



VistaLuxe® Collection



We're for the visionaries.®

My Vision:
Dissolve the boundary
between
home and horizon.

Amy Janof, AIA
Janof Architecture | Seattle, WA



Our Vision:
Create a home
where architecture
is distilled
to its very essence.

**Gabriel Keller, Assoc. AIA
and Lars Peterssen, AIA**
Peterssen/Keller Architecture | Minneapolis, MN



My Vision:
Invite beautiful views
from
sunrise to sunset.

Brad Tomecek, AIA, LEED BD+C
Tomecek Studio Architecture | Denver, CO



My Vision:
Create a dynamic structure
that incorporates
optimal views.

Jason Weil, Architect
Retro+Fit Design, LLC | Asheville, NC



My Vision:
Create a home
simultaneously separate from
and intertwined with
nature.

Gregory Wiedemann, AIA
Wiedemann Architects, LLC | Bethesda, MD





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VistaLuxe® Collection

Kolbe's VistaLuxe Collection was collaboratively developed with architects for designs that utilize clean lines and multiple units to create large expanses of glass. Perfect for contemporary projects requiring a streamlined look, VistaLuxe combines function with style to create openings as unique as your vision.

The VistaLuxe Collection provides:

- A reduced visible frame for an increased viewing area
- An industry-leading frame-to-daylight-opening ratio
- Enhanced energy efficiency and thermal performance
- Precise vertical and horizontal alignment on mullioned units, with glass in the same plane
- Consistent profiles with square interiors and exteriors
- An alternative to steel, or an option used in conjunction with steel products
- An extruded aluminum exterior with wood interior
- Custom solutions and complementary products





Photo courtesy of Christopher Simmonds Architect

VistaLuxe Collection Exterior Styles

To perfectly match your architectural design and performance requirements, products in the VistaLuxe Collection are available in two different profile styles: Flush and Accent. Choose the style that best complements the design of your project's aesthetic. Then, customize your windows and doors with color, wood species, glass, and other options.

Flush

Flush style VistaLuxe windows and doors are created with the sash in the same plane as the frame. For an extremely streamlined look, choose Flush style VistaLuxe products. Available with either double or triple pane glass.



Accent

To add depth and visual interest to your project, choose Accent style VistaLuxe products. The sash is recessed from the frame to create a shadow line, while still keeping glass in the same plane across other Accent style VistaLuxe windows and doors. Available with either double or triple pane glass.



Casements & Awnings

VistaLuxe Collection casements and awnings are perfect for configurations that take advantage of natural ventilation. The reduced visible frame allows a greater daylight opening and increased viewing area – an 82% vision area on a 3-foot-by-6-foot casement. The optional Evo operator elevates the streamlined aesthetic, allowing the hardware to remain discreet and maintaining the clean lines of the product.





© Anice Hoachlander

Standard Features

- ▶ Pine interiors, ready for a variety of finishes
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, insulating LoE²-270 glass
- ▶ Accessory grooves are integral to the extruded frames so units can easily be milled together
- ▶ Interior insect screens with Rustic aluminum frames and BetterVue[®] fiberglass mesh
- ▶ Stainless steel exterior operator parts
- ▶ Matte Black folding handle
- ▶ Integral nailing fin with additional head drip caps

Options* (*custom options are also available*)

- ▶ Insect screens with White, Beige, Coal Black, Sand, Dark Bronze anodized, or Clear anodized frames
- ▶ Wood-wrapped insect screen frames with UltraVue[®] fiberglass screen mesh, aluminum mesh or charcoal-colored aluminum mesh
- ▶ Flat casing and stucco return kits for field application
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Steel stiffeners with matching mull covers
- ▶ Floor sill available in Dark Bronze anodized or Clear anodized to match or mull with inswing doors or outswing doors
- ▶ Window Opening Control Device available on casements
- ▶ Motorized operator available on awnings
- ▶ Evo operator
- ▶ Extension jambs (*up to 12" applied*)
- ▶ Galvanized steel installation clips

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Hardware

Folding Hardware

As standard, Matte Black folding handles are applied to VistaLuxe Collection casements and awnings. Optional Satin Nickel and Rustic Umber finishes are also available. Multi-point lock handle finishes will match the finish of operator handle covers.

Evo Operator*

Kolbe's proprietary Evo operator elevates contemporary design and functional operation with a slim, streamlined style designed to complement the clean lines of VistaLuxe casements and awnings. These handle sets feature a square, flat profile and are available in Matte Black, Satin Nickel or White. Simply push the button and slide the lever to open your casement or awning – no cranking required.

*Not intended for egress situations. Cannot be used with all glazing options. Contact your dealer for more information.

Folding Handle
(shown in Matte Black)



Folding Handle
(shown in Satin Nickel)



Evo Operator
(shown in Matte Black)



Evo Operator
(shown in Satin Nickel)



Direct Sets

VistaLuxe Collection direct sets are perfectly designed to complement other VistaLuxe windows and doors. Create a custom configuration by mulling direct sets to operating windows and doors – precise horizontal and vertical alignment across VistaLuxe products ensures your project will flow together seamlessly.





Standard Features

- ▶ Pine interiors, ready for a variety of finishes
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating *(meets performance requirements of AAMA 2605)*
- ▶ Energy efficient, insulating LoE²-270 glass
- ▶ Accessory grooves are integral to the extruded frames so units can easily be mulled together
- ▶ Glazing is direct set to the interior
- ▶ Integral nailing fin with additional head drip caps

Options* *(custom options are also available)*

- ▶ Flat casing and stucco return kits for field application
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Steel stiffeners with matching mull covers
- ▶ Floor sill available in Dark Bronze anodized or Clear anodized to match or mull with inswing doors or outswing doors
- ▶ Extension jambs *(up to 12" applied; over 12" shipped loose for field application)*
- ▶ Galvanized steel installation clips

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.



Corner Direct Sets

Direct set corner windows offer a reduced visible frame for increased viewing areas, while maintaining clean, eye-catching lines. Corner units are available factory-glazed with a post, or open for field-glazing with or without a post.





Standard Features

- ▶ Pine interiors, ready for a variety of finishes
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, insulating LoE²-270 glass
- ▶ Accessory grooves are integral to the extruded frames so units can easily be mulled together
- ▶ Glazing is direct set to the interior
- ▶ Nailing fin with additional head drip caps

Options* (*custom options are also available*)

- ▶ Flat casing and stucco return kits for field application
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Units available as a kit for easier handling (*requires field assembly and glazing; units too large to ship will automatically be sent as a kit*)
- ▶ Extension jambs (*up to 12" applied on factory-assembled units; shipped loose over 12" and for corner kits*)
- ▶ Galvanized steel installation clips
- ▶ Factory-assembled units with a corner post available in angles of 90° and 135°
- ▶ Factory-assembled units without a corner post available in any angle from 90° to 170°, in whole degree increments (*requires field glazing*)

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.



Geometric Direct Sets

Geometric direct set windows may be installed as stand-alone units or over other windows and doors. VistaLuxe Collection geometric direct sets are available in the same exterior styles as other VistaLuxe Collection products, to help seamlessly create large window walls.





Standard Features

- ▶ Pine interiors, ready for a variety of finishes
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, insulating LoE²-270 glass
- ▶ Accessory grooves are integral to the extruded frames so units can easily be milled together
- ▶ Glazing is direct set to the interior
- ▶ Nailing fin with additional head drip caps

Options* (*custom options are also available*)

- ▶ Flat casing and stucco return kits for field application
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Steel stiffeners with matching mull covers
- ▶ Floor sill available in Dark Bronze anodized or Clear anodized to match or mull with inswing or outswing doors
- ▶ Extension jambs (*up to 12" applied, over 12" shipped loose for field application*)
- ▶ Galvanized steel installation clips

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.



Swinging Doors

Doors can be a defining feature of a project – VistaLuxe Collection swinging doors are designed with slim stiles and rails to maximize viewing areas and invite the light into your space. Combine with other VistaLuxe products into a unique design while preserving symmetry and sightlines.





Photo courtesy of Christopher Simmonds Architect

Standard Features

- ▶ Panel thicknesses are defaulted by swing choice: inswing 1-3/4" or 2-1/8"; outswing 2-1/8"
- ▶ 3" wide stiles and top rail; 5" bottom rail
- ▶ LVL stiles for superior strength and stability
- ▶ Pine interiors, ready for a variety of finishes
- ▶ Exterior wood parts are treated
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, tempered LoE²-270 glass
- ▶ Accessory grooves are integral to the extruded frames so units can easily be mulled together
- ▶ Low-profile, Dark Bronze anodized aluminum exterior sill with an Oak interior threshold
- ▶ Nailing fin with additional head drip caps
- ▶ Matte Black Dallas handle set
- ▶ Adjustable Black hinges
- ▶ Weather-resistant, multi-point stainless steel operator parts and hardware channels
- ▶ Black weatherstripping

NOTE: All measurements are nominal.

Options* (*custom options are also available*)

- ▶ Panels available with 10" bottom rail and/or 5" stiles and top rail
- ▶ Electronic multi-point door lock for entrance doors with 5" wide stiles (*not available on double or French doors*)
- ▶ Multiple sill options, including Clear anodized aluminum, thermal or non-thermal ADA-compliant sills
- ▶ Flat casing and stucco return kits for field application
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Steel stiffeners with matching mull covers
- ▶ Extension jambs in a variety of sizes
- ▶ Galvanized steel installation clips
- ▶ Beige or Rustic weatherstripping
- ▶ 3" cross rail
- ▶ Flat panel configurations

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Hardware

Dallas Handles

As standard, Matte Black Dallas style handles are applied to VistaLuxe Collection inswing and outswing doors. Optional Satin Nickel and Rustic Umber finishes are also available. Hinge color will coordinate with handle color.

Baldwin Handles

Also available, through our partnership with Baldwin® Hardware, are Santa Monica and Lakeshore handle sets in Matte Black, Satin Nickel or Rustic Umber.

Dallas Handle
(shown in Rustic Umber)



Dallas Handle
(shown in Satin Nickel)



Santa Monica Handle
(shown in Matte Black)



Lakeshore Handle
(shown in Satin Nickel)

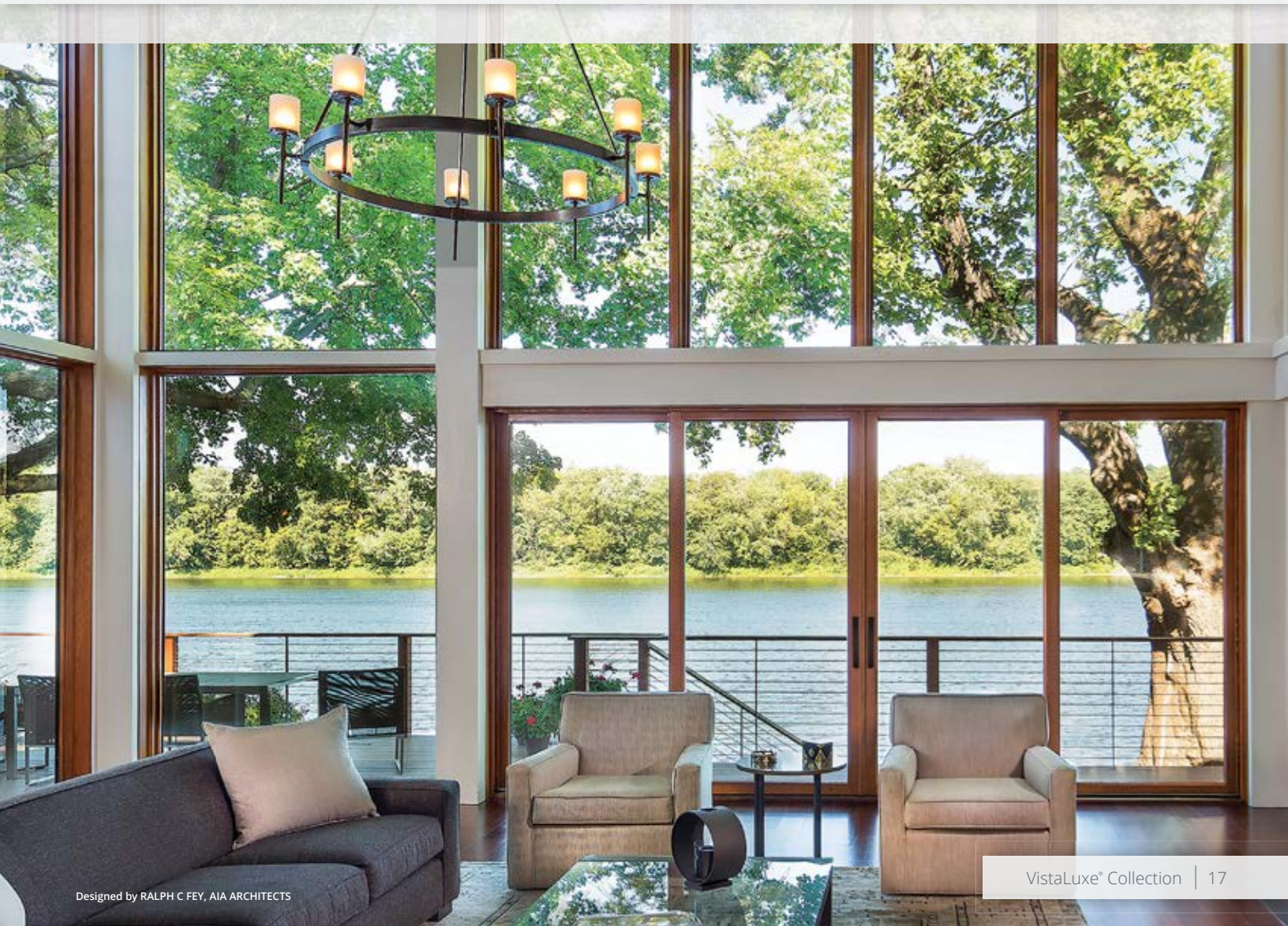






VistaLuxe Complementary Products

Numerous VistaLuxe Complementary products are available to help complete a VistaLuxe project. Because the details make the difference, most VistaLuxe complementary windows and doors have square interior and exterior sticking. And, with all of the customization options for which Kolbe is known, these products offer exceptional design flexibility to coordinate with any design.



Sliding Windows

Complementary sliding windows provide solutions for larger openings while offering solid performance ratings. The elevated design incorporates a sleek, extruded aluminum exterior with square sticking, a refined wood interior with square glazing bead, and tilt-in sash for easy cleaning. Single, double, triple, and quad configurations are available, including center-opening quad units that are perfect for pass-through service.





Standard Features

- ▶ Constructed of pine, with pine interior stops and wood mull casings on muller units
- ▶ Exterior wood parts are treated
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, insulating LoE²-270 glass
- ▶ Low profile, fiberglass sill with hidden weep system
- ▶ Tilt-in sash for easy cleaning (*this feature is not offered on units with sash wider than 2'6" and taller than 4'0"*)
- ▶ Matte Black positive action lock
- ▶ Center interlock and stiles have matching sightlines
- ▶ Nailing fin with head drip caps

NOTE: All measurements are nominal.

Options* (*custom options are also available*)

- ▶ Full or half insect screen with aluminum frame and options for BetterVue or UltraVue fiberglass screen mesh or aluminum screen mesh; frame to match the exterior color of the unit
- ▶ Retractable screen**
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Extension jambs (*up to 12" applied, over 12" shipped loose for field application*)
- ▶ Galvanized steel installation clips

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

** Available only on single, triple and quad units.

Operational Configurations

Single Sliding Window

- ▶ Active sash (interior sash) can be either left or right
- ▶ Stationary sash placed on the outside track

Double Sliding Window

- ▶ Primary active sash (interior sash) can be either left or right

Triple Sliding Window

- ▶ Operation = AFA (Active-Fixed-Active)
- ▶ Stationary sash placed on the outside track

Quad Sliding Window

- ▶ Operation = AFFA or FAAF (Active-Fixed-Fixed-Active or Fixed-Active-Active-Fixed)
- ▶ Stationary sash placed on the outside track

Hardware

Sash Lock

The positive action sash lock automatically locks when the window is closed, providing convenient security. Available finishes include Matte Black or Satin Nickel.

Finger Pulls

Finger pulls placed on the active sash assist in side-to-side sliding operation, and are available in Matte Black or Satin Nickel.

Sash Lock
(shown in Matte Black)



Sash Lock
(shown in Satin Nickel)



Finger Pull
(shown in Satin Nickel)



Folding Windows

Complementary folding windows offer expansive openings – perfect for entertaining indoors and out. With up to eight panels per side, folding windows are highly customizable with a number of different configurations available. Three-inch stiles and square interiors and exteriors provide an increased glass area. Add a pleated retractable screen to keep insects out and enjoy the view of any locale.





© Karl Neumann Photography



Standard Features

- ▶ 6-9/16" minimum jamb width
- ▶ 3" wide stiles and rails
- ▶ Frame setup up to 177" wide x 77-1/8" tall; all others knocked down
- ▶ Constructed of pine with pine interior stops
- ▶ Exterior wood parts are treated
- ▶ Extruded aluminum exterior finished with 70% PVDF fluoropolymer coating (meets performance requirements of AAMA 2605)

NOTE: All measurements are nominal.

- ▶ Energy efficient, insulating LoE²-270 glass
- ▶ Bronze weep sill with Oak interior threshold
- ▶ Grooved guide rollers with adjustable, ball-bearing wheels carry the folding panels
- ▶ Multi-point mortise latch with Dallas handle set on configurations with an access panel
- ▶ Face-mounted flush bolt locking hardware on folding panels
- ▶ Nailing fins with head drip caps

Options* (custom options are also available)

- ▶ Stile and top rail options: 3" or 5"
- ▶ Bottom rail options: 5" or 10"
- ▶ 2-1/4" thick panels
- ▶ Recessed floor track sill, weep or non-weep in a Bronze anodized finish
- ▶ Weep sill in a Clear anodized finish
- ▶ Magnetic latch or panel stays to assist in keeping windows stationary while open
- ▶ Single point hardware for access panel

- ▶ Concealed shootbolt locking hardware with Uno or Aria handle sets
- ▶ Black pleated retractable screens (available on units with the frame setup)
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Extension jambs in a wide variety of sizes (shipped loose for field application if over 12")
- ▶ Galvanized steel installation clips

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Hardware

Standard on the folding window is face-mounted flush bolt locking hardware. A matching finger pull is available in Matte Black and Satin Nickel, as well as matching hinge handles to help operate the panels. For a cleaner look, concealed shootbolt locking hardware is available with Uno or Aria handle sets in Matte Black or Dull/Brushed Chrome. Configurations with a swinging access panel include a Dallas handle set or Baldwin® Hardware's Santa Monica or Lakeshore handle set in Matte Black or Satin Nickel. To assist in keeping panels stationary while open, magnetic latches or panel stays are available.

Concealed Shoot Bolt
with Uno or Aria Handles



Flush Bolt



Hinge Handle



Magnetic Latch



Panel Stay



Uno
(shown in
Matte Black)



Aria
(shown in Dull/Brushed Chrome)



Dallas Handle
(shown in Matte Black)



Dallas Handle
(shown in Satin Nickel)



Santa Monica Handle
(shown in Matte Black)



Lakeshore Handle
(shown in Satin Nickel)



Folding Doors

Add architectural interest and merge outdoor and indoor spaces by using complementary folding doors. Choose from a variety of operating styles: doors that swing out, fold to one side, or split and fold to either side. Large expanses of glass are the perfect addition to a project that uses VistaLuxe windows and doors – narrow 3" stiles and square interiors and exteriors provide even greater daylight openings.





Standard Features

- ▶ 6-9/16" minimum jamb width
- ▶ 3" wide stiles and top rail; 5" bottom rail
- ▶ Frame setup up to 177" wide x 106" tall; all others knocked down
- ▶ Constructed of pine with pine interior stops
- ▶ Exterior wood parts are treated
- ▶ Extruded aluminum exterior finished with 70% PVDF fluoropolymer coating (meets performance requirements of AAMA 2605)

NOTE: All measurements are nominal.

- ▶ Energy efficient, tempered LoE²-270 glass
- ▶ Bronze weep sill with Oak interior threshold
- ▶ Grooved guide rollers with adjustable, ball-bearing wheels carry the folding panels
- ▶ Multi-point mortise latch with Dallas handle set on configurations with an access panel
- ▶ Face-mounted flush bolt locking hardware on folding panels
- ▶ Nailing fins with head drip caps

Options* (custom options are also available)

- ▶ Panels available with 10" bottom rail and/or 5" stiles and top rail
- ▶ 2-1/4" thick panels
- ▶ Recessed floor track sill, weep or non-weep in a Bronze anodized finish
- ▶ Weep sill in a Clear anodized finish
- ▶ Magnetic latch or panel stays to assist in keeping doors stationary while open
- ▶ Single point hardware for access door
- ▶ Concealed shootbolt locking hardware with Uno or Aria handle sets
- ▶ Black pleated sliding screens available up to 177" wide x 102" tall (frame size)
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Extension jambs in a wide variety of sizes (shipped loose for field application if over 12")
- ▶ Galvanized steel installation clips

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Hardware

Standard on the folding door is face-mounted flush bolt locking hardware. A matching finger pull is available in Matte Black and Satin Nickel, as well as matching hinge handles to help operate the panels. For a cleaner look, concealed shootbolt locking hardware is available with Uno or Aria handle sets in Matte Black or Dull/Brushed Chrome. Configurations with a swinging access panel include a Dallas handle set or Baldwin® Hardware's Santa Monica or Lakeshore handle set in Matte Black or Satin Nickel. To assist in keeping panels stationary while open, magnetic latches or panel stays are available.

Concealed Shoot Bolt
with Uno or Aria Handles



Flush Bolt



Hinge Handle



Magnetic Latch



Panel Stay



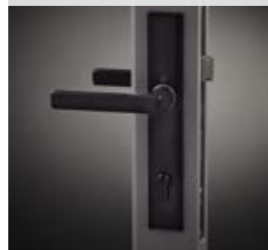
Uno
(shown in
Matte Black)



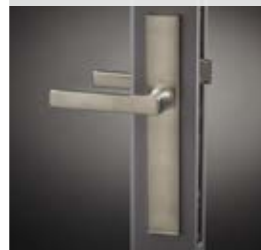
Aria
(shown in Dull/Brushed Chrome)



Dallas Handle
(shown in Matte Black)



Dallas Handle
(shown in Satin Nickel)



Santa Monica Handle
(shown in Matte Black)



Lakeshore Handle
(shown in Satin Nickel)



Sliding Patio Doors

Complementary sliding patio doors are a space-saving way to connect your indoor and outdoor living spaces. VistaLuxe sliding patio doors have 3" stiles and top rail and a 5" bottom rail, so you can embrace maximum views. 2-panel, 3-panel, and 4-panel configurations are available, with clean, square interiors and exteriors.





Photo courtesy of Caskey & Caskey of Shorewood Realtors



© Anice Hoachlander

Standard Features

- ▶ 3" wide stiles and top rail; 5" bottom rail
- ▶ Constructed of pine, with pine interior stops
- ▶ Exterior wood parts are treated
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, tempered LoE²-270 glass
- ▶ Accessory grooves are integral to the extruded frames so units can easily be milled together
- ▶ Tandem rollers with adjustable, ball-bearing wheels carry the sliding panel
- ▶ Frame set up (*units up to 8' tall*)
- ▶ Screens with BetterVue® fiberglass mesh and extruded aluminum frames
- ▶ One-piece, pultruded fiberglass sill with continuous aluminum sill nosing and fiberglass sill filler with an Oak interior threshold
- ▶ Matte Black Madison handle set with dual-point lock
- ▶ Nailing fin with head drip caps
- ▶ Corrosion-resistant stainless steel hardware
- ▶ Black weatherstripping and interlock

NOTE: All measurements are nominal.

Options* (*custom options are also available*)

- ▶ 2-panel, 3-panel and 4-panel configurations, including a 3-wide unit in an Active-Fixed-Active configuration
- ▶ 2-1/4" thick panel
- ▶ Panels available with 10" bottom rail and/or 5" stiles and top rail
- ▶ Accessory groove fillers and frame expanders for field application
- ▶ Universal design aluminum sill ramp kits
- ▶ Secondary security lock (*not available on all 2-1/4" panels*)
- ▶ Panel automation for ease of use
- ▶ Narrow flush pull handle
- ▶ Dallas handle set
- ▶ "Ultra" sliding screen with extruded aluminum screen frames and UltraVue fiberglass mesh or aluminum mesh
- ▶ Extension jambs in a wide variety of sizes (*shipped loose for field application*)
- ▶ Galvanized steel installation clips
- ▶ Beige weatherstripping and interlock

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Hardware

Madison Handles

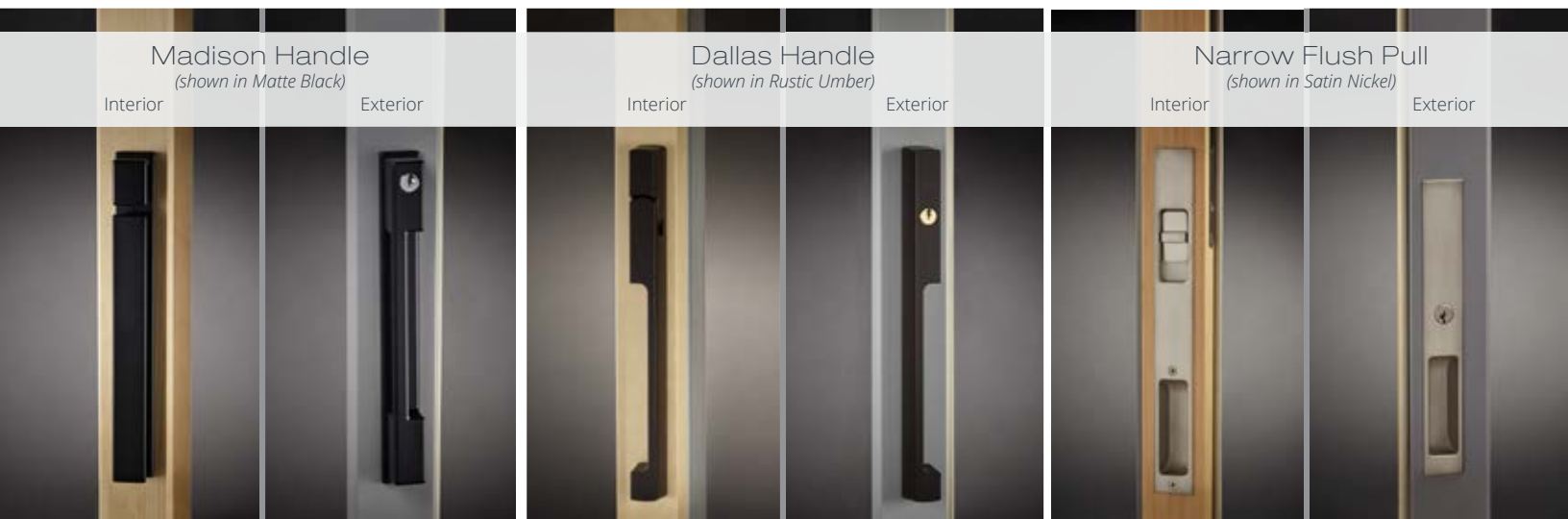
The refined Madison handle set was developed with a sleek, slim profile, and a clean, contemporary style. Available in Matte Black, Satin Nickel PVD or Rustic Umber, they are available with or without a key cylinder.

Dallas Handles

Available in Matte Black, Silver or Rustic Umber, Dallas handle sets have a multi-point lock and an optional key cylinder.

Narrow Flush Pull Handles

With dual-point locks and optional key cylinder, these handles are available in Matte Black, Satin Nickel or Rustic Umber.



Multi-Slide Doors

Complementary multi-slide doors upgrade standard patio door openings by expanding rooms to merge the outdoors with the indoors. VistaLuxe complementary multi-slide doors have square interior and exterior sticking, plus various stile, rail, and panel thickness options for exceptional design flexibility to match your VistaLuxe project. Configuration options include stacking, pocketing, and custom corner units.





Photo courtesy of Christopher Simmonds Architect

Standard Features

- ▶ Jamb depth is dependent on the number of panels used; wood interior jamb extension species to match interior of panels
- ▶ 3" wide stiles and top rail; 5" bottom rail
- ▶ Frame shipped knocked down, prepped for assembly
- ▶ Frame is constructed of Dark Bronze anodized aluminum with pine interior stops
- ▶ Exterior wood parts are treated
- ▶ Extruded aluminum exterior finished with a 70% PVDF fluoropolymer coating (*meets performance requirements of AAMA 2605*)
- ▶ Energy efficient, tempered LoE²-270 glass
- ▶ Glazed to the interior with square wood glazing beads
- ▶ Panel interlock is attached to and is a part of the frame for pocketing systems
- ▶ Extruded aluminum filler to cover head track and side jambs
- ▶ Thermally broken sill and frame
- ▶ Continuous full-width sill (*sill can be set into the floor system for low profile use*)
- ▶ Bottom rolling system with stainless steel wheels
- ▶ Dark Bronze anodized weep sill with stainless steel roller caps (*sill is prepped for water drainage and requires the use of a sill pan as standard*)
- ▶ Matte Black Madison handle set with dual-point lock
- ▶ Folding aluminum nailing fin applied

NOTE: All measurements are nominal.

Options* (*custom options are also available*)

- ▶ Panels available with 10" bottom rail and/or 5" stiles and top rail
- ▶ 2-1/4" thick panels
- ▶ Edge pull available on innermost panel of pocketing systems for ease of operation
- ▶ Panel automation for ease of use
- ▶ Narrow flush pull handle
- ▶ Dallas handle set
- ▶ Black pleated sliding screen
- ▶ Extension jambs in a wide variety of sizes (*shipped loose for field application*)

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Operational Configurations

- ▶ Stacking: one way or bi-parting
- ▶ Pocketing: one way or bi-parting
- ▶ 90 degree corner
- ▶ Custom degree corners

Hardware

Madison Handles

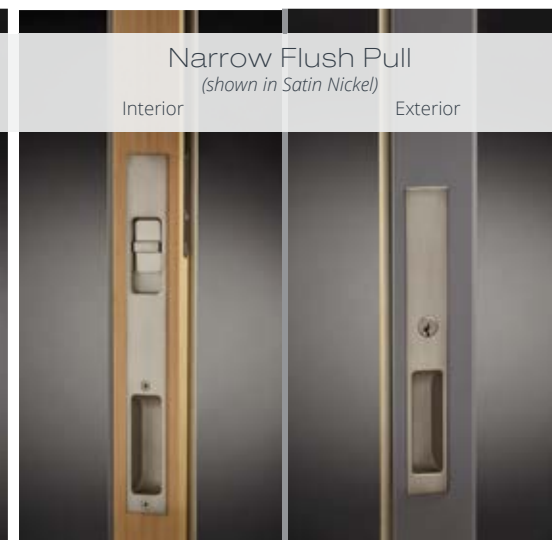
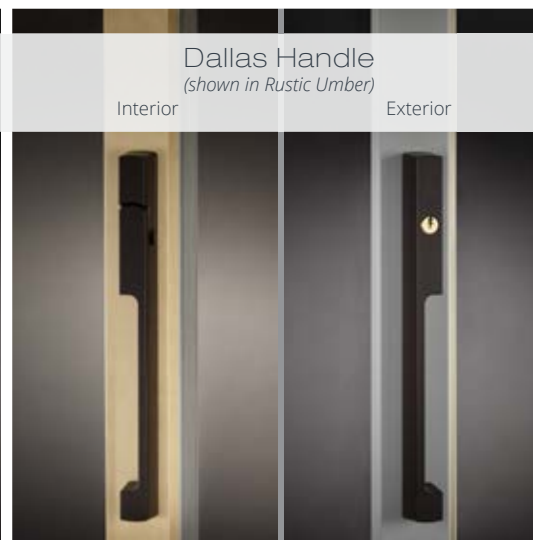
The refined Madison handle set was developed with a sleek, slim profile, and a clean, contemporary style. Available in Matte Black, Satin Nickel PVD or Rustic Umber, they are available with or without a key cylinder.

Dallas Handles

Available in Matte Black, Silver or Rustic Umber, Dallas handle sets have a multi-point lock and an optional key cylinder.

Narrow Flush Pull Handles

With dual-point locks and optional key cylinder, these handles are available in Matte Black, Satin Nickel or Rustic Umber.



TerraSpan® Lift & Slide Doors

Because of their large expanses of glass, TerraSpan lift & slide doors are an ideal complement to the VistaLuxe Collection. TerraSpan lift & slide doors stack or pocket up to ten door panels for up to 60 feet of panoramic views. These doors offer more than 900 operational configurations, including corner units, with panels that can either recess into a wall pocket or stack within the opening.





Standard Features

- ▶ Thermally broken fiberglass core frame and panels, finished on the interior with a solid wood cover
- ▶ Panels can pocket into a wall or stack together; 90° corner units are also available*
- ▶ Up to ten panels in a system
- ▶ 4-5/8" stiles and rails provide a large glass area
- ▶ Glazed to the interior with a square wood cover
- ▶ Extruded aluminum exterior with beveled sticking is finished with a 70% PVDF fluoropolymer coating *(meets performance requirements of AAMA 2605)*
- ▶ Energy efficient, tempered LoE²-270 glass
- ▶ Black anodized flush mount weep sill is thermally broken with 1/2" roller cap height
- ▶ Stainless steel multi-point locking hardware channels provide corrosion resistance and increased security
- ▶ Wheel sets are constructed of 300 series stainless steel *(drive bars, wheels, hubs and shafts, rivets, drive pins and link rods)* to provide superior corrosion resistance
- ▶ LS100 removable handle set
- ▶ Pocket cover for all pocket doors

NOTE: All measurements are nominal.

* Curved units are also available; contact your Kolbe dealer for further information and to ask about the availability of other options not shown in this catalog.

Options* *(custom options are also available)*

- ▶ 12" bottom rail height for meeting ADA compliance
- ▶ Black anodized recessed sill (weep or non-weep) with 1/2" roller cap height
- ▶ Interior flush sill nosing extensions
- ▶ Flush mount non-weep sill
- ▶ Pre-installed jamb jacks with color matched screw covers
- ▶ High performance or impact performance modifications
- ▶ Panel automation for ease of use
- ▶ Phantom® motorized executive insect screen, Genius® insect screen, Centor® insect screen or Black pleated accordion insect screen *(field applied)*

NOTE: All measurements are nominal.

* See pages 32-34 for wood species, interior & exterior finish, glass, and divided lite options available for all VistaLuxe Collection products.

Hardware

Standard on the TerraSpan is the interior LS100 removable handle set, which is available in Rustic Umber or Satin Nickel finishes. The LS300 is an optional handle, with a matching finger pull also available in Rustic Umber or Satin Nickel. Double fixed handles *(fixed handles on interior and exterior)* or single fixed handles *(on interior)* can be utilized in some designs.

180° Inset Handle

This unique pivoting handle has clean lines that complement contemporary design, and is required for each panel in a door system. With optional exterior pulls and interior lock covers, it is available in Matte Black, Rustic Umber or Silver.

LS100 Handle
(shown in Rustic Umber)



LS300 Handle
(shown in Satin Nickel)



LS300 Finger Pull
(shown in Satin Nickel)



180° Inset Handle *(shown in Rustic Umber)*
Recessed Operational







Options & Accessories

Craftsmanship and artistry are hallmarks of Kolbe products. We build innovative windows and doors with a wide array of options. But, don't let the standard options limit your imagination.

At Kolbe, we love a good challenge. We welcome projects that require special wood species, custom divided lite patterns, unique shapes, custom finish colors, unusual mulling configurations – you dream it, we'll build it. Our windows and doors are built to order, which allows you to choose the options that best fit with the design of your home and vision for your project. We offer many customizable options that blend beautifully with your home's décor.



Finish Options

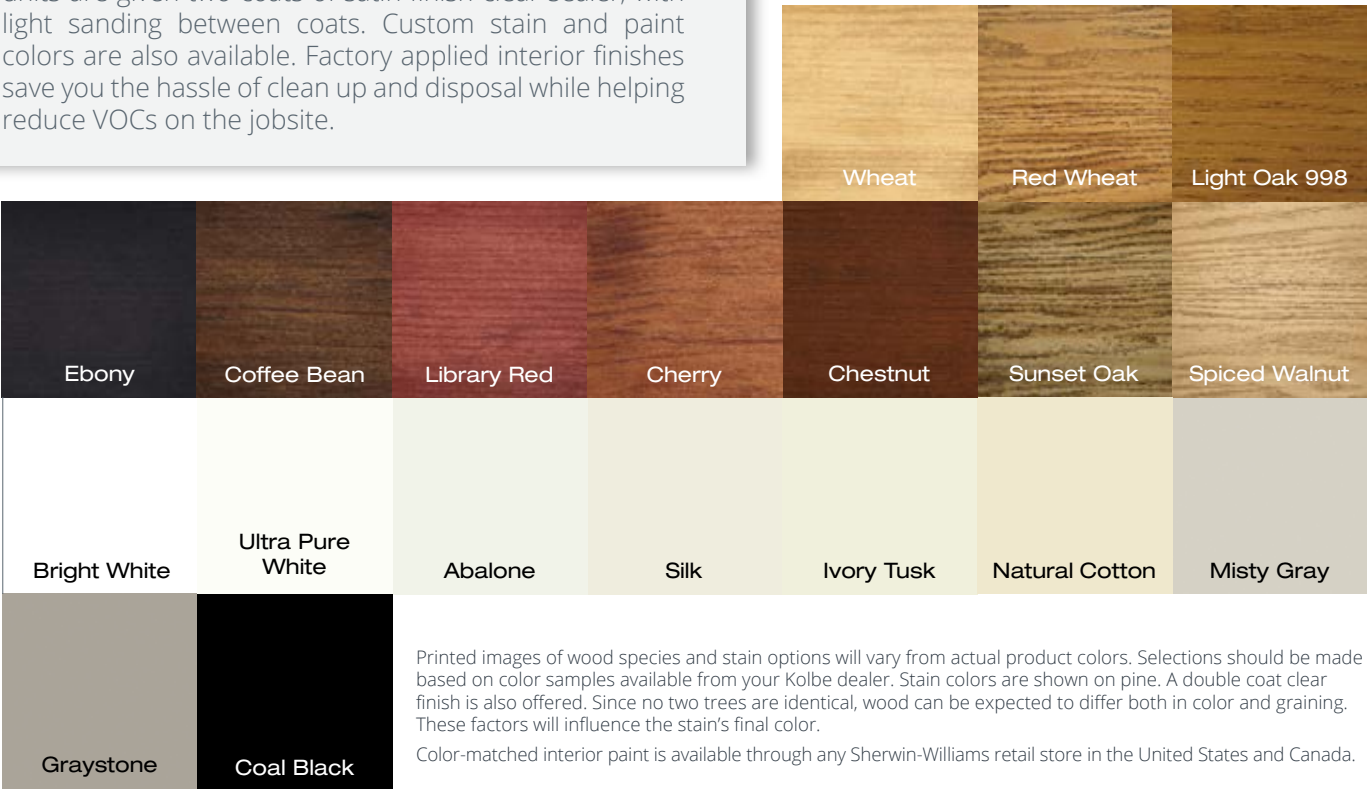
Interior Wood Species

In addition to the standard pine, VistaLuxe windows and doors can be constructed of other optional wood species that enhance their look. Pine and other wood species are sourced from managed forests. The Forest Stewardship Council® (FSC®)-certified wood species are also available for green building projects (FSC® license code FSC-C019541). Ask about the availability of additional wood species.



Interior Finish Options

For units that are ready to install upon delivery, VistaLuxe windows and doors can be prefinished on the interior with one of the water-based stains or paints shown. Stained units are given two coats of satin finish clear sealer, with light sanding between coats. Custom stain and paint colors are also available. Factory applied interior finishes save you the hassle of clean up and disposal while helping reduce VOCs on the jobsite.



Printed images of wood species and stain options will vary from actual product colors. Selections should be made based on color samples available from your Kolbe dealer. Stain colors are shown on pine. A double coat clear finish is also offered. Since no two trees are identical, wood can be expected to differ both in color and graining. These factors will influence the stain's final color. Color-matched interior paint is available through any Sherwin-Williams retail store in the United States and Canada.

Exterior Color Options

VistaLuxe products are finished with a 70% PVDF fluoropolymer coating, which is the best choice for durability and resistance to chemicals, abrasion, corrosion, and weathering. It carries up to a 30-year warranty, which proves Kolbe's commitment to providing the very best. In addition to the standard colors, custom colors can be specified, as can 4 anodized aluminum finishes and 4 mica fluoropolymer finishes.

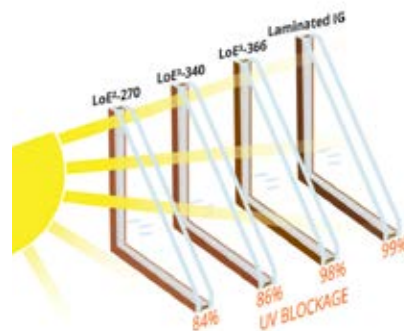


Printed images of exterior finishes may vary slightly from actual colors. Selections should be made based on actual color samples available from your Kolbe dealer.

There is a "color range" with anodized colors. That is, there is an acceptable "light" to "dark" color range that can be experienced on any job. According to AAMA 611-98 specifications, Section 8.3, the range may be up to 5 Delta E's. We can provide from our anodized vendor color samples of this color range if requested. The color range is due to numerous variables which include (but are not limited to) the shape of the parts, alloy variations and time in the anodizing process. This could mean that a sash part may appear slightly different in color than a frame part. This is/will be acceptable. Even the samples that may be provided may vary from the final product due to the variables. You must be aware of this as this will be considered acceptable.

Glass Options

Kolbe offers glazing options to provide optimum energy efficiency for the geographic region in which you live. As standard, most units use double-pane insulating LoE²-270 glass. LoE is a “smart” coating that reduces energy transfer through the insulating glass unit. LoE coated glass is also designed to reflect room-side heat back into the room during winter months. In summer, visible sunlight is allowed in while blocking 96% of the sun’s infrared heat energy. The result is reduced heating and cooling costs throughout the year. LoE coatings also reduce the potential for condensation, as well as provide protection against fading of furniture, fabrics and carpeting.



NOTE: Tested units include argon. The laminate has 1/4" inner pane. Based on Lawrence Berkeley Lab (LBL) Window 5.2 © 2003 analysis for classical UV transmission data.

NOTE: Not all glass is available on all products. Please contact your Kolbe dealer for product specifics.

LoE-180, LoE² 270, LoE³-340, LoE³-366, Neat and Preserve are trademarks of Cardinal IG.

Kolbe also offers the following glass options, as well as many specialized options.

LoE-180

When the weather turns frigid, LoE-180 glass is the perfect cold remedy. It keeps homes warmer and more comfortable by blocking heat loss to the outside and letting the sun’s heat stream in to increase solar heat gain.

LoE³-340

A tinted glass recommended for warm climates that achieves solar control over a wide range of the spectrum, while also helping to reduce glare.

LoE³-366

Offers an ideal balance of solar control and high visibility by blocking 95% of UV rays while maintaining the interior temperature.

ThermaPlus LoE

Helps to meet the strictest energy requirements; provides protection against heat loss and UV damage.

Preserve Film

A film that protects the glass surfaces from scratches during transit and construction, as well as reducing the time involved in job site clean-up.

Triple Pane

Provides a greater energy performing window that keeps indoor air warm and comfortable, prevents heat loss and lowers your heating bills. It is constructed with three panes of glass, Thermo-Edge spacer bars and is available with a variety of LoE coatings that best suit your needs.

Tinted, Colored or Patterned

Provides shading, privacy or visual interest.

Tempered

Standard in Kolbe doors to address safety concerns. Also available in window units to meet specific building codes.

Laminated

Benefits include safety, security, sound control and provides the ultimate in UV blockage.

Neat®

Harnesses the sun’s UV rays to loosen dirt so water can rinse it away, leaving windows virtually spotless. A special sputter-coating process makes the glass ultra smooth, so the water “sheets off” more readily than it would on uncoated glass, allowing you to spend less time cleaning.

Divided Lite Options

Further customize your VistaLuxe windows and doors with the addition of divided lites. Kolbe’s performance divided lite (PDL) glazing system gives the appearance of true divided lites without sacrificing energy efficiency. Extruded aluminum bars are adhered to the exterior and wood bars to the interior of the single lite of insulating glass. Spacer bars are installed within the insulating glass unit, helping create the illusion of true divided lites. Square profile VistaLuxe PDL bars are available in 5/8", 7/8", 1-1/8", 1-3/8", 1-3/4", 2-1/4" and 4-1/2" bar widths, with custom widths available.



Performance Options

Kolbe is proud to offer VistaLuxe Collection windows and doors that have been verified by the Passive House Institute US (PHIUS) to help you continue your commitment to high performance building principles. Our range of certified products means you can get American-made windows and doors for your entire passive house project from one manufacturer. Kolbe's PHIUS-certified products have the same attention-to-detail and superior quality for which Kolbe products are known, and are available with the multitude of options you've come to expect from Kolbe.



For more information on our PHIUS-verified products, visit www.kolbewindows.com/resources/phius.



Automation Options

Operate windows and doors with a touch of a button or flip of a switch. Kolbe integrates the latest technology advancements into select products for ease of use, security and convenience. This innovative functionality puts the control in the hands of the users through remotes, keypads, touch screens and other integration devices.

Electronic operators are available for awnings, sliding patio doors, multi-slide doors and TerraSpan lift & slide doors. Adjustable opening and closing speeds ease movement of heavy door panels and multiple units, and help operate hard-to-reach windows.



Professional Tools

Kolbe offers a number of tools to help building professionals provide clients with realistic visuals of their project. VistaLuxe Collection 3D models offer great design flexibility for design professionals who prefer to work in three dimensions. These models provide the ability to view products from different perspectives, incorporate options, and customize models specific to projects.



Courtesy of Timothy Cox, AIA

To download VistaLuxe Revit® and SketchUp™ models, visit:

- ▶ www.kolbewindows.com/architect-library
- ▶ www.CADdetails.com
- ▶ www.3dwarehouse.sketchup.com

Also available at www.kolbewindows.com:

- ▶ Cross section drawings
- ▶ Available sizes
- ▶ Installation instructions
- ▶ Performance data
- ▶ Thermal performance information
- ▶ Mulling limitations
- ▶ Product and installation videos

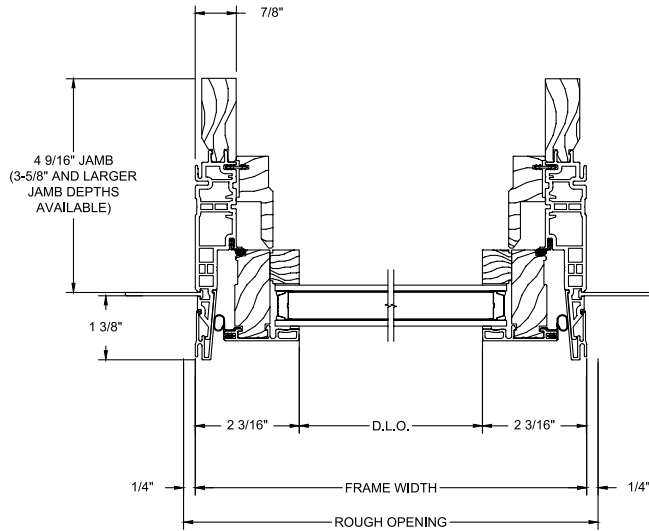


Courtesy of Janvin Lowe

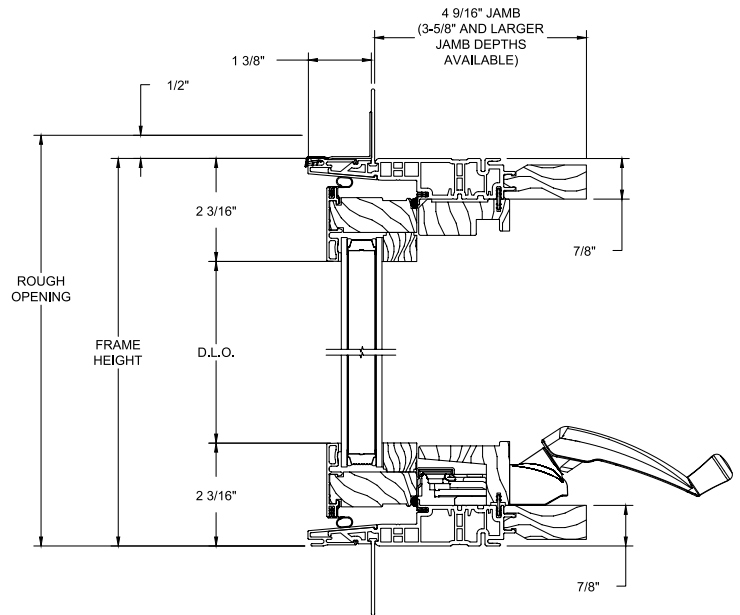
Casements & Awnings Cross Section Drawings

Accent Style Exterior

Horizontal Section

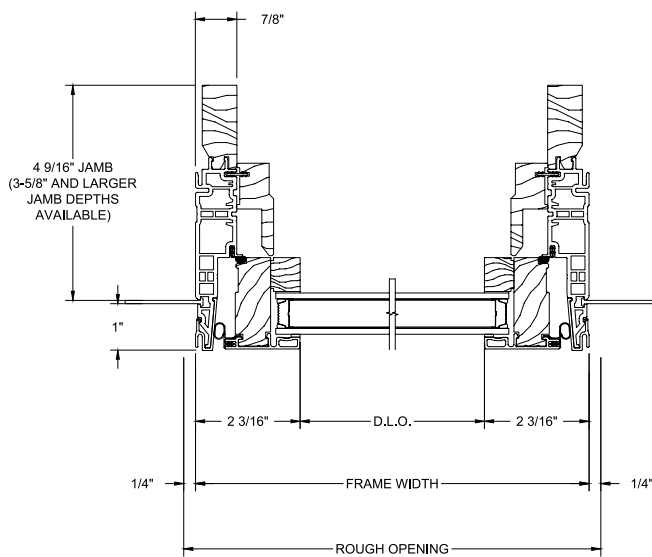


Vertical Section

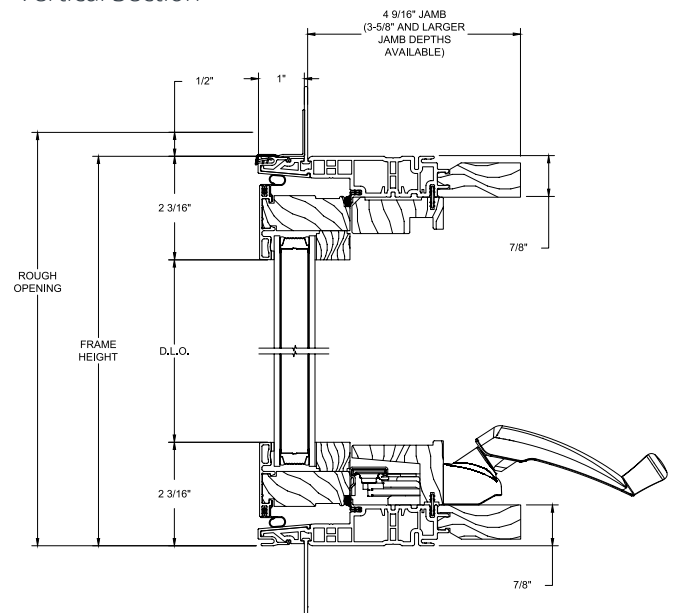


Flush Style Exterior

Horizontal Section



Vertical Section



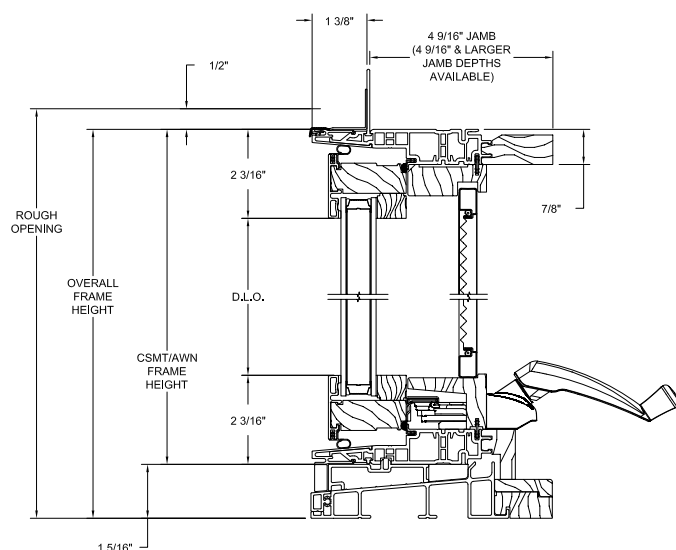
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Casements & Awnings Cross Section Drawings

Casement/Awning with Inswing Floor Sill

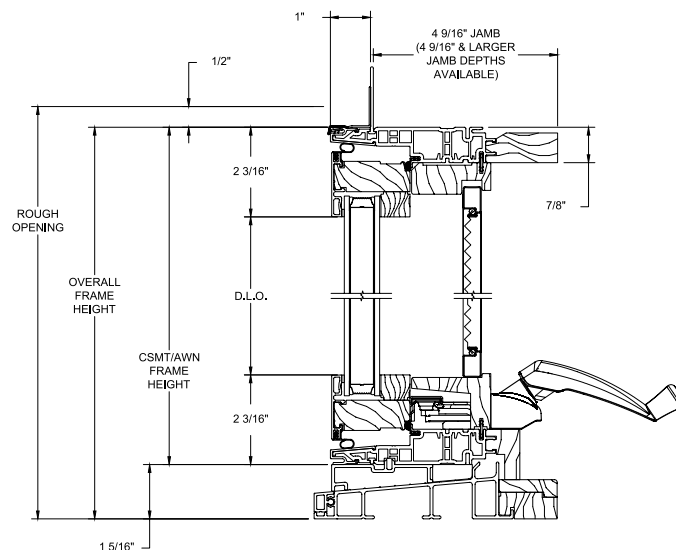
Accent Style Exterior

Vertical Section



Flush Style Exterior

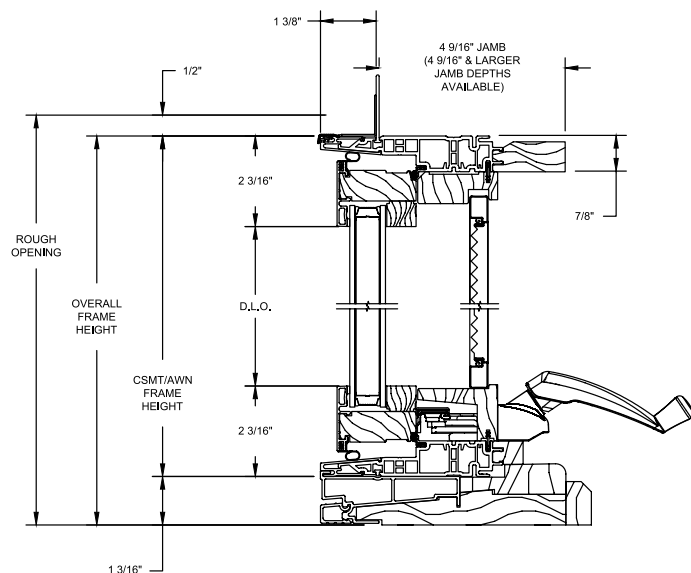
Vertical Section



Casement/Awning with Outswing Floor Sill

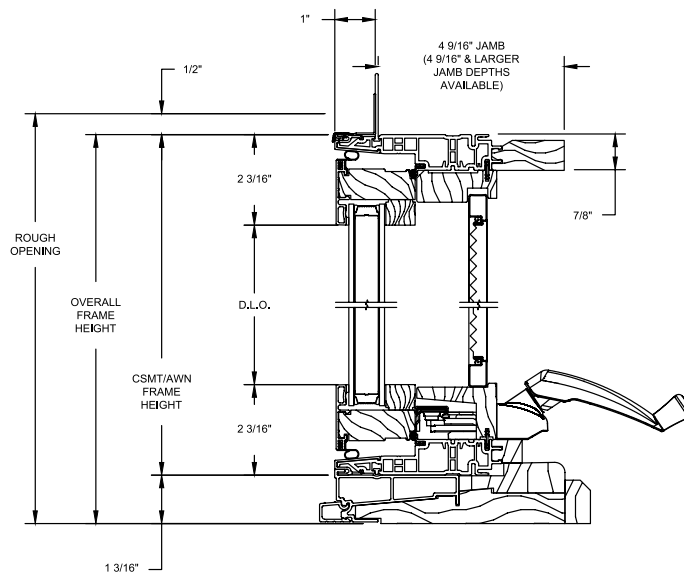
Accent Style Exterior

Vertical Section



Flush Style Exterior

Vertical Section

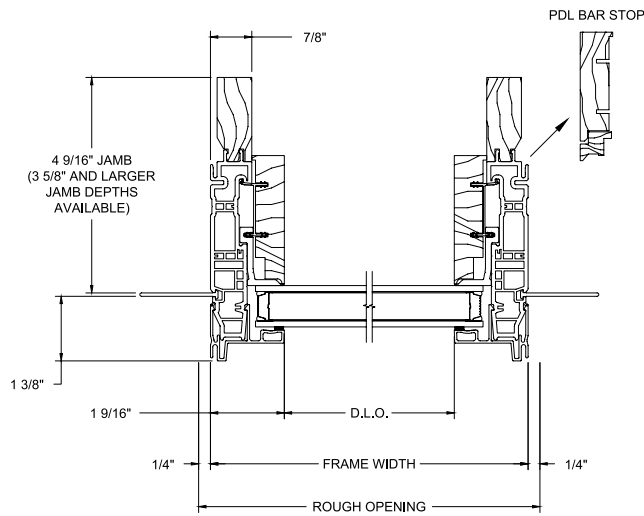


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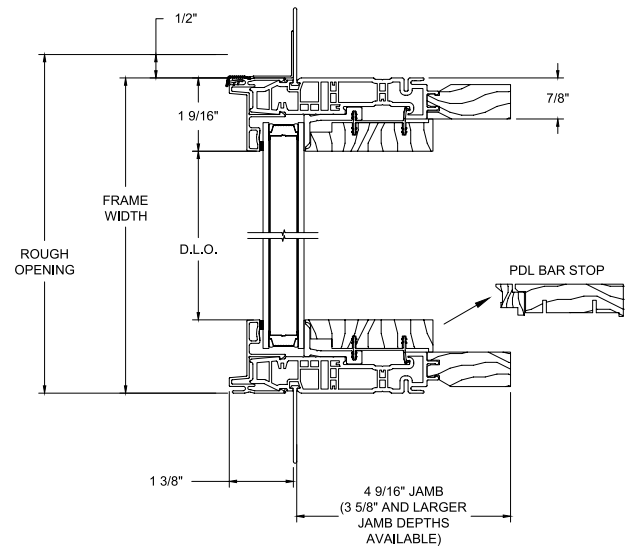
Direct Sets Cross Section Drawings

Accent Style Exterior

Horizontal Section

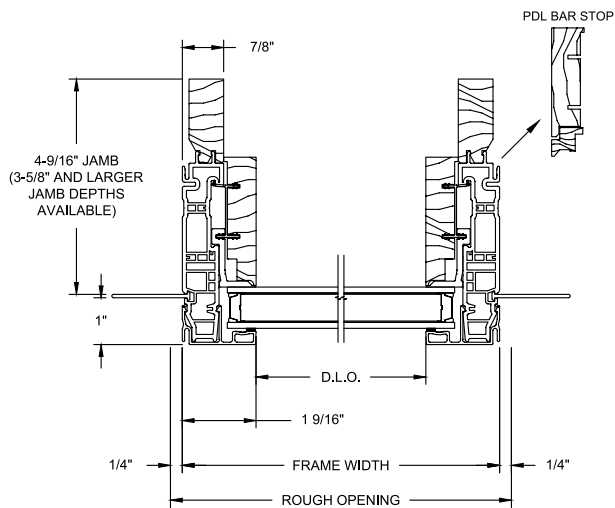


Vertical Section

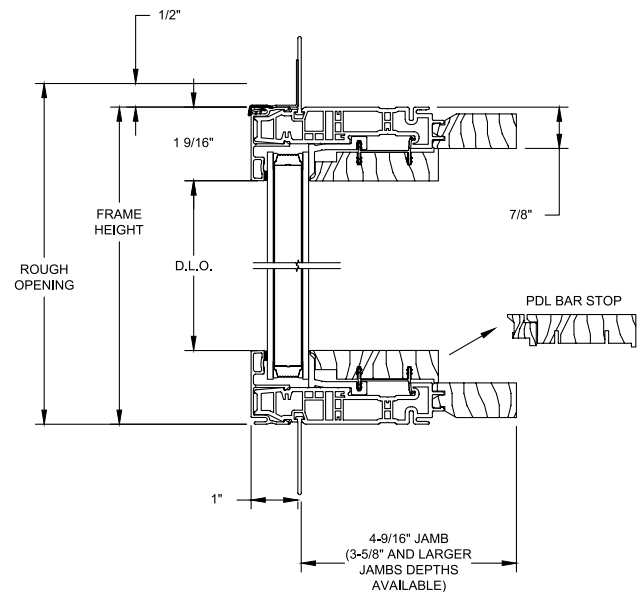


Flush Style Exterior

Horizontal Section



Vertical Section



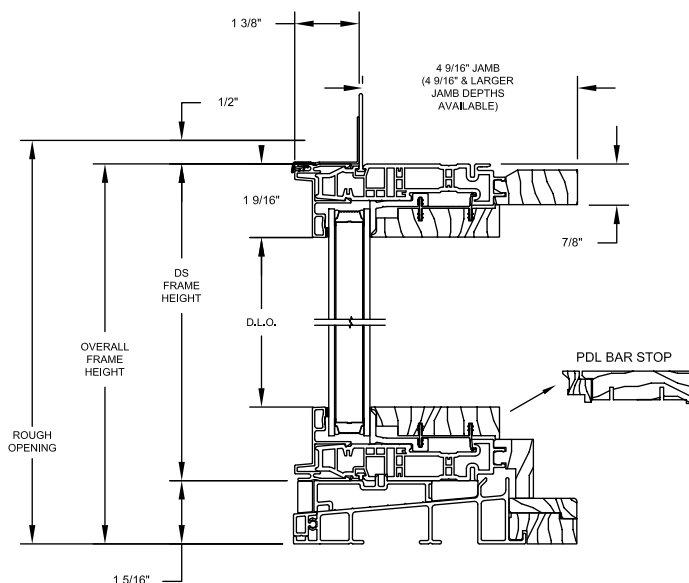
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Direct Sets Cross Section Drawings

Direct Set with Inswing Floor Sill

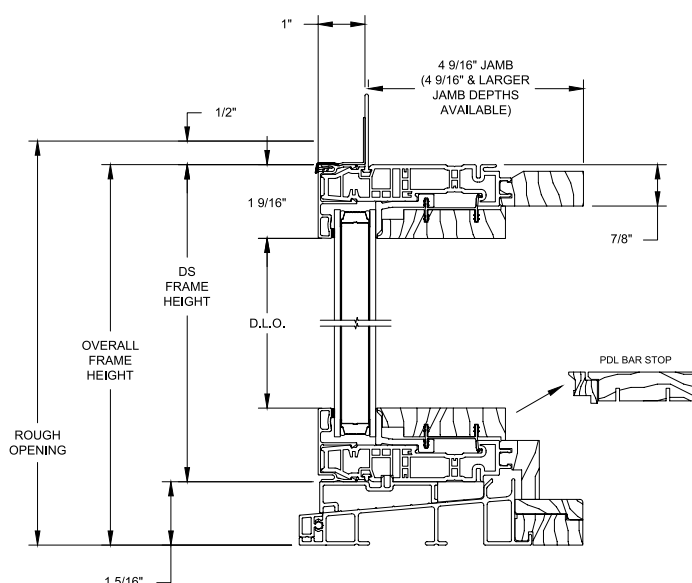
Accent Style Exterior

Vertical Section



Flush Style Exterior

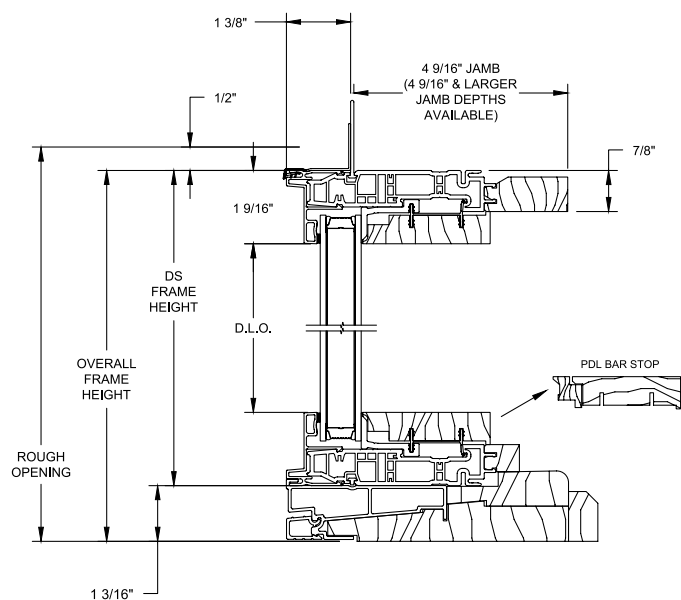
Vertical Section



Direct Set with Outswing Floor Sill

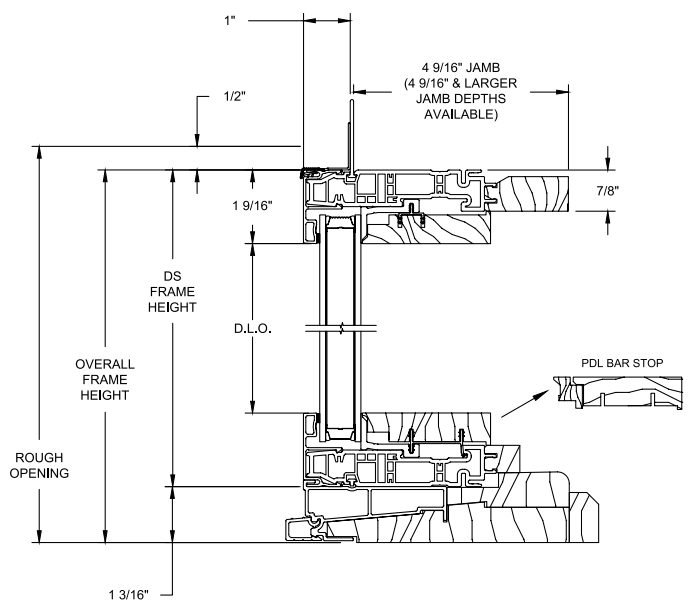
Accent Style Exterior

Vertical Section



Flush Style Exterior

Vertical Section

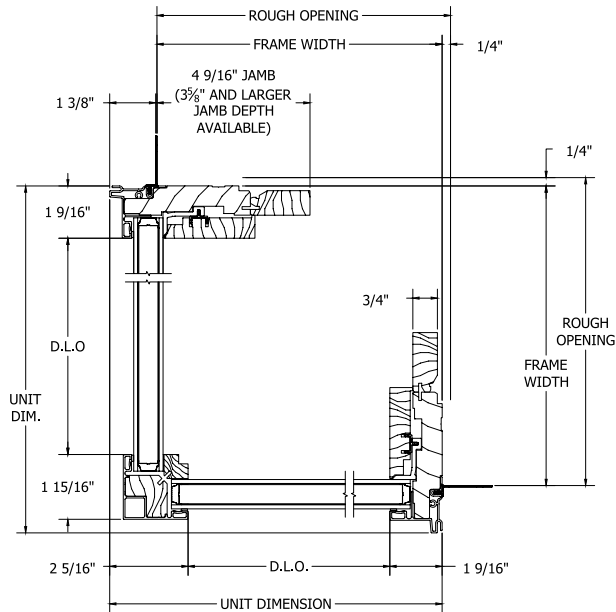


NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

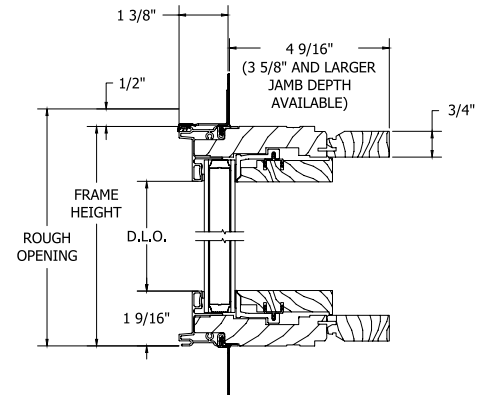
Corner Direct Sets Cross Section Drawings

Accent Style Exterior

Horizontal Section

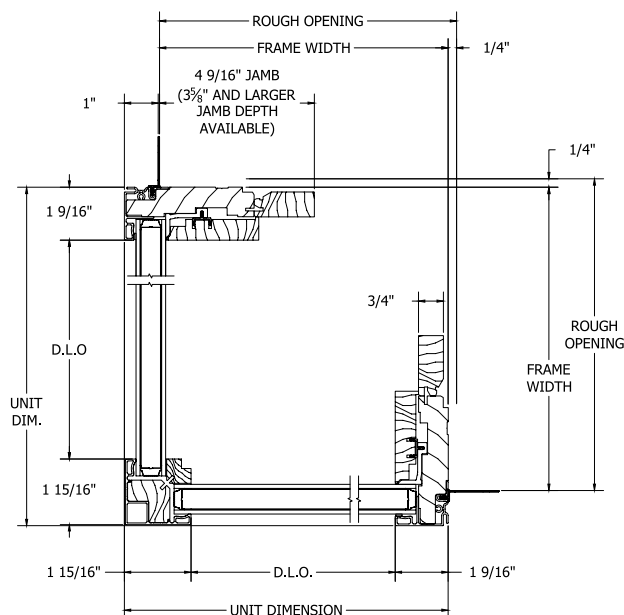


Vertical Section

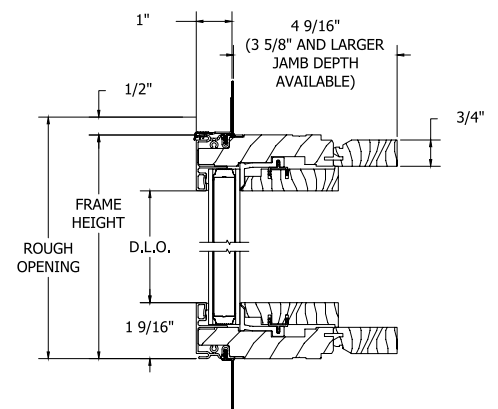


Flush Style Exterior

Horizontal Section



Vertical Section

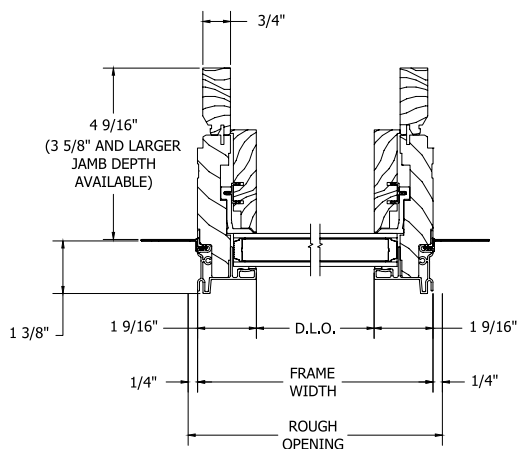


NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbwindows.com.

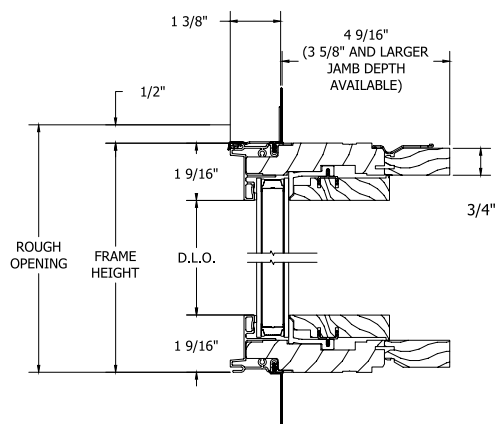
Geometric Direct Sets Cross Section Drawings

Accent Style Exterior

Horizontal Section

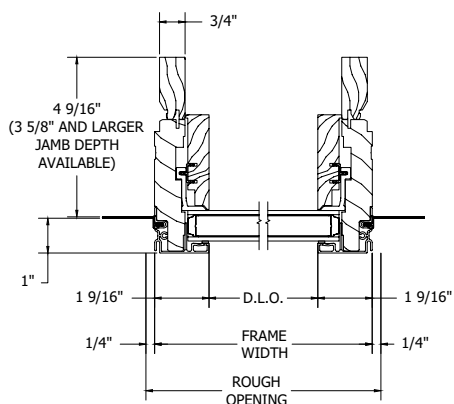


Vertical Section

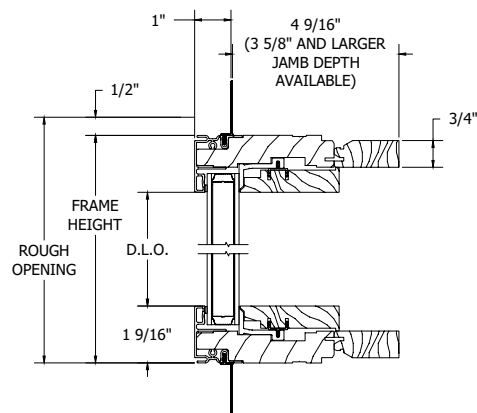


Flush Style Exterior

Horizontal Section



Vertical Section

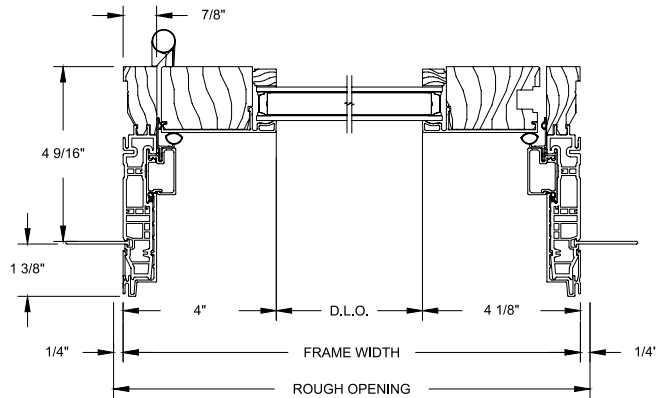


NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

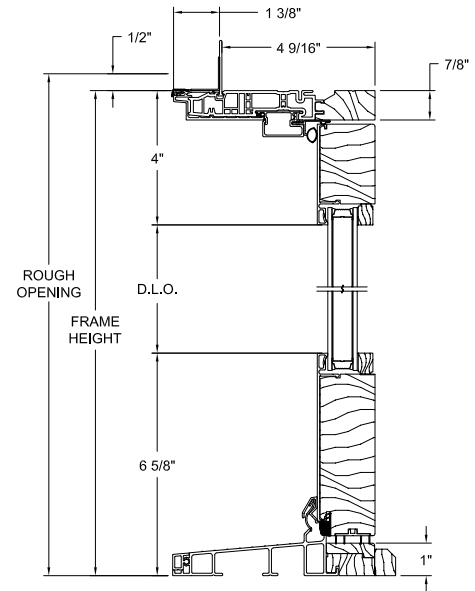
Swinging Doors Cross Section Drawings

Active Inswing Door | Accent Style Exterior

Horizontal Section

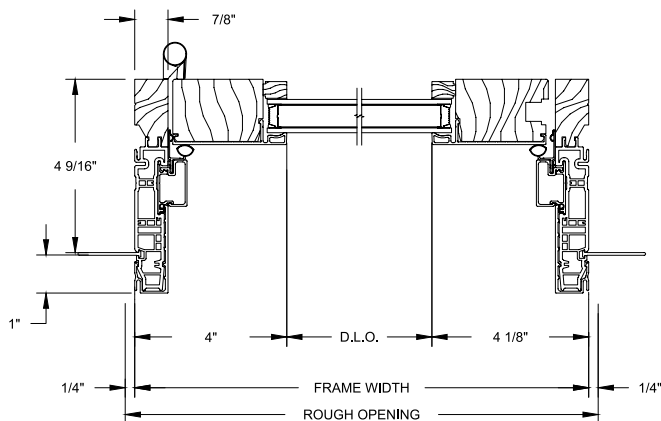


Vertical Section

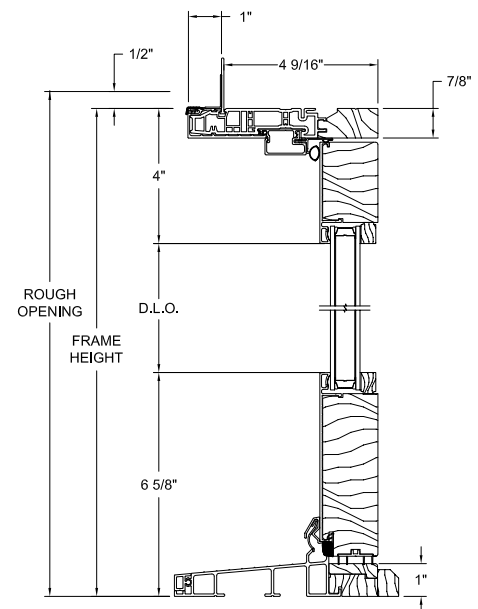


Active Inswing Door | Flush Style Exterior

Horizontal Section



Vertical Section



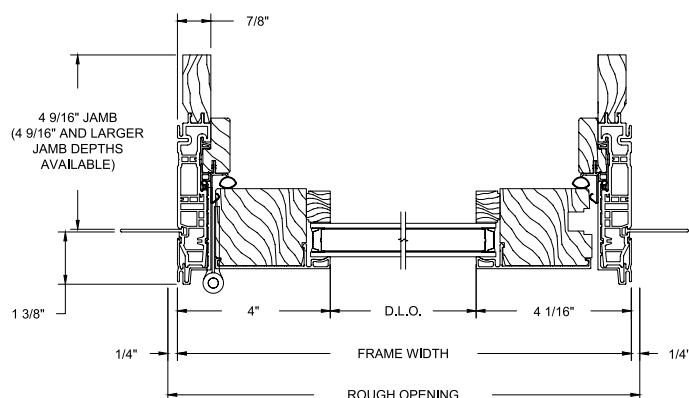
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Swinging Doors

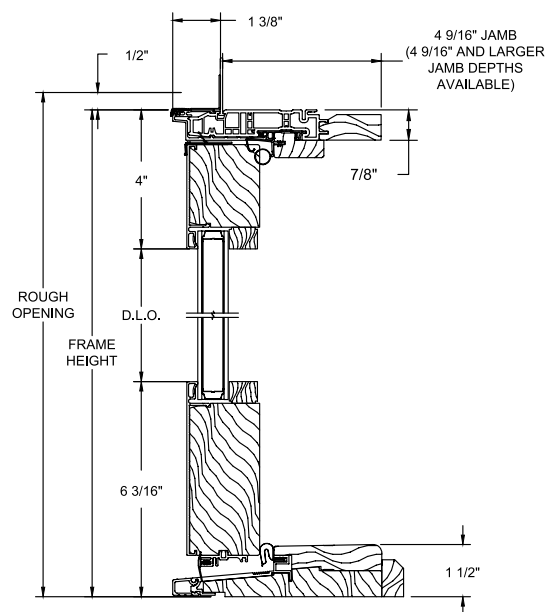
Cross Section Drawings

Active Outswing Door | Accent Style Exterior

Horizontal Section

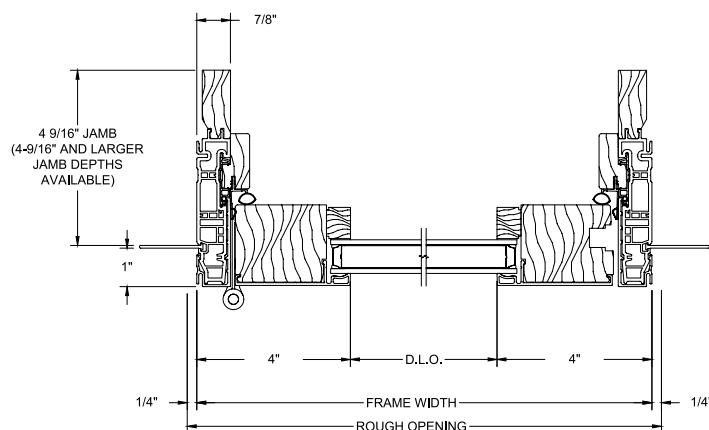


Vertical Section

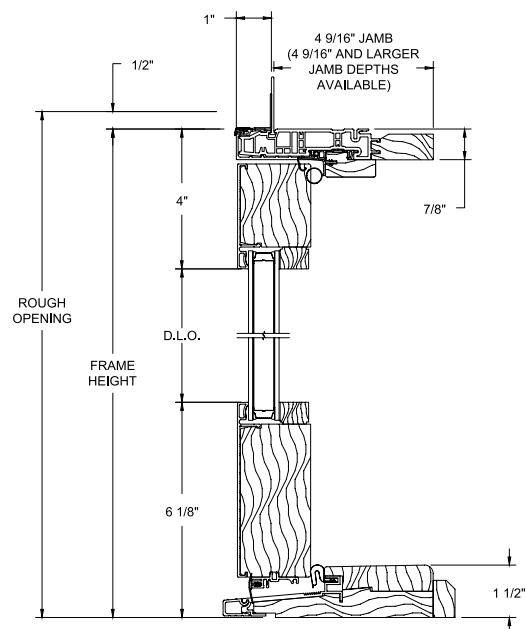


Active Outswing Door | Flush Style Exterior

Horizontal Section



Vertical Section



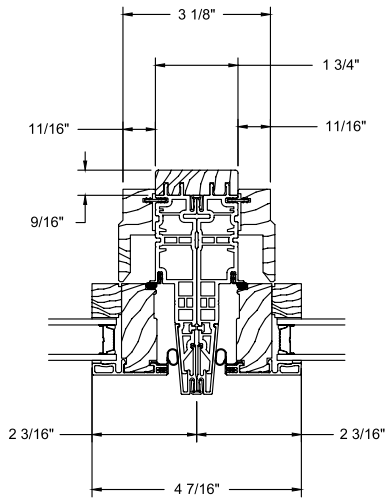
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Mull Details

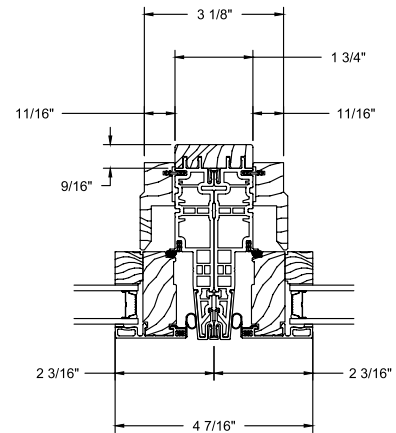
Cross Section Drawings

Casement/Awning Mull'd to Casement/Awning

Accent Style Exterior

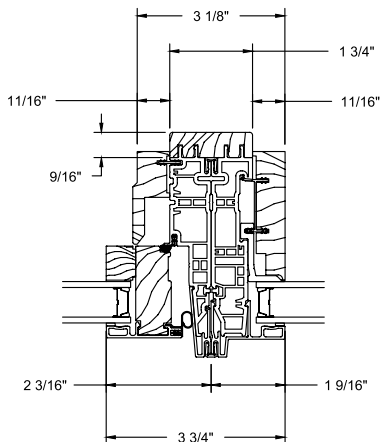


Flush Style Exterior

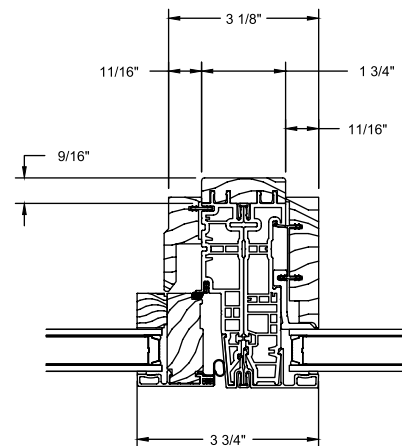


Casement/Awning Mull'd to Direct Set

Accent Style Exterior



Flush Style Exterior



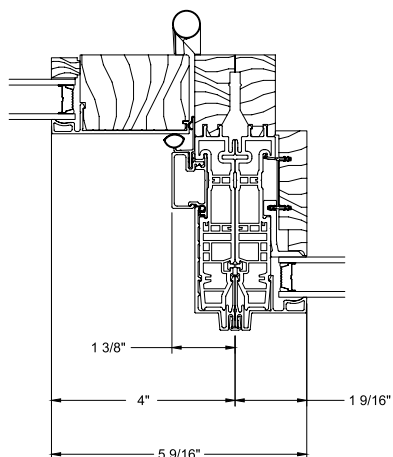
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Mull Details

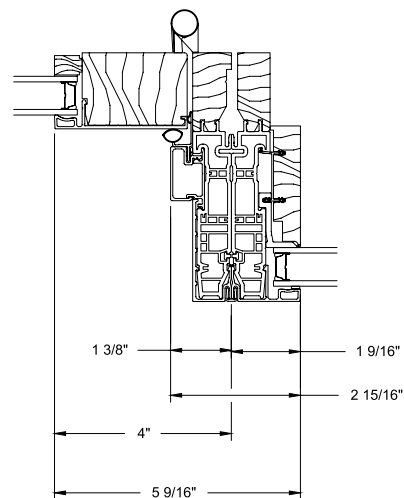
Cross Section Drawings

Inswing Door Mull to Direct Set

Accent Style Exterior

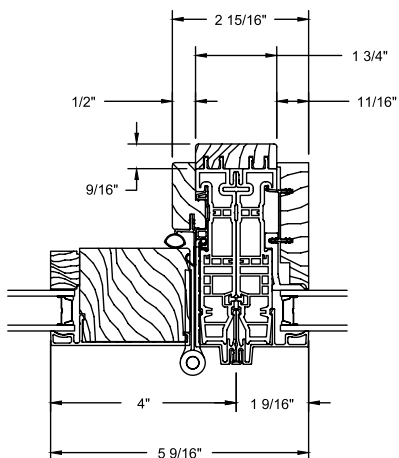


Flush Style Exterior

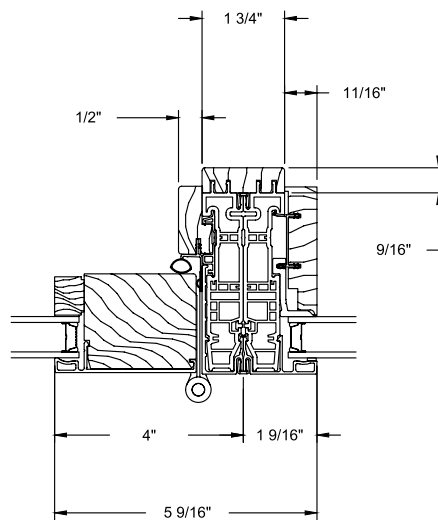


Outswing Door Mull to Direct Set

Accent Style Exterior



Flush Style Exterior



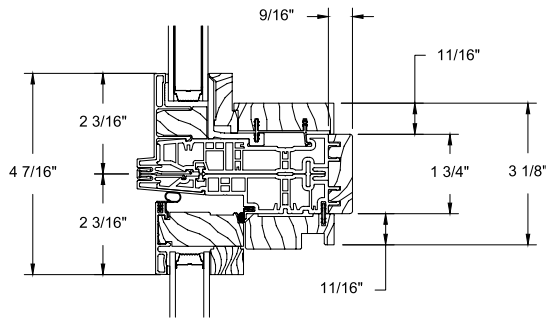
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Stack Details

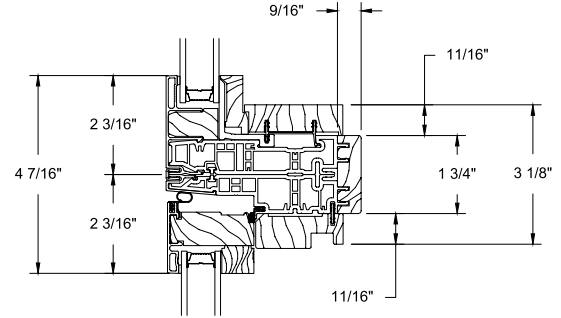
Cross Section Drawings

Picture Transom Direct Set Stacked Above Operable Casement/Awning

Accent Style Exterior

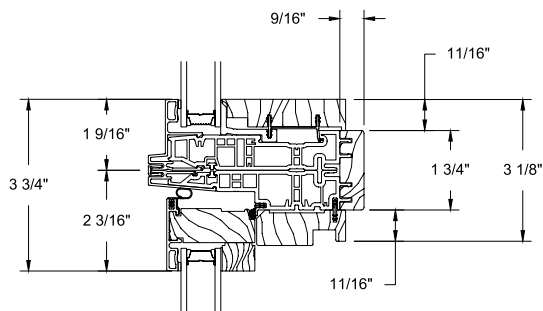


Flush Style Exterior

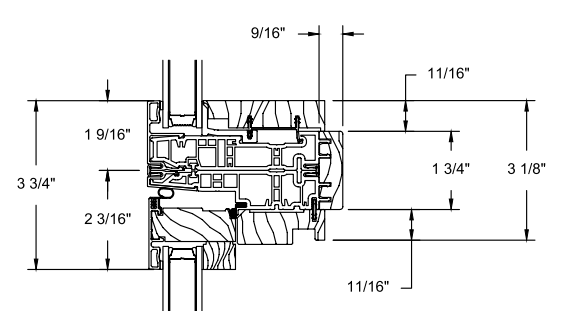


Direct Set Stacked Above Operable Casement/Awning

Accent Style Exterior



Flush Style Exterior



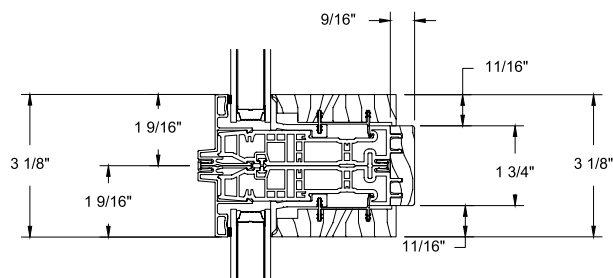
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Stack Details

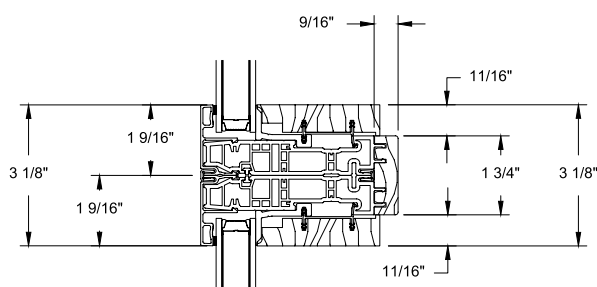
Cross Section Drawings

Direct Set Stacked Above Direct Set

Accent Style Exterior



Flush Style Exterior

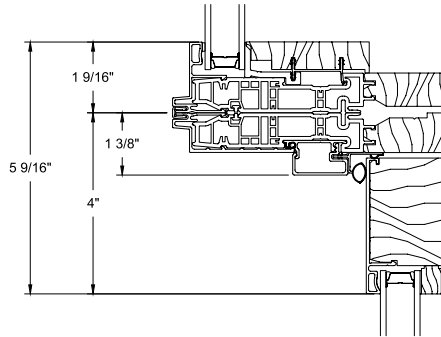


NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

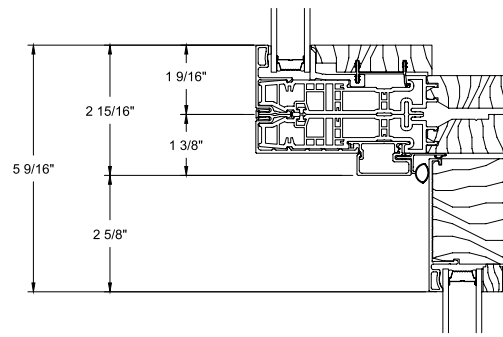
Stack Details Cross Section Drawings

Direct Set Stacked Above Inswing Door

Accent Style Exterior

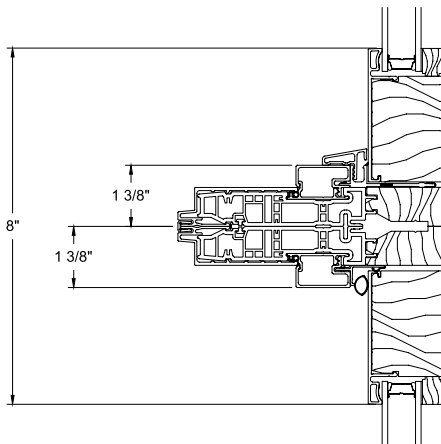


Flush Style Exterior

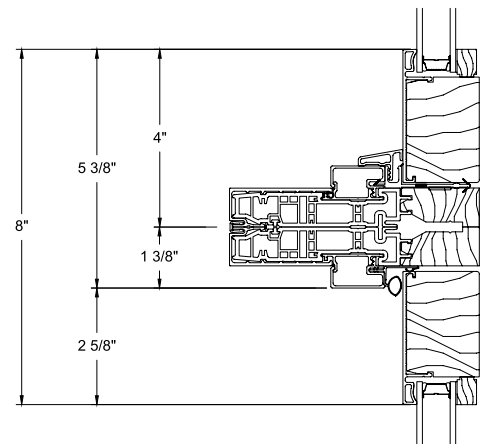


Inswing Door Transom Stacked Above Inswing Door

Accent Style Exterior



Flush Style Exterior



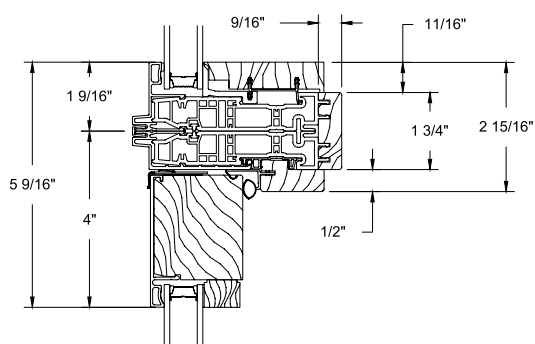
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Stack Details

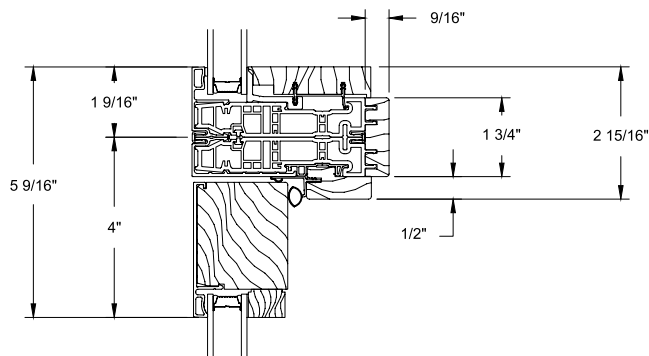
Cross Section Drawings

Direct Set Stacked Above Outswing Door

Accent Style Exterior

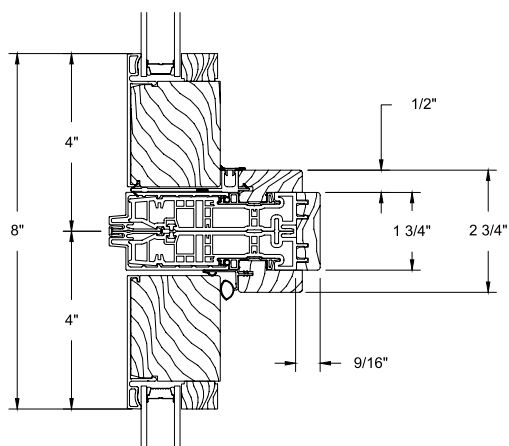


Flush Style Exterior

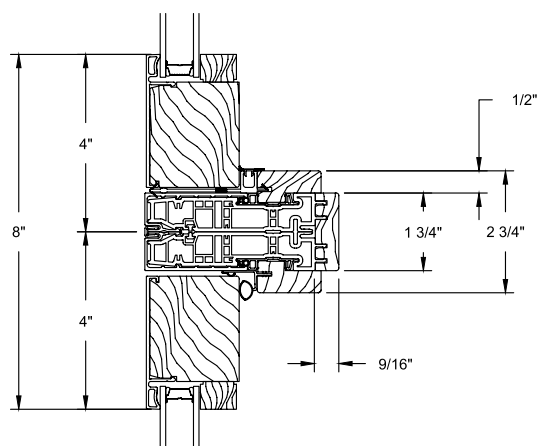


Outswing Door Transom Stacked Above Outswing Door

Accent Style Exterior



Flush Style Exterior



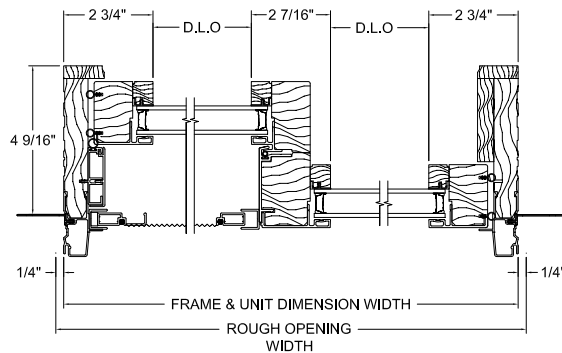
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Complementary Sliding Windows

Cross Section Drawings

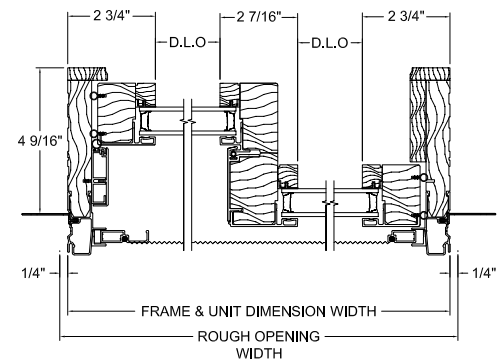
Single

Horizontal Section



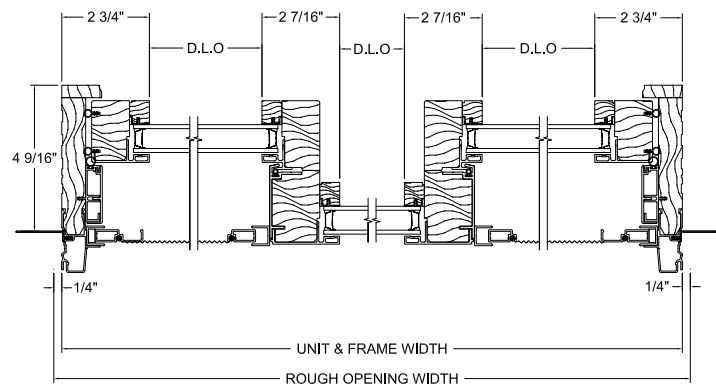
Double

Horizontal Section



Triple

Horizontal Section

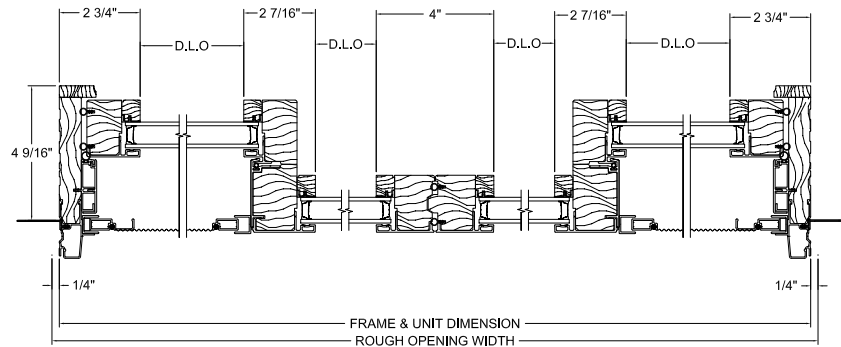


NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Complementary Sliding Windows Cross Section Drawings

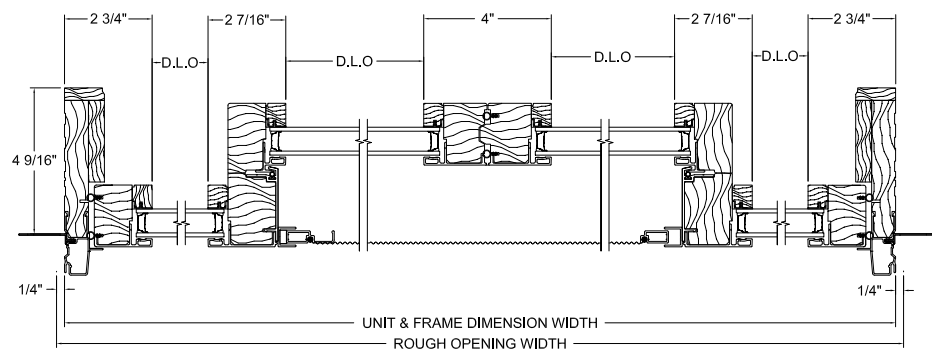
Quad – Active-Fixed-Fixed-Active

Horizontal Section



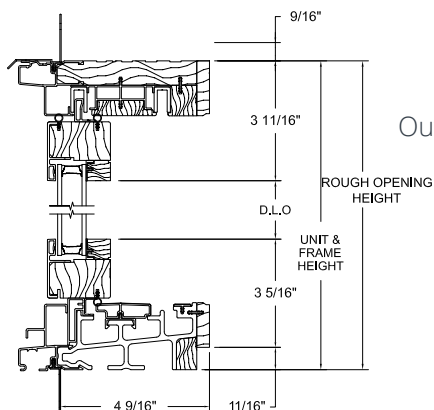
Quad – Fixed-Active-Active-Fixed

Horizontal Section

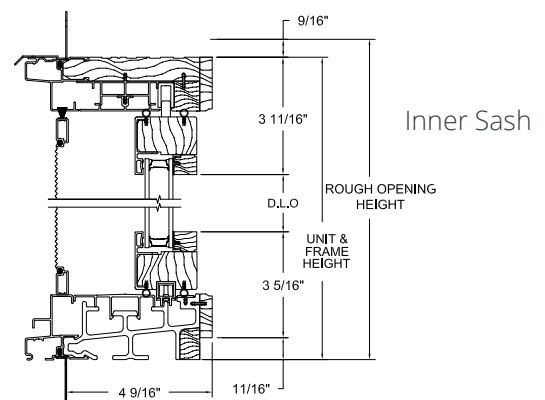


Single, Double, Triple, Quad

Vertical Section



Outer Sash



Inner Sash

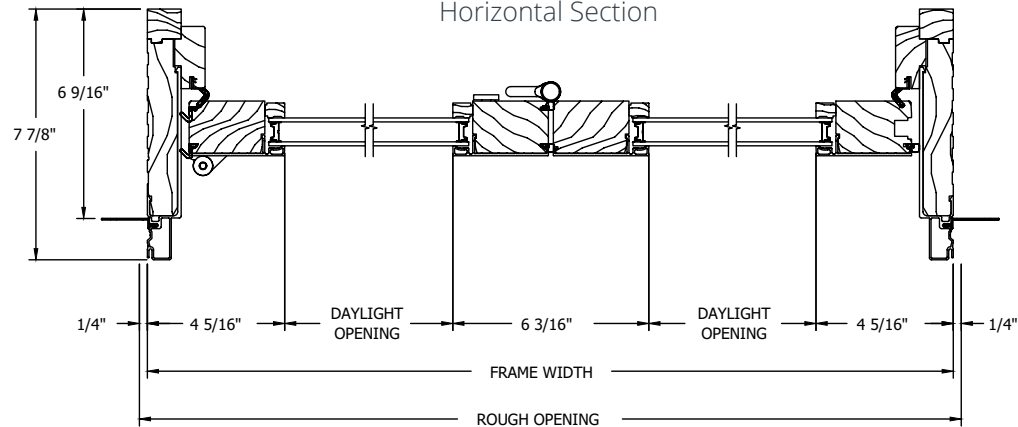
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Complementary Folding Windows & Doors

Cross Section Drawings

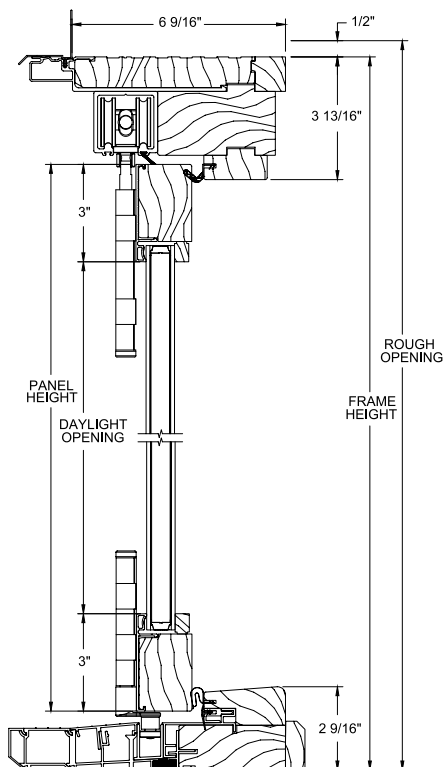
2-wide

Horizontal Section



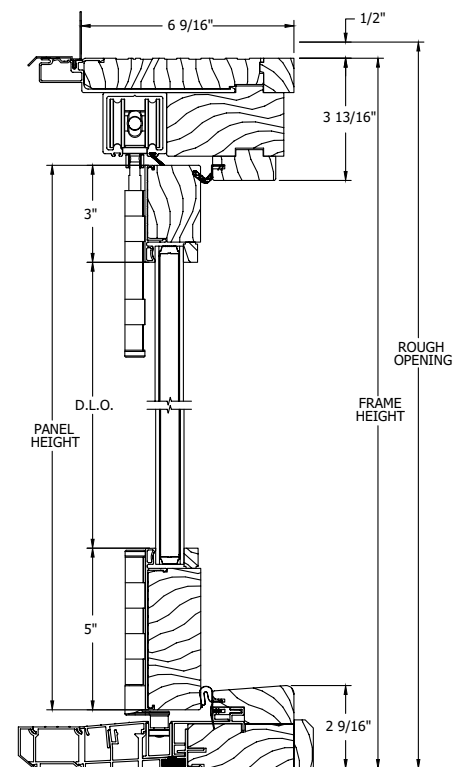
3" Top Rail, 3" Bottom Rail

Vertical Section



3" Top Rail, 5" Bottom Rail

Vertical Section



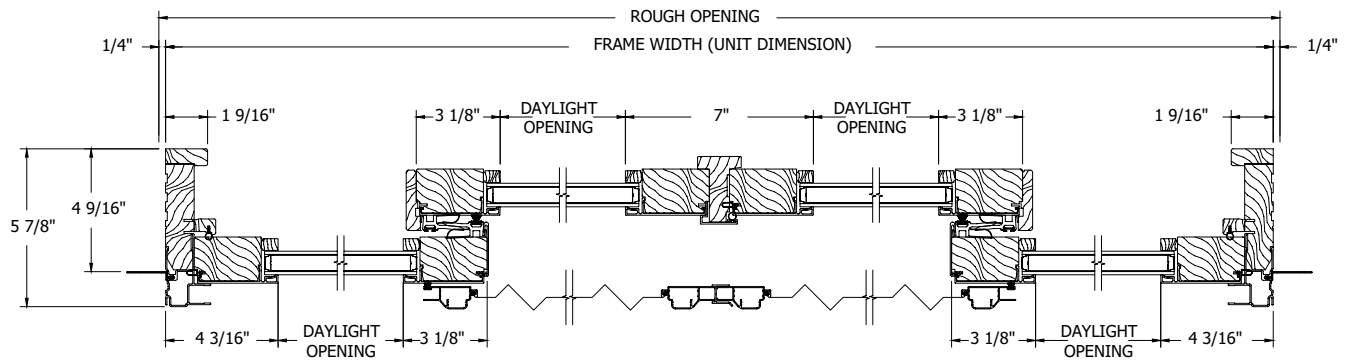
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Complementary Sliding Patio Doors

Cross Section Drawings

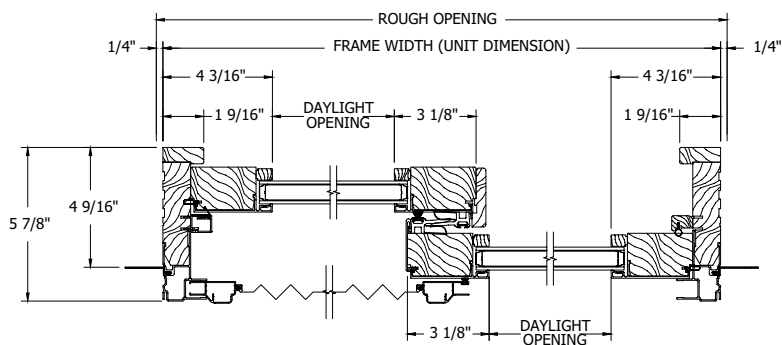
4-wide

Horizontal Section

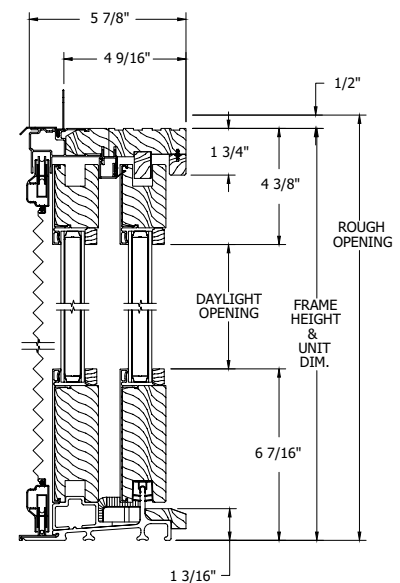


2-wide

Horizontal Section



Vertical Section



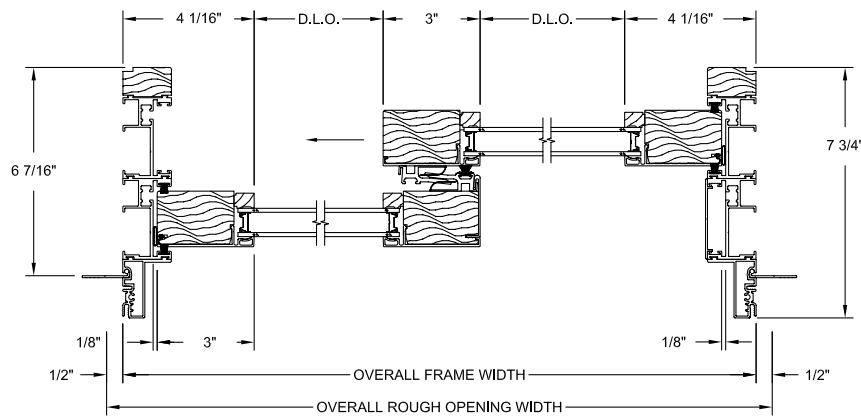
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Complementary Multi-Slide Doors

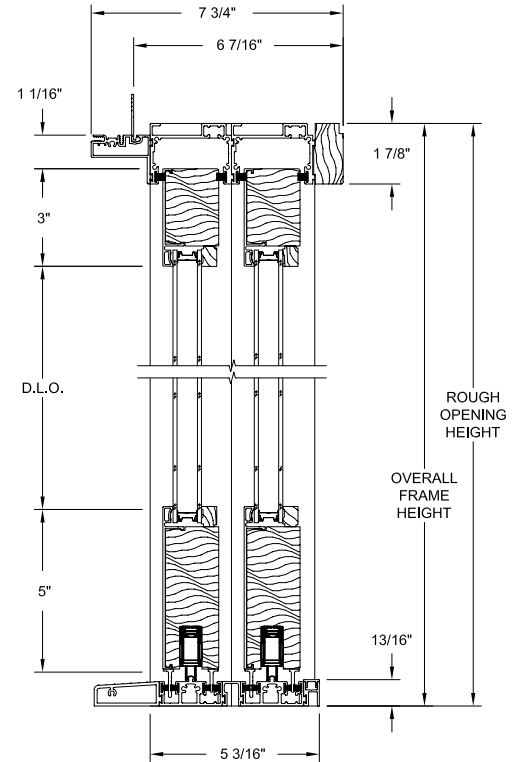
Cross Section Drawings

2-wide

Horizontal Section



Vertical Section



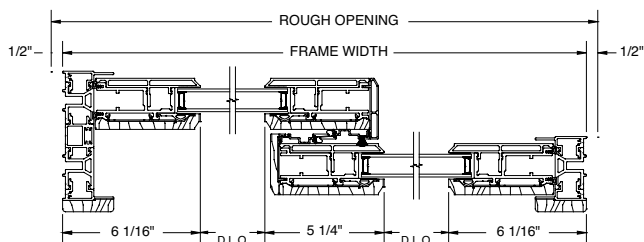
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

TerraSpan® Lift & Slide Doors

Cross Section Drawings

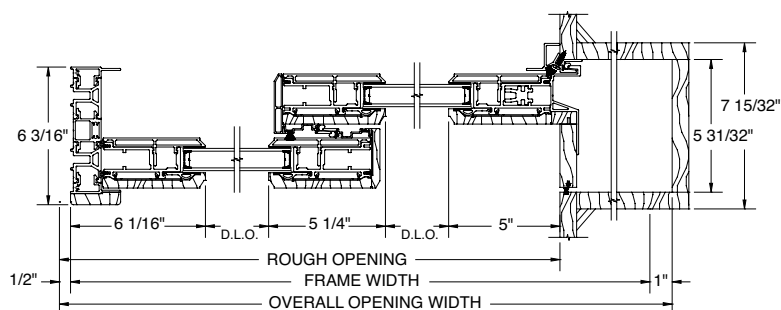
2-wide Stacking

Horizontal Section



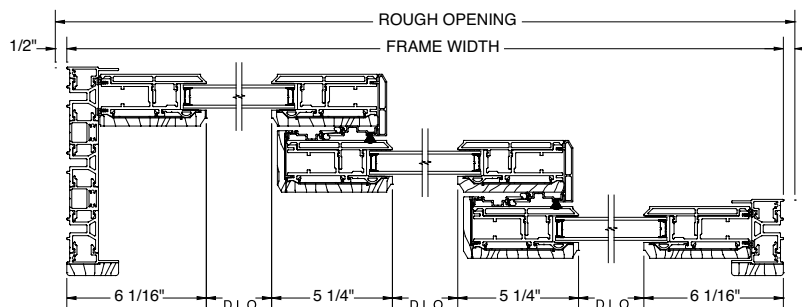
2-wide Pocketing

Horizontal Section



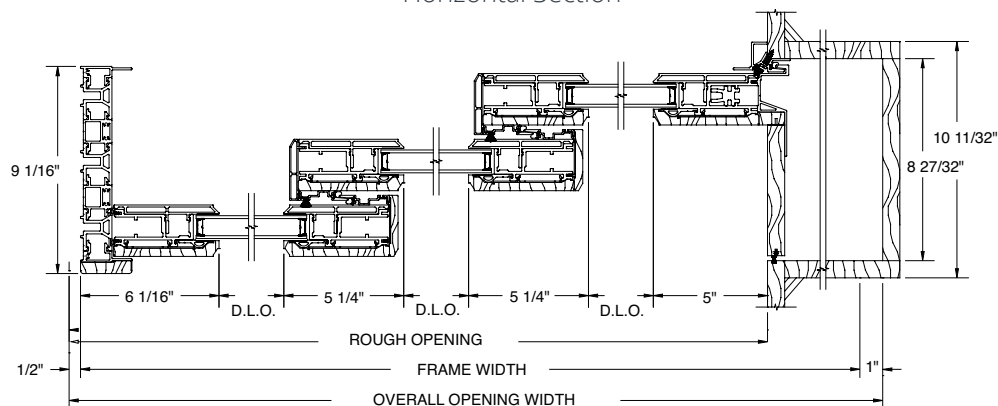
3-wide Stacking

Horizontal Section



3-wide Pocketing

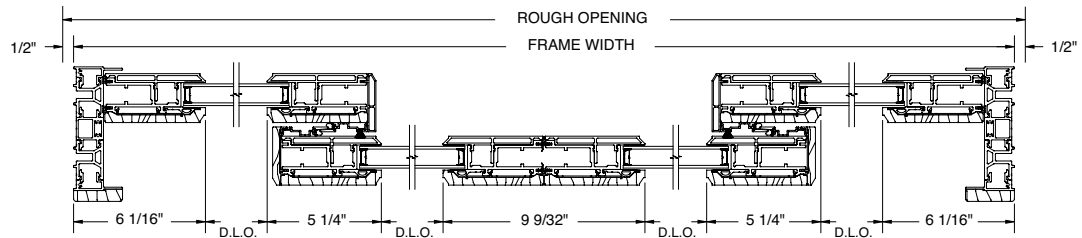
Horizontal Section



NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

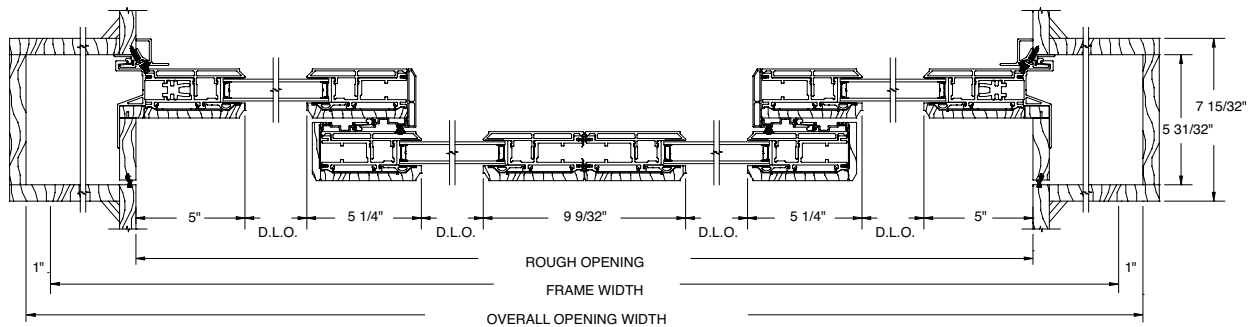
4-wide Stacking – Center-opening*

Horizontal Section



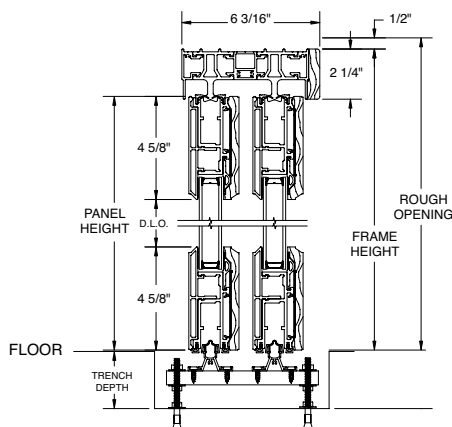
4-wide Pocketing – Center-opening*

Horizontal Section



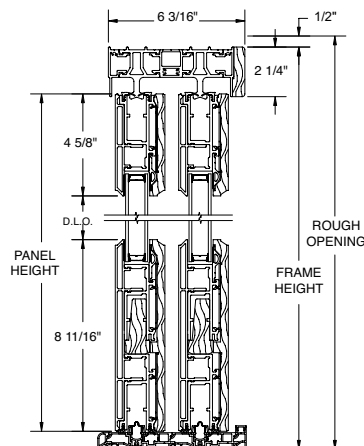
1.75" Panel with Recessed Sill

Vertical Section

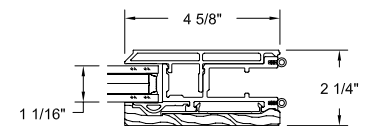


1.75" Panel with Weep Sill

Vertical Section



Interior Panel Cover Square Detail



*There is no difference in the horizontal section details between a flush sill and a recessed sill for center-operating units.

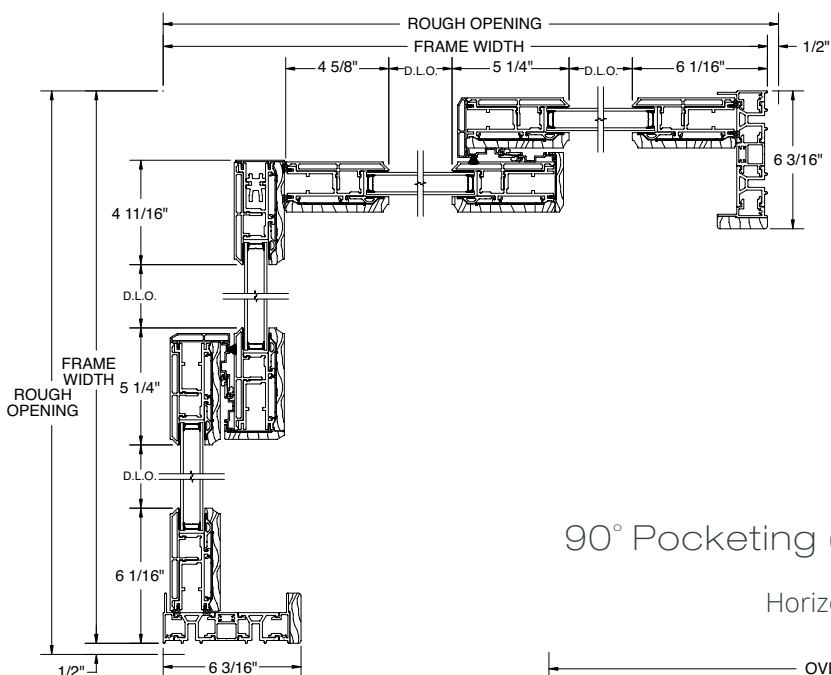
NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

TerraSpan® Lift & Slide Doors

Cross Section Drawings

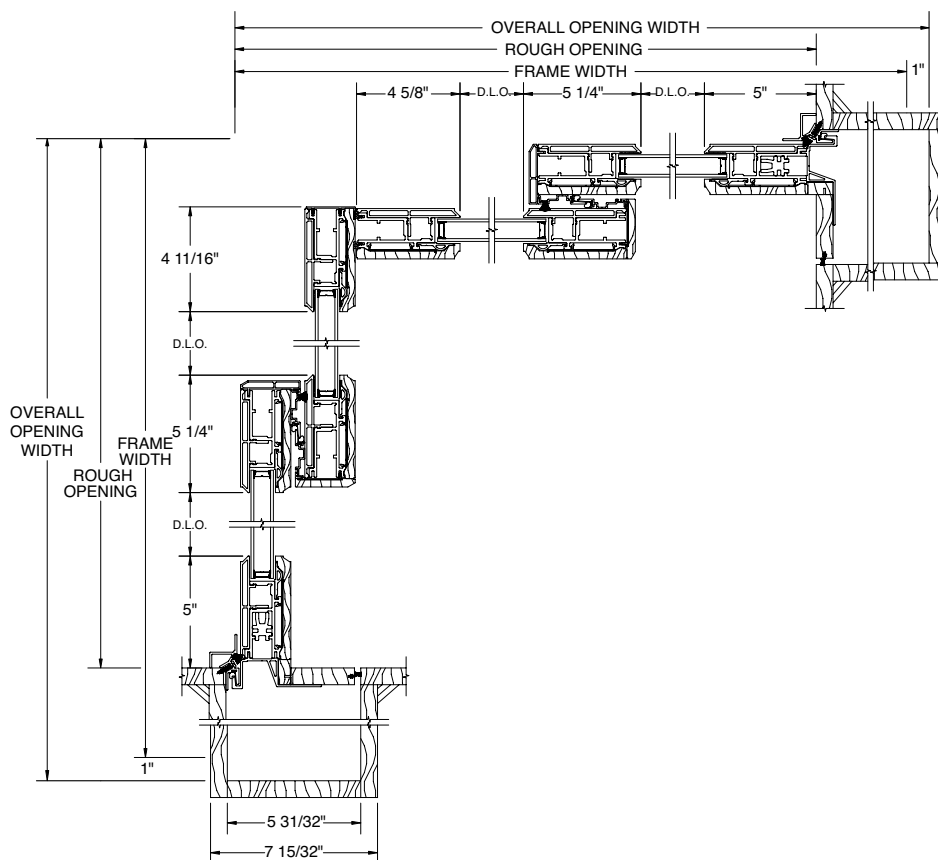
90° Stacking (Recessed Sill Only)

Horizontal Section



90° Pocketing (Recessed Sill Only)

Horizontal Section



NOTE: Drawings are not to scale. Additional and the most current drawings, including drawings with triple pane glass, are available at kolbewindows.com.

Sizing & Limitations

Size Limitations for Muller Assemblies**:

Maximum Width: 14' 0"

Maximum Height: 9' 0"

** Accessories are available for mulls.

Size Limitations for Casements:

Minimum Width: 1' 4"

Maximum Width: 3' 0"

Minimum Height: 1' 6"

Maximum Height: 6' 0"

Size Limitations for Awnings:

Minimum Width: 1' 4"

Maximum Width: 4' 0"

Minimum Height: 1' 4"*

Maximum Height: 3' 6"

* Not available with locks.

Casements (venting)									
Frame Size	Width		1' 4"	1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	3' 0"
	Rough Opening		1' 4-1/2"	1' 8-1/2"	2' 0-1/2"	2' 4-1/2"	2' 6-1/2"	2' 8-1/2"	3' 0-1/2"
Height		Glass Size	12-9/16"	16-9/16"	20-9/16"	24-9/16"	26-9/16"	28-9/16"	32-9/16"
2' 0"	2' 0-1/2"	20-9/16"	1-4 x 2-0	1-8 x 2-0	2-0 x 2-0	2-4 x 2-0	2-6 x 2-0	2-8 x 2-0	3-0 x 2-0
2' 6"	2' 6-1/2"	26-9/16"	1-4 x 2-6	1-8 x 2-6	2-0 x 2-6	2-4 x 2-6	2-6 x 2-6	2-8 x 2-6	3-0 x 2-6
3' 0"	3' 0-1/2"	32-9/16"	1-4 x 3-0	1-8 x 3-0	2-0 x 3-0	2-4 x 3-0	2-6 x 3-0	2-8 x 3-0	3-0 x 3-0
3' 6"	3' 6-1/2"	38-9/16"	1-4 x 3-6	1-8 x 3-6	2-0 x 3-6	2-4 x 3-6	2-6 x 3-6	2-8 x 3-6	3-0 x 3-6
4' 0"	4' 0-1/2"	44-9/16"	1-4 x 4-0	1-8 x 4-0	2-0 x 4-0	2-4 x 4-0	2-6 x 4-0	2-8 x 4-0	3-0 x 4-0
4' 6"	4' 6-1/2"	50-9/16"	1-4 x 4-6	1-8 x 4-6	2-0 x 4-6	2-4 x 4-6	2-6 x 4-6	2-8 x 4-6	3-0 x 4-6
5' 0"	5' 0-1/2"	56-9/16"	1-4 x 5-0	1-8 x 5-0	2-0 x 5-0	2-4 x 5-0	2-6 x 5-0	2-8 x 5-0	3-0 x 5-0
5' 6"	5' 6-1/2"	62-9/16"	1-4 x 5-6	1-8 x 5-6	2-0 x 5-6	2-4 x 5-6	2-6 x 5-6	2-8 x 5-6	3-0 x 5-6
6' 0"	6' 0-1/2"	68-9/16"	1-4 x 6-0	1-8 x 6-0	2-0 x 6-0	2-4 x 6-0	2-6 x 6-0	2-8 x 6-0	3-0 x 6-0

Awnings (venting)											
Frame Size	Width		1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	3' 0"	3' 6"	4' 0"	
	Rough Opening		1' 8-1/2"	2' 0-1/2"	2' 4-1/2"	2' 6-1/2"	2' 8-1/2"	3' 0-1/2"	3' 6-1/2"	4' 0-1/2"	
Height		Glass Size	16-9/16"	20-9/16"	24-9/16"	26-9/16"	28-9/16"	32-9/16"	38-9/16"	44-9/16"	
1' 4"	1' 4-1/2"	12-9/16"	1-8 x 1-4*	2-0 x 1-4*	2-4 x 1-4*	2-6 x 1-4*	2-8 x 1-4*	3-0 x 1-4*	3-6 x 1-4*	4-0 x 1-4*	4-6 x 1-4*
1' 8"	1' 8-1/2"	16-9/16"	1-8 x 1-8	2-0 x 1-8	2-4 x 1-8	2-6 x 1-8	2-8 x 1-8	3-0 x 1-8	3-6 x 1-8	4-0 x 1-8	4-6 x 1-8
2' 0"	2' 0-1/2"	20-9/16"	1-8 x 2-0	2-0 x 2-0	2-4 x 2-0	2-6 x 2-0	2-8 x 2-0	3-0 x 2-0	3-6 x 2-0	4-0 x 2-0	4-6 x 2-0
2' 6"	2' 6-1/2"	26-9/16"	1-8 x 2-6	2-0 x 2-6	2-4 x 2-6	2-6 x 2-6	2-8 x 2-6	3-0 x 2-6	3-6 x 2-6	4-0 x 2-6	4-6 x 2-6
3' 0"	3' 0-1/2"	32-9/16"	1-8 x 3-0	2-0 x 3-0	2-4 x 3-0	2-6 x 3-0	2-8 x 3-0	3-0 x 3-0	3-6 x 3-0	4-0 x 3-0	4-6 x 3-0
3' 6"	3' 6-1/2"	38-9/16"	1-8 x 3-6	2-0 x 3-6	2-4 x 3-6	2-6 x 3-6	2-8 x 3-6	3-0 x 3-6	3-6 x 3-6	4-0 x 3-6	4-6 x 3-6
4' 0"	4' 0-1/2"	44-9/16"	1-8 x 4-0	2-0 x 4-0	2-4 x 4-0	2-6 x 4-0	2-8 x 4-0	3-0 x 4-0	3-6 x 4-0	4-0 x 4-0	4-6 x 4-0
4' 6"	4' 6-1/2"	50-9/16"	1-8 x 4-6	2-0 x 4-6	2-4 x 4-6	2-6 x 4-6	2-8 x 4-6	3-0 x 4-6	3-6 x 4-6	4-0 x 4-6	4-6 x 4-6
5' 0"	5' 0-1/2"	56-9/16"	1-8 x 5-0	2-0 x 5-0	2-4 x 5-0	2-6 x 5-0	2-8 x 5-0	3-0 x 5-0	3-6 x 5-0	4-0 x 5-0	4-6 x 5-0

Size Limitations for Picture Casements/Awnings:

Minimum Width: 1' 4"

Maximum Width: 9' 0"

Minimum Height: 1' 4"

Maximum Height: 7' 0"

Picture Casements/Awnings (direct set)														
Frame Size	Width		1' 4"	1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	3' 0"	3' 6"	4' 0"	4' 6"	5' 0"	5' 6"
	Rough Opening		1' 4-1/2"	1' 8-1/2"	2' 0-1/2"	2' 4-1/2"	2' 6-1/2"	2' 8-1/2"	3' 0-1/2"	3' 6-1/2"	4' 0-1/2"	4' 6-1/2"	5' 0-1/2"	5' 6-1/2"
Height		Glass Size	12-9/16"	16-9/16"	20-9/16"	24-9/16"	26-9/16"	28-9/16"	32-9/16"	38-9/16"	44-9/16"	50-9/16"	56-9/16"	62-9/16"
1' 4"	1' 4-1/2"	12-9/16"	1-4 x 1-4	1-8 x 1-4	2-0 x 1-4	2-4 x 1-4	2-6 x 1-4	2-8 x 1-4	3-0 x 1-4	3-6 x 1-4	4-0 x 1-4	4-6 x 1-4	5-0 x 1-4	5-6 x 1-4
1' 8"	1' 8-1/2"	16-9/16"	1-4 x 1-8	1-8 x 1-8	2-0 x 1-8	2-4 x 1-8	2-6 x 1-8	2-8 x 1-8	3-0 x 1-8	3-6 x 1-8	4-0 x 1-8	4-6 x 1-8	5-0 x 1-8	5-6 x 1-8
2' 0"	2' 0-1/2"	20-9/16"	1-4 x 2-0	1-8 x 2-0	2-0 x 2-0	2-4 x 2-0	2-6 x 2-0	2-8 x 2-0	3-0 x 2-0	3-6 x 2-0	4-0 x 2-0	4-6 x 2-0	5-0 x 2-0	5-6 x 2-0
2' 6"	2' 6-1/2"	26-9/16"	1-4 x 2-6	1-8 x 2-6	2-0 x 2-6	2-4 x 2-6	2-6 x 2-6	2-8 x 2-6	3-0 x 2-6	3-6 x 2-6	4-0 x 2-6	4-6 x 2-6	5-0 x 2-6	5-6 x 2-6
3' 0"	3' 0-1/2"	32-9/16"	1-4 x 3-0	1-8 x 3-0	2-0 x 3-0	2-4 x 3-0	2-6 x 3-0	2-8 x 3-0	3-0 x 3-0	3-6 x 3-0	4-0 x 3-0	4-6 x 3-0	5-0 x 3-0	5-6 x 3-0
3' 6"	3' 6-1/2"	38-9/16"	1-4 x 3-6	1-8 x 3-6	2-0 x 3-6	2-4 x 3-6	2-6 x 3-6	2-8 x 3-6	3-0 x 3-6	3-6 x 3-6	4-0 x 3-6	4-6 x 3-6	5-0 x 3-6	5-6 x 3-6
4' 0"	4' 0-1/2"	44-9/16"	1-4 x 4-0	1-8 x 4-0	2-0 x 4-0	2-4 x 4-0	2-6 x 4-0	2-8 x 4-0	3-0 x 4-0	3-6 x 4-0	4-0 x 4-0	4-6 x 4-0	5-0 x 4-0	5-6 x 4-0
4' 6"	4' 6-1/2"	50-9/16"	1-4 x 4-6	1-8 x 4-6	2-0 x 4-6	2-4 x 4-6	2-6 x 4-6	2-8 x 4-6	3-0 x 4-6	3-6 x 4-6	4-0 x 4-6	4-6 x 4-6	5-0 x 4-6	5-6 x 4-6
5' 0"	5' 0-1/2"	56-9/16"	1-4 x 5-0	1-8 x 5-0	2-0 x 5-0	2-4 x 5-0	2-6 x 5-0	2-8 x 5-0	3-0 x 5-0	3-6 x 5-0	4-0 x 5-0	4-6 x 5-0	5-0 x 5-0	5-6 x 5-0
5' 6"	5' 6-1/2"	62-9/16"	1-4 x 5-6	1-8 x 5-6	2-0 x 5-6	2-4 x 5-6	2-6 x 5-6	2-8 x 5-6	3-0 x 5-6	3-6 x 5-6	4-0 x 5-6	4-6 x 5-6	5-0 x 5-6	5-6 x 5-6
6' 0"	6' 0-1/2"	68-9/16"	1-4 x 6-0	1-8 x 6-0	2-0 x 6-0	2-4 x 6-0	2-6 x 6-0	2-8 x 6-0	3-0 x 6-0	3-6 x 6-0	4-0 x 6-0	4-6 x 6-0	5-0 x 6-0	5-6 x 6-0

NOTE: For the most up-to-date data, please visit kolbwindows.com.

Custom sizes may be available within the size limitations shown. Other limitations may apply as well.

Sizing & Limitations

Size Limitations for Direct Sets:

Minimum Width: 1' 4"

Maximum Width: 7' 0"

Minimum Height: 1' 4"

Maximum Height: 10' 0"

Size Limitations for Geometric Direct Sets:

Triangle Minimum Angle: 20°

All Shapes Minimum Leg Length: 8"

Maximum Box Size: 84" x 120"

Direct Set Windows																	
Frame Size		Width		1' 4"	1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	3' 0"	3' 4"	3' 6"	4' 0"	4' 6"	5' 0"	5' 6"	6' 0"
	Rough Opening		1' 4-1/2"	1' 8-1/2"	2' 0-1/2"	2' 4-1/2"	2' 6-1/2"	2' 8-1/2"	3' 0-1/2"	3' 4-1/2"	3' 6-1/2"	4' 0-1/2"	4' 6-1/2"	5' 0-1/2"	5' 6-1/2"	6' 0-1/2"	
Height		Glass Size	14-1/32"	18-1/32"	22-1/32"	26-1/32"	28-1/32"	30-1/32"	34-1/32"	38-1/32"	40-1/32"	46-1/32"	52-1/32"	58-1/32"	64-1/32"	70-1/32"	
1' 4"	1' 4-1/2"	14-1/32"	1-4 x 1-4	1-8 x 1-4	2-0 x 1-4	2-4 x 1-4	2-6 x 1-4	2-8 x 1-4	3-0 x 1-4	3-4 x 1-4	3-6 x 1-4	4-0 x 1-4	4-6 x 1-4	5-0 x 1-4	5-6 x 1-4	6-0 x 1-4	
1' 8"	1' 8-1/2"	18-1/32"	1-4 x 1-8	1-8 x 1-8	2-0 x 1-8	2-4 x 1-8	2-6 x 1-8	2-8 x 1-8	3-0 x 1-8	3-4 x 1-8	3-6 x 1-8	4-0 x 1-8	4-6 x 1-8	5-0 x 1-8	5-6 x 1-8	6-0 x 1-8	
2' 0"	2' 0-1/2"	22-1/32"	1-4 x 2-0	1-8 x 2-0	2-0 x 2-0	2-4 x 2-0	2-6 x 2-0	2-8 x 2-0	3-0 x 2-0	3-4 x 2-0	3-6 x 2-0	4-0 x 2-0	4-6 x 2-0	5-0 x 2-0	5-6 x 2-0	6-0 x 2-0	
2' 6"	2' 6-1/2"	28-1/32"	1-4 x 2-6	1-8 x 2-6	2-0 x 2-6	2-4 x 2-6	2-6 x 2-6	2-8 x 2-6	3-0 x 2-6	3-4 x 2-6	3-6 x 2-6	4-0 x 2-6	4-6 x 2-6	5-0 x 2-6	5-6 x 2-6	6-0 x 2-6	
3' 0"	3' 0-1/2"	34-1/32"	1-4 x 3-0	1-8 x 3-0	2-0 x 3-0	2-4 x 3-0	2-6 x 3-0	2-8 x 3-0	3-0 x 3-0	3-4 x 3-0	3-6 x 3-0	4-0 x 3-0	4-6 x 3-0	5-0 x 3-0	5-6 x 3-0	6-0 x 3-0	
3' 6"	3' 6-1/2"	40-1/32"	1-4 x 3-6	1-8 x 3-6	2-0 x 3-6	2-4 x 3-6	2-6 x 3-6	2-8 x 3-6	3-0 x 3-6	3-4 x 3-6	3-6 x 3-6	4-0 x 3-6	4-6 x 3-6	5-0 x 3-6	5-6 x 3-6	6-0 x 3-6	
4' 0"	4' 0-1/2"	46-1/32"	1-4 x 4-0	1-8 x 4-0	2-0 x 4-0	2-4 x 4-0	2-6 x 4-0	2-8 x 4-0	3-0 x 4-0	3-4 x 4-0	3-6 x 4-0	4-0 x 4-0	4-6 x 4-0	5-0 x 4-0	5-6 x 4-0	6-0 x 4-0	
4' 6"	4' 6-1/2"	52-1/32"	1-4 x 4-6	1-8 x 4-6	2-0 x 4-6	2-4 x 4-6	2-6 x 4-6	2-8 x 4-6	3-0 x 4-6	3-4 x 4-6	3-6 x 4-6	4-0 x 4-6	4-6 x 4-6	5-0 x 4-6	5-6 x 4-6	6-0 x 4-6	
5' 0"	5' 0-1/2"	58-1/32"	1-4 x 5-0	1-8 x 5-0	2-0 x 5-0	2-4 x 5-0	2-6 x 5-0	2-8 x 5-0	3-0 x 5-0	3-4 x 5-0	3-6 x 5-0	4-0 x 5-0	4-6 x 5-0	5-0 x 5-0	5-6 x 5-0	6-0 x 5-0	
5' 6"	5' 6-1/2"	64-1/32"	1-4 x 5-6	1-8 x 5-6	2-0 x 5-6	2-4 x 5-6	2-6 x 5-6	2-8 x 5-6	3-0 x 5-6	3-4 x 5-6	3-6 x 5-6	4-0 x 5-6	4-6 x 5-6	5-0 x 5-6	5-6 x 5-6	6-0 x 5-6	
6' 0"	6' 0-1/2"	70-1/32"	1-4 x 6-0	1-8 x 6-0	2-0 x 6-0	2-4 x 6-0	2-6 x 6-0	2-8 x 6-0	3-0 x 6-0	3-4 x 6-0	3-6 x 6-0	4-0 x 6-0	4-6 x 6-0	5-0 x 6-0	5-6 x 6-0	6-0 x 6-0	

Size Limitations for Direct Set Corner Windows*:

Factory-assembled with or without corner post:

Minimum Width: 12"

Maximum Width: 72"

Minimum Height: 15"

Maximum Height: 120"

Field-glazed units without a corner post:

Accent and Flush Style Exteriors: Minimum glass thickness: 1/8"

Accent and Flush Style Exteriors: Maximum glass thickness: 1-3/8"

Factory-glazed with corner post:

Maximum combined Left + Right Width: 84"

Maximum combined Height: 110"

* Units beyond the factory-glazed limit will be shipped as a kit that requires field assembly and glazing.

Direct Set Transoms for Inswing & Outswing Doors										
Call-out of matching door unit			For Mulling Above Single Doors				For Mulling Above Double Doors			
			2-0	2-6	2-8	3-0	4-0	5-0	5-4	6-0
Frame Size	Width		2' 2"	2' 8"	2' 10"	3' 2"	4' 2-25/32"	5' 2-25/32"	5' 6-25/32"	6' 2-25/32"
	Rough Opening		2' 2-1/2"	2' 8-1/2"	2' 10-1/2"	3' 2-1/2"	51-5/16"	63-5/16"	67-5/16"	75-5/16"
Height		Glass Size	24-1/32"	30-1/32"	32-1/32"	36-1/32"	48-13/16"	60-13/16"	64-13/16"	72-13/16"
1' 0"	1' 0-1/2"	10-1/32"	2-0 x 1-0	2-6 x 1-0	2-8 x 1-0	3-0 x 1-0	4-0 x 1-0	5-0 x 1-0	5-4 x 1-0	6-0 x 1-0
1' 4"	1' 4-1/2"	14-1/32"	2-0 x 1-4	2-6 x 1-4	2-8 x 1-4	3-0 x 1-4	4-0 x 1-4	5-0 x 1-4	5-4 x 1-4	6-0 x 1-4
1' 6"	1' 6-1/2"	16-1/32"	2-0 x 1-6	2-6 x 1-6	2-8 x 1-6	3-0 x 1-6	4-0 x 1-6	5-0 x 1-6	5-4 x 1-6	6-0 x 1-6
1' 8"	1' 8-1/2"	18-1/32"	2-0 x 1-8	2-6 x 1-8	2-8 x 1-8	3-0 x 1-8	4-0 x 1-8	5-0 x 1-8	5-4 x 1-8	6-0 x 1-8
2' 0"	2' 0-1/2"	22-1/32"	2-0 x 2-0	2-6 x 2-0	2-8 x 2-0	3-0 x 2-0	4-0 x 2-0	5-0 x 2-0	5-4 x 2-0	6-0 x 2-0
2' 6"	2' 6-1/2"	28-1/32"	2-0 x 2-6	2-6 x 2-6	2-8 x 2-6	3-0 x 2-6	4-0 x 2-6	5-0 x 2-6	5-4 x 2-6	6-0 x 2-6

NOTE: For the most up-to-date data, please visit kolbewindows.com.

Custom sizes may be available within the size limitations shown. Other limitations may apply as well.

Size Limitations for Swinging Doors:

Minimum Width: 1' 6"

Maximum Width: 3' 6"

Minimum Height: 1' 6"

Maximum Height: 10' 0"

Inswing Doors (with standard sills)																		
Call-out						Single Doors				French Doors (Double-wide Opening)								
						2-0	2-6	2-8	3-0	4-0	5-0	5-4	6-0					
Nominal Panel Size						2' 0"	2' 6"	2' 8"	3' 0"	2' 0"	2' 6"	2' 8"	3' 0"					
	Rough Opening					Width					26-1/2"	32-1/2"	34-1/2"	38-1/2"	51-9/32"	63-9/32"	67-9/32"	75-9/32"
		Glass Size*		Glass Size†		18-7/8"	24-7/8"	26-7/8"	30-7/8"	18-7/8"	24-7/8"	26-7/8"	30-7/8"					
	Height		Glass Size††		Glass Size‡	14-7/8"	20-7/8"	22-7/8"	26-7/8"	14-7/8"	20-7/8"	22-7/8"	26-7/8"					
6' 8"	82-11/16"	72-9/16"	70-9/16"	66-15/16"	64-15/16"	2-0 x 6-8	2-6 x 6-8	2-8 x 6-8	3-0 x 6-8	4-0 x 6-8	5-0 x 6-8	5-4 x 6-8	6-0 x 6-8					
7' 0"	86-11/16"	76-9/16"	74-9/16"	70-15/16"	68-15/16"	2-0 x 7-0	2-6 x 7-0	2-8 x 7-0	3-0 x 7-0	4-0 x 7-0	5-0 x 7-0	5-4 x 7-0	6-0 x 7-0					
8' 0"	98-11/16"	88-9/16"	86-9/16"	82-15/16"	80-15/16"	2-0 x 8-0	2-6 x 8-0	2-8 x 8-0	3-0 x 8-0	4-0 x 8-0	5-0 x 8-0	5-4 x 8-0	6-0 x 8-0					
9' 0"***	110-11/16"	100-9/16"	98-9/16"	94-15/16"	92-15/16"	2-0 x 9-0	2-6 x 9-0	2-8 x 9-0	3-0 x 9-0	4-0 x 9-0	5-0 x 9-0	5-4 x 9-0	6-0 x 9-0					
10' 0"***	122-11/16"	112-9/16"	110-9/16"	106-15/16"	104-15/16"	2-0 x 10-0	2-6 x 10-0	2-8 x 10-0	3-0 x 10-0	4-0 x 10-0	5-0 x 10-0	5-4 x 10-0	6-0 x 10-0					

Outswing Doors (with standard sills)																		
Call-out						Single Doors				French Doors (Double-wide Opening)								
						2-0	2-6	2-8	3-0	4-0	5-0	5-4	6-0					
Nominal Panel Size						2' 0"	2' 6"	2' 8"	3' 0"	2' 0"	2' 6"	2' 8"	3' 0"					
	Rough Opening					Width					26-1/2"	32-1/2"	34-1/2"	38-1/2"	51-9/32"	63-9/32"	67-9/32"	75-9/32"
		Glass Size*		Glass Size†		18-7/8"	24-7/8"	26-7/8"	30-7/8"	18-7/8"	24-7/8"	26-7/8"	30-7/8"					
	Height		Glass Size††		Glass Size‡	14-7/8"	20-7/8"	22-7/8"	26-7/8"	14-7/8"	20-7/8"	22-7/8"	26-7/8"					
6' 8"	82-11/16"	73"	71"	67-3/8"	65-3/8"	2-0 x 6-8	2-6 x 6-8	2-8 x 6-8	3-0 x 6-8	4-0 x 6-8	5-0 x 6-8	5-4 x 6-8	6-0 x 6-8					
7' 0"	86-11/16"	77"	75"	71-3/8"	69-3/8"	2-0 x 7-0	2-6 x 7-0	2-8 x 7-0	3-0 x 7-0	4-0 x 7-0	5-0 x 7-0	5-4 x 7-0	6-0 x 7-0					
8' 0"	98-11/16"	89"	87"	83-3/8"	81-3/8"	2-0 x 8-0	2-6 x 8-0	2-8 x 8-0	3-0 x 8-0	4-0 x 8-0	5-0 x 8-0	5-4 x 8-0	6-0 x 8-0					
9' 0"***	110-11/16"	101"	99"	95-3/8"	93-3/8"	2-0 x 9-0	2-6 x 9-0	2-8 x 9-0	3-0 x 9-0	4-0 x 9-0	5-0 x 9-0	5-4 x 9-0	6-0 x 9-0					
10' 0"***	122-11/16"	113"	111"	107-3/8"	105-3/8"	2-0 x 10-0	2-6 x 10-0	2-8 x 10-0	3-0 x 10-0	4-0 x 10-0	5-0 x 10-0	5-4 x 10-0	6-0 x 10-0					

Inswing Door Sidelites (sash set)							
Nominal Panel Size / Call-out				1-0	1-2	1-4	1-6
	Rough Opening		Width	14-1/2"	16-1/2"	18-1/2"	20-1/2"
	Height	Glass Size*	Glass Size†	6-7/8"	8-7/8"	10-7/8"	12-7/8"
6' 8"	82-11/16"	72-9/16"	66-15/16"	1-0 x 6-8	1-2 x 6-8	1-4 x 6-8	1-6 x 6-8
7' 0"	86-11/16"	76-9/16"	70-15/16"	1-0 x 7-0	1-2 x 7-0	1-4 x 7-0	1-6 x 7-0
8' 0"	98-11/16"	88-9/16"	82-15/16"	1-0 x 8-0	1-2 x 8-0	1-4 x 8-0	1-6 x 8-0
9' 0"***	110-11/16"	100-9/16"	94-15/16"	1-0 x 9-0	1-2 x 9-0	1-4 x 9-0	1-6 x 9-0
10' 0"***	122-11/16"	112-9/16"	106-15/16"	1-0 x 10-0	1-2 x 10-0	1-4 x 10-0	1-6 x 10-0

* Applies to doors with standard sill, 3" stiles & top rail, and 5" bottom rail.

† Applies to doors with standard sill, 3" stiles & top rail, and 10" bottom rail.

†† Applies to doors with standard sill, 5" stiles & top rail, and 5" bottom rail.

‡ Applies to doors with standard sill, 5" stiles & top rail, and 10" bottom rail.

*** Applies to doors with 2-1/4" panels only.

Outswing Door Sidelites (sash set)							
Nominal Panel Size / Call-out				1-0	1-2	1-4	1-6
	Rough Opening		Width	14-1/2"	16-1/2"	18-1/2"	20-1/2"
	Height	Glass Size*	Glass Size†	6-7/8"	8-7/8"	10-7/8"	12-7/8"
6' 8"	82-11/16"	73"	67-3/8"	1-0 x 6-8	1-2 x 6-8	1-4 x 6-8	1-6 x 6-8
7' 0"	86-11/16"	77"	71-3/8"	1-0 x 7-0	1-2 x 7-0	1-4 x 7-0	1-6 x 7-0
8' 0"	98-11/16"	89"	83-3/8"	1-0 x 8-0	1-2 x 8-0	1-4 x 8-0	1-6 x 8-0
9' 0"***	110-11/16"	101"	95-3/8"	1-0 x 9-0	1-2 x 9-0	1-4 x 9-0	1-6 x 9-0
10' 0"***	122-11/16"	113"	107-3/8"	1-0 x 10-0	1-2 x 10-0	1-4 x 10-0	1-6 x 10-0

NOTE: For the most up-to-date data, please visit kolbewindows.com.

Custom sizes may be available within the size limitations shown. Other limitations may apply as well.

Sizing & Limitations for Complementary Products

Sliding Windows:

Single Sliding Window:

Sash: Minimum Width: 12", Maximum Width: 48"

Rough Opening: Minimum Width: 24", Maximum Width: 96"

Rough Opening: Minimum Height: 14", Maximum Height: 72"

Double Sliding Window:

Sash: Minimum Width: 12", Maximum Width: 48"

Rough Opening: Minimum Width: 24", Maximum Width: 96"

Rough Opening: Minimum Height: 14", Maximum Height: 72"

Triple Sliding Window:

Operating Sash: Minimum Width: 12"

Operating Sash: Maximum Width: 30"

Stationary Sash: 2 x Operating Sash Width + 3-1/8"

Rough Opening: Minimum Width: 48", Maximum Width: 120"

Rough Opening: Minimum Height: 14", Maximum Height: 72"

Quad Sliding Window:

Operating Sash: Minimum Width: 12"

Operating Sash: Maximum Width: 42"

Rough Opening: Minimum Width: 48", Maximum Width: 168"

Rough Opening: Minimum Height: 14", Maximum Height: 72"

Sliding Patio Doors:

1-3/4" Thick Panels

Minimum Jamb Size: 4-9/16"

Minimum Panel Width: 29-3/4"

Maximum Panel Width: 48-1/4"

Minimum Panel Height: 57-23/32"

Maximum Panel Height: 95-21/32"

2-1/4" Thick Panels

Minimum Jamb Size: 5-5/8"

Minimum Panel Width: 29-1/2"

Maximum Panel Width: 60"

Minimum Panel Height: 57-7/32"

Maximum Panel Height: 119-21/32"

Folding Windows:

Minimum Jamb Size: 6-9/16"

Minimum Panel Width: 16"

Maximum Panel Width: 39-3/8"

Minimum Panel Height: 36"

Maximum Panel Height: 72"

Maximum Panels per Side: 8

Folding Doors:

Minimum Jamb Size: 6-9/16"

Minimum Panel Width: 23-3/4"

Maximum Panel Width: 39-3/8"

Minimum Panel Height: 72"

Maximum Panel Height: 120"

Maximum Panels per Side: 8

Multi-Slide Doors:

Minimum Panel Width: 23-3/4"

Maximum Panel Width: 47-3/4"

Minimum Panel Height: 33-9/16"

Maximum Panel Height: 120"

Maximum Panels per Unit: 10

TerraSpan® Lift & Slide Doors:

Minimum Panel Width: 30"

Maximum Panel Width: 72"

Minimum Panel Height: 36"

Maximum Panel Height: 144"

Maximum Panels per Unit: 10

NOTE: Units with panel sizes wider than 72" and/or taller than 144" are available on a project-by-project basis, subject to review.

NOTE: For the most up-to-date data, please visit kolbewindows.com.

Custom sizes may be available within the size limitations shown. Other limitations may apply as well.

Clear Opening Dimensions

Definitions of Acceptable Emergency Escape & Rescue Openings:

"Egress" has long been the term used to describe the clear opening dimensions of a window or door necessary to enter or exit a building in case of an emergency. With the release of the International Building Code (IBC) and International Residential Code (IRC), "egress" is no longer the appropriate term.

IBC and IRC have set the following as basic requirements for Emergency Escape & Rescue Openings.

- ▶ Minimum Opening Width: 20 inches (508 mm)
- ▶ Minimum Opening Height: 24 inches (610 mm)
- ▶ Minimum Opening Area: 5.7 sq. ft. (0.53 m²)

NOTE: Please check your local codes to confirm that these Emergency Escape & Rescue Opening requirements are applicable. Other requirements may also apply.

Notes for Casement Windows:

- ▶ Shaded units meet most national building codes for emergency escape and rescue requirements.
- ▶ Casements with Evo operators may not be considered emergency escape and rescue windows. Please contact your dealer for clear opening dimensions.
- ▶ Clear opening charts apply only to rectangle-shaped units unless otherwise specified. Clear openings are based on the unit being open to 90 degrees.

Standard Sizes	Sq. Ft. Clear Opg.	Clear Opg.		Sq. Ft. D.L.O.	Sq. Ft. Vent	Sq. Ft. of Frame Dim.
		Width	Height			
Casements with Dyad or Dual-Arm Operators & Adjustable Bar Hinges						
1'4" x 2'0"	1.15	8-7/32	20-3/32	1.57	1.77	2.67
1'4" x 2'6"	1.49	8-7/32	26-3/32	2.05	2.30	3.33
1'4" x 3'0"	1.83	8-7/32	32-3/32	2.53	2.83	4.00
1'4" x 3'6"	2.17	8-7/32	38-3/32	3.02	3.36	4.67
1'4" x 4'0"	2.52	8-7/32	44-3/32	3.50	3.88	5.33
1'4" x 4'6"	2.86	8-7/32	50-3/32	3.98	4.41	6.00
1'4" x 5'0"	3.20	8-7/32	56-3/32	4.46	4.94	6.67
1'4" x 5'6"	3.54	8-7/32	62-3/32	4.94	5.47	7.33
1'4" x 6'0"	3.89	8-7/32	68-3/32	5.42	6.00	8.00
1'8" x 2'0"	1.71	12-7/32	20-3/32	2.11	2.33	3.33
1'8" x 2'6"	2.21	12-7/32	26-3/32	2.76	3.02	4.17
1'8" x 3'0"	2.72	12-7/32	32-3/32	3.41	3.72	5.00
1'8" x 3'6"	3.23	12-7/32	38-3/32	4.06	4.41	5.83
1'8" x 4'0"	3.74	12-7/32	44-3/32	4.71	5.11	6.67
1'8" x 4'6"	4.25	12-7/32	50-3/32	5.36	5.81	7.50
1'8" x 5'0"	4.76	12-7/32	56-3/32	6.00	6.50	8.33
1'8" x 5'6"	5.27	12-7/32	62-3/32	6.65	7.20	9.17
1'8" x 6'0"	5.78	12-7/32	68-3/32	7.30	7.89	10.00
2'0" x 2'0"	2.26	16-7/32	20-3/32	2.66	2.89	4.00
2'0" x 2'6"	2.94	16-7/32	26-3/32	3.47	3.75	5.00
2'0" x 3'0"	3.61	16-7/32	32-3/32	4.29	4.61	6.00

Standard Sizes	Sq. Ft. Clear Opg.	Clear Opg.		Sq. Ft. D.L.O.	Sq. Ft. Vent	Sq. Ft. of Frame Dim.
		Width	Height			
Casements with Dyad or Dual-Arm Operators & Adjustable Bar Hinges (cont.)						
2'0" x 3'6"	4.29	16-7/32	38-3/32	5.10	5.47	7.00
2'0" x 4'0"	4.97	16-7/32	44-3/32	5.92	6.33	8.00
2'0" x 4'6"	5.64	16-7/32	50-3/32	6.73	7.20	9.00
2'0" x 5'0"	6.32	16-7/32	56-3/32	7.55	8.06	10.00
2'0" x 5'6"	6.99	16-7/32	62-3/32	8.36	8.92	11.00
2'0" x 6'0"	7.67	16-7/32	68-3/32	9.18	9.78	12.00
2'4" x 2'0"	2.82	20-7/32	20-3/32	3.20	3.44	4.67
2'4" x 2'6"	3.66	20-7/32	26-3/32	4.18	4.47	5.83
2'4" x 3'0"	4.51	20-7/32	32-3/32	5.16	5.50	7.00
2'4" x 3'6"	5.35	20-7/32	38-3/32	6.15	6.53	8.17
2'4" x 4'0"	6.19	20-7/32	44-3/32	7.13	7.56	9.33
2'4" x 4'6"	7.03	20-7/32	50-3/32	8.11	8.59	10.50
2'4" x 5'0"	7.88	20-7/32	56-3/32	9.09	9.62	11.67
2'4" x 5'6"	8.72	20-7/32	62-3/32	10.07	10.65	12.83
2'4" x 6'0"	9.56	20-7/32	68-3/32	11.06	11.67	14.00
2'6" x 2'0"	3.10	22-7/32	20-3/32	3.47	3.72	5.00
2'6" x 2'6"	4.03	22-7/32	26-3/32	4.54	4.84	6.25
2'6" x 3'0"	4.95	22-7/32	32-3/32	5.60	5.95	7.50
2'6" x 3'6"	5.88	22-7/32	38-3/32	6.67	6.67	8.75
2'6" x 4'0"	6.80	22-7/32	44-3/32	7.73	7.73	10.00
2'6" x 4'6"	7.73	22-7/32	50-3/32	8.80	8.80	11.25
2'6" x 5'0"	8.66	22-7/32	56-3/32	9.86	9.86	12.50
2'6" x 5'6"	9.58	22-7/32	62-3/32	10.93	11.51	13.75
2'6" x 6'0"	10.51	22-7/32	68-3/32	11.99	12.62	15.00
2'8" x 2'0"	3.12	22-11/32	20-3/32	3.74	4.00	5.33
2'8" x 2'6"	4.05	22-11/32	26-3/32	4.89	5.20	6.67
2'8" x 3'0"	4.98	22-11/32	32-3/32	6.04	6.39	8.00
2'8" x 3'6"	5.91	22-11/32	38-3/32	7.19	7.59	9.33
2'8" x 4'0"	6.84	22-11/32	44-3/32	8.34	8.78	10.67
2'8" x 4'6"	7.77	22-11/32	50-3/32	9.49	9.98	12.00
2'8" x 5'0"	8.70	22-11/32	56-3/32	10.64	11.17	13.33
2'8" x 5'6"	9.63	22-11/32	62-3/32	11.78	12.37	14.67
2'8" x 6'0"	10.57	22-11/32	68-3/32	12.93	13.57	16.00
3'0" x 2'0"	3.68	26-11/32	20-3/32	4.29	4.56	6.00
3'0" x 2'6"	4.77	26-11/32	26-3/32	5.60	5.92	7.50
3'0" x 3'0"	5.87	26-11/32	32-3/32	6.92	7.29	9.00
3'0" x 3'6"	6.97	26-11/32	38-3/32	8.23	8.65	10.50
3'0" x 4'0"	8.07	26-11/32	44-3/32	9.55	10.01	12.00
3'0" x 4'6"	9.16	26-11/32	50-3/32	10.86	11.37	13.50
3'0" x 5'0"	10.26	26-11/32	56-3/32	12.18	12.73	15.00
3'0" x 5'6"	11.36	26-11/32	62-3/32	13.49	14.10	16.50
3'0" x 6'0"	12.46	26-11/32	68-3/32	14.81	15.46	18.00

NOTE: For the most up-to-date data, please visit kolbewindows.com.

Clear Opening Dimensions

Standard Sizes	Sq. Ft. Clear Opg.	Clear Opg.		Sq. Ft. D.L.O.	Sq. Ft. Vent	Sq. Ft. of Frame Dim.
		Width	Height			
Awnings with Adjustable Bar Hinges						
1'8" x 1'4"	0.95	16-11/16	8-7/32	1.25	1.40	2.22
2'0" x 1'4"	1.18	20-11/16	8-7/32	1.57	1.74	2.67
2'4" x 1'4"	1.41	24-11/16	8-7/32	1.89	2.07	3.11
2'6" x 1'4"	1.52	26-11/16	8-7/32	2.05	2.24	3.33
2'8" x 1'4"	1.64	28-11/16	8-7/32	2.21	2.41	3.56
3'0" x 1'4"	1.87	32-11/16	8-7/32	2.53	2.75	4.00
3'6" x 1'4"	2.21	38-11/16	8-7/32	3.02	3.25	4.67
4'0" x 1'4"	2.55	44-11/16	8-7/32	3.50	3.75	5.33
1'8" X 1'8"	1.42	16-11/16	12-7/32	1.68	1.87	2.78
2'0" X 1'8"	1.76	20-11/16	12-7/32	2.11	2.31	3.33
2'4" X 1'8"	2.09	24-11/16	12-7/32	2.55	2.76	3.89
2'6" X 1'8"	2.26	26-11/16	12-7/32	2.76	2.98	4.17
2'8" X 1'8"	2.43	28-11/16	12-7/32	2.98	3.21	4.44
3'0" X 1'8"	2.77	32-11/16	12-7/32	3.41	3.65	5.00
3'6" X 1'8"	3.28	38-11/16	12-7/32	4.06	4.32	5.83
4'0" X 1'8"	3.79	44-11/16	12-7/32	4.71	4.99	6.67
1'8" x 2'0"	1.88	16-11/16	16-7/32	2.11	2.33	3.33
2'0" X 2'0"	2.33	20-11/16	16-7/32	2.66	2.89	4.00
2'4" X 2'0"	2.78	24-11/16	16-7/32	3.20	3.44	4.67
2'6" X 2'0"	3.01	26-11/16	16-7/32	3.47	3.72	5.00
2'8" X 2'0"	3.23	28-11/16	16-7/32	3.74	4.00	5.33
3'0" X 2'0"	3.68	32-11/16	16-7/32	4.29	4.56	6.00
3'6" X 2'0"	4.36	38-11/16	16-7/32	5.10	5.40	7.00
4'0" X 2'0"	5.03	44-11/16	16-7/32	5.92	6.24	8.00
1'8" x 2'6"	2.57	16-11/16	22-7/32	2.76	3.02	4.17
2'0" X 2'6"	3.19	20-11/16	22-7/32	3.47	3.75	5.00
2'4" X 2'6"	3.81	24-11/16	22-7/32	4.18	4.47	5.83
2'6" X 2'6"	4.12	26-11/16	22-7/32	4.54	4.84	6.25
2'8" X 2'6"	4.43	28-11/16	22-7/32	4.89	5.20	6.67
3'0" X 2'6"	5.04	32-11/16	22-7/32	5.60	5.92	7.50
3'6" X 2'6"	5.97	38-11/16	22-7/32	6.67	7.01	8.75
4'0" X 2'6"	6.90	44-11/16	22-7/32	7.73	8.10	10.00
1'8" x 3'0"	3.27	16-11/16	28-7/32	3.41	3.72	5.00
2'0" X 3'0"	4.05	20-11/16	28-7/32	4.29	4.61	6.00
2'4" X 3'0"	4.84	24-11/16	28-7/32	5.16	5.50	7.00
2'6" X 3'0"	5.23	26-11/16	28-7/32	5.60	5.95	7.50
2'8" X 3'0"	5.62	28-11/16	28-7/32	6.04	6.39	8.00
3'0" X 3'0"	6.41	32-11/16	28-7/32	6.92	7.29	9.00
3'6" X 3'0"	7.58	38-11/16	28-7/32	8.23	8.62	10.50
4'0" X 3'0"	8.76	44-11/16	28-7/32	9.55	9.96	12.00

Notes for Awning Windows:

- ▶ Awning windows may not be considered emergency escape and rescue windows because operator arms protrude across the clear opening and windows require a direction change from vertical to horizontal to exit through the window.
- ▶ Clear openings determined after unhooking and retracting operator arms, then pushing the sash open to 90 degrees.
- ▶ Wide awning operators are used on units with box sizes greater than 20".
- ▶ Narrow awning operators are used on units with box sizes less than or equal to 20".
- ▶ Awnings with Evo operators may not be considered emergency escape and rescue windows. Please contact your distributor for clear opening dimensions.
- ▶ Clear opening charts apply only to rectangle-shaped units unless otherwise specified.

Notes for Inswing Doors:

- ▶ For units with ADA-compliant sills, add 23/32" to the clear opening heights shown here.
- ▶ Shaded units meet most national building codes for emergency escape and rescue requirements and means of egress.
- ▶ Clear openings are based upon the door being open to 90 degrees.
- ▶ Panels have 5" bottom rails, with 3" stiles and top rails as standard.

Standard Size	Sq. Ft. Clear Opg.		Clear Opg. Width		Clear Opg. Ht.	Sq. Ft. D.L.O.	Sq. Ft. Vent	Sq. Ft. of Unit Frame Dim.
	1 Open	2 Open	1 Open	2 Open				
Inswing Doors with 1-3/4" Thick Panels*, 1-wide								
2068	11.77	-	21-11/32	-	79-13/32	.88	12.82	14.8
2668	15.08	-	27-11/32	-	79-13/32	11.86	16.13	18.22
2868	16.18	-	29-11/32	-	79-13/32	12.86	17.23	19.36
3068	18.39	-	33-11/32	-	79-13/32	14.85	19.44	21.64
2070	12.36	-	21-11/32	-	83-13/32	9.38	13.47	15.53
2670	15.84	-	27-11/32	-	83-13/32	12.53	16.94	19.11
2870	17.00	-	29-11/32	-	83-13/32	13.58	18.10	20.31
3070	19.31	-	33-11/32	-	83-13/32	15.68	20.42	22.69
2080	14.14	-	21-11/32	-	95-13/32	10.87	15.40	17.69
2680	18.12	-	27-11/32	-	95-13/32	14.52	19.38	21.78
2880	19.44	-	29-11/32	-	95-13/32	15.73	20.70	23.14
3080	22.09	-	33-11/32	-	95-13/32	18.17	23.35	25.86
Inswing Doors with 1-3/4" Thick Panels*, 2-wide (French)								
4068	11.77	24.38	21-11/32	44-7/32	79-13/32	17.77	26.49	28.92
5068	15.08	31.00	27-11/32	56-7/32	79-13/32	23.73	33.10	35.75
5468	16.18	33.21	29-11/32	60-7/32	79-13/32	25.72	35.31	38.03
6068	18.39	37.62	33-11/32	68-7/32	79-13/32	29.69	39.72	42.58
4070	12.36	25.61	21-11/32	44-7/32	83-13/32	18.76	27.82	30.33
5070	15.84	32.56	27-11/32	56-7/32	83-13/32	25.06	34.77	37.49
5470	17.00	34.88	29-11/32	60-7/32	83-13/32	27.16	37.09	39.88
6070	19.31	39.51	33-11/32	68-7/32	83-13/32	31.35	41.72	44.66
4080	14.14	29.30	21-11/32	44-7/32	95-13/32	21.74	31.82	34.56
5080	18.12	37.25	27-11/32	56-7/32	95-13/32	29.04	39.77	42.73
5480	19.44	39.90	29-11/32	60-7/32	95-13/32	31.47	42.42	45.45
6080	22.09	45.20	33-11/32	68-7/32	95-13/32	36.33	47.72	50.89

*For 2-1/4" thick panels, subtract 3/8" from the clear opening widths shown here for each active panel.

NOTE: For the most up-to-date data, please visit kolbewindows.com.

Notes for Outswing Doors:

- ▶ For units with ADA-compliant sills, add 1" for thermal or 1-1/4" for non-thermal to the clear opening heights shown here.
- ▶ Shaded units meet most national building codes for emergency escape and rescue requirements and means of egress.
- ▶ Clear openings are based upon the door being open to 90 degrees.
- ▶ Panels have 5" bottom rails, with 3" stiles and top rails as standard.

Standard Size	Sq. Ft. Clear Opg.		Clear Opg. Width		Clear Opg. Ht.	Sq. Ft. D.L.O.	Sq. Ft. Vent	Sq. Ft. of Unit Frame Dim.
	1 Open	2 Open	1 Open	2 Open				
Outswing Doors with 1-3/4" or 2-1/4" Thick Panels, 1-wide								
2068	11.69	-	21-9/32	-	79-1/8	8.95	12.78	14.81
2668	14.99	-	27-9/32	-	79-1/8	11.94	16.07	18.22
2868	16.09	-	29-9/32	-	79-1/8	12.93	17.17	19.36
3068	18.29	-	33-9/32	-	79-1/8	14.93	19.37	21.64
2070	12.28	-	21-9/32	-	83-1/8	9.44	13.42	15.53
2670	15.75	-	27-9/32	-	83-1/8	12.60	16.88	19.11
2870	16.90	-	29-9/32	-	83-1/8	13.66	18.04	20.31
3070	19.21	-	33-9/32	-	83-1/8	15.76	20.35	22.69
2080	14.06	-	21-9/32	-	95-1/8	10.94	15.36	17.69
2680	18.02	-	27-9/32	-	95-1/8	14.60	19.32	21.78
2880	19.34	-	29-9/32	-	95-1/8	15.82	20.64	23.14
3080	21.99	-	33-9/32	-	95-1/8	18.26	23.29	25.86
Outswing Doors with 1-3/4" or 2-1/4" Thick Panels, 2-wide (French)								
4068	11.69	24.23	21-9/32	44-3/32	79-1/8	17.89	26.39	28.92
5068	14.99	30.82	27-9/32	56-3/32	79-1/8	23.88	32.99	35.75
5468	16.09	33.02	29-9/32	60-3/32	79-1/8	25.87	35.18	38.03
6068	18.29	37.42	33-9/32	68-3/32	79-1/8	29.86	39.58	42.58
4070	12.28	25.45	21-9/32	44-3/32	83-1/8	18.89	27.73	30.33
5070	15.75	32.38	27-9/32	56-3/32	83-1/8	25.21	34.65	37.49
5470	16.90	34.69	29-9/32	60-3/32	83-1/8	27.31	36.96	39.88
6070	19.21	39.31	33-9/32	68-3/32	83-1/8	31.52	41.58	44.66
4080	14.06	29.13	21-9/32	44-3/32	95-1/8	21.88	31.73	34.56
5080	18.02	37.05	27-9/32	56-3/32	95-1/8	29.19	39.66	42.73
5480	19.34	39.70	29-9/32	60-3/32	95-1/8	31.63	42.30	45.45
6080	21.99	44.98	33-9/32	68-3/32	95-1/8	36.51	47.58	50.89

Rough Opening Recommendations:

The Kolbe standard rough opening dimensions published in our product literature are provided as a guideline to maintain a minimum 1/4" space between the window or patio door and the building structure. There are certain situations where Kolbe recommends a gap larger than our published 1/4" standard:

- ▶ When installation clips are used, the gap should be increased to 1/2" on the sides, top and bottom of the unit.
- ▶ When mulls are installed in the opening, the gap all around should be increased to 1/2". For installation consistency, the same gap should be used on all units in the project.
- ▶ Kolbe recommends a sill pan drainage system be used and the gap should be increased to 1/2" on the top and bottom of the unit.

Because every installation is different, Kolbe strongly recommends consultation with the local supplier or a qualified contractor, architect or structural engineer prior to the installation of any Kolbe product. Installation of Kolbe products, including sizing of rough opening, method of attachment, fastener selection, and code compliance is the sole responsibility of the architect, building owner, contractor and/or consumer.

Unless otherwise specified, if units are ordered by rough opening, Kolbe will size the units using our standard minimum 1/4" gap – regardless of the options or construction of the product ordered.

Energy Performance Data

ENERGY STAR® – United States

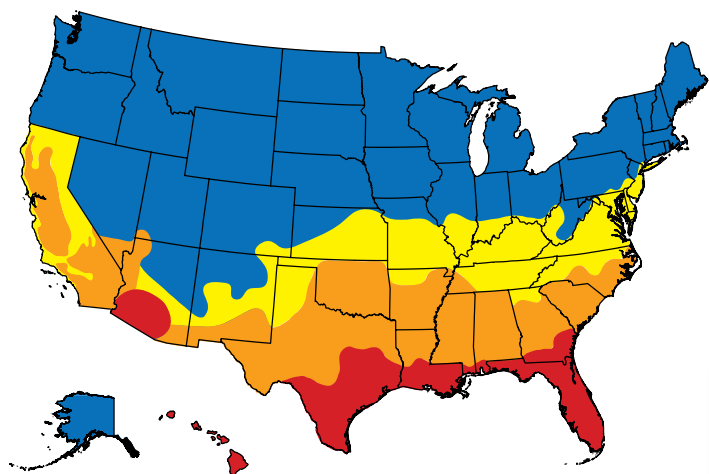


Energy Star is a government-regulated program that was created by the Environmental Protection Agency (EPA), and the U.S. Department of Energy (DOE), to help consumers quickly and easily identify energy saving products.

The Energy Star program uses energy values obtained by window and door manufacturers through the National Fenestration Rating Council (NFRC) program. NFRC ratings are based on the energy performance of the total window or door – both glass and frame.

The Energy Star program for the United States divides the nation into four separate climate zones – Northern, North-Central, South-Central, and Southern.

The performance criteria that needs to be met in order to be Energy Star compliant in a specific climate zone (effective January 1, 2015) is shown in the charts provided.



- **Northern**
Mostly Heating
- **South-Central**
Heating & Cooling
- **North-Central**
Heating & Cooling
- **Southern**
Mostly Cooling

2015 ENERGY STAR Qualification Criteria for Windows

Climate Zones - U.S.		U-Factor	SHGC
 	North-Central	≤ 0.30	≤ 0.40
 	South-Central	≤ 0.30	≤ 0.25
 	Southern	≤ 0.40	≤ 0.25

**Northern zone windows can meet prescriptive (1st row) or alternative energy performance (2nd & 3rd row) criteria to qualify for ENERGY STAR.

2016 ENERGY STAR Qualification Criteria for Windows

The effective date for the Northern Zone prescriptive and equivalent energy performance criteria for windows is January 1, 2016. North-Central, South-Central, and Southern criteria will continue to follow 2015 guidelines.

Climate Zones - U.S.		U-Factor	SHGC
 	Northern**	≤ 0.27	Any
 	Northern**	$= 0.28$	≥ 0.32
 	Northern**	$= 0.29$	≥ 0.37
 	Northern**	$= 0.30$	≥ 0.42

**Northern zone windows can meet prescriptive (1st row) or alternative energy performance (2nd, 3rd, and 4th rows) criteria to qualify for ENERGY STAR.

2015 ENERGY STAR Qualification Criteria for Doors

Glazing	U-Factor	SHGC	
Opaque	≤ 0.17	No rating	
$\leq 1/2$ -Lite	≤ 0.25	≤ 0.25	
$> 1/2$ -Lite	≤ 0.30	Northern North-Central	≤ 0.40
		Southern South-Central	≤ 0.25

California's Title 24

Kolbe's VistaLuxe Collection windows and doors can meet the strict California Title 24 Building Energy Efficiency Standards. Talk to your dealer about VistaLuxe products with glass options that help meet these stringent energy efficiency requirements, yet maintain their minimalist aesthetic and maximum view.

For energy performance data, visit:
► www.kolbewindows.com/energy

Kolbe demonstrates a commitment to providing accurate energy data by having products independently simulated, tested, inspected and listed in the NFRC certification program, and making that data available at kolbewindows.com and window labels.

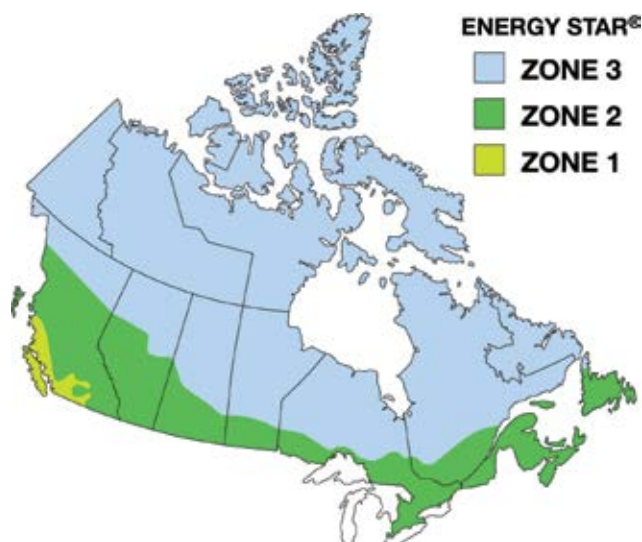
NOTE: Energy performance data and air, water, structural data is updated on a continuous basis. For the most current information, contact your local Kolbe dealer.

ENERGY STAR® – Canada

Products may comply for Canada's Energy Star program based on these compliance paths: their total U-factor, their Energy Rating (ER), or both. The Energy Rating is based on a product's overall performance based on three criteria: (1) solar heat gain, (2) U-factor, and (3) average air tightness. The higher the ER number, the better the product's thermal performance.



The U-factor and ER criteria for Canada's three climate zones is shown in the charts provided. For more detailed information about their Energy Rating system and Kolbe products that qualify for Canada's Energy Star Program, visit their website at www.oee.nrcan.gc.ca/energystar.



2015 ENERGY STAR – Canada Qualification Criteria for Windows and Sliding Doors[†]

Zone	COMPLIANCE PATHS		
	Minimum Energy Rating (ER)	or	Maximum U-Factor
1	25	or	≤ 0.28 (Min. ER = 16)
2	29	or	≤ 0.25 (Min. ER = 20)
3	34	or	≤ 0.21 (Min. ER = 24)

2015 ENERGY STAR – Canada Qualification Criteria for Doors[†]

Zone	COMPLIANCE PATHS		
	Minimum Energy Rating (ER)	or	Maximum U-Factor
1	25	or	≤ 0.28
2	29	or	≤ 0.28
3	34	or	≤ 0.21

[†]Criteria shown applies to both sliding and hinged doors and in all four climate zones. Doors following the "Maximum U-factor" compliance path do not have a minimum ER requirement.

U-FACTOR CONVERSION	
Imperial	Metric
0.35	2.00
0.32	1.80
0.28	1.60
0.25	1.40
0.21	1.20

Energy Performance Terminology

- ▶ U-Factor refers to a measure of heat transfer through the window or door unit. A lower U-factor means less heat escapes during winter weather, thus reducing heating costs in cold climates.
- ▶ R-Value refers to resistance to heat flow. A high R-value indicates that a window or door has good heat insulating properties.
- ▶ Solar Heat Gain Coefficient (SHGC) is a measure of how much solar energy is passing through the unit's glass. The lower a window or door unit's SHGC, the less solar heat is transmitted into a room, thus allowing for lower cooling bills in hot climates.
- ▶ Visible Transmittance (VT) is a measure of the portion of visible light that passes through a window or door. The higher a window or door unit's VT Total, the more visible light is transmitted into a room. This value is influenced by both the glass selection and by the ratio of glazing and frame area.

NOTE: Energy performance data and air, water, and structural data is updated on a continuous basis. For the most current information, contact your local Kolbe dealer.



KOLBE

WINDOWS & DOORS

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