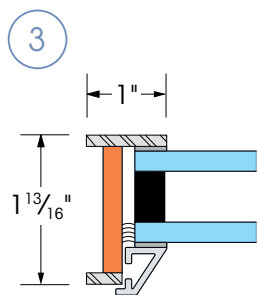
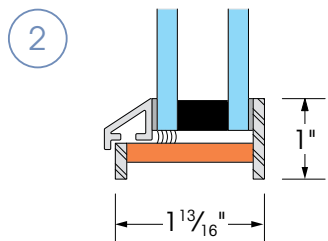
WINDOW SYSTEMS



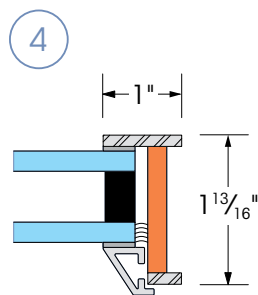




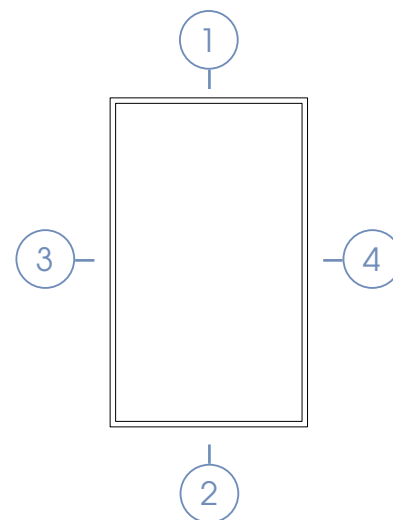
Exterior



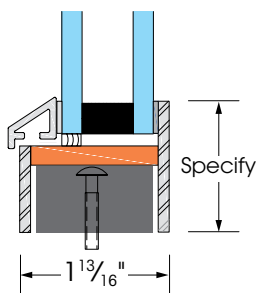
Exterior



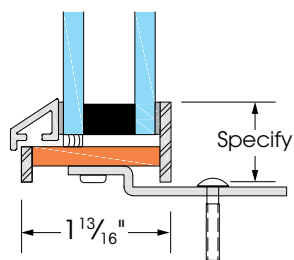
ELEVATION



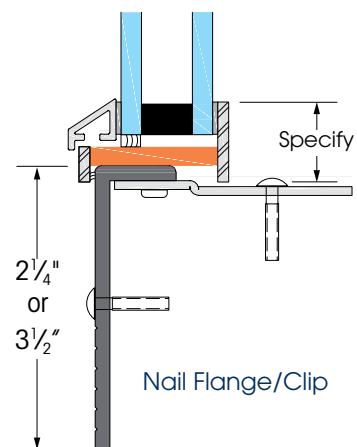
SILL ANCHORING OPTIONS



Composite Sill Block



Anchor Clip



Nail Flange/Clip

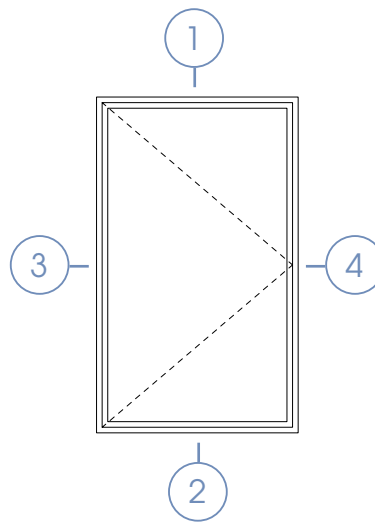
# CASEMENT WINDOWS

## FEATURES:

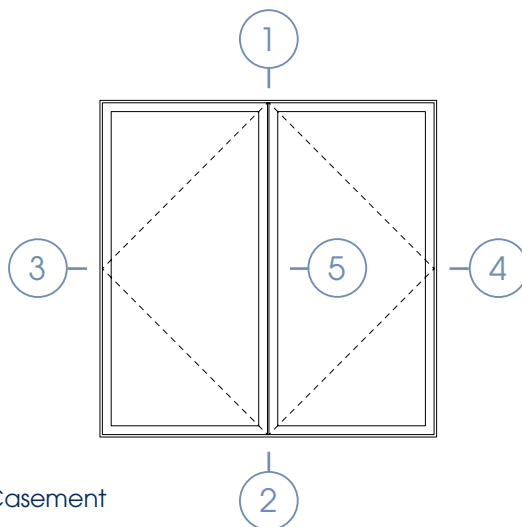
- Out-swing or In-swing
- Roto-crank or push-out operation
- Removable fixed screens or roll-down screens available
- Sizes up to: 3'-6" width, 8' height



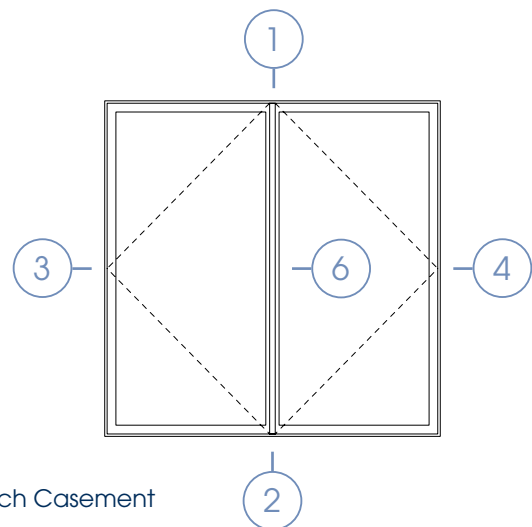
## ELEVATIONS



Casement

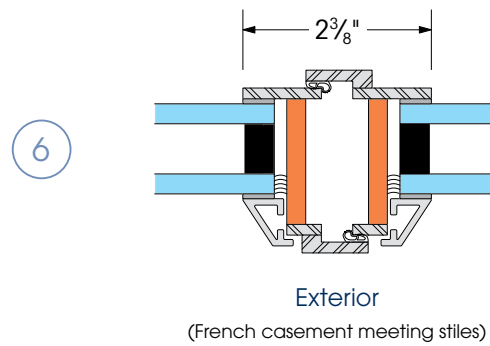
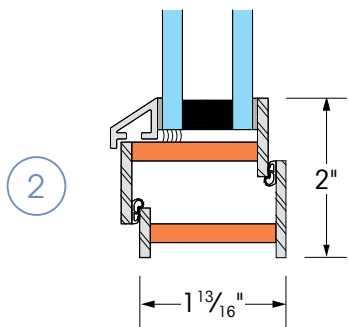
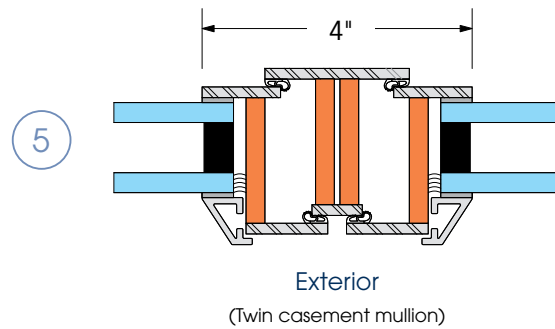
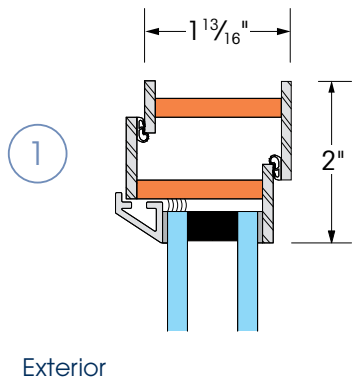
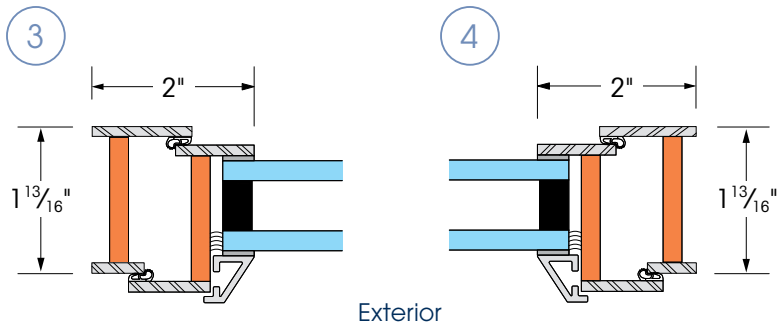


Twin Casement

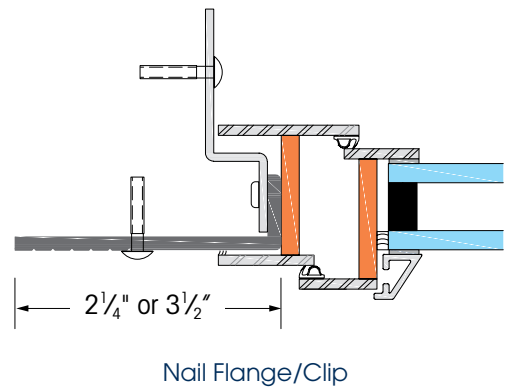
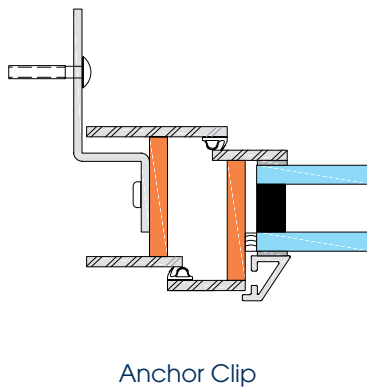
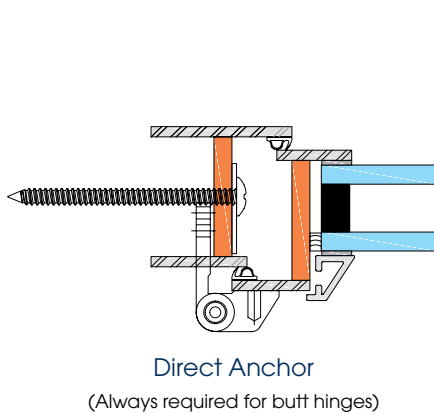


French Casement

## DETAILS



## ANCHORING OPTIONS





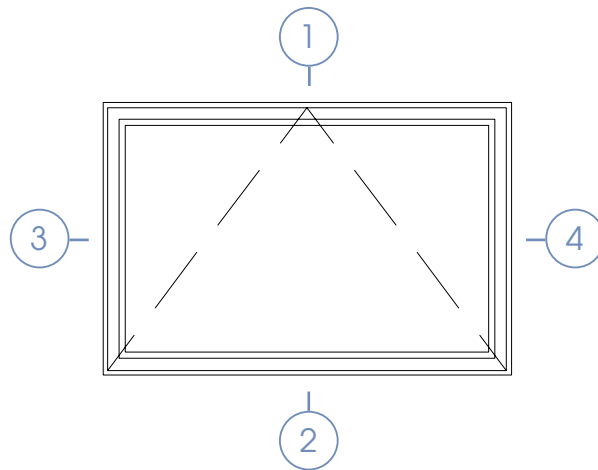
**AWNING WINDOW OPTIONS:**

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

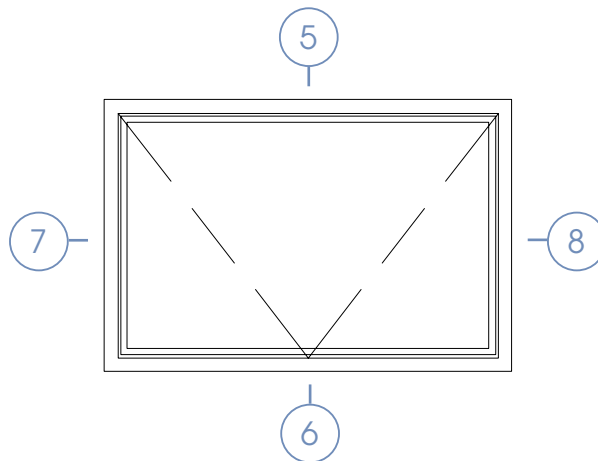
**HOPPER WINDOW OPTIONS:**

- Concealed friction hinge with limiter

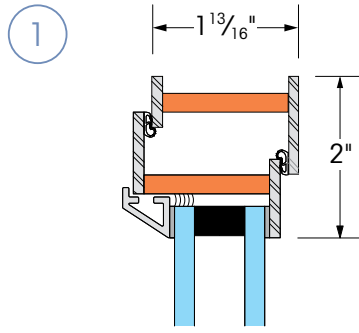
**AWNING ELEVATION**



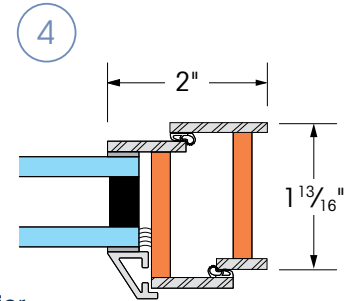
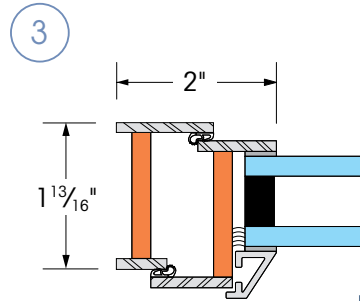
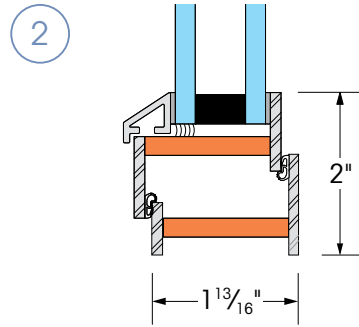
**HOPPER ELEVATION**



## AWNING DETAILS



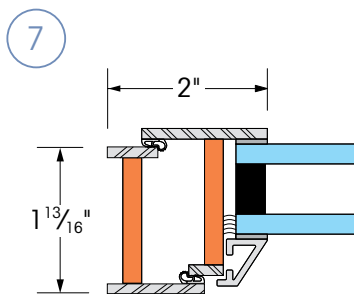
Exterior



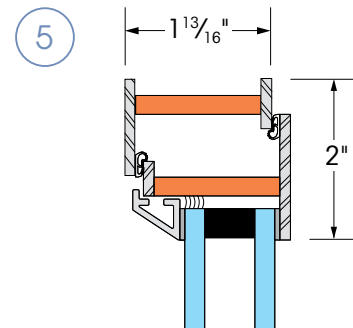
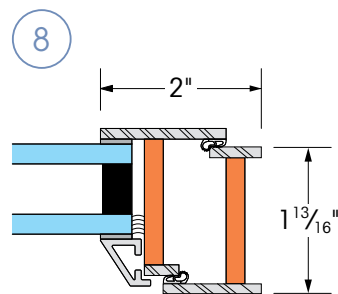
Exterior



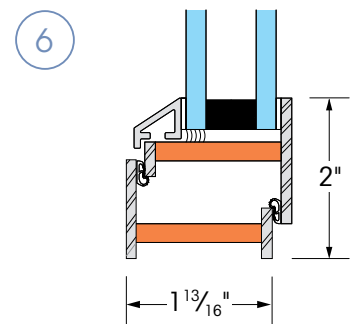
## HOPPER DETAILS



Exterior



Exterior





# THERMALSTEEL

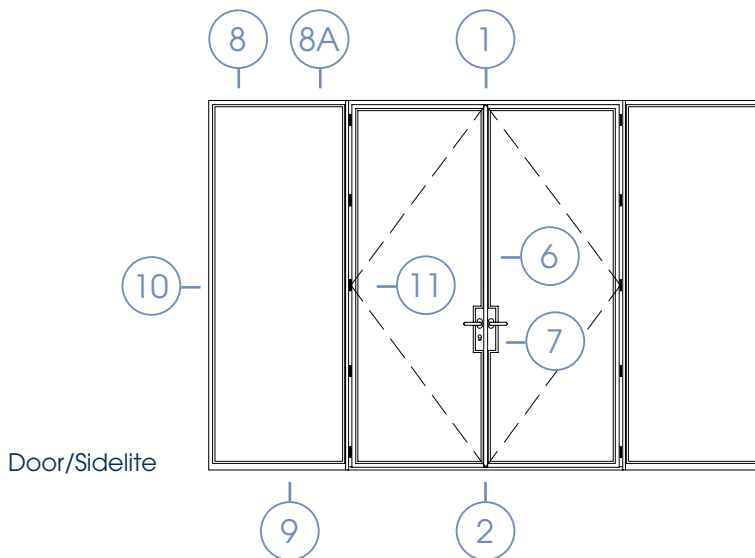
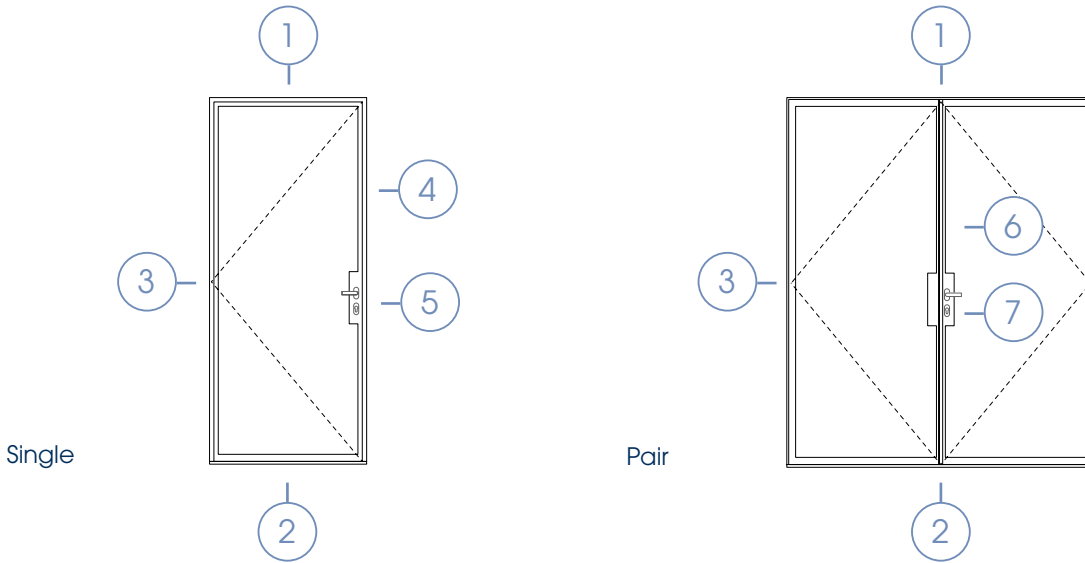
SWINGING DOOR SYSTEMS

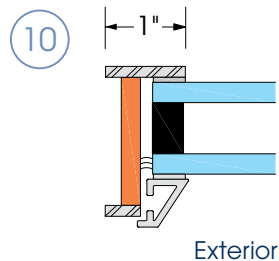
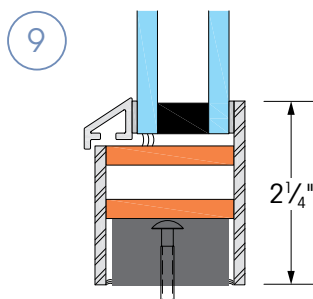
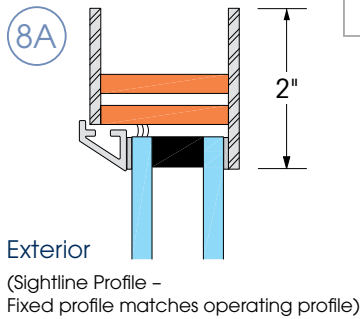
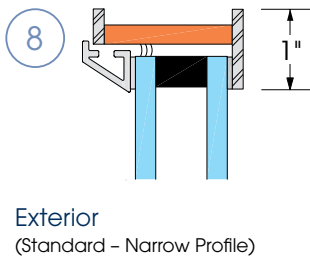
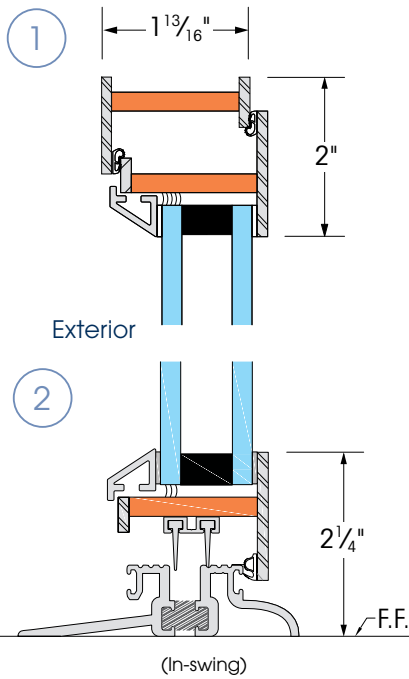
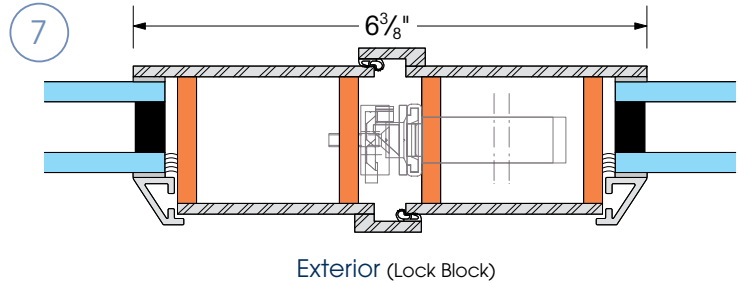
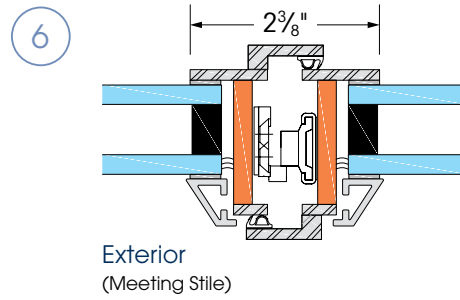
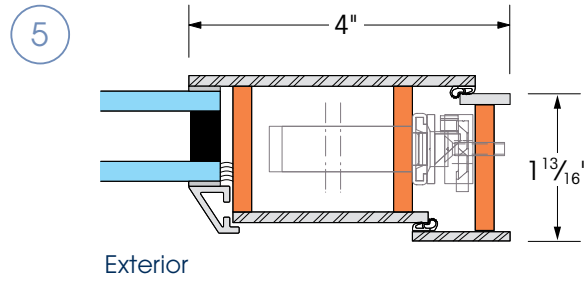
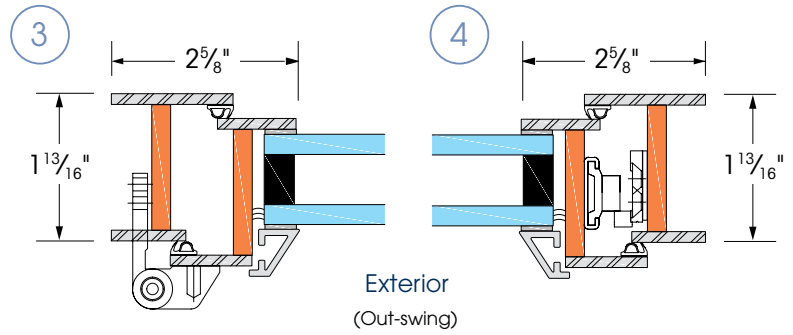


**FEATURES:**

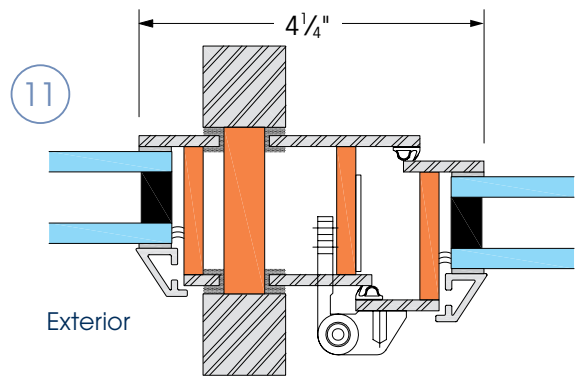
- In-swing or out-swing
- Multi-point Lock standard
- Lock-box options:
  - 12" standard
  - Stretched between muntins

**ELEVATIONS**



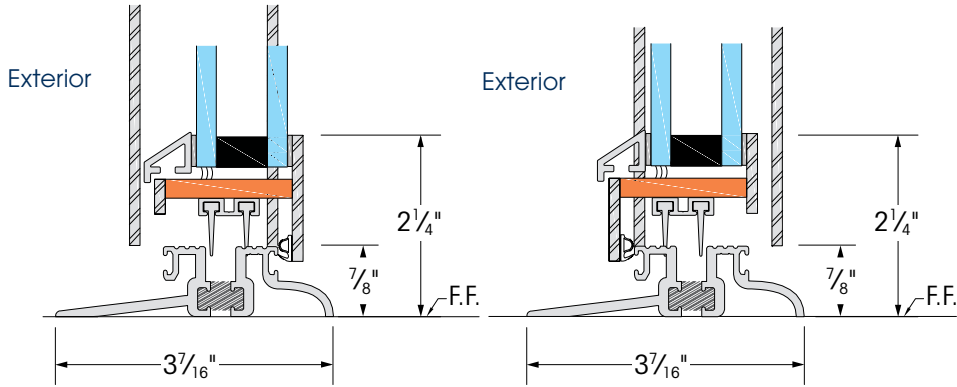


SIDELIGHT DETAILS





## SILL OPTIONS

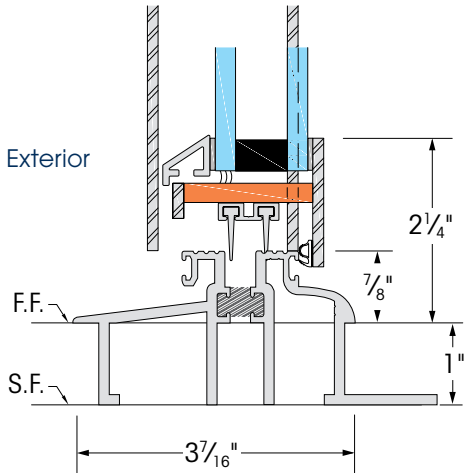


Aluminum In-Swing (standard)  
Thermal Break

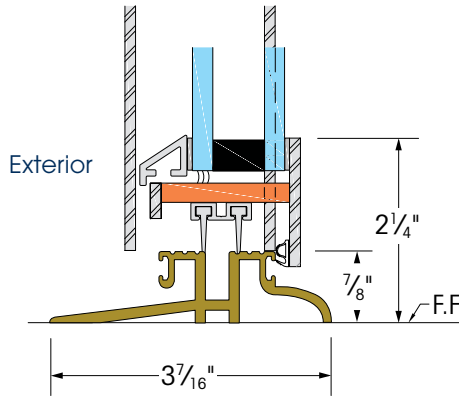
Aluminum Out-Swing (standard)  
Thermal Break

### FEATURES:

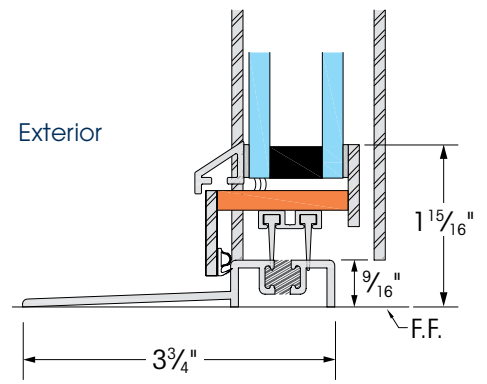
- Aluminum and solid bronze sills available
- Custom door bottom rail heights available
- Recessed flat door panels available



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

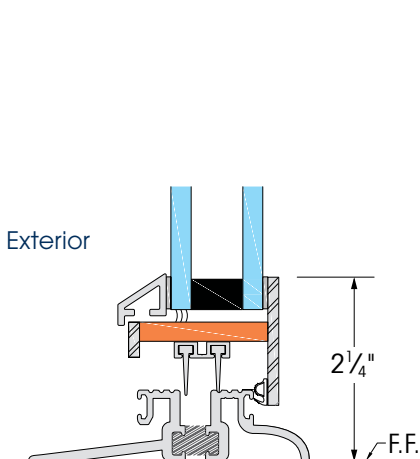


Solid Bronze (In-Swing/Out-Swing)  
Non-Thermal Break

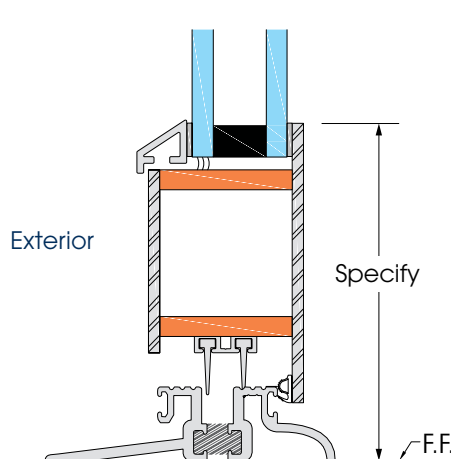


Low Profile Out-Swing  
Aluminum-Thermal Break

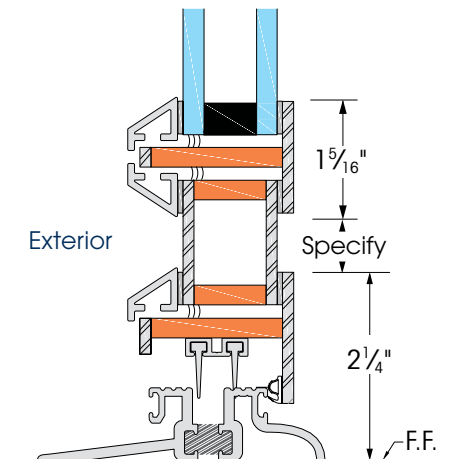
## BOTTOM RAIL OPTIONS



Standard Bottom Rail



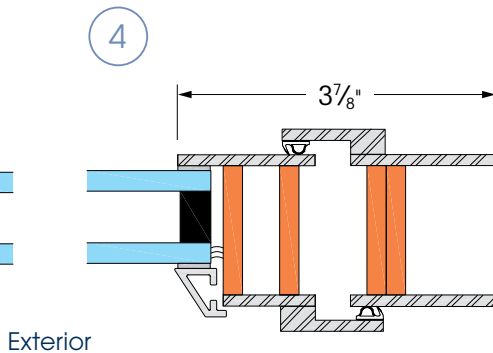
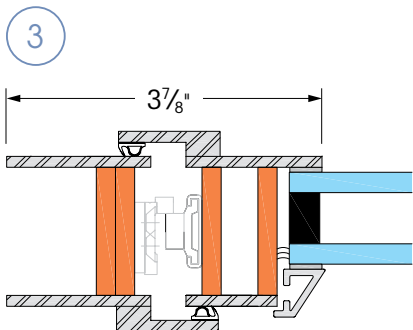
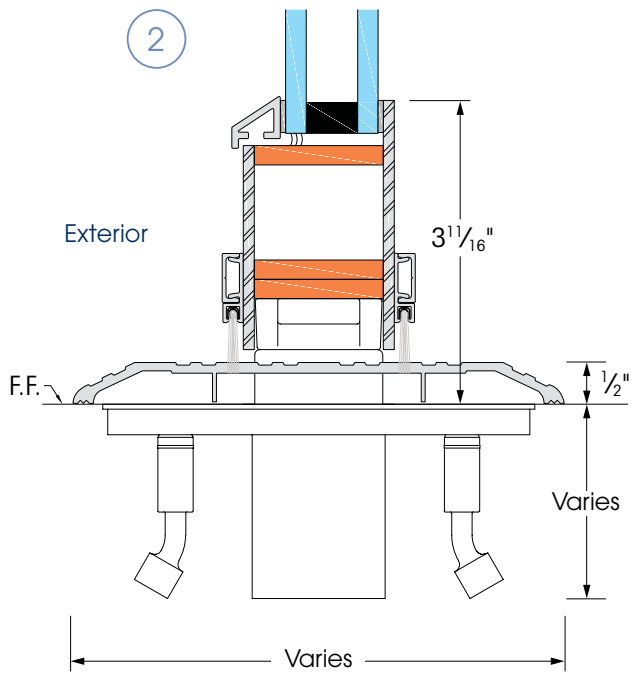
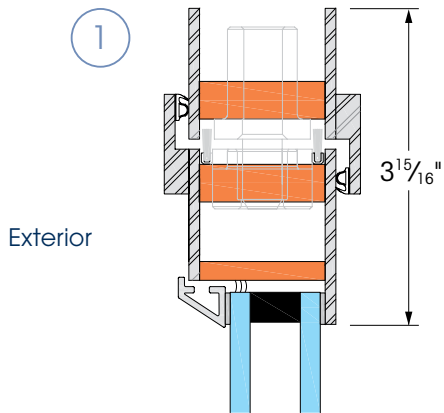
Variable Bottom Rail



Recessed Bottom Panel

# THERMALSTEEL

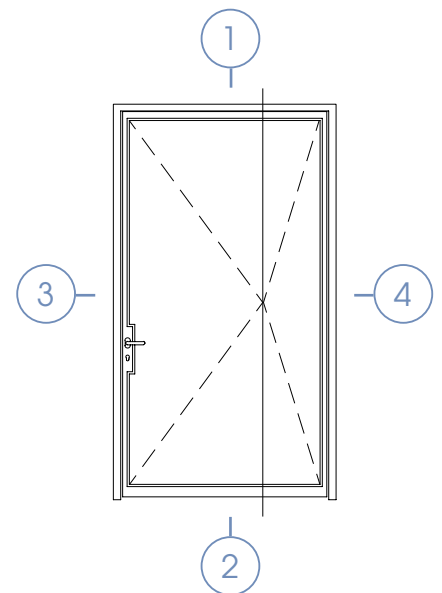
PIVOT DOOR



**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

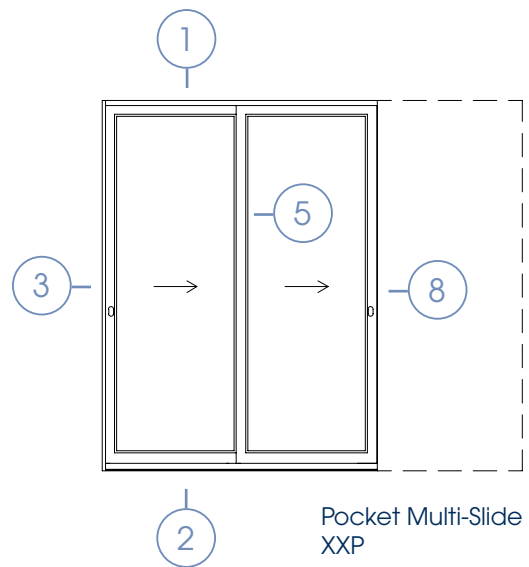
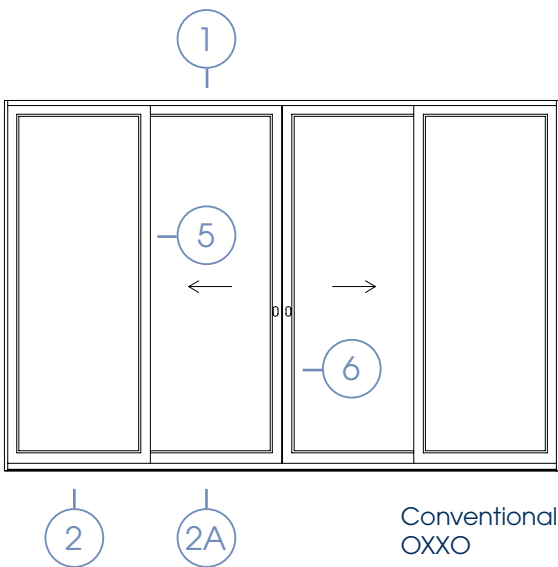
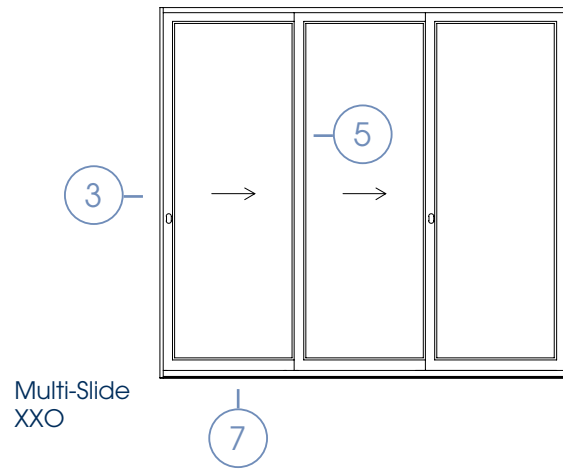
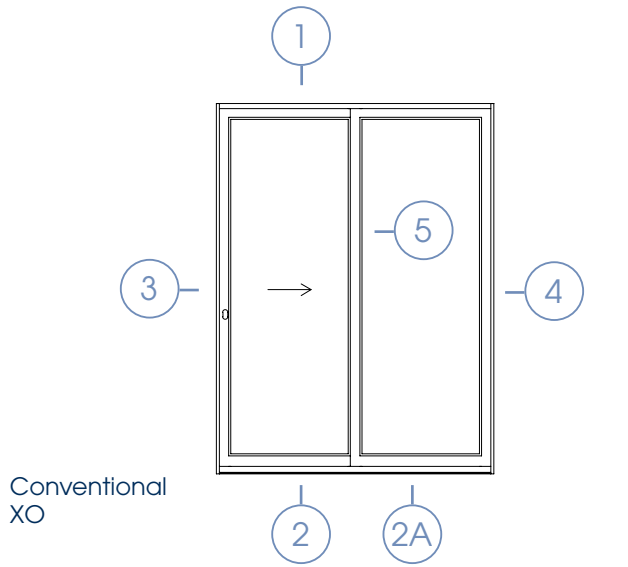
LIFT-SLIDE DOOR SYSTEMS



**FEATURES:**

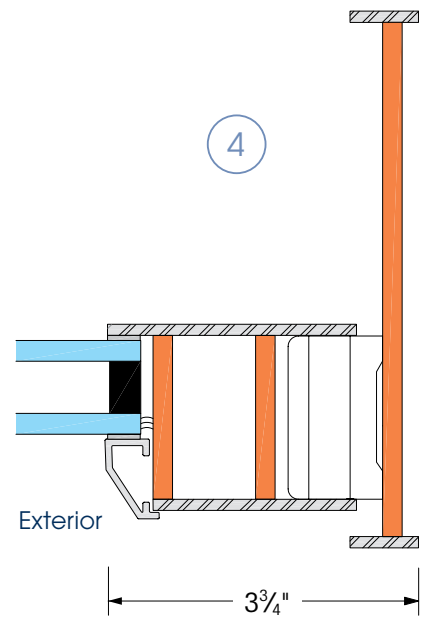
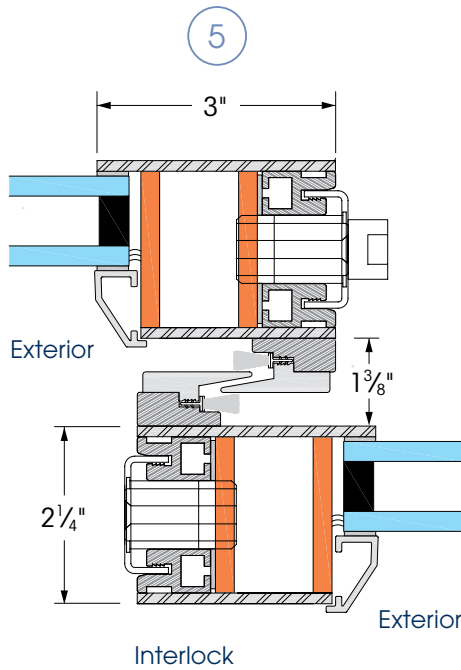
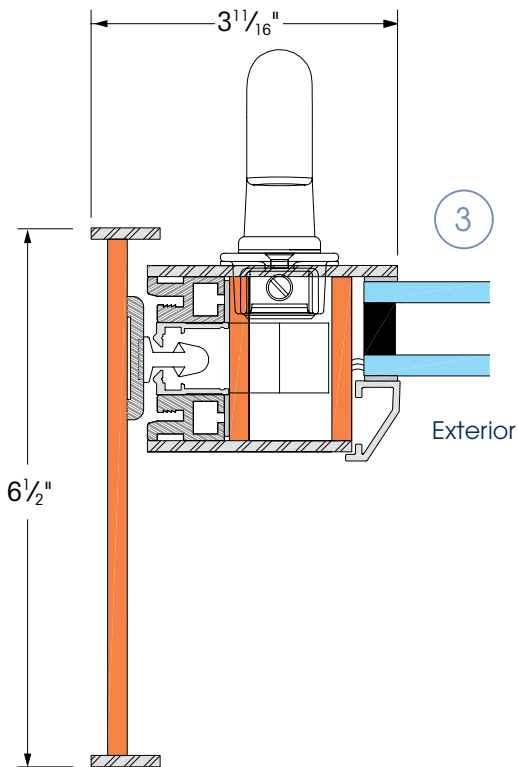
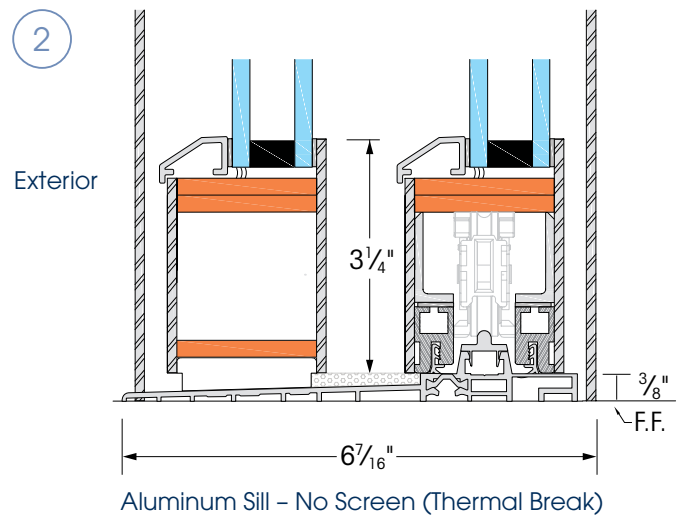
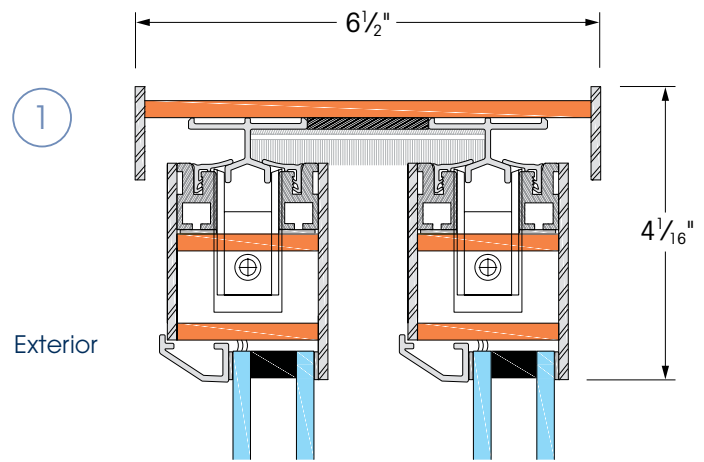
- Conventional and multi-slide configurations
- Stainless steel lift-slide hardware gear
- Door panel sizes up to: 6' width, 12' height
- Sliding screen doors available
- Dual or triple glaze glass options available

**ELEVATIONS**

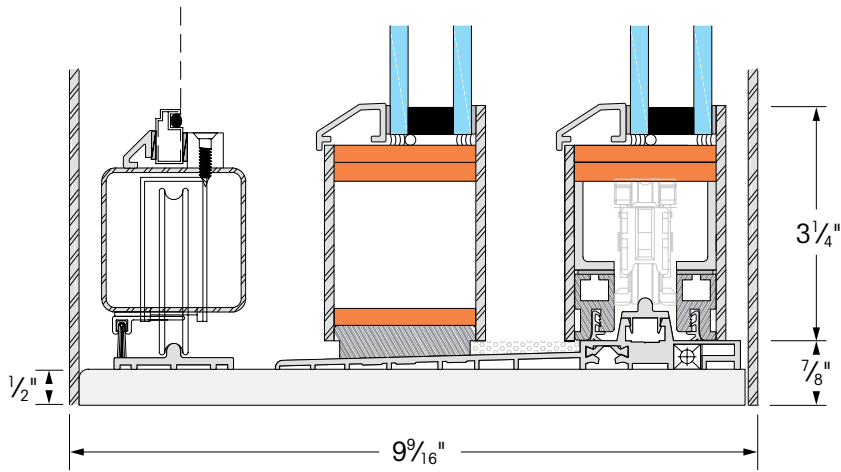


**FEATURES:**

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



2A

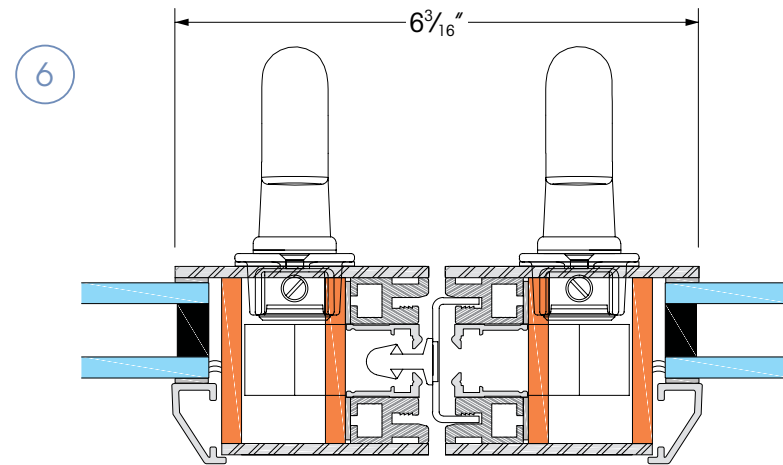


Aluminum Sill - With Screen (Thermal Break)

**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

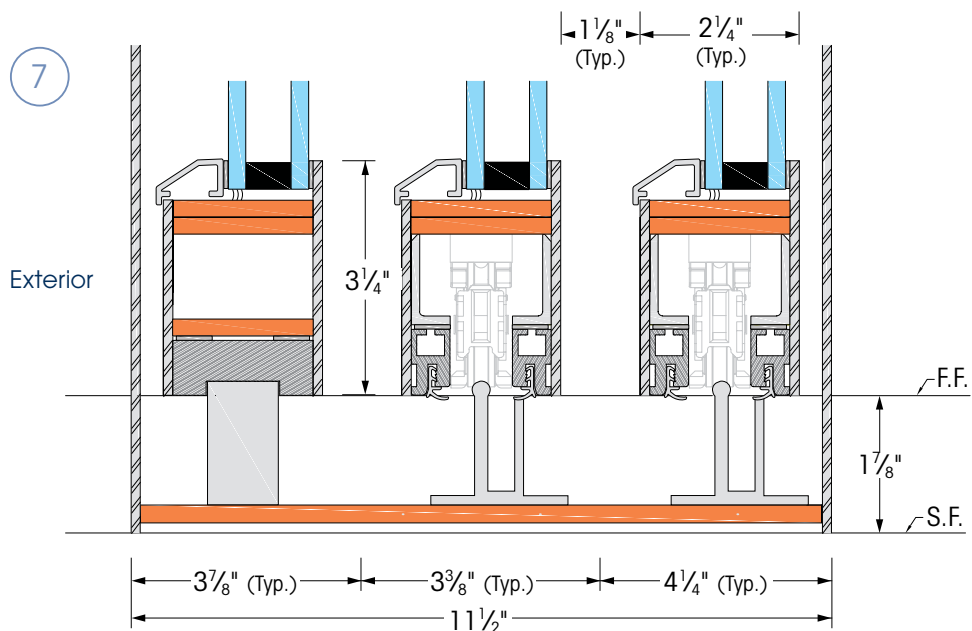
6



Exterior

Meeting Stiles

7



Exterior

Flush Track with Drain System - Multi-side

## LIFT-SLIDE HARDWARE:

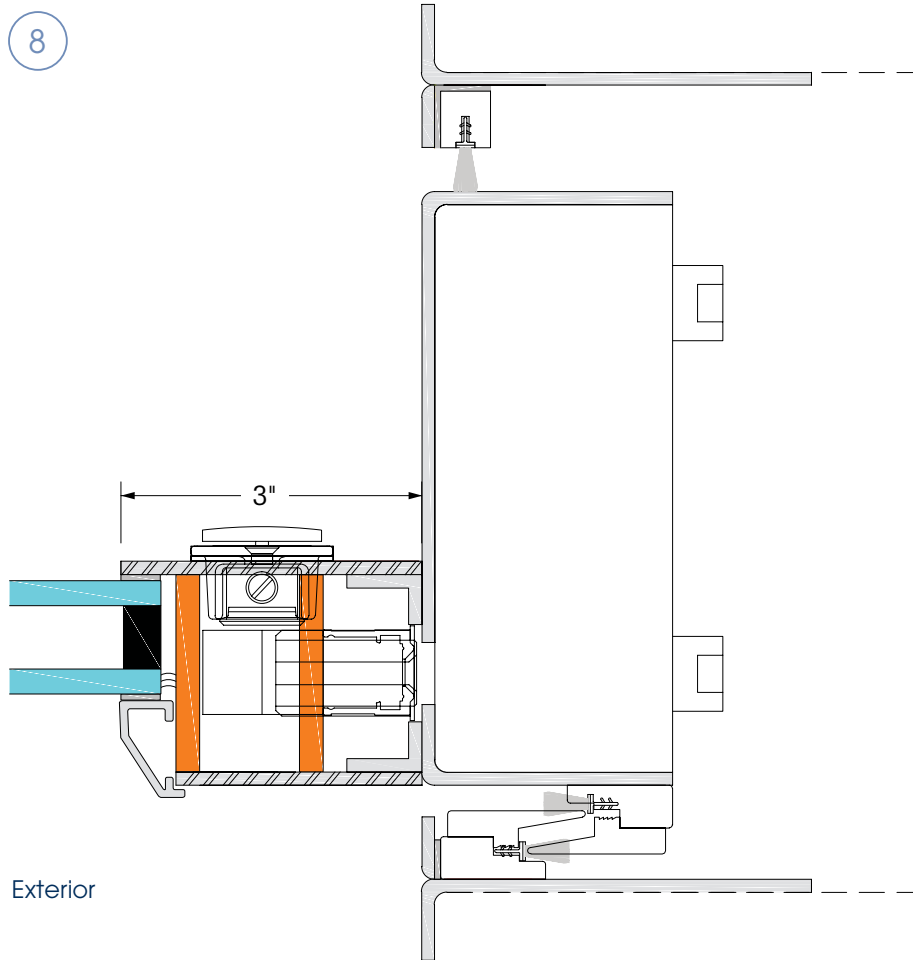
- Solid bronze lever (standard - interior)
- Removable handle for pocket doors
- Bronze flush pull (standard - exterior)
- Dark bronze finish standard



## LIFT SLIDE TRIM



## POCKET DETAIL

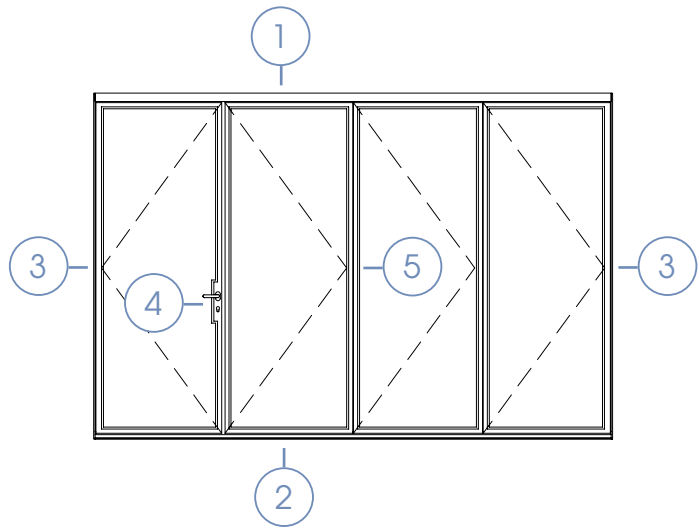






# THERMALSTEEL

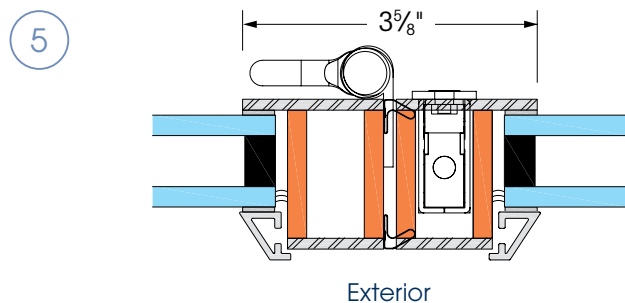
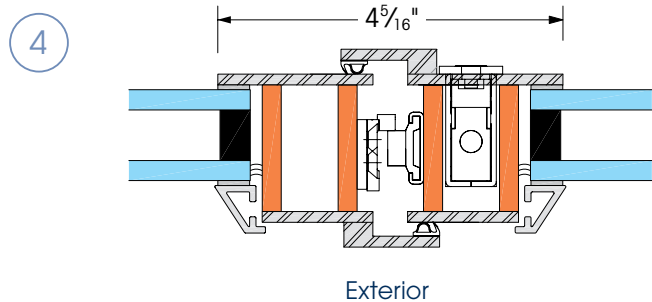
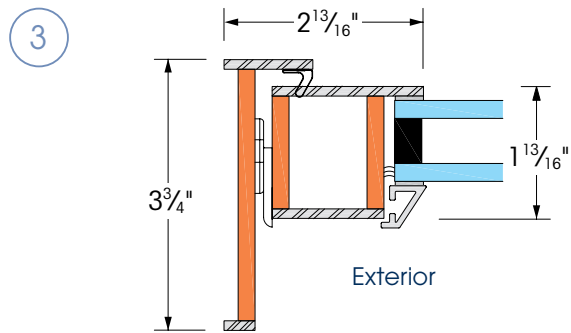
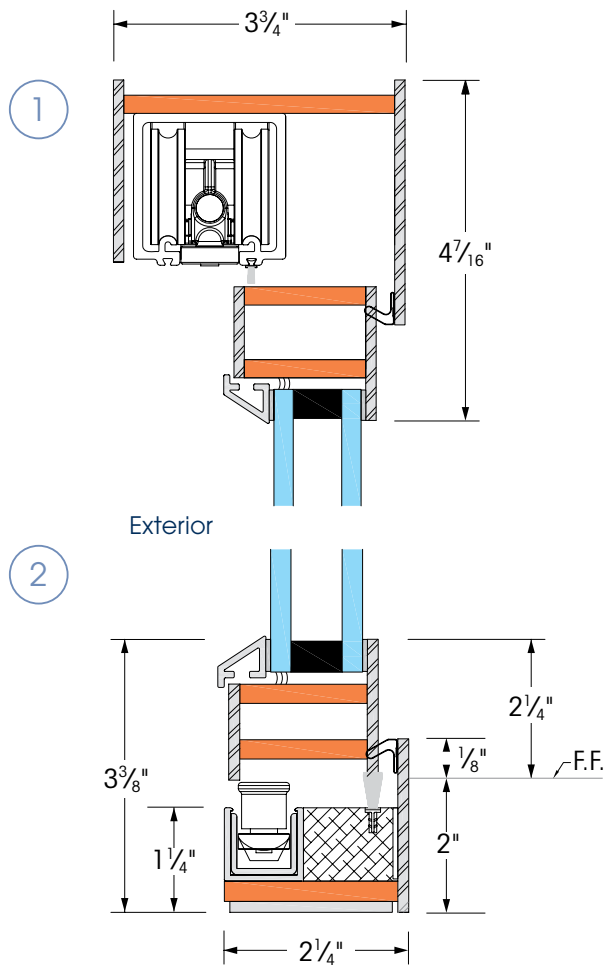
MULTI-FOLD DOOR SYSTEMS

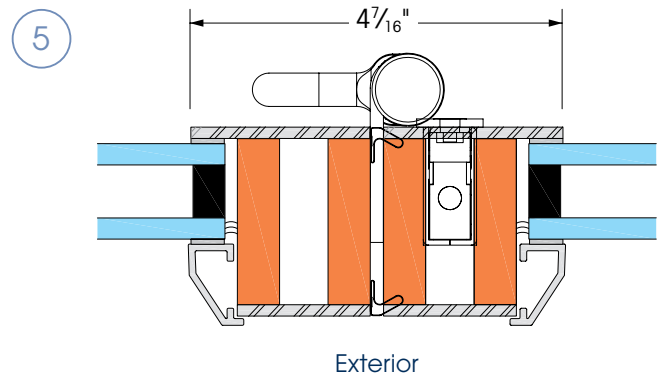
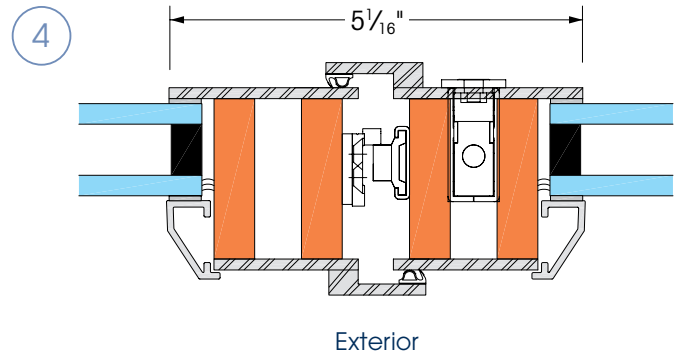
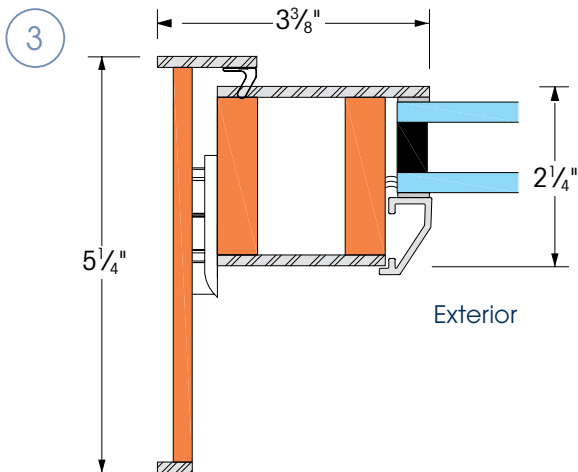
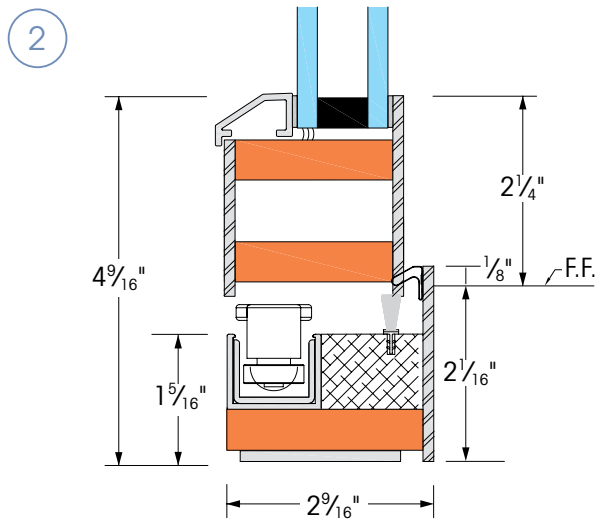
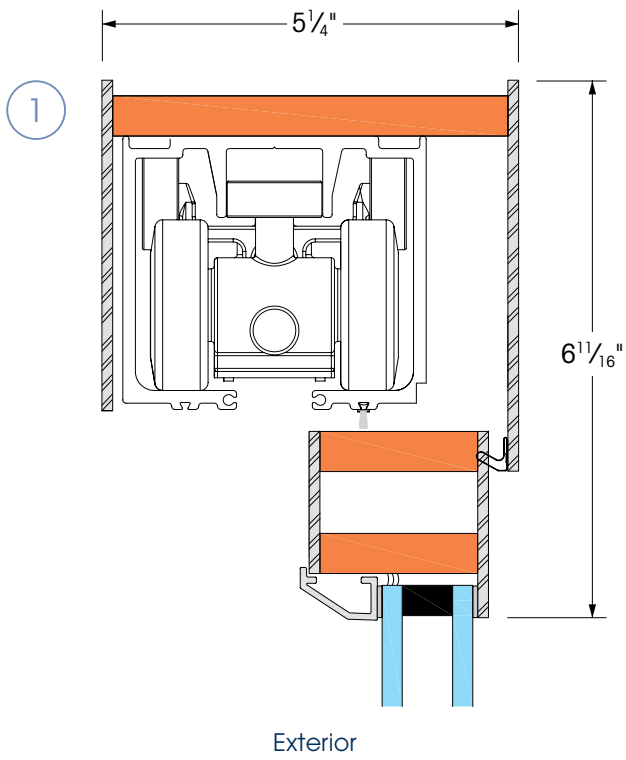


100 SYSTEM DETAILS

FEATURES:

- Door panel sizes up to: 39" width, 120" height, not to exceed 220 lbs
- Door thickness 1<sup>13</sup>/<sub>16</sub>"
- 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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