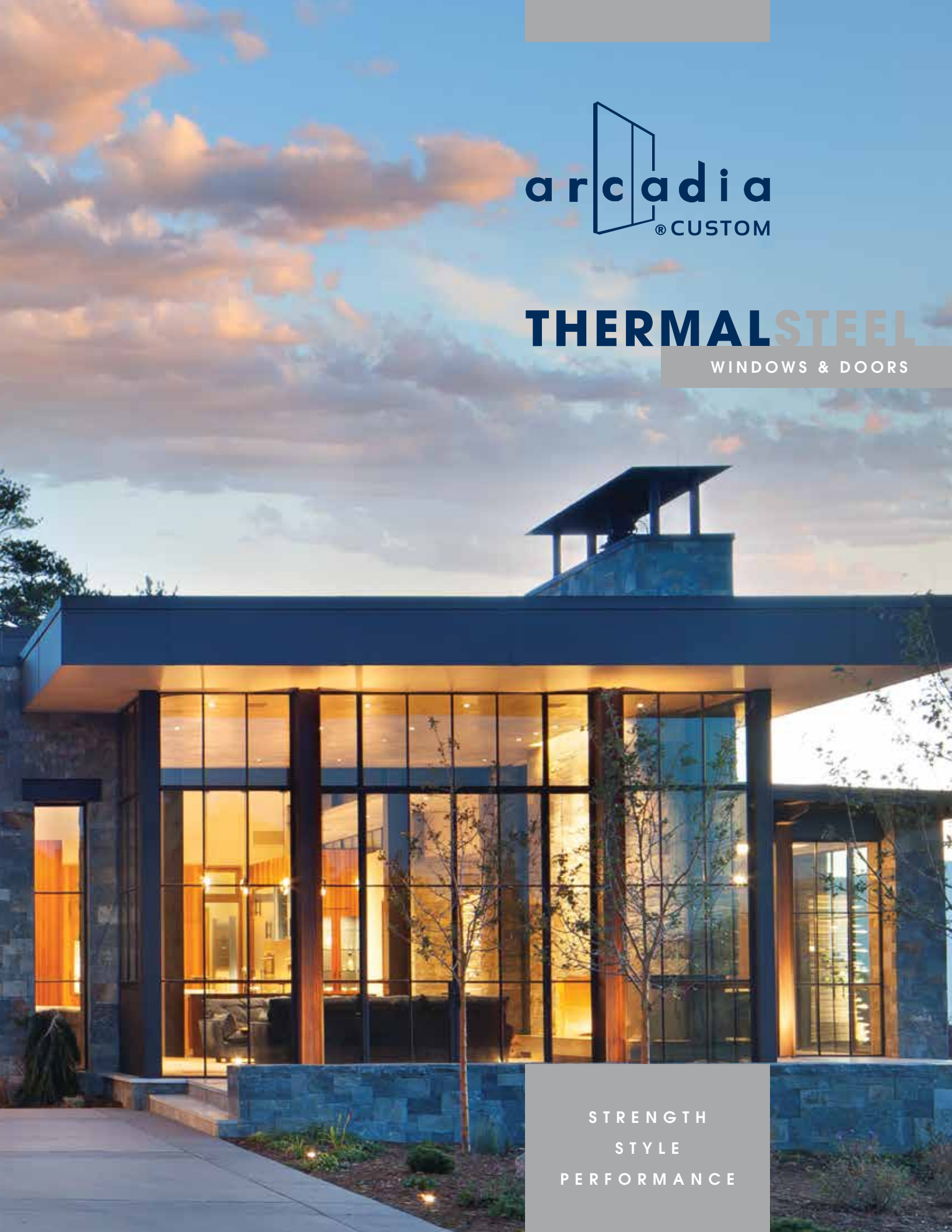

arcadia® CUSTOM

THERMALSTEEL

WINDOWS & DOORS

STRENGTH

STYLE

PERFORMANCE

ARCADIA CUSTOM

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.

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.

KNOWLEDGE

EXPERIENCE

PASSION

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THERMALSTEEL

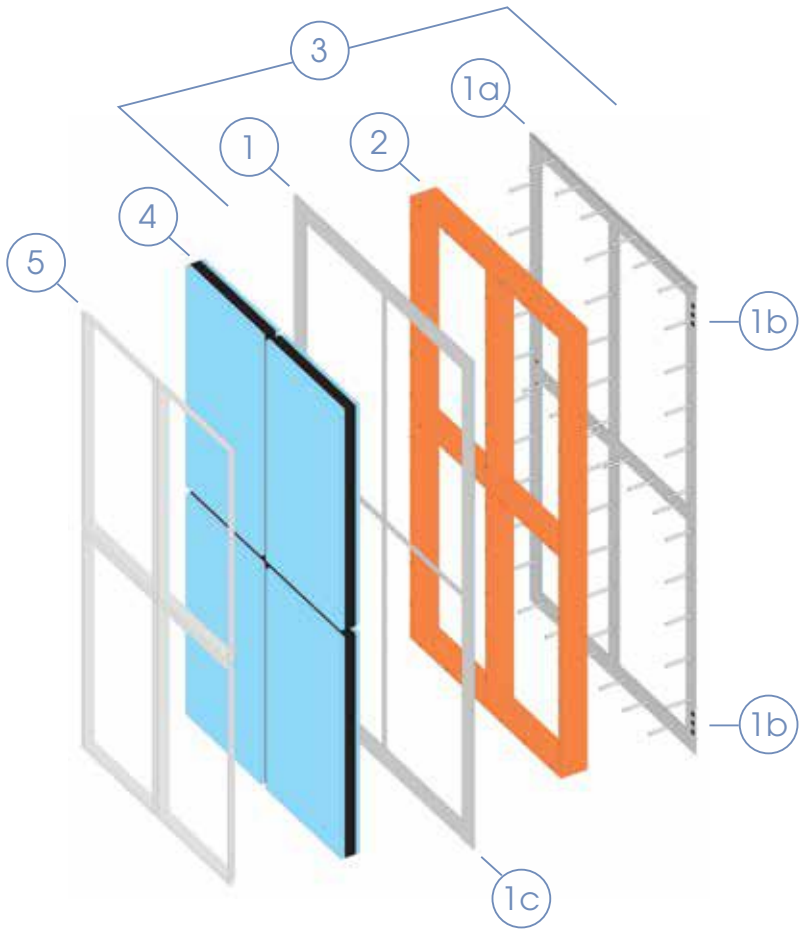
TECHNOLOGY

LASER CUTTING

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

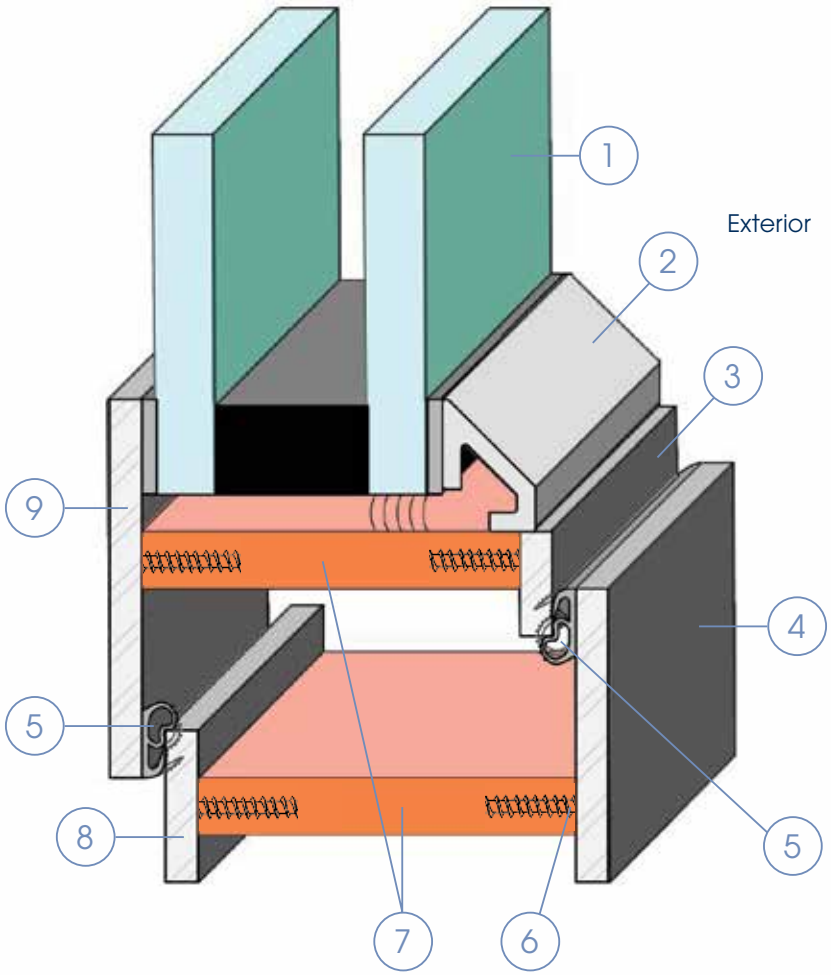
iCORE ASSEMBLY



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 composit 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

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

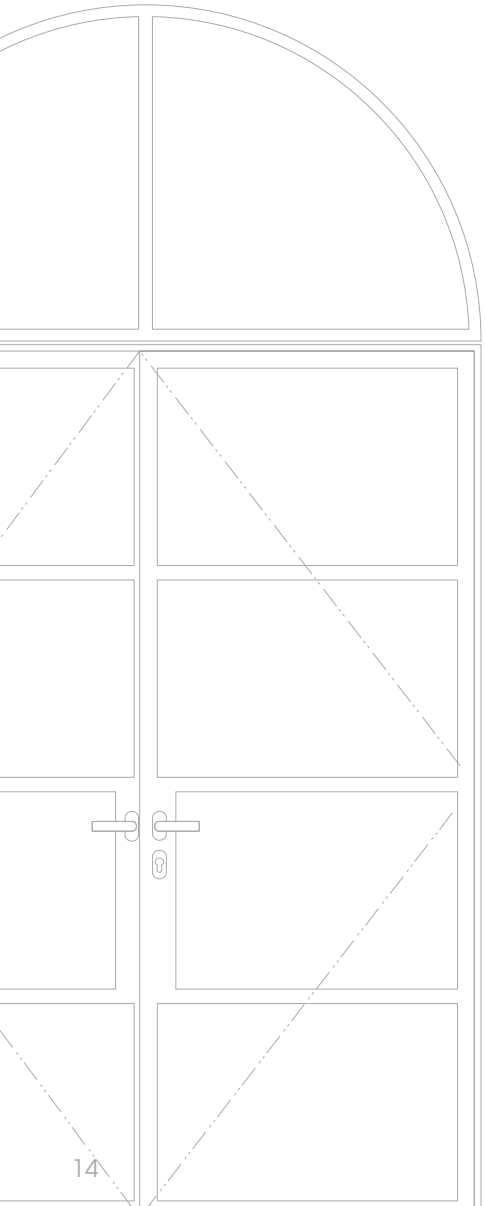
- 20-year limited warranty on our doors and windows – longest most comprehensive in the industry
- 10-year limited warranty on glass
- Because the product ships with the glass installed from our factory, you have "complete" warranty coverage from one company, unlike the typical limited coverage where 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

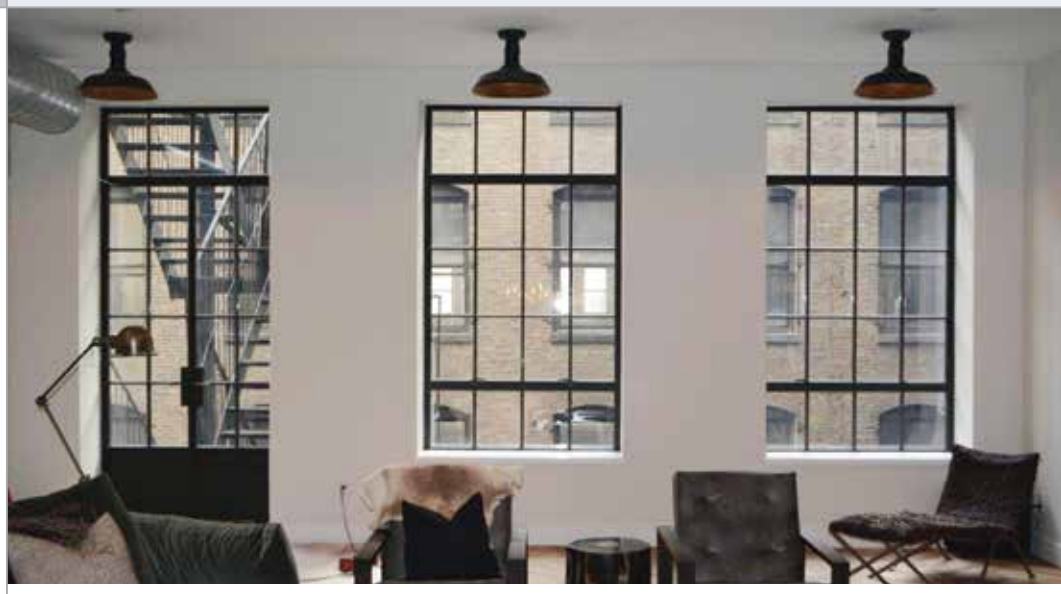
THERMALSTEEL

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.

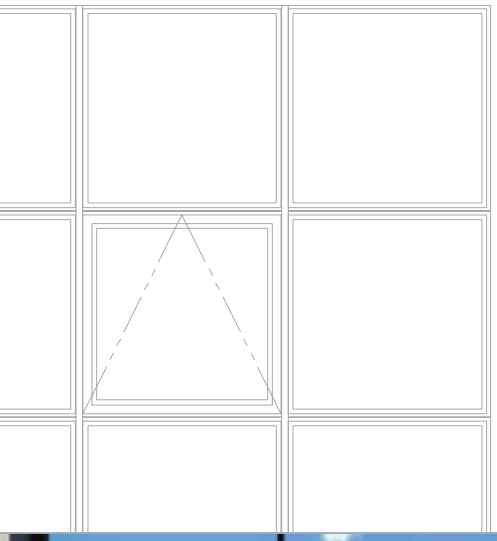




- High performace glass options
- Multiple glazing frame (bead) and muntin bar options
- Unlimited door and window configurations
- Mulling options that can create walls of glass
- Finish options: unlimited paint colors, brushed stainless surface or Cor-ten® surface
- Radius and curved-in-plane designs
- 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



Arcadia Custom offers improved energy performance insultated 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.

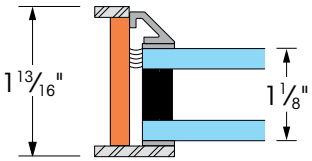
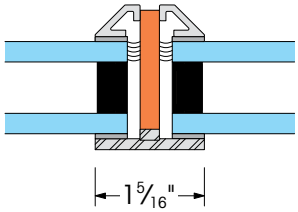
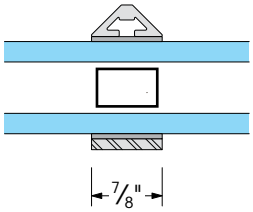
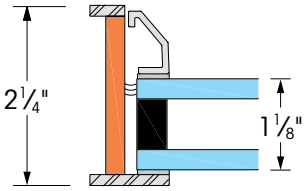
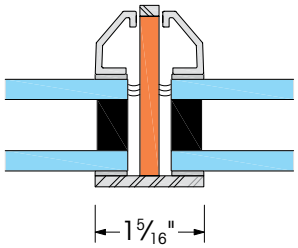
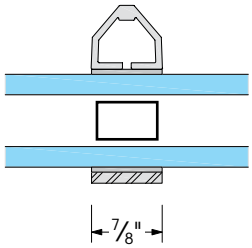
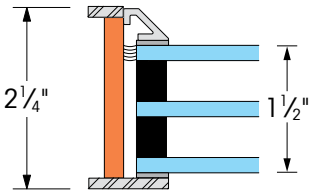
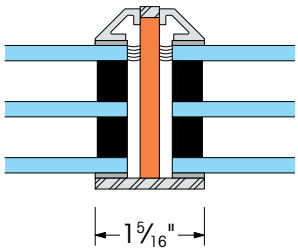
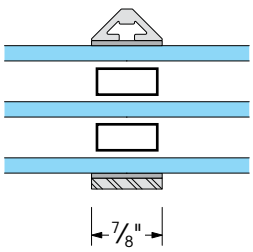
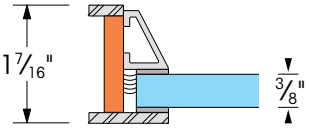
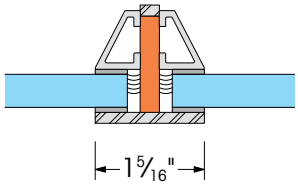
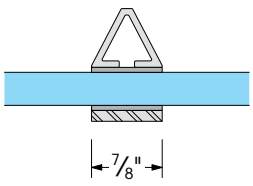
FEATURES INCLUDE:

- 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			

THERMALSTEEL

GLAZING FRAME & MUNTIN OPTIONS

Putty Glazing Frame

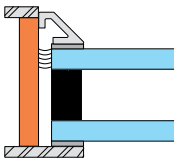
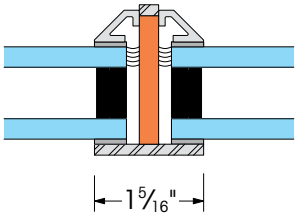
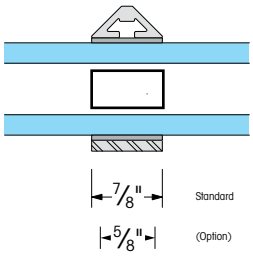
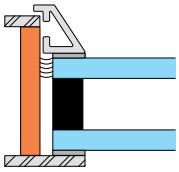
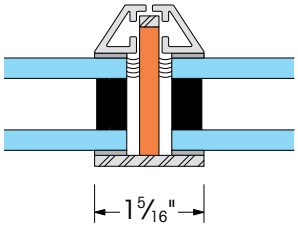
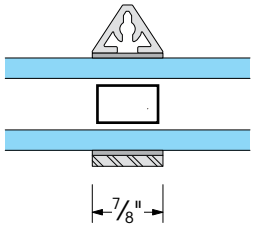
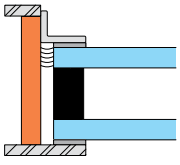
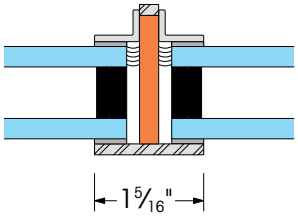
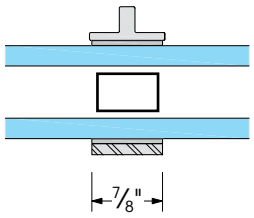
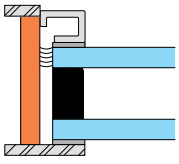
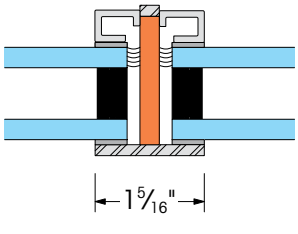
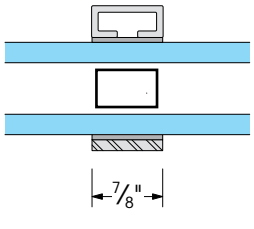
Sloped Bevel Glazing Frame

Offset Glazing Frame

Square Glazing Frame

FEATURES:

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

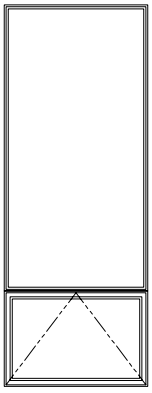
PERIMETER	TDL MUNTIN	SDL MUNTIN	
			Putty
			Sloped Bevel
			Offset
			Square

THERMALSTEEL

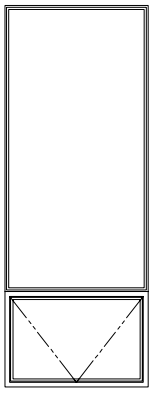
WINDOW CONFIGURATIONS

ELEVATIONS

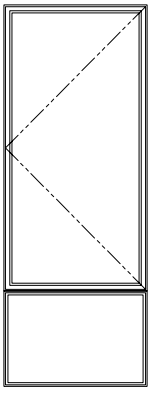
Other window configurations available.



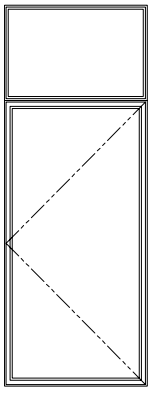
Fixed Over Awning



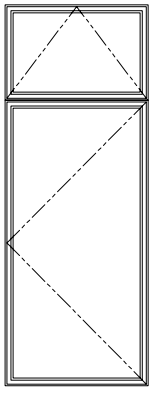
Fixed Over Hopper



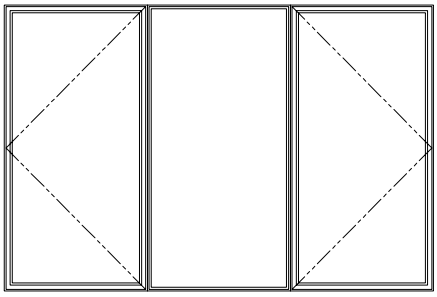
Casement Over Fixed



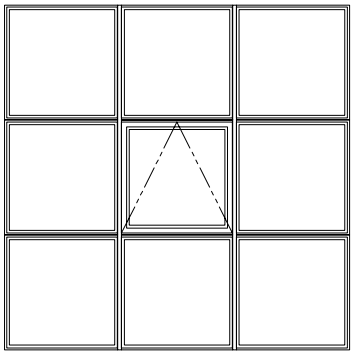
Fixed Over Casement



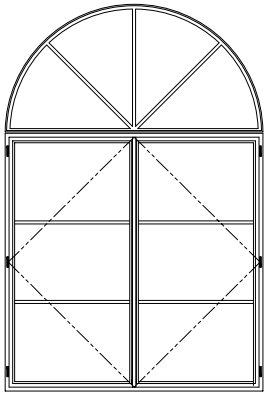
Awning Over Casement



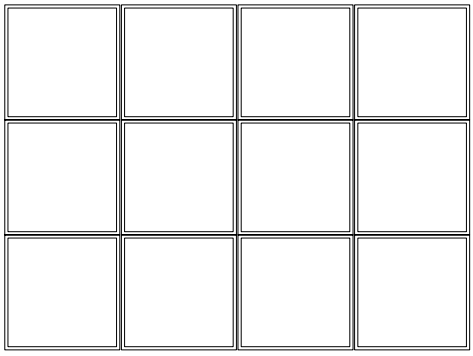
Left, Fixed, Right



Fixed/Operating Window Wall



1/2 Round Transom Over French Casement



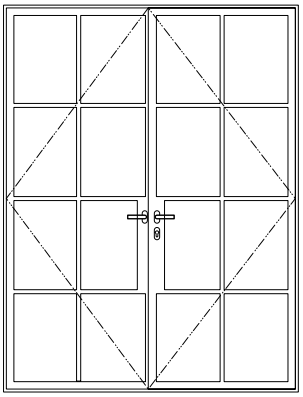
Fixed Window Wall

THERMALSTEEL

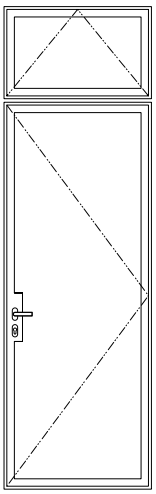
DOOR CONFIGURATIONS

ELEVATIONS

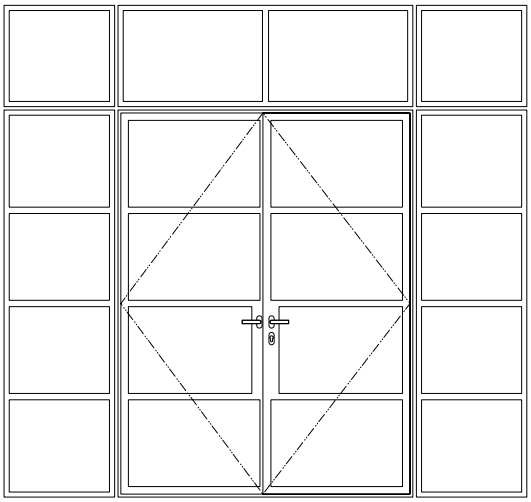
Other door configurations available.



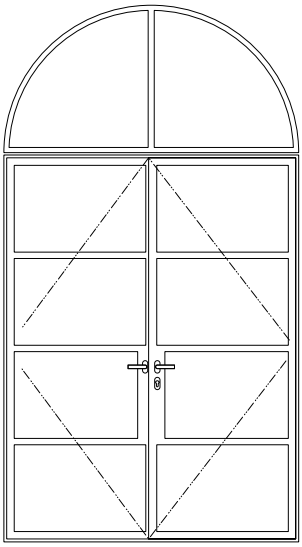
Pair



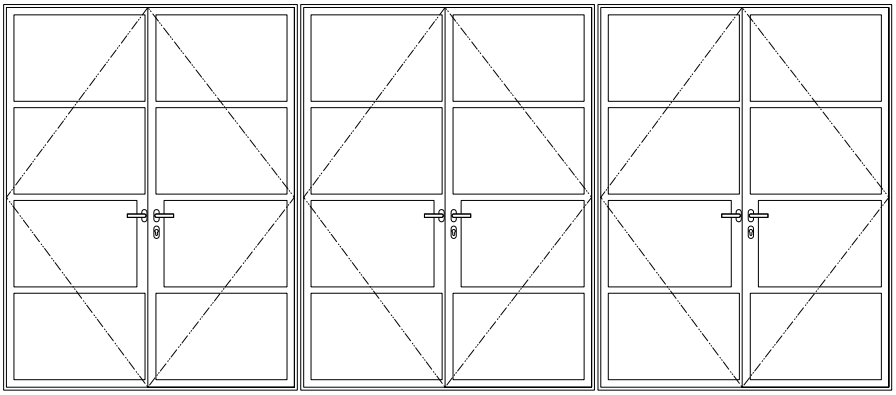
Awning Over Door



Sidelight/Transom Door System



1/2 Round Transom Over Pair

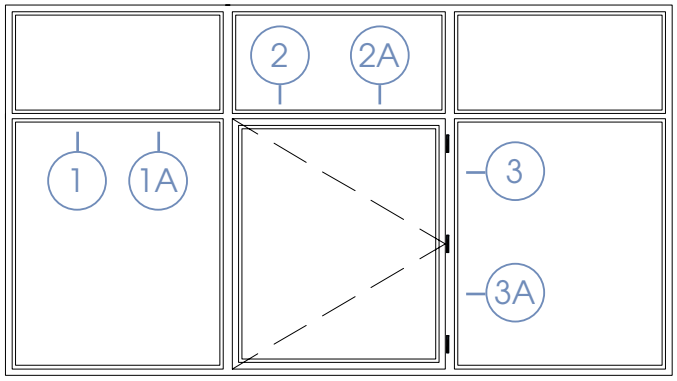


Mulled French Door System

THERMALSTEEL

WINDOW MULLION OPTIONS

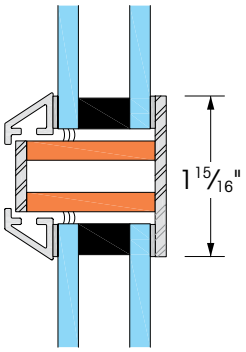
WINDOW ELEVATION



INTEGRAL MULLION DETAILS

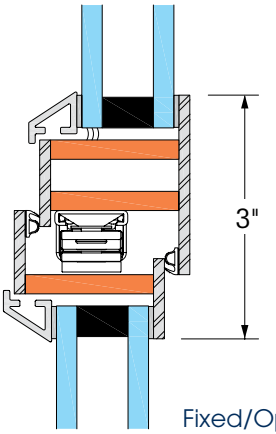
Size limitation: 12' width, 6' height, not to exceed 72 sq ft. Larger sizes require structural mullions.

1



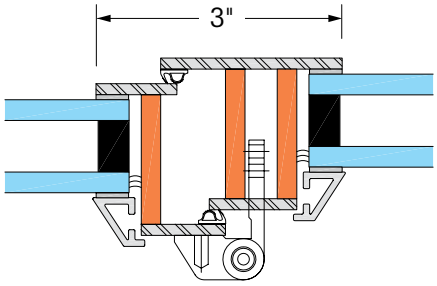
Fixed/Fixed

2



Fixed/Operable

3

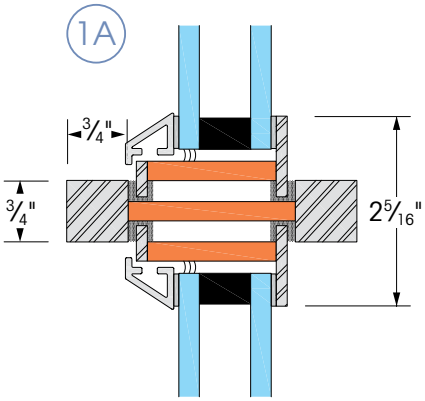


Operable/Fixed

STRUCTURAL MULLION DETAILS

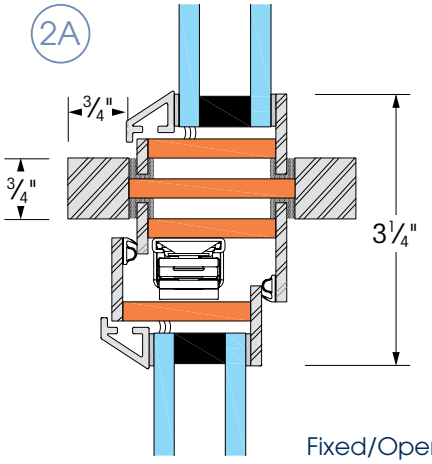
Structural mullions designed to support window and door systems only, not structures above unit.

1A



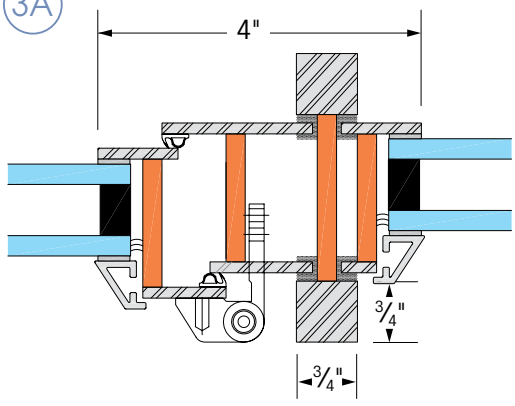
Fixed/Fixed

2A



Fixed/Operable

3A

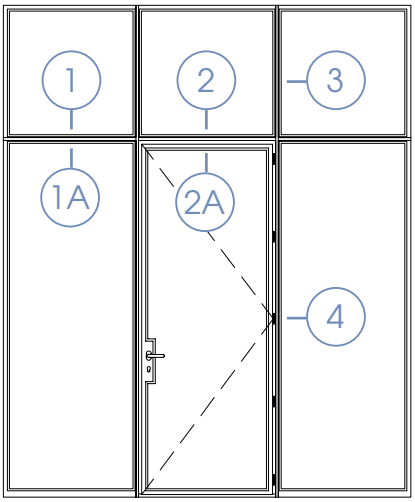


Operable/Fixed

THERMALSTEEL

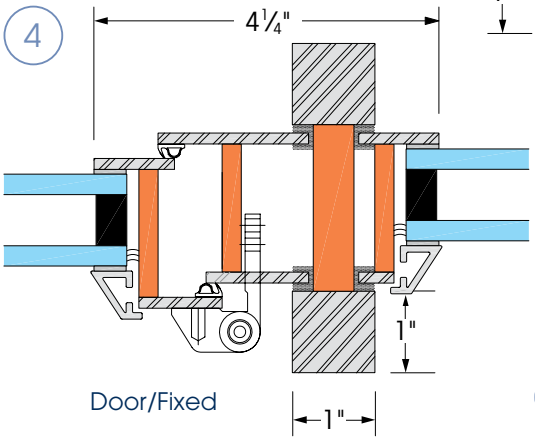
DOOR MULLION OPTIONS

DOOR ELEVATION

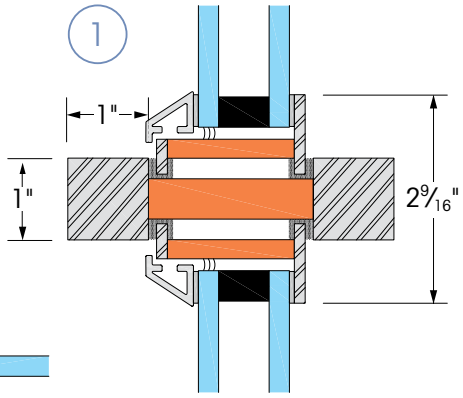


STRUCTURAL MULLION DETAILS

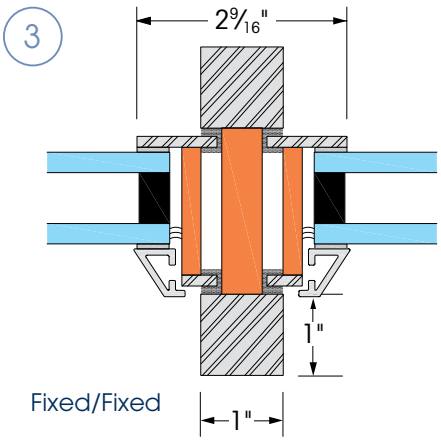
Structural mullion required at door sidelite transition.
Structural mullions run continously vertical for support.



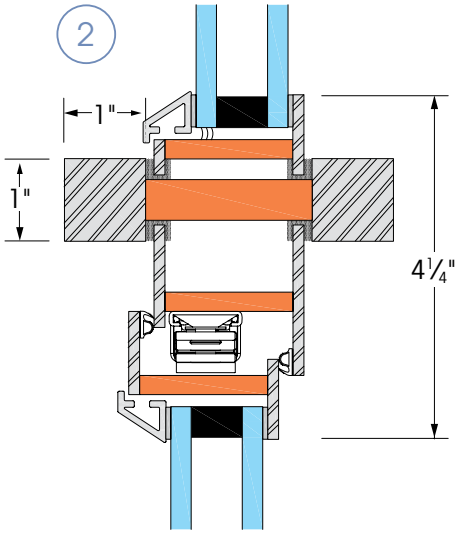
Door/Fixed



Fixed/Fixed

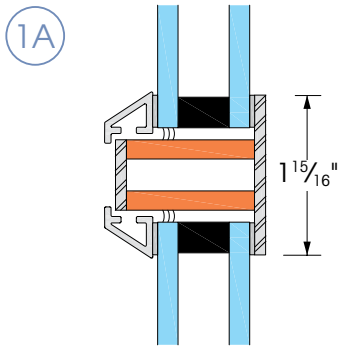


Fixed/Fixed

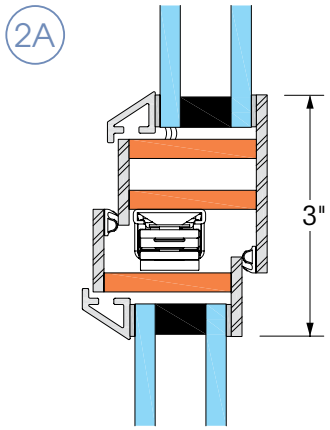


Fixed/Operable

INTEGRAL MULLION



Fixed/Fixed

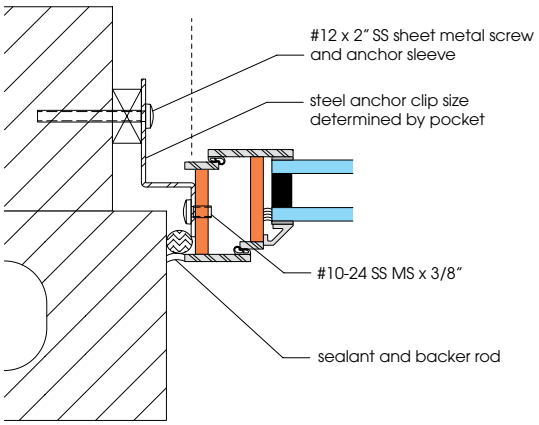


Fixed/Operable

THERMALSTEEL

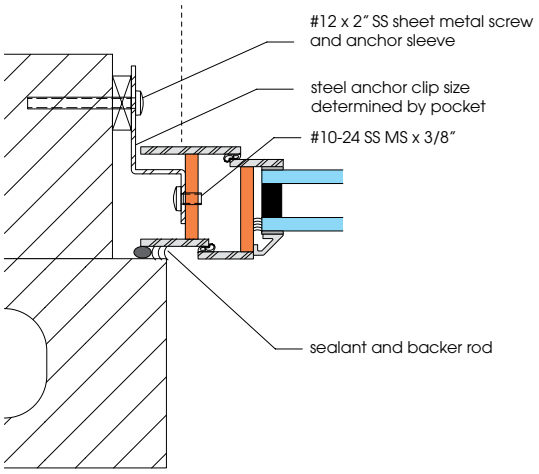
INSTALLATION DETAILS

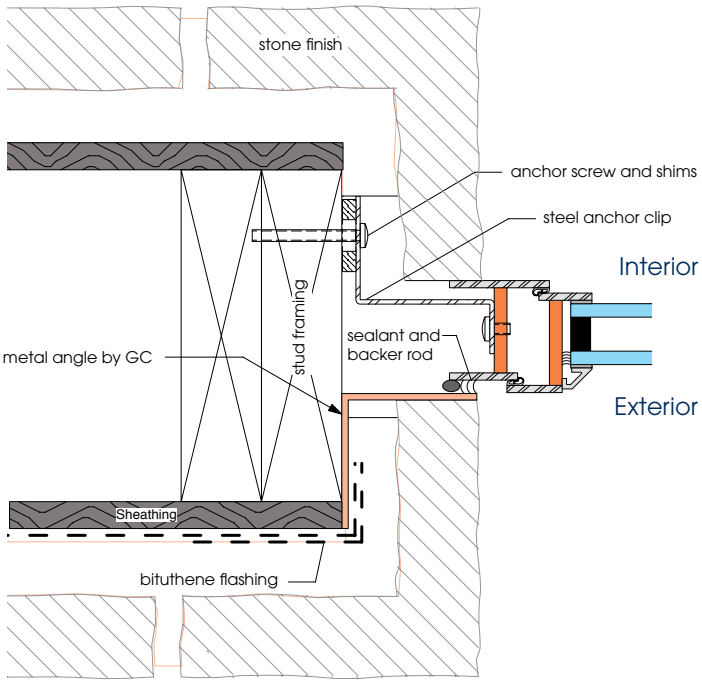
Brick - Flush Installation



Brick - Lap Installation

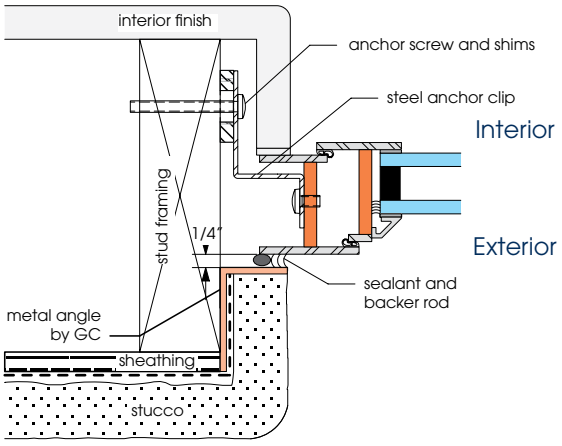
(Shown with extended frame)





Stone - Lap Installation

(Shown with extended frame)

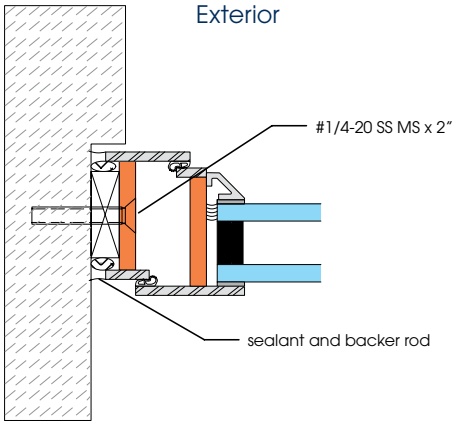


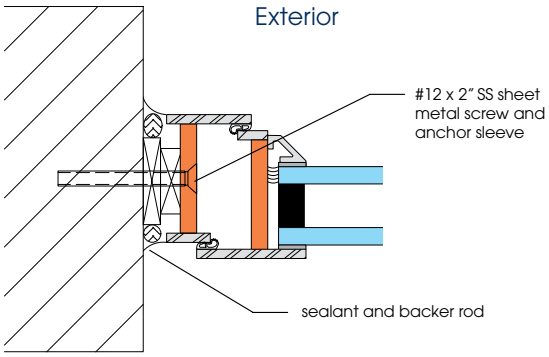
Stucco/Drywall - Lap Installation

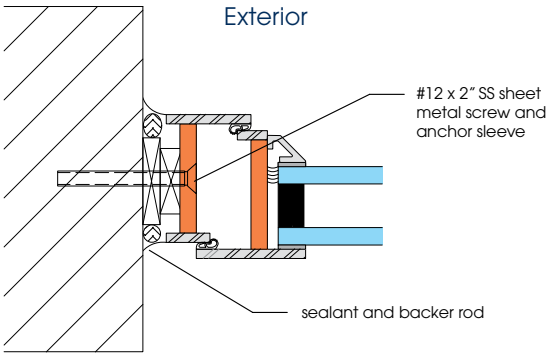
(Shown with extended frame)

DIRECT ANCHOR

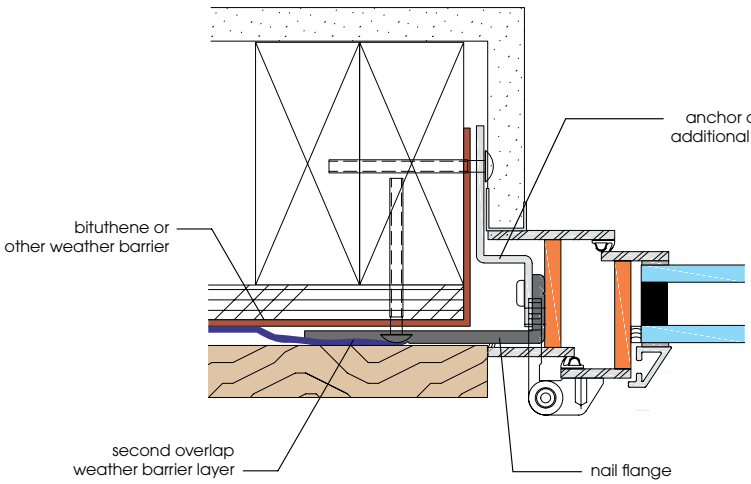
Direct anchor not availalbe on fixed units.



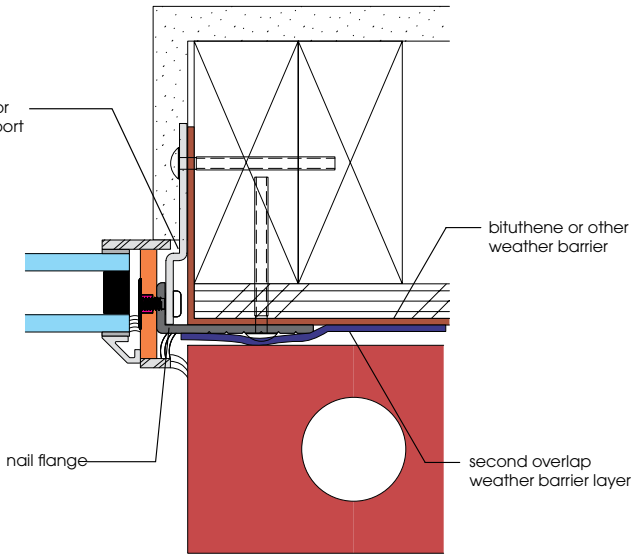




ALUMINUM NAIL FLANGE



3½" Nail Flange with Clip

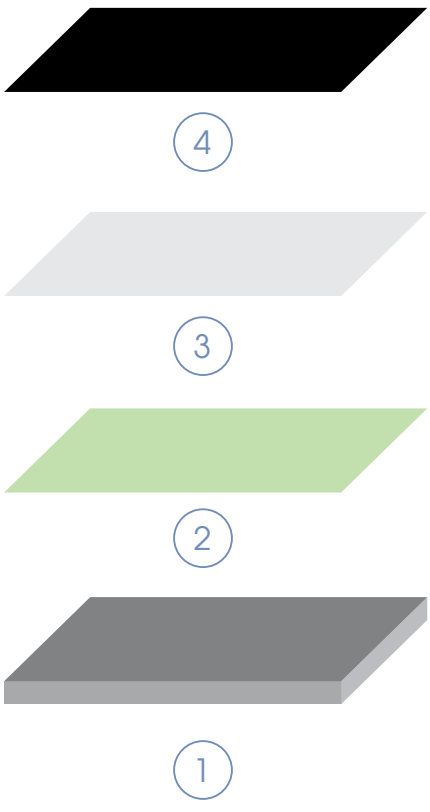


2¼" Nail Flange

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 polyureathane paint allows for unlimited color choices. Choose from any RAL, Metallic, or Exotic finish. Custom color match paint also available.



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

STANDARD PAINT OPTIONS

Textured or smooth paint surface available.

Sift Expresso (Texture)

Jet Black

9011 Black

Atelier Dominique

Argento 305 Metallic

Statuary Bronze

Black Bean Soup

Brick Red

Champagne 301 Metallic

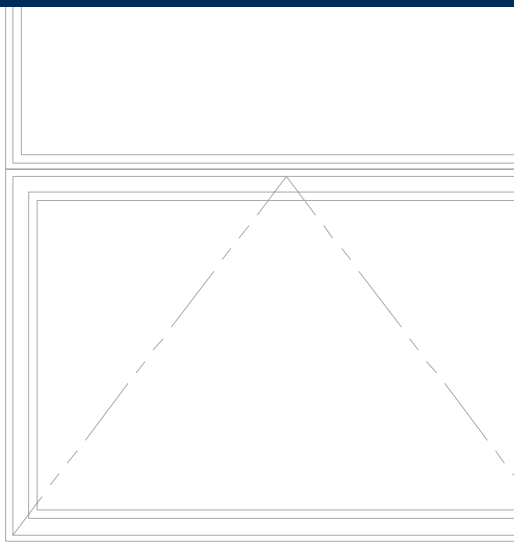
Sandstone

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 appearence, rust staining possible

THERMALSTEEL

WINDOW HARDWARE

FEATURES:

- Solid bronze hinges
- Solid bronze hardware trim available
- Stainless steel roto-crank arms for corosion 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.

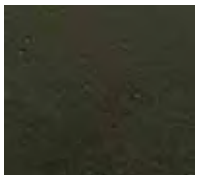
*BRONZE HARDWARE FINISH OPTIONS

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

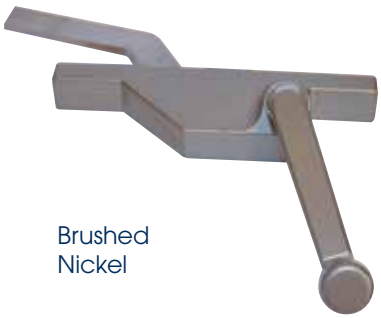
Multi-point Trim (Steel)

Black and nickel finish only.

Black
(Standard)

Crank-Out Operator (Steel)

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



Brushed
Nickel

Bronze 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

Lever Escutcheon
& interior Thumb Turn

Keyed Profile
Cylinder

Bronze Door Levers

*See finish options on page 37.

#016 Handle

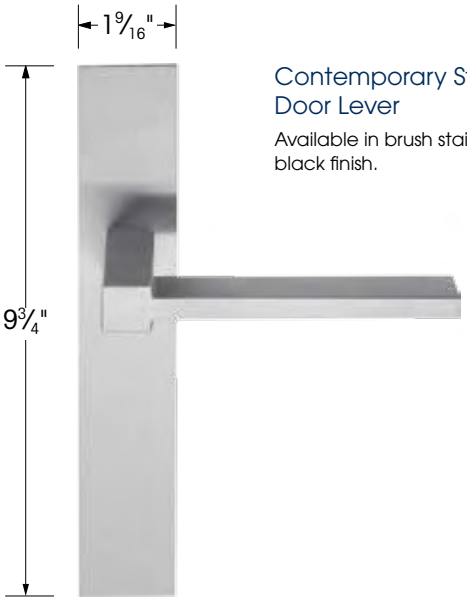
#164 Handle

#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.

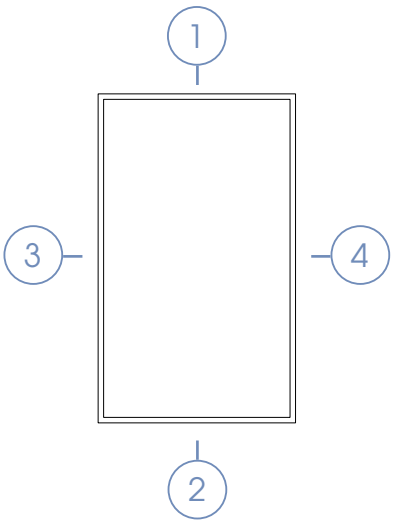
DOOR HINGE

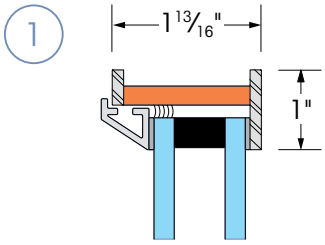
Butt Hinge - Standard (Solid Bronze)

*See finish options page 35.

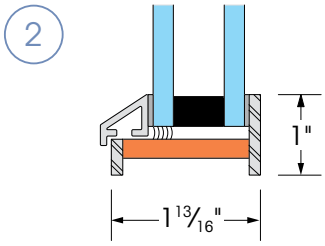
THERMALSTEEL
WINDOW SYSTEMS

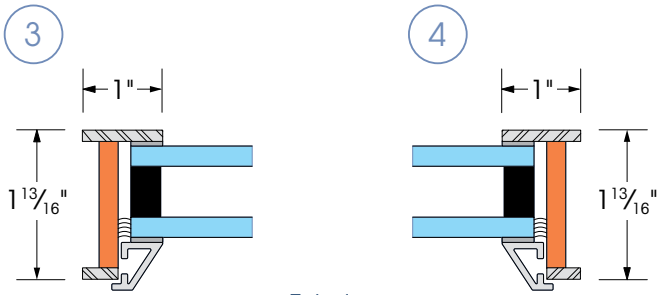
ELEVATION





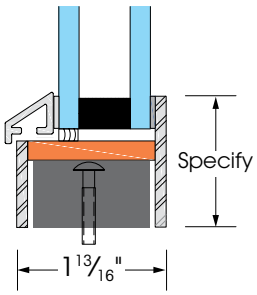
Exterior



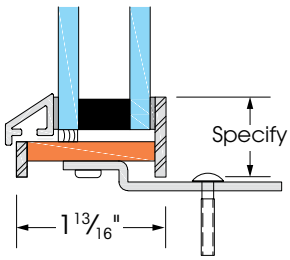


Exterior

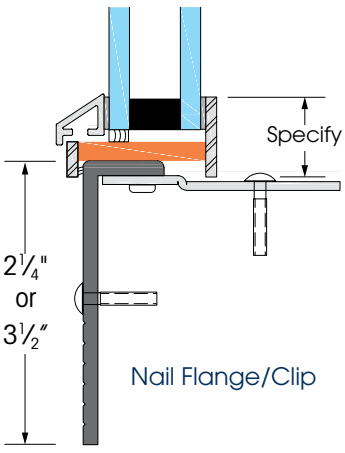
SILL ANCHORING OPTIONS



Composite Sill Block



Anchor Clip



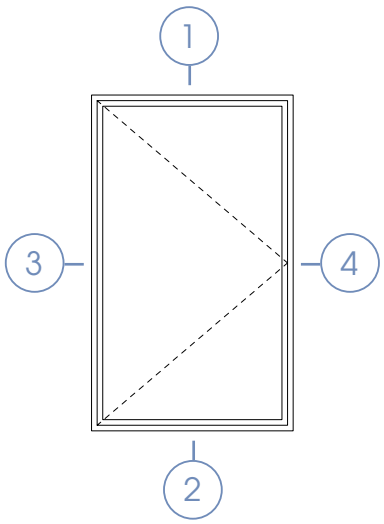
Nail Flange/Clip

CASEMENT WINDOWS

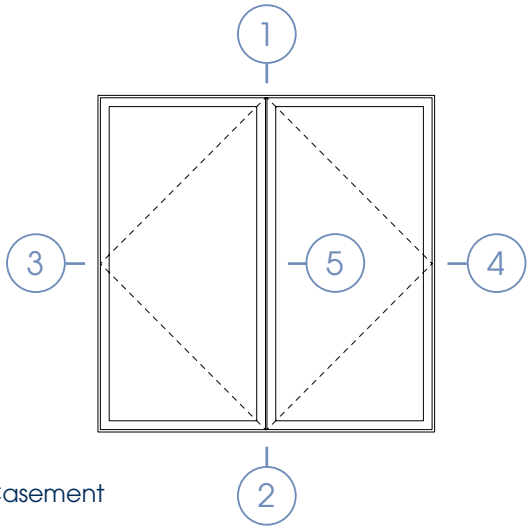
FEATURES:

- 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

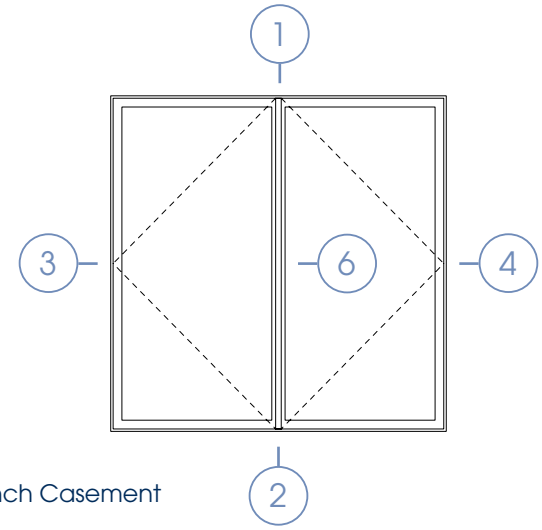
ELEVATIONS



Casement



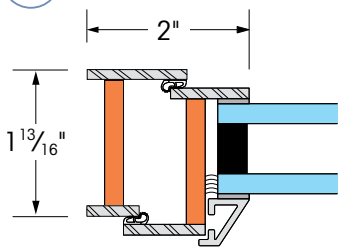
Twin Casement



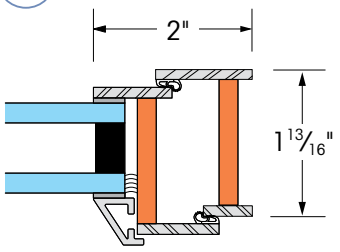
French Casement

DETAILS

3

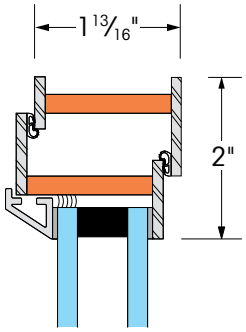


4



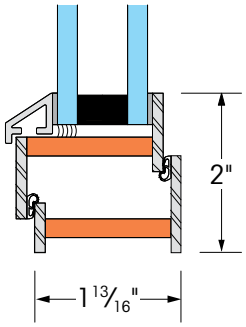
Exterior

1

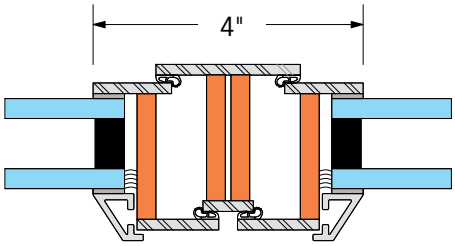


Exterior

2



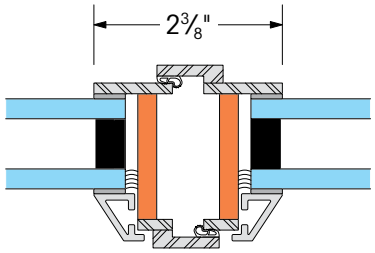
5



Exterior

(Twin casement mullion)

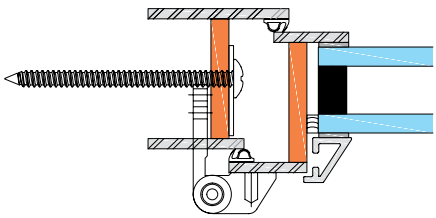
6



Exterior

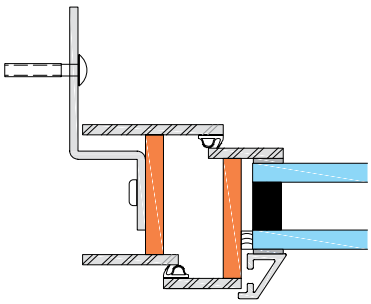
(French casement meeting stiles)

ANCHORING OPTIONS

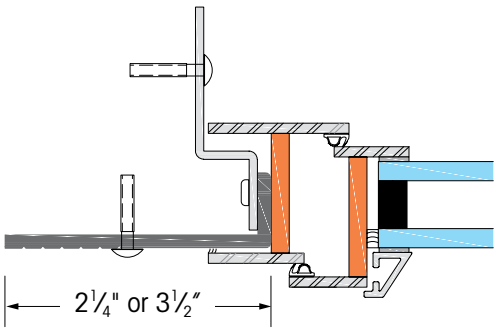


Direct Anchor

(Always required for butt hinges)



Anchor Clip



Nail Flange/Clip

AWNING/HOPPER

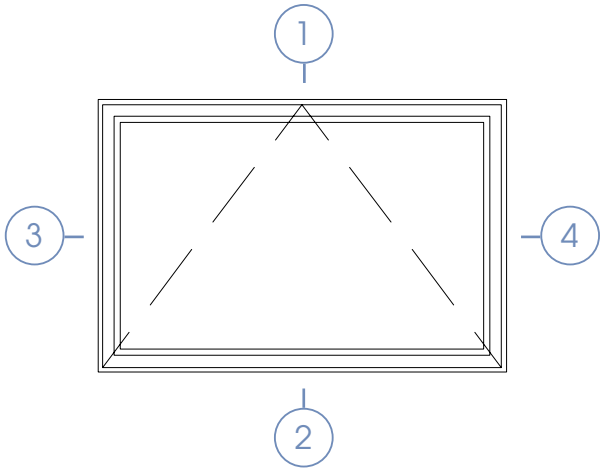
AWNING WINDOW OPTIONS:

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

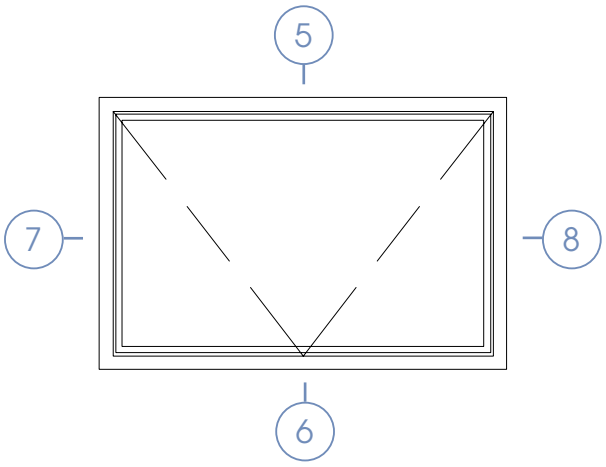
HOPPER WINDOW OPTIONS:

- Concealed friction hinge with limiter

AWNING ELEVATION



HOPPER ELEVATION



AWNING DETAILS

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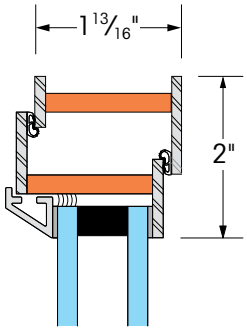

Exterior

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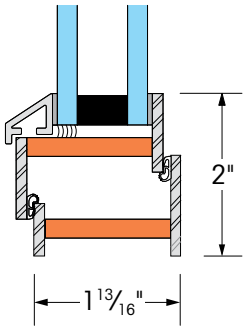

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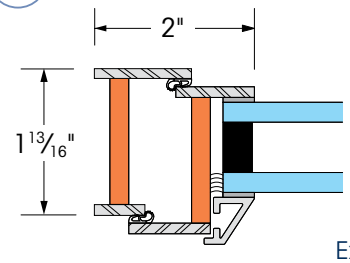

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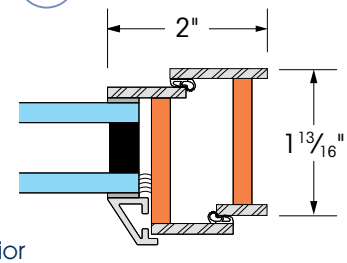
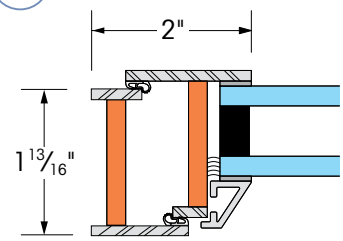


Exterior

HOPPER DETAILS

7



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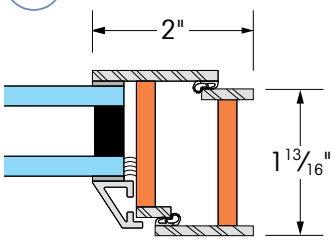

Exterior

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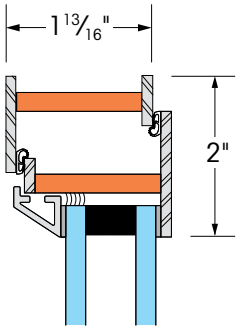
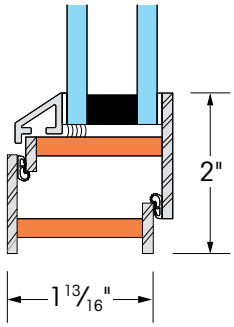


Exterior

6



THERMALSTEEL

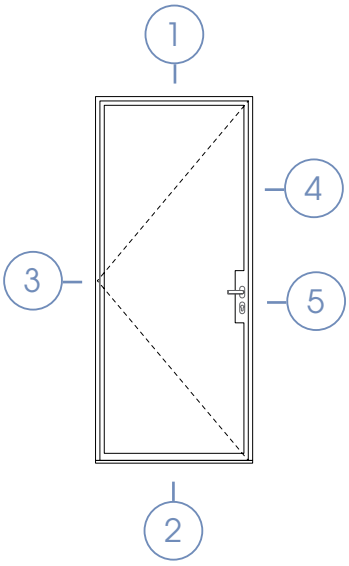
SWINGING DOOR SYSTEMS

FRENCH DOORS

FEATURES:

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

ELEVATIONS



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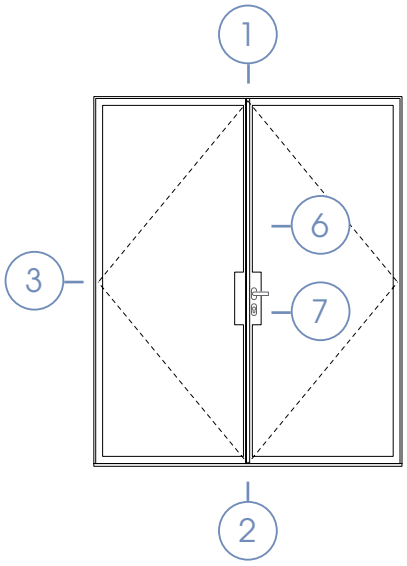
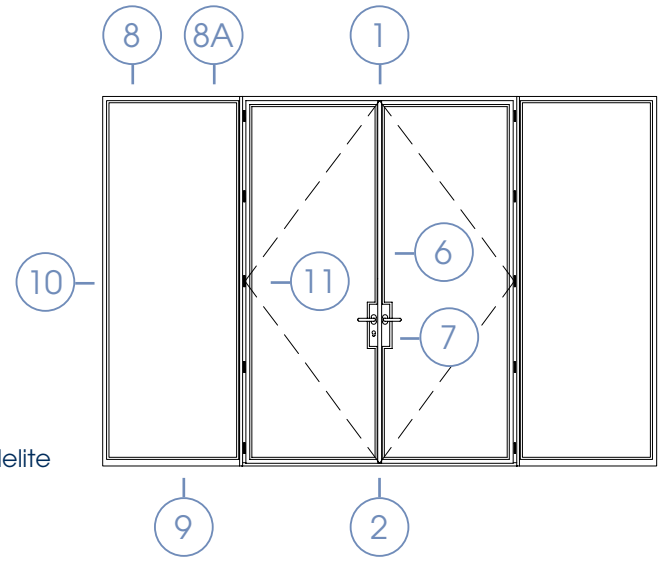


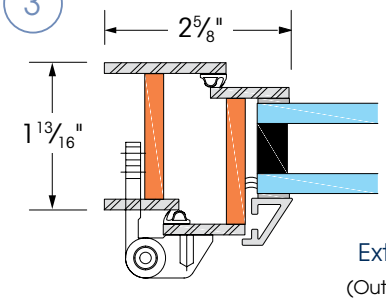
Pair



Door/Sidelite

DETAILS

3



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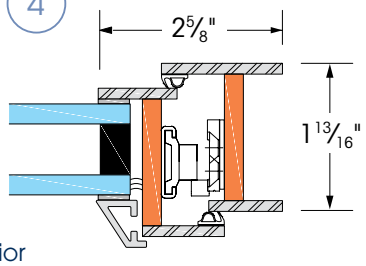
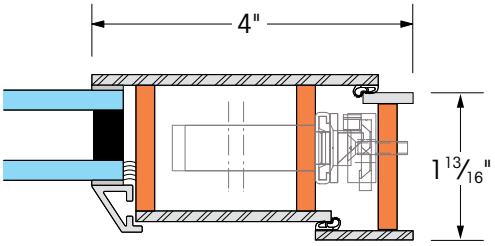


Exterior
(Out-swing)

5



Exterior

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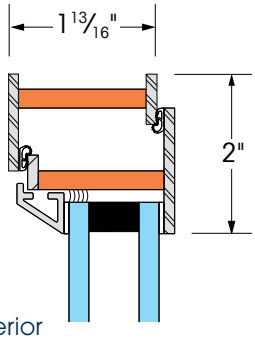

Exterior

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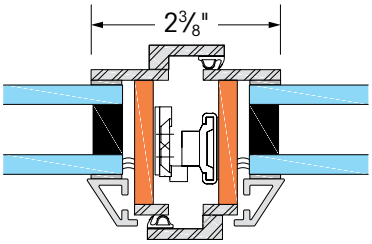
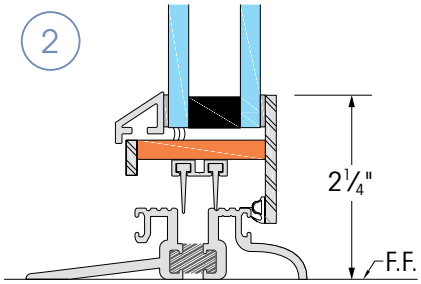


Exterior
(Meeting Stile)

2



(In-swing)

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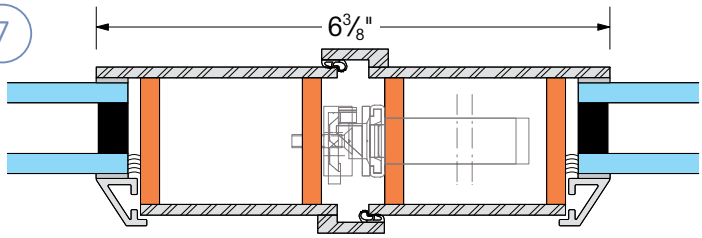
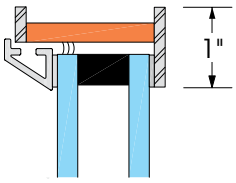


Exterior (Lock Block)

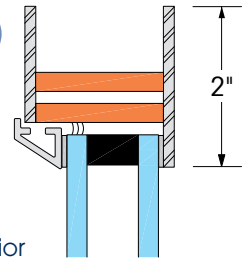
SIDELIGHT DETAILS

8



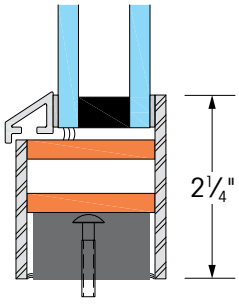
Exterior
(Standard – Narrow Profile)

8A



Exterior
(Sightline Profile –
Fixed profile matches operating profile)

9



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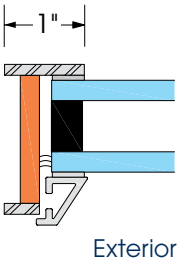
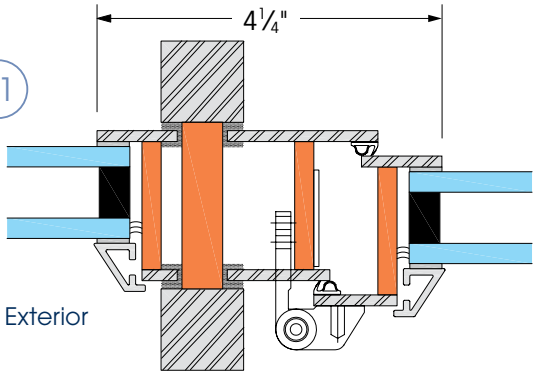


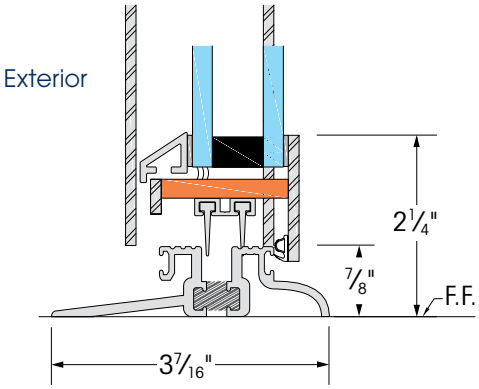
Exterior

11

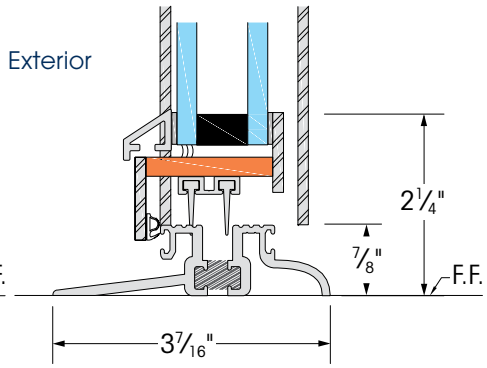


Exterior

SILL OPTIONS



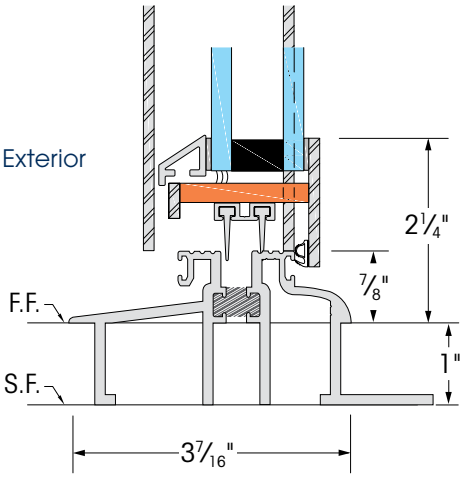
Aluminum In-Swing (standard)
Thermal Break



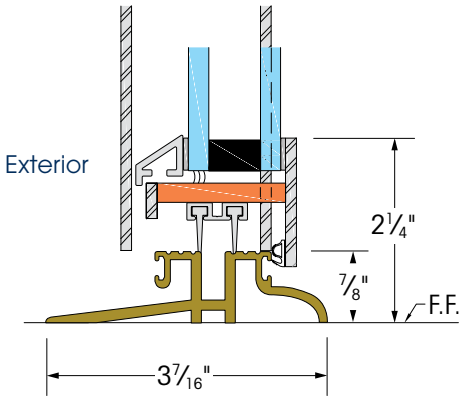
Aluminum Out-Swing (standard)
Thermal Break

FEATURES:

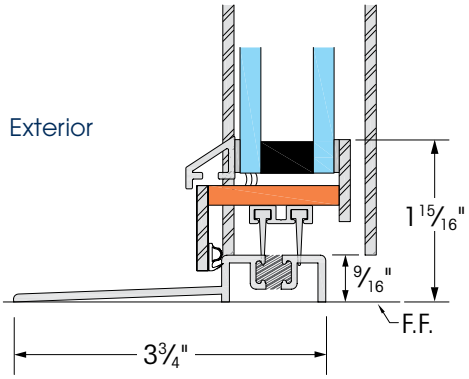
- Aluminum and solid bronze sills available
- Custom door bottom rail heights available
- Recessed flat door panels available



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

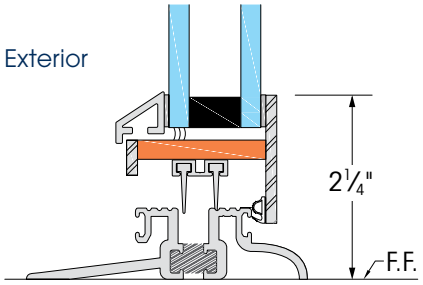


Solid Bronze (In-Swing/Out-Swing)
Non-Thermal Break

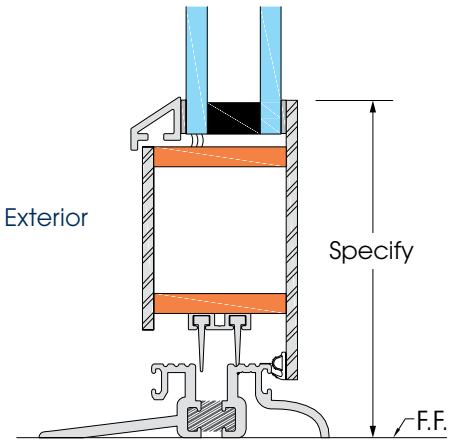


Low Profile Out-Swing
Aluminum-Thermal Break

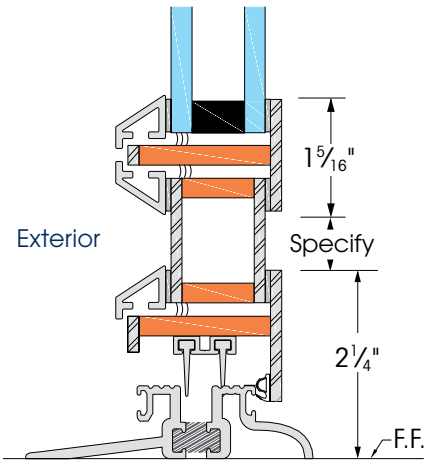
BOTTOM RAIL OPTIONS



Standard Bottom Rail



Variable Bottom Rail



Recessed Bottom Panel

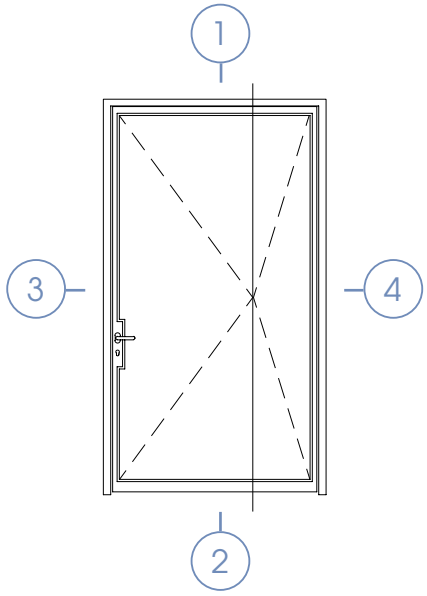
THERMALSTEEL

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



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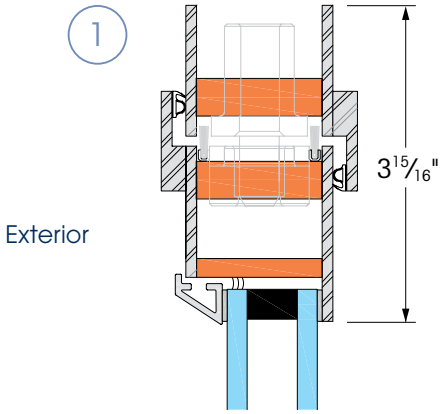

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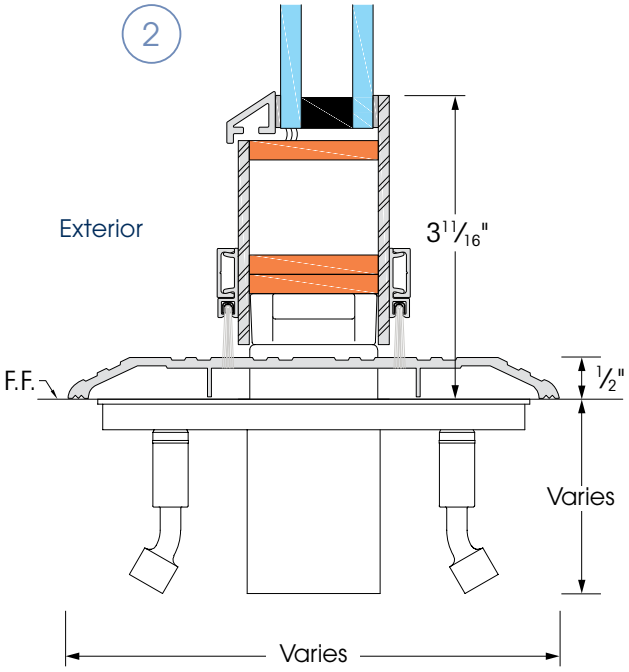

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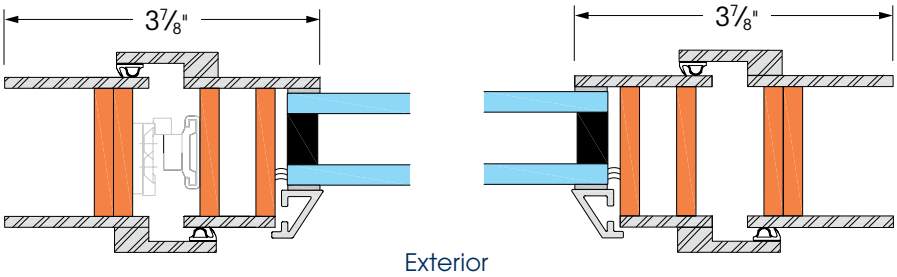


THERMALSTEEL

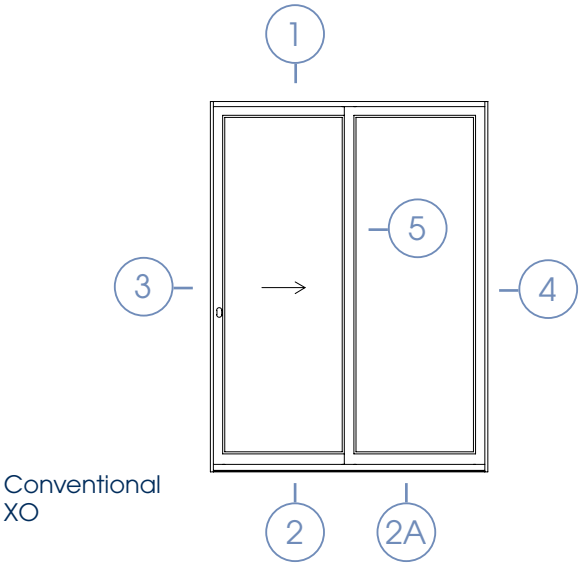
LIFT-SLIDE DOOR SYSTEMS

LIFT-SLIDE DOORS

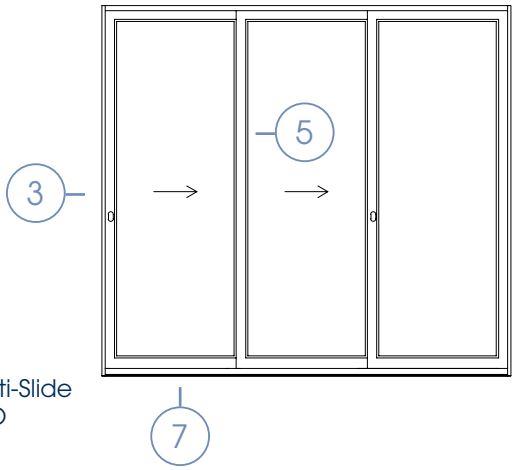
FEATURES:

- 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

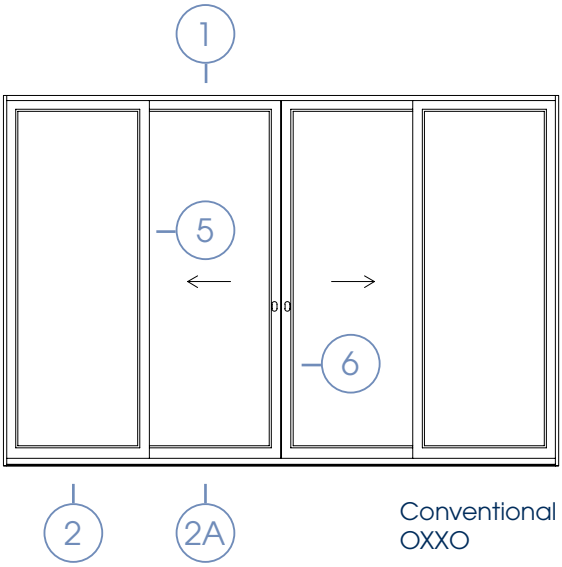
ELEVATIONS



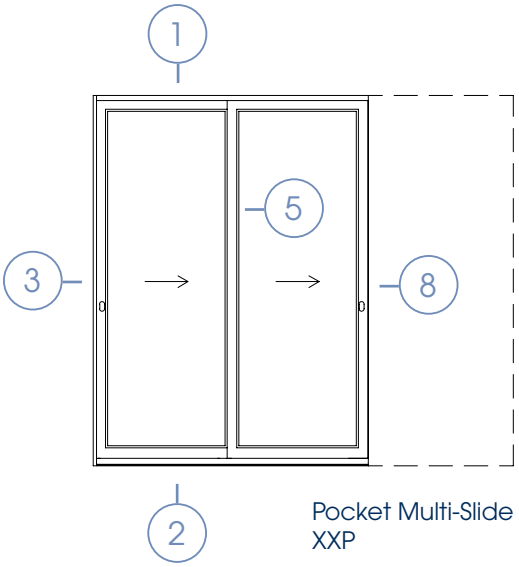
Conventional
XO



Multi-Slide
XXO



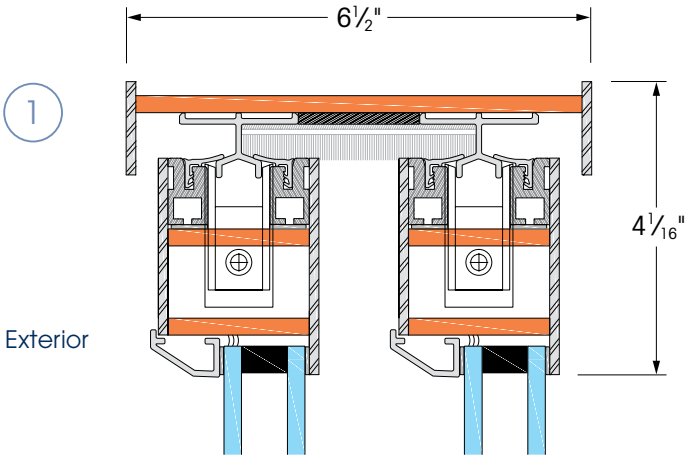
Conventional
OXXO

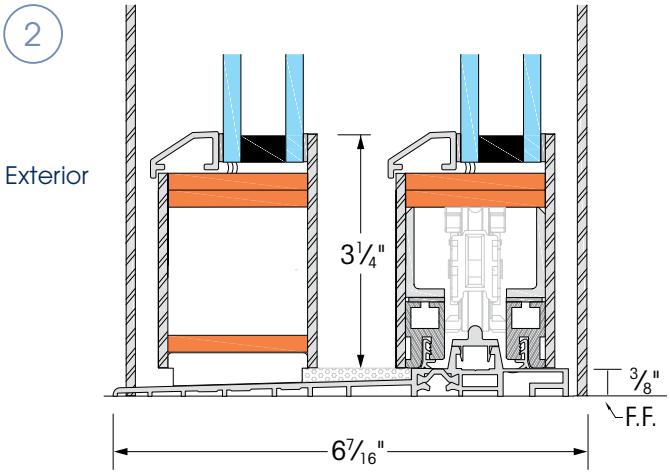


Pocket Multi-Slide
XXP

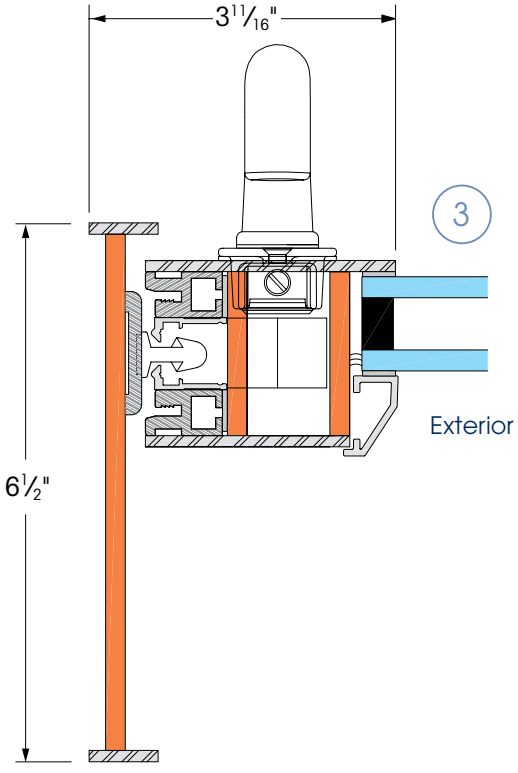
FEATURES:

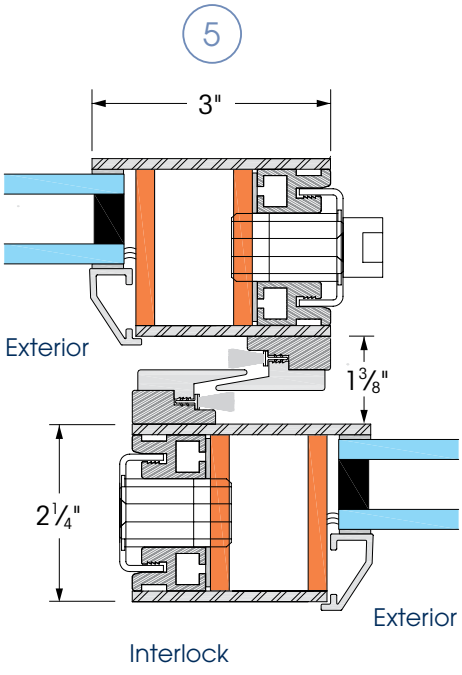
- Conventional lift-slide sill options:
  - Flush track
  - Aluminum sill (thermally broken)
- Sliding screen doors available

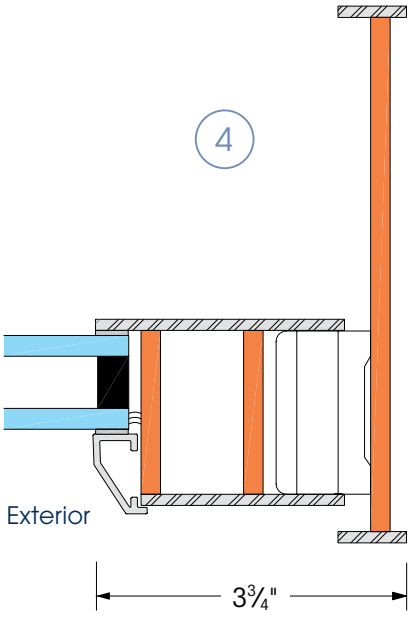




Aluminum Sill – No Screen (Thermal Break)







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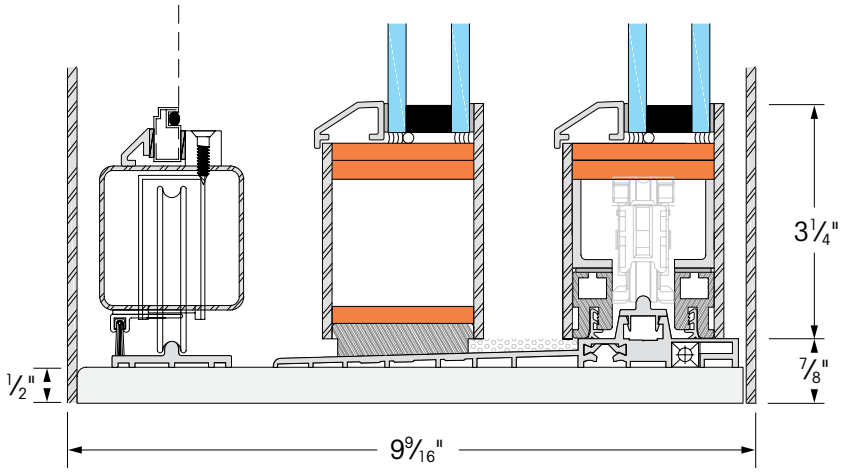
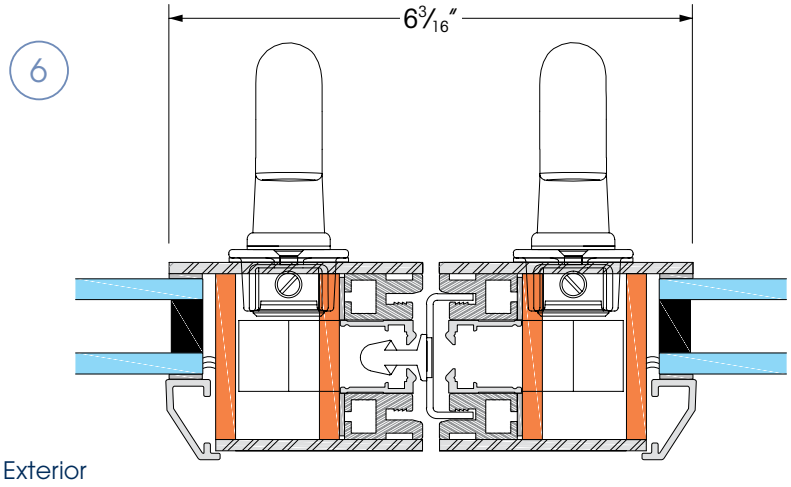


Aluminum Sill – With Screen (Thermal Break)

FEATURES:

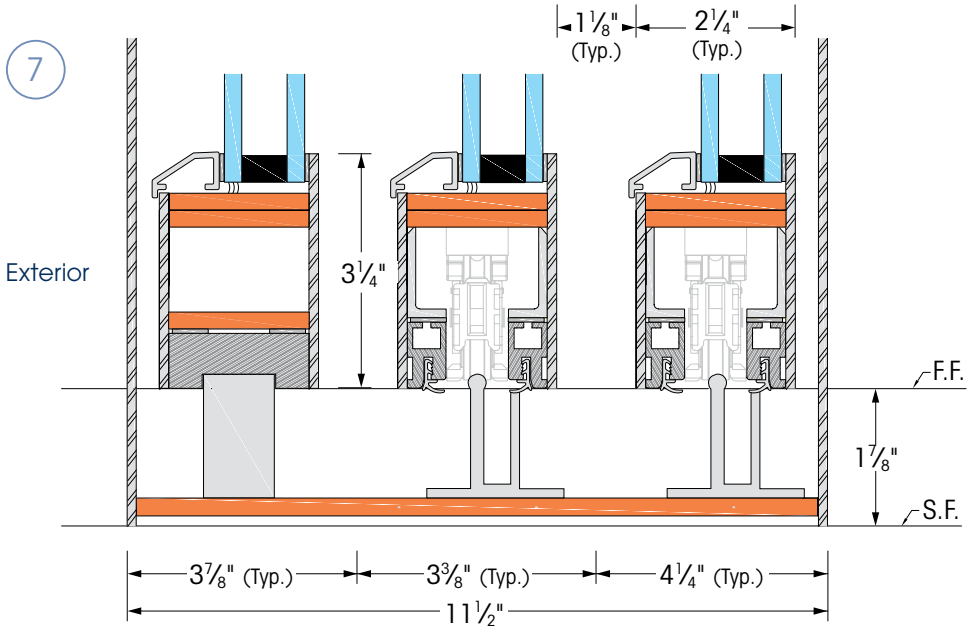
- Multi-slide sill options:
  - Flush track – unlimited number of door panels
  - Aluminum sill (thermally broken), up to 3 door panels
- Pocket lift-slide:
  - Flush track only

6



Meeting Stiles

7



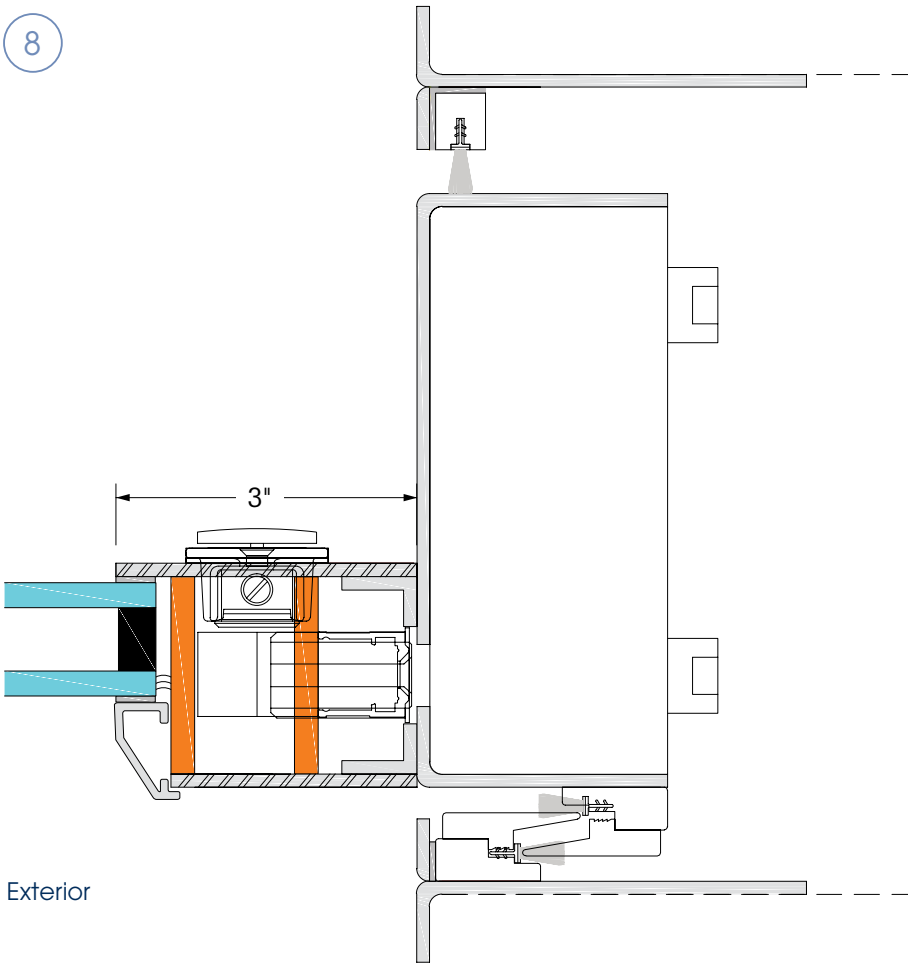
Flush Track with Drain System – Multi-slide

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

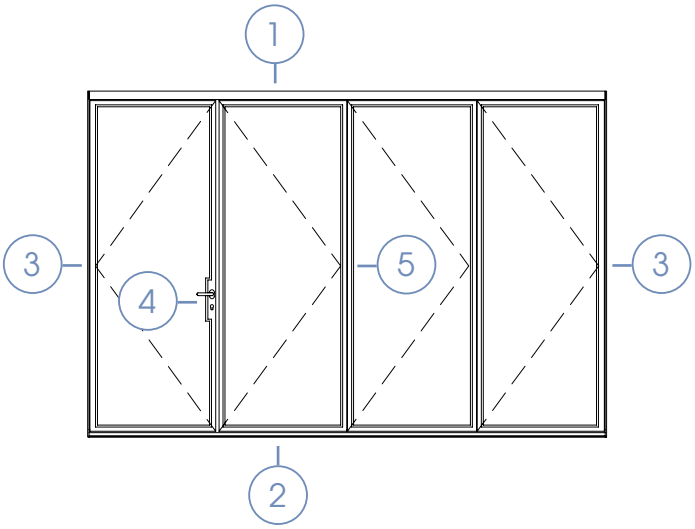
POCKET DETAIL



THERMALSTEEL

MULTI-FOLD DOOR SYSTEMS

ELEVATION

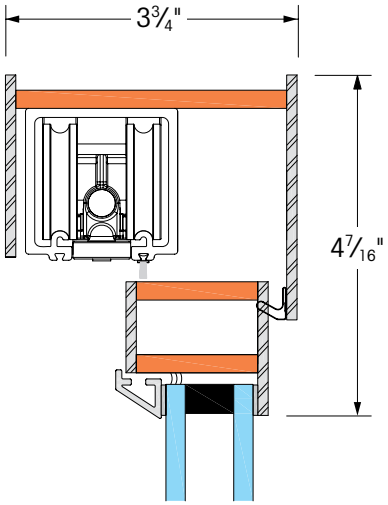


100 SYSTEM DETAILS

FEATURES:

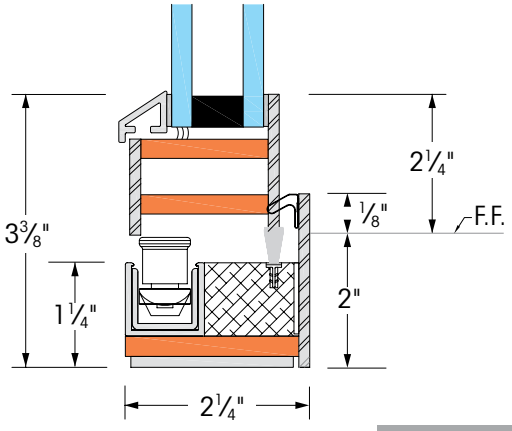
- Door panel sizes up to: 39" width, 120" height, not to exceed 220 lbs
- Door thickness 1 13/16"
- Available from 3 to 8 door configurations

1



Exterior

2



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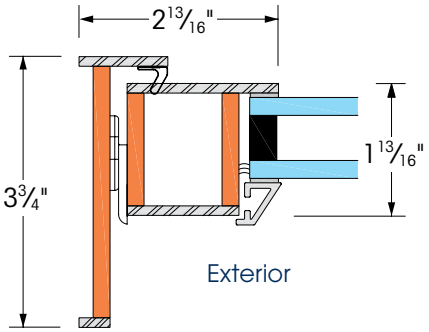

Exterior

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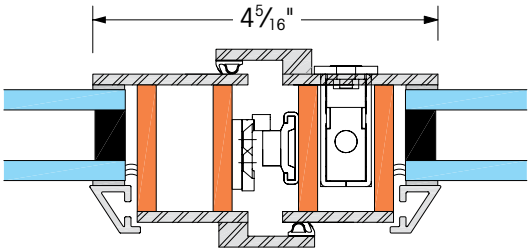

Exterior

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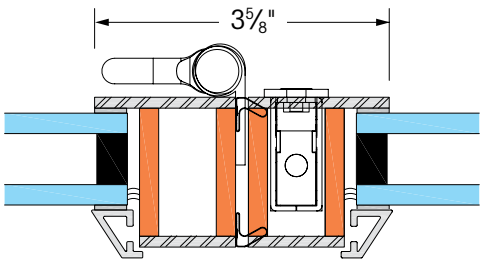
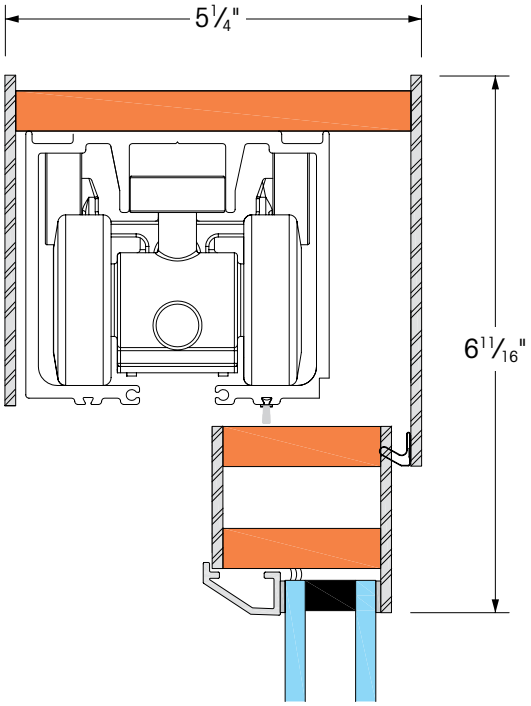


Exterior

FEATURES:

- Door panel sizes up to: 42" width, 144" height, not to exceed 330 lbs
- Door thickness 2¼"
- Available from 3 to 8 door configurations

1



Exterior

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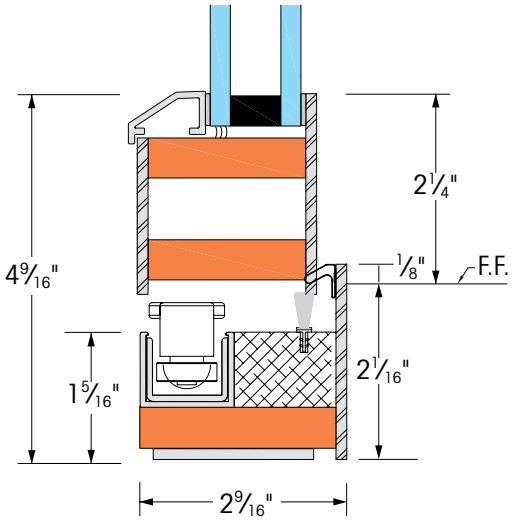

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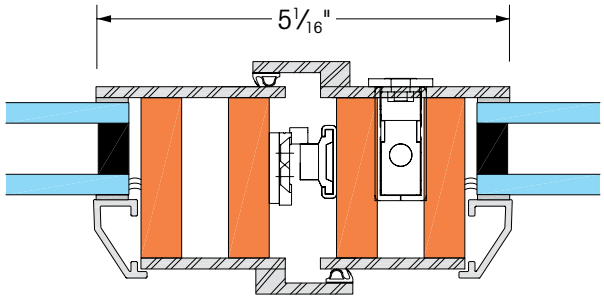

Exterior

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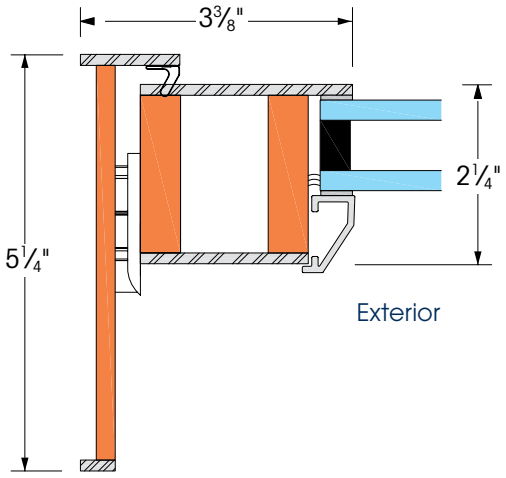
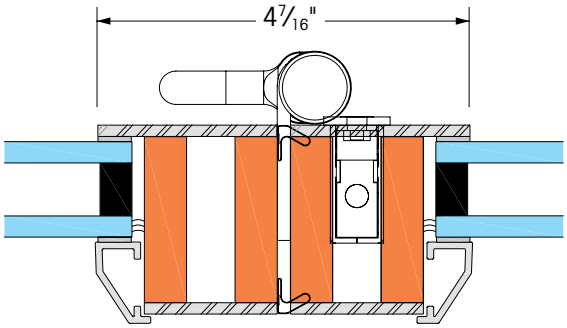
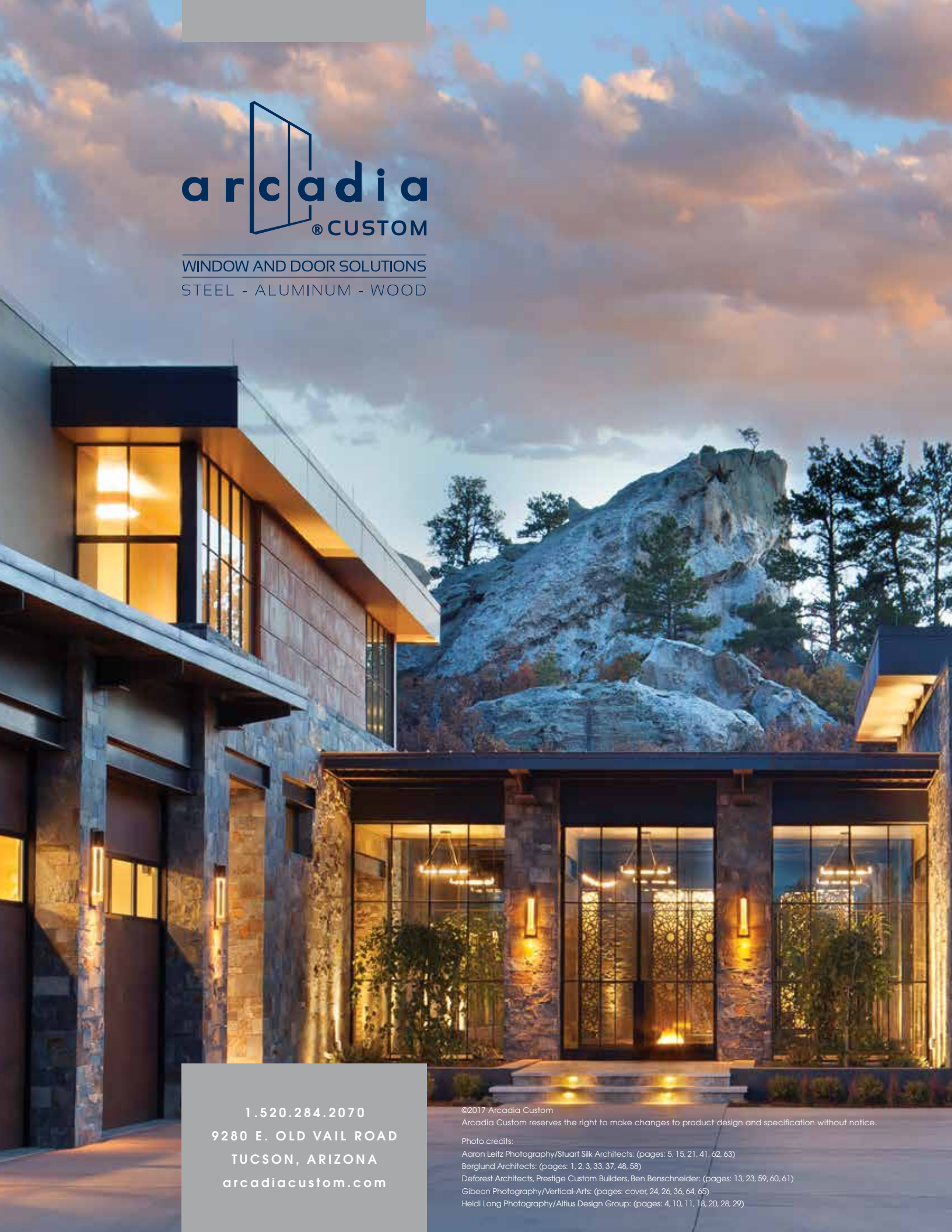


Exterior

5



Exterior



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