





We're for the visionaries."

We're for people who take building to new levels.



We're for people who are passionate about design, who care about the big picture and the smallest detail. We're for people who aren't satisfied with mainstream choices... who push the limits of what's possible with the options and innovations that can only be found in Kolbe windows and doors.



We're for quality craftsmanship.

We're for a tradition of excellence that outlasts the latest design trend. The Kolbe story began with a family and a vision. More than 75 years after the Kolbe brothers began their commitment to producing premium quality windows and doors, products bearing their family name can be found in some of North America's most impressive homes and businesses.

We're for expertise.

We're for people who dream of a personalized design experience. That's why you can't find Kolbe windows and doors in the aisles of a home center. Our products are only available through a Kolbe dealer, because they are as passionate about windows and doors as you are about bringing your vision to life. And they will work with you to make your dream a concrete reality.





We're for possibilities.

We're for people who won't settle for "standard." We're for limitless options and custom solutions that can only be found in Kolbe's made-to-order products. Our team members are craftspeople who focus on building one window or door at a time, to create distinctive products that fulfill your unique vision.

We're for innovation.

We're for people who want to take building to new levels, with advancements in not only extraordinary sizes and shapes, but also ground-breaking products. We're for creative thinking that redefines what's possible, constantly reimagining our windows and doors to elevate style, performance and functionality.



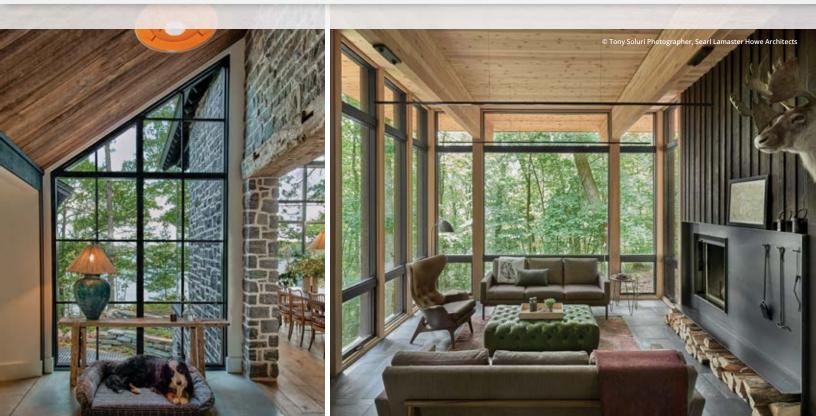
Let us bring your vision to life.



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VistaLuxe Collection

Kolbe's VistaLuxe[®] Collection is ideal for contemporary designs that utilize clean lines and large expanses of glass. The original collection, VistaLuxe WD LINE, continues to offer versatility, with extruded aluminum exteriors and warm wood interiors, whereas the VistaLuxe AL LINE offers thermally broken, all-aluminum windows and doors. The collection's design flexibility, functionality, and endless style choices are sure to match any modern aesthetic.

VistaLuxe WD LINE Window Profile Styles



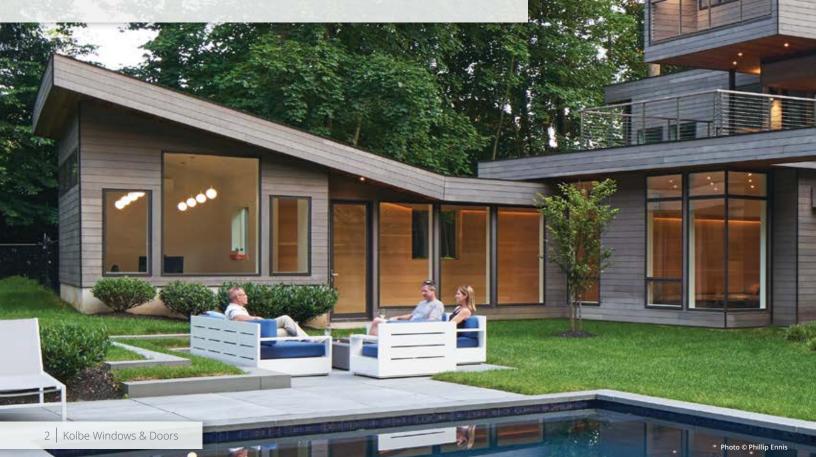
Flush

- Extremely streamlined look
- Sash is level with the frame
- With double or triple pane glass



Accent

- Adds depth and visual interest
- Sash is recessed from the frame to create a shadow line
- With double or triple pane glass



VistaLuxe®Collection WD LINE

The VistaLuxe WD LINE's extruded aluminum exteriors and warm wood interiors prove that minimalist design can feel warm and organic. Perfect for projects requiring a streamlined look, the VistaLuxe WD LINE combines function with style to create openings as unique as your vision.

The VistaLuxe WD LINE 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 mulled windows, with glass in the same plane
- · 2 exterior profile styles with square interiors and exteriors
- An alternative to steel, or an option used in conjunction with steel products
- Custom solutions and complementary products

Casements & Awnings | Direct Sets | Swinging Doors | Sliding Windows | Folding Windows Sliding Doors | Folding Doors | Multi-Slide Doors | Pivot Doors







Casements & Awnings

VistaLuxe WD LINE 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-ft-by-6-ft casement. The optional Evo operator elevates the streamlined aesthetic, allowing the hardware to remain discreet – maintaining the clean lines of the product.

Features

- Pine interiors, ready for a variety of finishes (pg. 30)
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating Solar Low-E glass (pg. 32)
- Accessory grooves are integral to the extruded frames so units can easily be mulled together
- Interior insect screens with Rustic aluminum frames and BetterVue[®] fiberglass mesh (pg. 33)
- Stainless steel exterior operator parts
- Matte Black Ashlar handle (pg. 34)
- Integral nailing fin with additional head drip caps

*Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details. BetterVue® is a registered trademark of PHIFER INCORPORATED.



- ▶ 70% fluoropolymer exterior paint finish**
- Insect screens with White, Beige, Coal Black, Sand, Dark Bronze anodized, or Clear anodized frames
- Wood-wrapped insect screen frames, UltraVue[®] fiberglass screen mesh, aluminum mesh, or charcoalcolored 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 (WOCD) available on casements (pg. 39)
- Motorized operator available on awnings
- Evo operator[†] (pg. 34)
- Extension jambs (up to 12" applied; over 12" shipped loose for field application)
- Galvanized steel installation clips

NOTE: All measurements are nominal.

**Recommended for coastal and heavy salt concentration areas.

UltraVue® is a registered trademark of PHIFER INCORPORATED. †Not intended for egress situations. Cannot be used with all glazing options. Contact your Kolbe dealer for more information.



Direct Sets

VistaLuxe WD LINE direct sets are perfectly designed to combine with other VistaLuxe WD LINE products. Create a custom configuration by mulling direct sets to operating windows and doors, or create large walls of glass with multiple direct sets in floor-to-ceiling configurations that precisely align both horizontally and vertically.

Features

- ▶ Pine interiors, ready for a variety of finishes (pg. 30)
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating Solar Low-E glass (pg. 32)
- 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





- ▶ 70% fluoropolymer exterior paint finish**
- 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





Corner Direct Sets

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

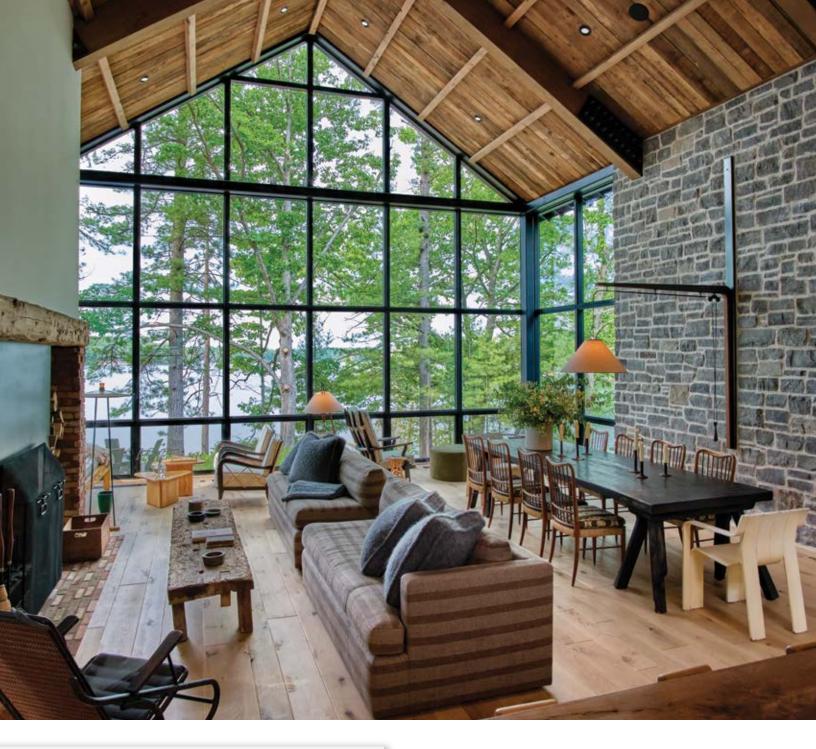
Features

- ▶ Pine interiors, ready for a variety of finishes (pg. 30)
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- ▶ Energy efficient, insulating Solar Low-E glass (pg. 32)
- 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

*Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details.



- ▶ 70% fluoropolymer exterior paint finish**
- ▶ 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)



Geometric Direct Sets

Geometric direct set windows can be installed as stand-alone units, or mulled above other windows and doors to accentuate a roofline. VistaLuxe WD LINE geometric direct sets are available in the same exterior styles as other VistaLuxe WD LINE products, to help seamlessly create large window walls.

Features

- ▶ Pine interiors, ready for a variety of finishes (pg. 30)
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating Solar Low-E glass (pg. 32)
- 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



- ▶ 70% fluoropolymer exterior paint finish**
- 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

Swinging Doors

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

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Features

- Panel thicknesses are defaulted by swing choice: inswing 1-3/4" or 2-1/4"; outswing 2-1/4"
- ▶ 3" wide stiles and top rail; 5" bottom rail
- LVL stiles for superior strength and stability
- ▶ Pine interiors, ready for a variety of finishes (pg. 30)
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating tempered Solar Low-E glass (pg. 32)

Options (custom options are also available)

- ▶ 70% fluoropolymer exterior paint finish**
- 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

- 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 (pg. 34)
- Adjustable Black hinges
- Weather-resistant, multi-point stainless steel operator parts and hardware channels
- Black weatherstripping
- Steel stiffeners with matching mull covers
- Extension jambs in a variety of sizes
- Baldwin[®] handle set (pg. 34)
- Ashley Norton handle set (pg. 35)
- Galvanized steel installation clips
- Beige or Rustic weatherstripping
- ► 3" cross rail
- Flat panel configurations

NOTE: All measurements are nominal.

*Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details. **Recommended for coastal and heavy salt concentration areas. See your Kolbe dealer for details. Baldwin® is a registered trademark of Baldwin Hardware Corporation







Complementary Products

Numerous VistaLuxe WD LINE Complementary products are available to help complete a project. Because the details make the difference, most VistaLuxe WD LINE 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 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 tiltin sash for easy cleaning. Single, double, triple, and quad configurations are available, including center-opening quad units that are perfect for pass-through service.

Features

- Constructed of pine, with pine interior stops and wood mull casings on mulled units
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating Solar Low-E glass (pg. 32)
- 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 (pg. 36)
- Center interlock and stiles have matching sightlines
- Nailing fin with head drip caps



- ▶ 70% fluoropolymer exterior paint finish**
- ▶ 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 (pg. 33)
- 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
- ▶ Window Opening Control Device (WOCD)[†] (pg. 39)

**Recommended for coastal and heavy salt concentration areas. See your Kolbe dealer for details.

BetterVue® and UltraVue® are registered trademarks of PHIFER INCORPORATED. †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

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.



© Fyfe Photography

- Constructed of pine with pine interior stops
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- ▶ 3" wide stiles and rails
- ▶ Frame setup up to 177" wide x 77-1/8" tall; all others knocked down
- ▶ 6-9/16" minimum jamb width

- Energy efficient, insulating Solar Low-E glass (pg. 32)
- 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 (pg. 34)
- Face-mounted flush bolt locking hardware on folding panels
- Nailing fins with head drip caps

NOTE: All measurements are nominal.

*Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details.



- ▶ 70% fluoropolymer exterior paint finish**
- 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 (pg. 36)
- Single point hardware for access panel

- Concealed shootbolt locking hardware with Uno or Aria handle sets (pg. 36)
- ▶ Baldwin[®] handle set (pg. 34)
- Ashley Norton handle set (pg. 35)
- 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

Sliding Doors

Complementary sliding patio doors are a space-saving way to connect your indoor and outdoor living spaces. VistaLuxe WD LINE 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.

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CHARLES N

hoto © Phillip En

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 with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating tempered Solar Low-E glass (pg. 32)
- Accessory grooves are integral to the extruded frames so units can easily be mulled together
- Tandem rollers with adjustable, ball-bearing wheels carry the sliding panel

Options (custom options are also available)

- ▶ 70% fluoropolymer exterior paint finish**
- ▶ 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 (pg. 39)

Operational Configurations

- ▶ 1-panel, 2-panel, 3-panel and 4-panel
- 3-wide unit in an Active-Fixed-Active (AFA) configuration

NOTE: All measurements are nominal.

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- Frame set up (units up to 8' tall)
- Screens with BetterVue[®] fiberglass mesh and extruded aluminum frames (pg. 33)
- 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 (pg. 38)
- Nailing fin with head drip caps
- Corrosion-resistant stainless steel hardware
- Black weatherstripping and interlock
- Narrow flush pull handle (pg. 38)
- Dallas handle set (pg. 38)
- Square handle (pg. 38)
- Sliding screen with extruded aluminum screen frames and UltraVue[®] fiberglass mesh or aluminum mesh (pg. 33)
- Extension jambs in a wide variety of sizes (shipped loose for field application)
- Galvanized steel installation clips



Folding Doors

Add architectural interest and merge indoor and outdoor spaces with 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 WD LINE windows and doors – narrow 3" stiles and square interiors and exteriors provide a contemporary touch.





- ▶ 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 with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating tempered Solar Low-E glass (pg. 32)
- 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 (pg. 37)
- ► Face-mounted flush bolt locking hardware on folding panels (pg. 36)
- Nailing fins with head drip caps

NOTE: All measurements are nominal.

*Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details.



- ▶ 70% fluoropolymer exterior paint finish**
- 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 (pg. 36)
- Single point hardware for access door

- Concealed shootbolt locking hardware with Uno or Aria handle sets (pg. 36)
- Baldwin[®] handle set (pg. 37)
- Ashley Norton handle set (pg. 35)
- 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

NOTE: All measurements are nominal.

**Recommended for coastal and heavy salt concentration areas. See your Kolbe dealer for details. Baldwin® is a registered trademark of Baldwin Hardware Corporation

Multi-Slide Doors

Complementary multi-slide doors upgrade standard patio door openings by expanding rooms to merge the outdoors with the indoors. VistaLuxe WD LINE 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. Configurations include stacking, pocketing, and custom corner units.





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 with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating tempered Solar Low-E glass (pg. 32)
- 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 (pg. 38)
- ▶ Folding aluminum nailing fin applied

NOTE: All measurements are nominal.

*Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details.



- 70% fluoropolymer exterior paint finish** •
- 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 (pg. 38)
- Panel automation for ease of use (pg. 39)
- Narrow flush pull handle (pg. 38)
- Dallas handle set (pg. 38)
- Black pleated sliding screen
- Extension jambs in a wide variety of sizes (shipped loose for field application) •

Operational Configurations

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

NOTE: All measurements are nominal. **Recommended for coastal and heavy salt concentration areas. See your Kolbe dealer for details.



Pivot Doors

A unique and elegant option for a wider single door, VistaLuxe WD LINE inswing and outswing pivot doors offer not only larger openings for entrance areas, but increased views and daylight. The VistaLuxe WD LINE of pivot doors offers up to 5' x 10' openings, with clean lines and specialized hardware for smooth operation.

Features

- 2-3/4" thick panels
- 5" wide stiles and top rail; 5" bottom rail
- LVL stiles for superior strength and stability
- Pine interiors, ready for a variety of finishes (pg. 30)
- Exterior wood parts are treated
- Extruded aluminum exterior with Vantage* paint finish (meets top-end performance requirements of AAMA 2604) (pg. 31)
- Energy efficient, insulating tempered Solar Low-E glass (pg. 32)

Options (custom options are also available)

- 70% fluoropolymer exterior paint finish[†]
- Panels available with 10" bottom rail
- 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

- Square exterior sticking and interior glazing bead
- Accessory grooves are integral to the extruded frames so units can easily be mulled together
- Nailing fin with head drip caps
- Matte Black Dallas handle set (pg. 37)
- ADA-Compliant sill** in Bronze Anodized
- Weather-resistant, multi-point stainless steel operator parts and hardware channels
- Black weatherstripping
- Dual or triple pane glass (pg. 32)
- Dallas handle set (pg. 37)
- ▶ Rockwood® GeoMetek pull handle (pg. 37)
- ► ADA-Compliant sill** in Clear Anodized
- Beige or Rustic weatherstripping
- 3" cross rail
- Flat panel configurations
- All wood panel

NOTE: All measurements are nominal.

- *Vantage is a Silicon Modified Polyester (SMP) exterior finish. See your Kolbe dealer for details.
- ** These options may meet standards of the Americans with Disabilities Act. Certain product limitations and modifications may apply. Please contact your local Kolbe dealer for more information.
- † Recommended for coastal and heavy salt concentration areas. See your Kolbe dealer for details.







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 welcome projects that require special wood species and finishes, custom divided lite patterns, large expanses of glass, unique configurations, and stylish functionality. Our windows and doors are built to order, allowing you to choose the options that best suit the design of your home and vision for your project. We offer many customizable options and solutions that coordinate beautifully with your home's décor and desired functionality.



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.

					Pine	Maple
	A DECEMBER OF A				and series	
			The second			
			and the second		Auger -	
Walnut	Bamboo	Fires	Mahogany	Alder	Oak	Cherry

Interior Wood Finishes

For units that are ready to install upon delivery, most of Kolbe's wood 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 as a top coat. Because our interior finishes are water-based, low-VOC stains and paints, you can rest assured you've made an environmentally conscious decision. Custom colors are also available.



Ebony	Coffee Bean	Library Red	Cherry	Chestnut	Sunset Oak	Spiced Walnut
Bright White	Ultra Pure White	Abalone	Silk	Ivory Tusk	Natural Cotton	Misty Gray
				*Applied as a single coat of paint, with some visible wood grain Printed images of wood species and stain options will vary from actual pro colors. Selections should be made based on color samples available from Kolbe dealer. Stain colors are shown on pine. A double coat clear finish is offered. Since no two trees are identical, wood can be expected to differ b in color and graining. These factors will influence the stain's final color.		
Graystone	Coal Black	White*	Black*	Color-matched interior store in the United Sta	r paint is available through ates and Canada.	any Sherwin-Williams retail

Some options for our products may have limited color offerings or may incur a nominal charge. Check with your Kolbe dealer for further details on pricing and availability.

Exterior Color Options

Mudpie

Gingersnap

VistaLuxe WD LINE products are finished with Vantage^{*}, a durable exterior paint that resists fading, chalking and marring, and carries up to a 30-year warranty^{**}. In addition to our large palette of standard exterior colors, choose a Mica[†], Anodized, or 70% PVDF fluoropolymer[†] finish for a distinct touch on your unique project. Or, for a truly one-of-a-kind statement, create a custom color to make your windows and doors far from ordinary.

Nutmeg

Truffle

e*, ng In rs,	White	Cloud	Ultra Pure White
er [†] or or	Abalone	Alabaster	Camel
ahara	Beige	Natural Cotton	Spiced Vinegar
Rustic	Shadow	Shale	Smokestack

Onyx	Coal Black	Midnight	Steel Gray	Slate	Castlerock	Timberwolf
Corbeau	Sapphire	Coastal Storm	Anchor Gray	Lunar	Emerald Isle	Mediterranean
Cider	Copper Canyon	Maize	Green Tea Leaf	Basil	Hartford Green	Mystic Ivy
Papaya	Roma	Chutney	Custom Colors Available	zed	Clear Anodized	Champagne Anodized
Galaxy Silver Mica†	Silverstorm Mica†	Cosmic Gray Mica†	Night Sky Mica†	Mica ⁺ Anodized	Black Anodized	Dark Bronze Anodized

Sa

E

Khaki

Bronze

* Vantage, a Silicon Modified Polyester (SMP), is the standard exterior finish for Kolbe's VistaLuxe WD LINE products.

**Coastal applications vary from this. Please contact your Kolbe dealer for warranty specifics.

† Mica finishes are 70% PVDF fluoropolymer as standard. Fluoropolymer coatings meet performance requirements of AAMA-2605 and are recommended for coastal applications. Please see your Kolbe dealer for details.

Some options for our products may have limited color offerings or may incur a nominal charge. Check with your Kolbe dealer for further details on pricing and availability. 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 Es. 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. Low-E is a "smart" coating that reduces energy transfer through the insulating glass unit. The result is reduced heating and cooling costs throughout the year. Low-E coatings also reduce the potential for condensation, as well as provide protection against fading of furniture, fabrics and carpeting.

Kolbe offers the following Low-E glass options, as well as many specialized options.

Solar Gain Low-E

When the weather turns frigid, Solar Gain Low-E 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.

Solar Low-E

Suitable for most climates and meets most energy zone requirements. Solar Low-E glass is designed to reflect room-side heat back into the room during winter months. In summer, visible sunlight is allowed in while blocking most of the sun's infrared heat energy. Kolbe's standard.

Solar Control Low-E

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

Solar Advanced Control Low-E

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

ThermaPlus Low-E

An additional Low-E coating which helps to meet the strictest energy requirements by providing protection against heat loss and UV damage. Available with dual pane versions of Solar Gain Low-E, Solar Low-E, Solar Control Low-E, and Solar Advanced Control Low-E glass.

Triple Pane

Provides a greater energy performing window that keeps indoor air warm and comfortable, prevents heat loss, and can lower your heating bills. It is constructed with three panes of glass, thermal spacer bars and is available in Solar Gain Low-E, Solar Low-E, Solar Control Low-E, and Solar Advanced Control Low-E glass.

Preserve® Film

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

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 cleaner, longer. 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.

Not all glass is available on all products. Please contact your Kolbe dealer for product specifics. Neat+ and Preserve are trademarks of Cardinal IG. Low-E insulating glass with a stainless steel spacer bar carries a 20-year warranty. Not all glass options listed have the same glass warranty. Please contact your dealer for details.



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.



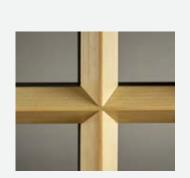
Divided Lite Options

Performance Divided Lites

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



Square Profile PDL



Triangular Profile PDL*

*Triangular PDL bars are available on the interior only, and are not available for triple pane glass units, sliding windows, or 1-3/4" thick doors. Further limitations may apply. Please consult your local Kolbe dealer for more information.

Insect Screen Mesh

Kolbe windows feature various screen mesh options to keep insects out. BetterVue[®] fiberglass mesh is less visible than many screens in the industry, and has a tighter weave to keep smaller bugs out. It is also flame retardant, and doesn't stain, crease or dent. UltraVue[®] mesh offers the ultimate in visibility. Both of these options meet strict chemical emissions limits for healthier interiors. Or, choose durable Aluminum screen mesh to help guard against damage from fiberglass screen-eating insects found in certain regions.



UltraVue® Mesh



BetterVue® Mesh



Aluminum Mesh

Water Shed Technology™

Water Shed Technology is an advanced water repellent coating that allows screens to repel water and debris. BetterVue and UltraVue mesh feature this durable coating that increases the life expectancy of the screens, by keeping them cleaner longer. Water beads up and rolls off, to preserve viewing clarity, rain or shine.

Water Shed Technology[™] is a trademark of PHIFER INCORPORATED. BetterVue[®] and UltraVue[®] are registered trademarks of PHIFER INCORPORATED.



Hardware Options

Casements & Awnings

Ashlar Handle

As standard, Ashlar handles and Ashlar locking levers are applied to VistaLuxe WD LINE casements and awnings. The square silhouettes and modern styling complement the clean lines and narrow frames of contemporary window and door configurations, while meeting egress requirements. Or choose an optional Traditional locking lever. Both styles are available in Satin Nickel, White, Rustic Umber and Matte Black.

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 WD LINE 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.



Ashlar Handle (shown in Rustic Umber)



Evo Operator* (shown in Satin Nickel)





Traditional Locking Lever^{**} (shown in White)

Ashlar Locking Lever (shown in Rustic Umber)

Swinging Doors

Swinging doors are available with an array of lever handle styles, featuring multi-point locks, with optional keyed handle sets and attractive finishes to coordinate with your décor. Choose from Dallas handle sets in Satin Nickel PVD[†], Matte Black, or Matte Black/Brushed Gold finishes, or Baldwin[®] Santa Monica and Lakeshore handle sets in Satin Nickel PVD[†] or Matte Black.



Dallas Handle (shown in Satin Nickel PVD[†])



Dallas Handle (shown in Matte Black/Brushed Gold)



Baldwin® Santa Monica Handle (shown in Matte Black)

Baldwin[®] Lakeshore Handle (shown in Satin Nickel PVD⁺)

*Not intended for egress situations. Cannot be used with all glazing options. Contact your dealer for more information. **Locking lever is not available on French casements.

TPVD (Physical Vapor Deposition) finish is an application over the color which helps protect the finish from tarnishing, peeling, and cracking. Printed images of hardware finishes will vary from actual colors. Not all hardware colors are available on all hardware options. Selections should be made based on color samples available from your Kolbe dealer.

Swinging Doors (cont.)

Ashley Norton

Kolbe's selection of Ashley Norton Hardware for swinging doors allows design flexibility, with a choice of material, backplate, lever style, and finish. Solid brass or bronze[†] levers and backplates are offered in a variety of combinations. Bronze handle sets are recommended for coastal applications.

Backplates: City (square) Rectangular (beveled)	Lever Styles: Apollo Atlas Colonial Meridian Bauhaus	Finishes: Satin Nickel Polished Chrome Dark Oil-Rubbed [*] Flat Black	Backplates: Urban (square) Rectangular (beveled)	Lever Styles: Apollo Atlas Colonial Meridian Churchill	Finishes: White Bronze ^{*†} Dark Bronze ^{*†} Matte Black [†]
BRASS	Chester		BRONZE [†]	Hampton	



Apollo Lever (shown with brass City backplate in Polished Chrome)



Chester Lever (shown with brass Rectangular backplate in Dark Oil-Rubbed*)



Bauhaus Lever (shown with brass City backplate in Satin Nickel)



Colonial Lever (shown with brass Rectangular backplate in Dark Oil-Rubbed*)



Meridian Lever (shown with bronze Urban backplate in Dark Bronze^{*†})



Atlas Lever (shown with bronze Urban backplate in Dark Bronze*†)



Churchill Lever (shown with bronze Rectangular backplate in Dark Bronze^{*†})



Hampton Lever (shown with bronze Rectangular backplate in White Bronze^{*†})

* Dark Oil-Rubbed, Dark Bronze and White Bronze are living finishes that will change appearance with time and use.

† Bronze handle sets are recommended for coastal applications. Printed images of hardware finishes will vary from actual colors. Selections should be made based on color samples available from your Kolbe dealer.

Hardware Options

Sliding Windows

Sash Lock

The positive action sash lock automatically locks when the window is closed, providing convenient security. Finger pulls placed on the active sash assist in side-to-side sliding operation. Both handles are available in Matte Black or Satin Nickel.



Sash Lock (shown in Matte Black)



Sash Lock (shown in Satin Nickel)



Flush Finger Pull (shown in Satin Nickel)

Folding Windows & Doors

Folding panels are available with surface-mounted flush bolts. Hinge handles are included on most panels that fold to the exterior. For those without hinge handles, finger pulls are available. Top and bottom concealed flush bolts are operated with either an Aria or Uno handle in Brushed Chrome or Matte Black.

For units with a swinging panel, choose from Dallas handle sets (see pg. 34) or Baldwin® handle sets. Ashley Norton handle sets are also available (see pg. 35).



Flush Shoot Bolt (shown in Satin Nickel)



Hinge Handle (shown in Matte Black)



Finger Pull (shown in Satin Nickel)



Aria Handle w/ Concealed Shoot Bolts (shown in Matte Black)



Uno Handle w/ Concealed Shoot Bolts (shown in Brushed Chrome)

Printed images of hardware finishes will vary from actual colors. Not all hardware colors are available on all hardware options. Selections should be made based on color samples available from your Kolbe dealer.

Pivot Doors

Dallas Handles

As standard, Matte Black Dallas lever handles with multi-point locks are applied to VistaLuxe WD LINE inswing and outswing pivot doors. Optional Satin Nickel PVD* and Matte Black/Brushed Gold finishes are also available. Single-point locking hardware and keyed handle sets are also available.

Rockwood® GeoMetek Pull Handles

Also available are full length pull handles in Satin Stainless or Black Suede, for a sleek, minimalist design. A thumb turn mechanism and keyed cylinder lock the handle.



Dallas Handle (shown in Satin Nickel PVD*)



Dallas Handle (shown in Matte Black/Brushed Gold)



Pull Handle (shown in Satin Stainless)





*PVD (Physical Vapor Deposition) finish is an application over the color which helps protect the finish from tarnishing, peeling, and cracking.

Printed images of hardware finishes will vary from actual colors. Not all hardware colors are available on all hardware options. Selections should be made based on color samples available from your Kolbe dealer.

Hardware Options

Sliding & Multi-Slide Doors

VistaLuxe WD LINE sliding doors are available with a variety of handle sets and locking options, including Madison, Dallas and Square^{*} handles, with contemporary style and sophisticated finishes. For unobtrusive style, choose a narrow flush pull handle. Edge pulls^{**} are also available on the end panels of pocketing multi-slide doors.









Interior Exterior Madison Handle (shown in Matte Black)

Interior E Dallas Handle (shown in Brushed Gold)

Square Handle^{*} (shown in Satin Nickel)



Narrow Flush Pull (shown in Satin Nickel)

Edge Pull** (shown in Satin Nickel)

*Square handle not available on multi-slide doors.

**Edge pull not available on sliding doors.

Printed images of hardware finishes will vary from actual colors. Not all hardware colors are available on all hardware options. Selections should be made based on color samples available from your Kolbe dealer.

Functionality Options

Automation Options*

For ease of use, you can operate windows and doors with a touch of a button or a flip of a switch. Kolbe integrates the latest technology advancements into select window and door products.

Motorized operators are available for VistaLuxe WD LINE awning windows, making them perfect for people with limited mobility or units in hard-to-reach areas.

Automation options^{*} are available for VistaLuxe WD LINE Complementary sliding and multi-slide doors. Frames and panels come factory-prepped to receive the system and motor.

- Motor is hidden within the door frame interior wood cover
- Operate by touch screen, wired wall switch or Smartphone
- > Optional Motion Sensor Kits provide additional safety features

*Available only on 2-wide and 4-wide sliding doors with 2-1/4" thick panels and complementary multi-slide doors. NOTES: Not all VistaLuxe WD LINE Complementary sliding and multi-slide doors are available with automated operation. This option may meet standards of the Americans with Disabilities Act. Certain product limitations and modifications may apply. Please contact your local Kolbe dealer for more information. For specific information on the products that meet Automation requirements, please contact your local distributor.



Window Opening Control Devices (WOCD)**

Kolbe offers Window Opening Control Devices (WOCDs) that restrict the size of the open window area to less than 4 inches, and feature a limit release mechanism to allow for emergency escape. These devices allow the window to latch into place at a predetermined position and automatically re-latch when closed. The WOCDs meet the ASTMF2090-13 requirements.

WOCDs with a Satin Nickel finish can be factory applied to VistaLuxe WD LINE single, triple and quad sliding windows, or field-applied to casements.



Sliding Window with WOCD

Cont.

Casement with WOCD

This device meets the stringent safety requirement of ASTM F2090-13 if applied per recommendations. Factory-applied WOCDs are available as kits for application on the job site. Not all windows are available with Window Opening Control Devices. Please ask your local Kolbe dealer about availability.

** Available only on casements and single, triple and quad sliding windows.



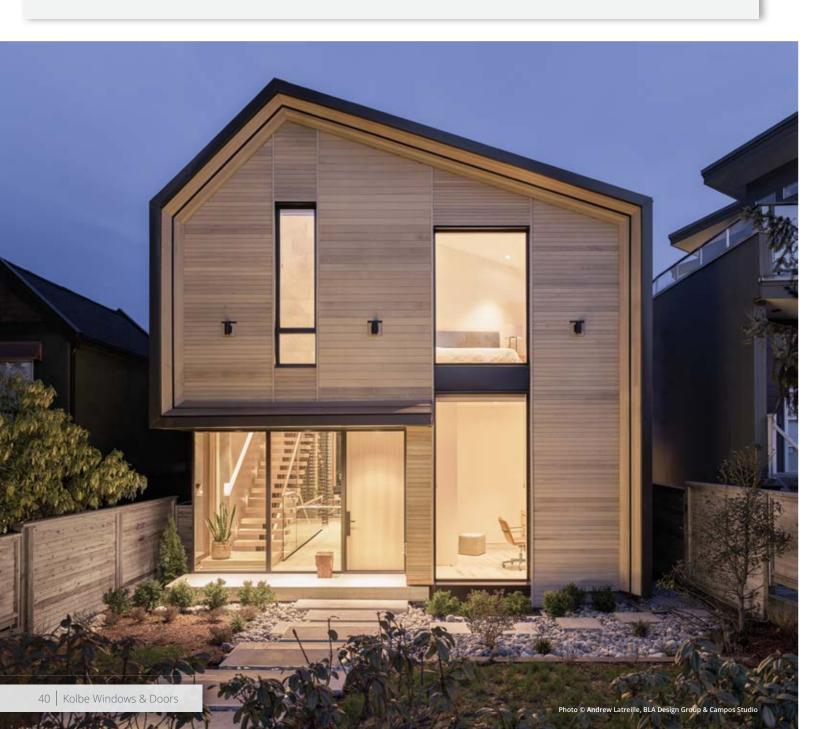
Performance Options

Passive House Institute US (PHIUS)

Kolbe is proud to offer VistaLuxe WD LINE 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 kolbewindows.com/solutions/phius.



Professional Tools

Kolbe prides itself on offering the tools and resources architects, builders and other industry professionals need to complete their projects. Kolbe's Architect Library is the main resource for drawings, details and information required for specifying Kolbe VistaLuxe WD LINE windows and doors for residential and commercial building projects. From 3D models, product specifications and ratings, energy and impact performance data, to continuing education courses and webinars, Kolbe supports all of your project needs.

Architect Library

Search our 2D drawings — including horizontal, vertical, mull and stack cross sections; elevations with rough opening dimensions; typical mull and stack configurations; common divided lite patterns; and 3D models.

3D Models

3D models for use in Revit[®] offer great design flexibility for design professionals who prefer to work in three dimensions.

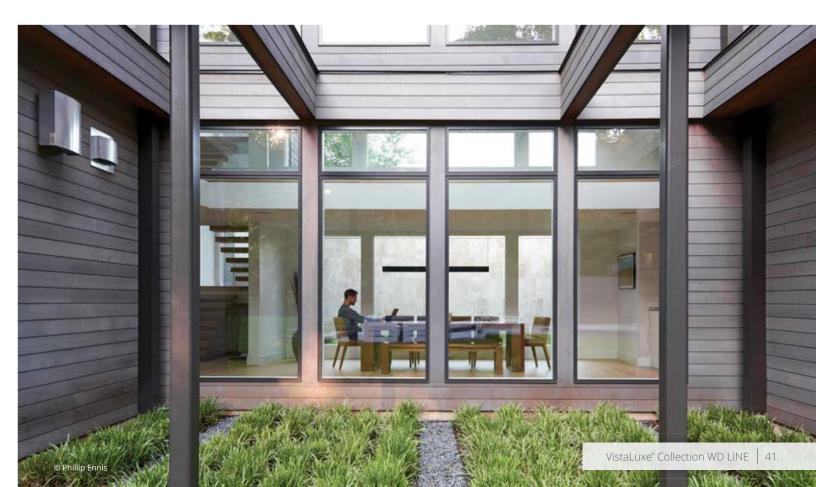
AIA/CES Courses

As a Registered AIA Continuing Education Services provider, Kolbe provides AIA Learning Units (LU) and/or Health, Safety & Welfare (HSW) credits as required per state and/or professional memberships to meet yearly requirements. See the full list of available courses on kolbewindows.com/resources/aia-continuing-education. To download Revit[®] Models, visit:

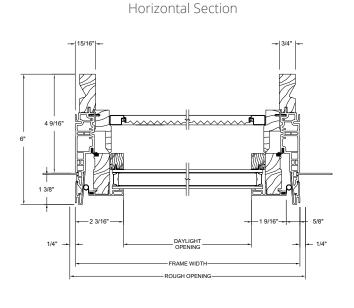
- ▶ kolbewindows.com/resources/architect-library
- market.bimsmith.com

Also available at kolbewindows.com:

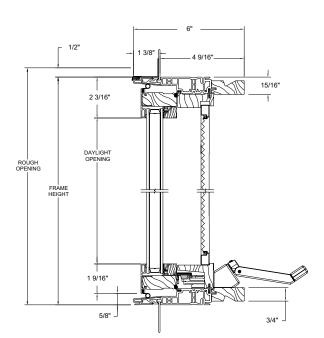
- Cross section drawings
- Available sizes
- ► Installation instructions
- Performance data
- Thermal performance information
- Acoustic data
- Mulling limitations
- Product and installation videos
- CSI specifications
- Virtual Showroom
- Inspiration Gallery



Casements & Awnings Cross Section Drawings



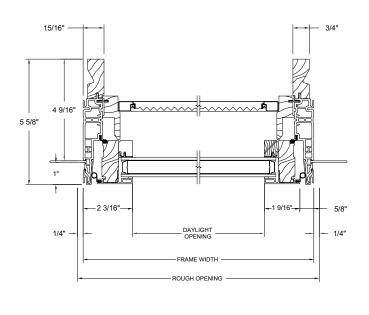
Accent Style Exterior



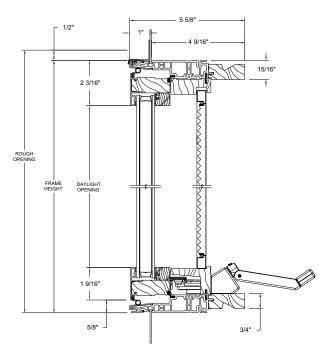
Vertical Section

Flush Style Exterior





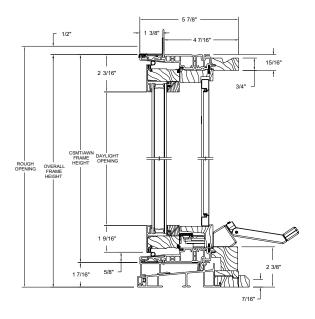
Vertical Section



Casement/Awning with Inswing Floor Sill

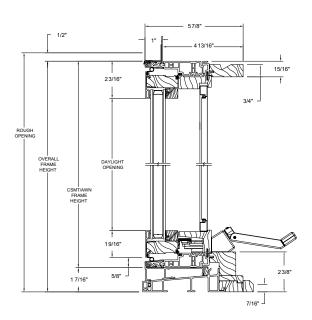
Accent Style Exterior

Vertical Section



Flush Style Exterior

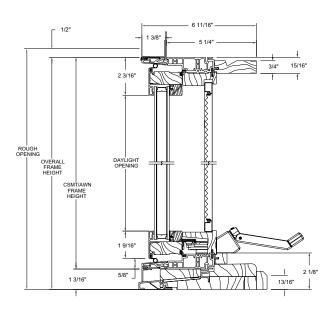
Vertical Section



Casement/Awning with Outswing Floor Sill

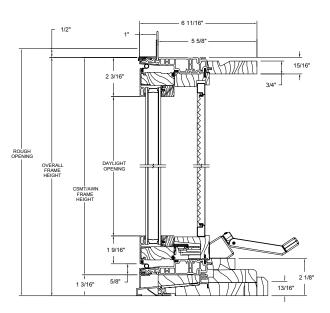


Vertical Section

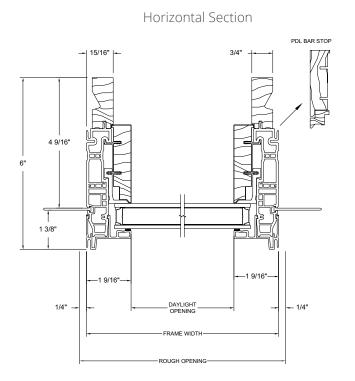


Flush Style Exterior

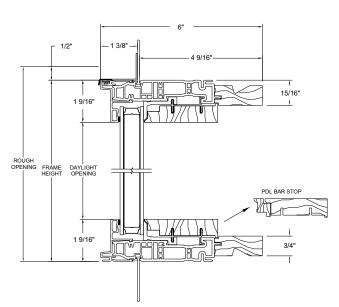
Vertical Section



Direct Sets Cross Section Drawings



Accent Style Exterior



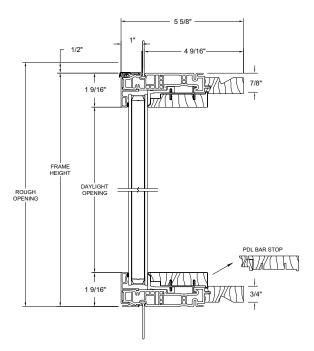
Vertical Section



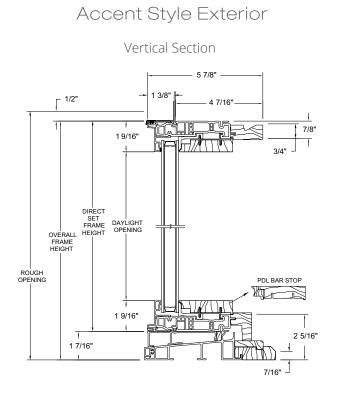


PDL BAR STOP

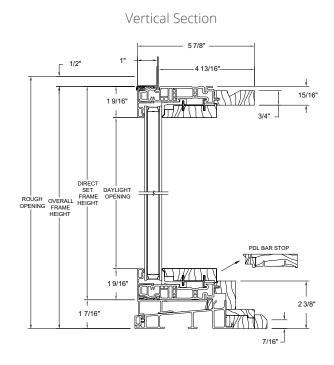
Vertical Section



Direct Set with Inswing Floor Sill



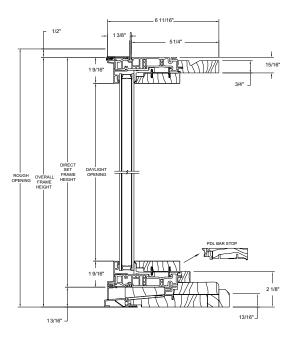
Flush Style Exterior



Direct Set with Outswing Floor Sill

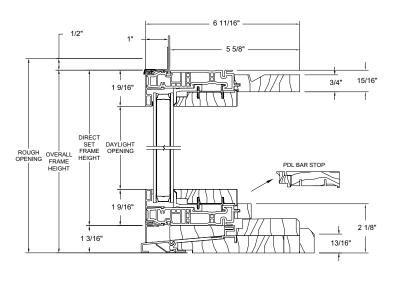
Accent Style Exterior





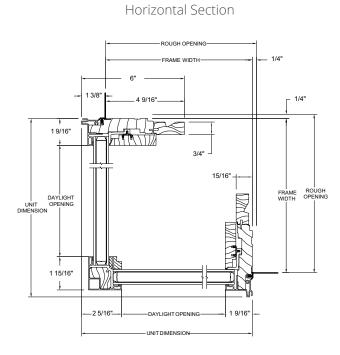
Flush Style Exterior

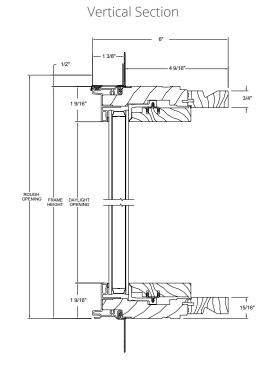
Vertical Section



Corner Direct Sets Cross Section Drawings

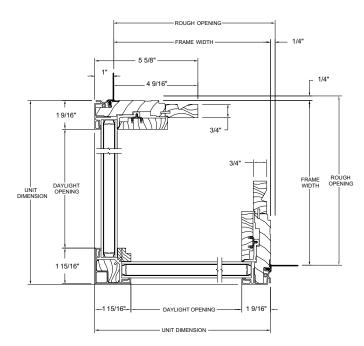
Accent Style Exterior



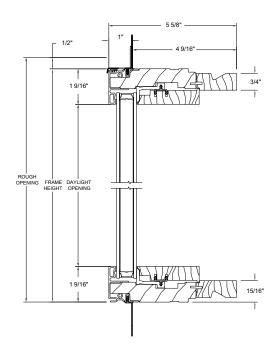




Horizontal Section

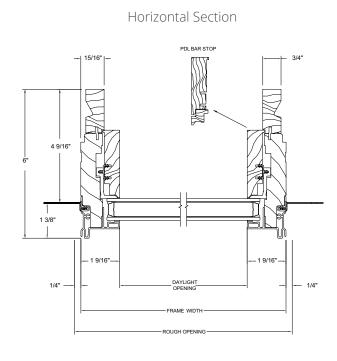


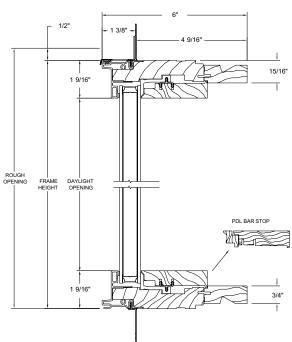
Vertical Section



Geometric Direct Sets Cross Section Drawings

Accent Style Exterior

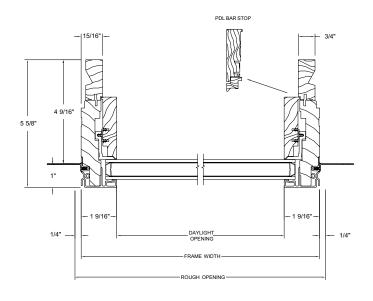




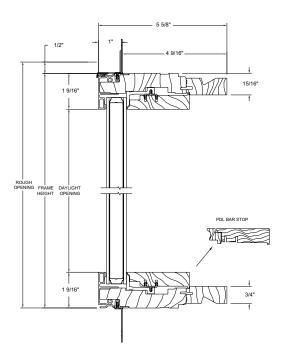
Vertical Section

Flush Style Exterior

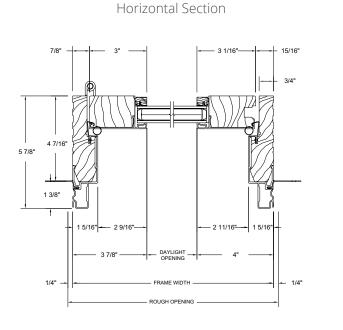
Horizontal Section

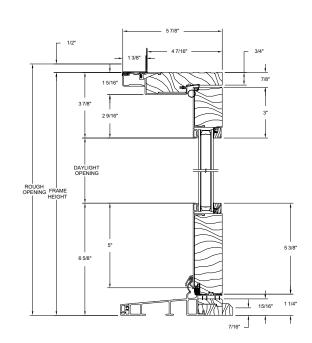


Vertical Section



Swinging Doors Cross Section Drawings



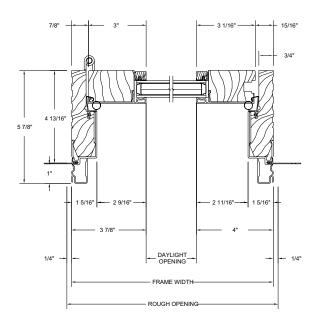


Vertical Section

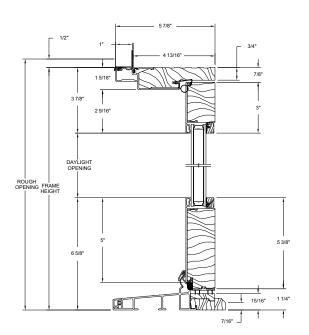
Active Inswing Door | Accent Style Exterior

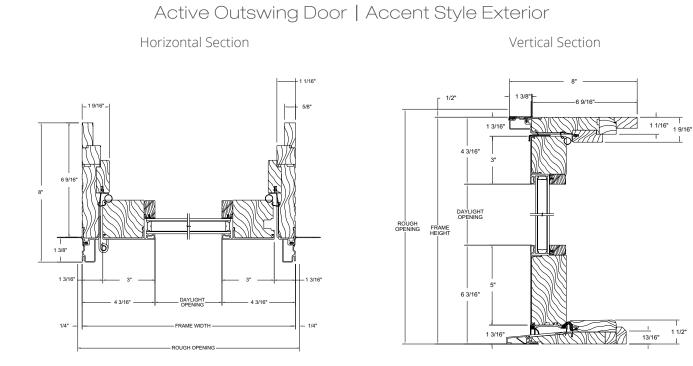
Active Inswing Door | Flush Style Exterior

Horizontal Section



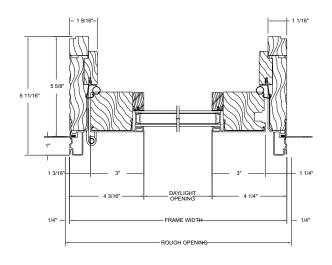
Vertical Section



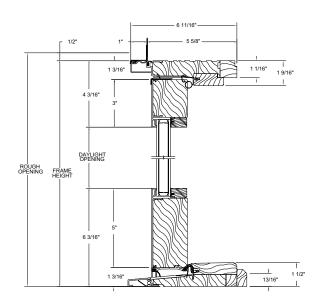


Active Outswing Door | Flush Style Exterior

Horizontal Section

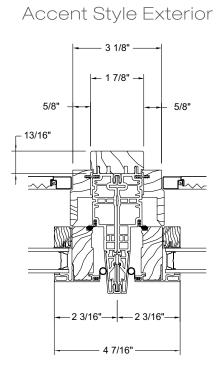


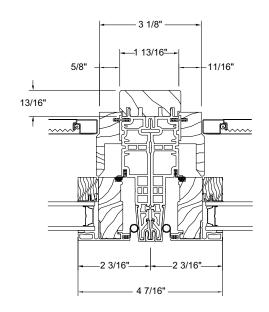
Vertical Section



Mull Details Cross Section Drawings

Casement/Awning Mulled to Casement/Awning

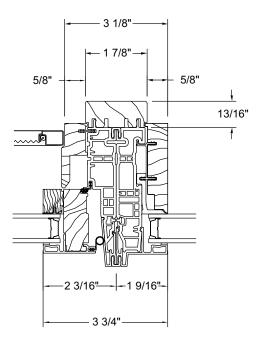




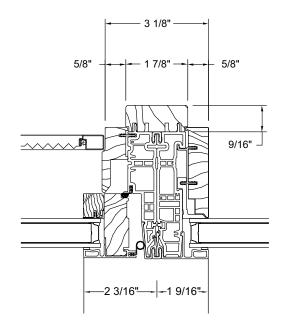
Flush Style Exterior

Casement/Awning Mulled to Direct Set

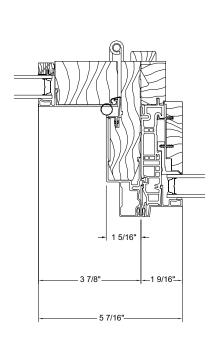
Accent Style Exterior



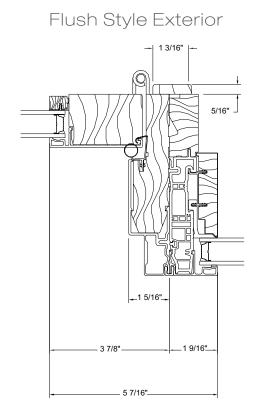
Flush Style Exterior



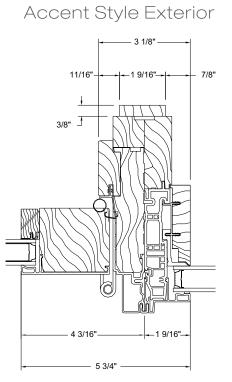
Inswing Door Mulled to Direct Set



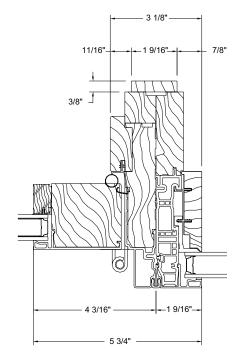
Accent Style Exterior



Outswing Door Mulled to Direct Set

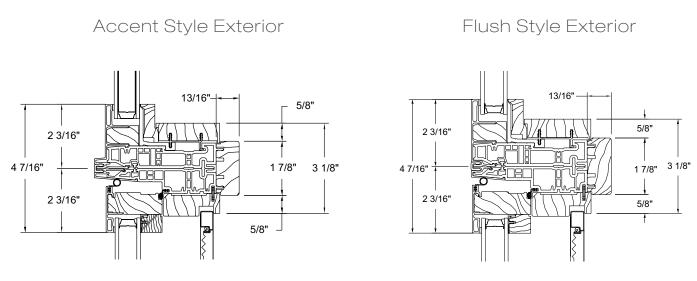


Flush Style Exterior



Stack Details Cross Section Drawings

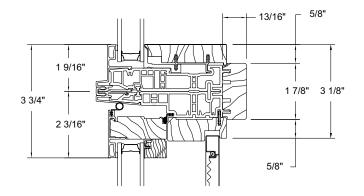
Picture Transom Direct Set Stacked Above Operable Casement/Awning

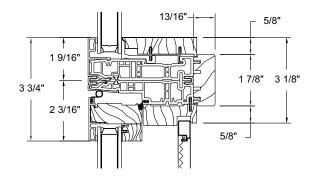


Direct Set Stacked Above Operable Casement/Awning

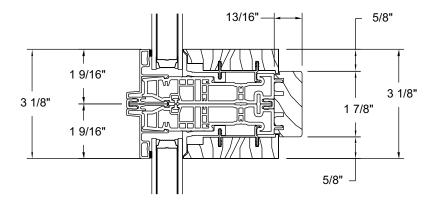
Accent Style Exterior

Flush Style Exterior



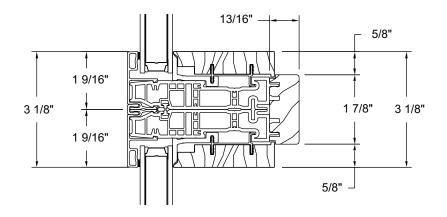


Direct Set Stacked Above Direct Set



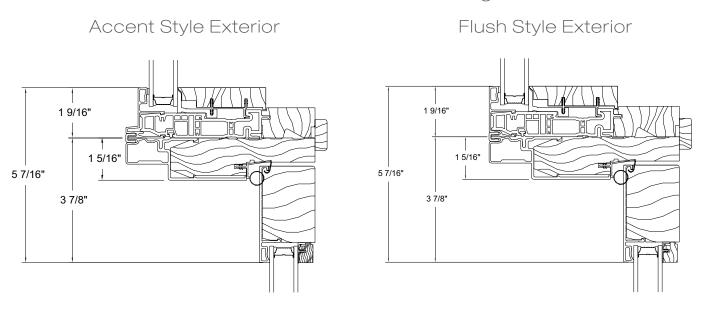
Accent Style Exterior

Flush Style Exterior



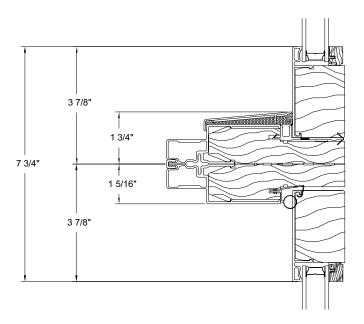
Stack Details Cross Section Drawings

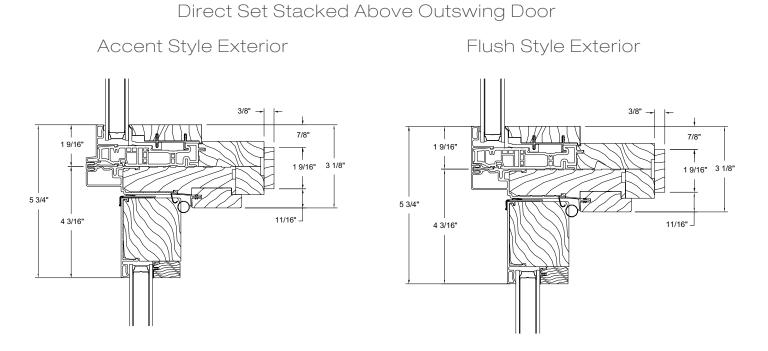
Direct Set Stacked Above Inswing Door



Inswing Door Transom Stacked Above Inswing Door

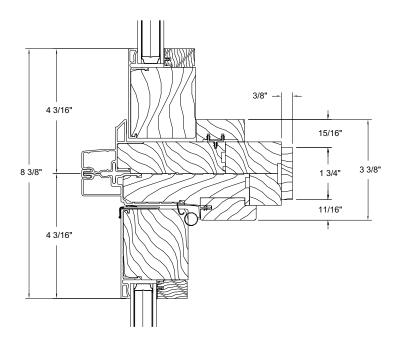
Accent or Flush Style Exterior



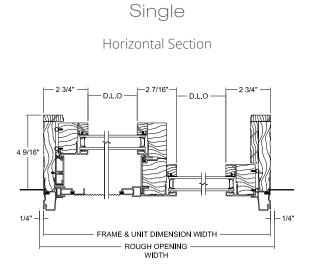


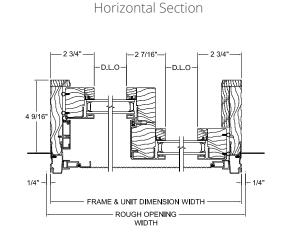
Outswing Door Transom Stacked Above Outswing Door

Accent or Flush Style Exterior



Complementary Sliding Windows Cross Section Drawings

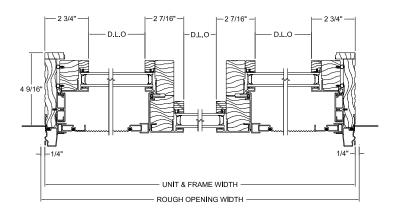




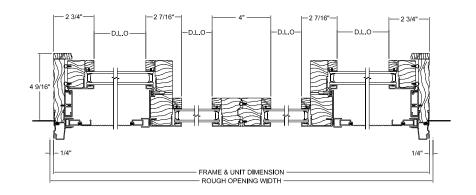
Double



Horizontal Section



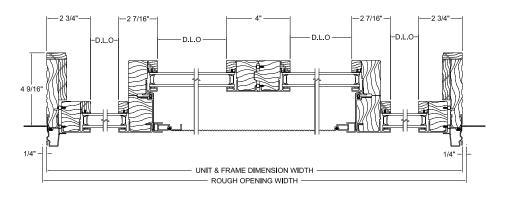




Horizontal Section

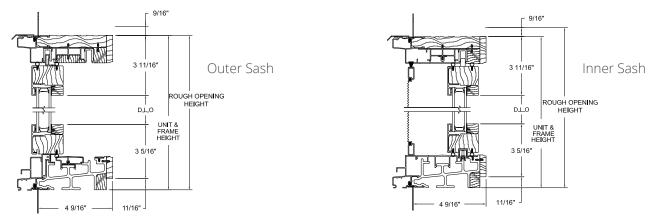
Quad - Fixed-Active-Active-Fixed

Horizontal Section



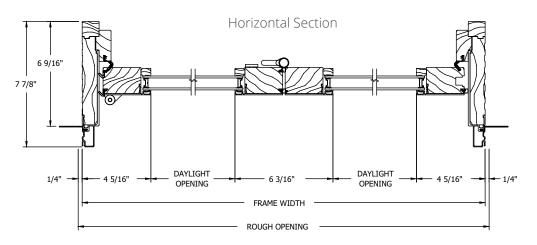
Single, Double, Triple, Quad

Vertical Section



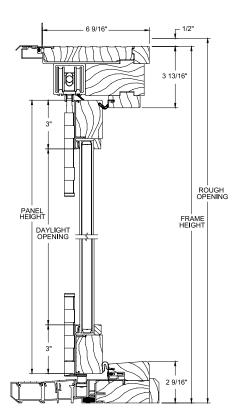
Complementary Folding Windows & Doors Cross Section Drawings

2-wide



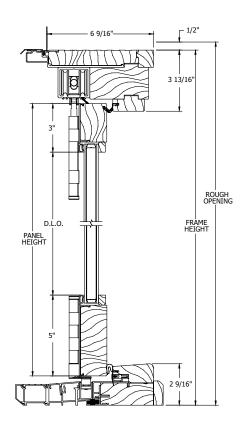
3" Top Rail, 3" Bottom Rail

Vertical Section



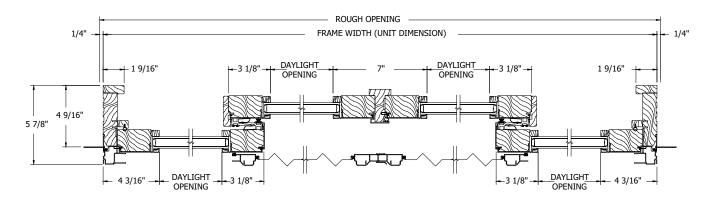
3" Top Rail, 5" Bottom Rail

Vertical Section



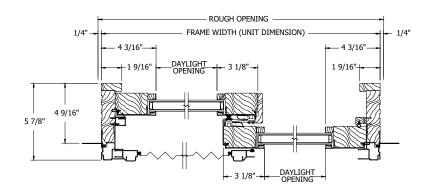
Complementary Sliding Patio Doors Cross Section Drawings

4-wide - Fixed-Active-Active-Fixed



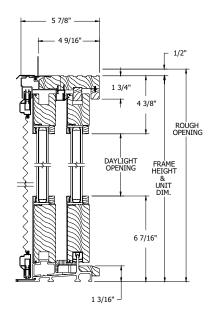
Horizontal Section

2-wide

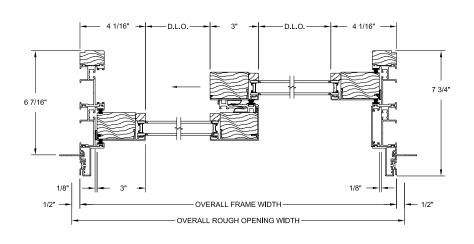


Horizontal Section

Vertical Section



Complementary Multi-Slide Doors Cross Section Drawings



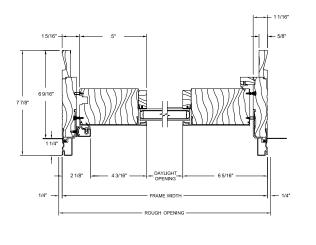
Horizontal Section

2-wide

7 3/4" 6 7/16" 1 1/16" r Nation 1 7/8" ļ 3 Q h 7 D.L.O. ROUGH OPENING HEIGHT OVERALL FRAME HEIGHT 13/16" ł _~~ _~~ - 53/16" -

Vertical Section

Complementary Pivot Doors Cross Section Drawings



Horizontal Section

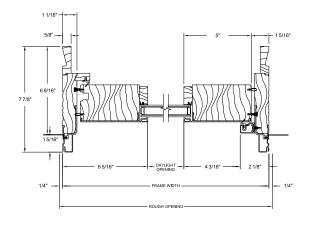


FRAME DATE HART COREINING CONCERNMENT OF THE RATE OF T

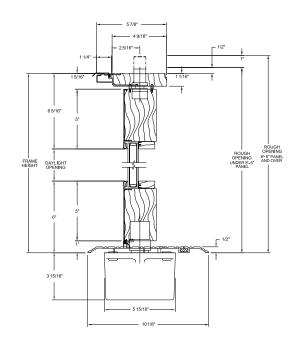
Vertical Section

Active Outswing Door | Flush Style Exterior

Horizontal Section



Vertical Section



Sizing & Limitations

Size Limitations for Mulled 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: 2' 0" Maximum Height: 6' 6"

Size Limitations for Awnings: Minimum Width: 1' 8" Maximum Width: 5' 0" Minimum Height: 1' 4"* Maximum Height: 5' 0" * Not available with locks.

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
Height		Glass Size	12-9/16"	16-9/16"	20-9/16"	24-9/16"	26-9/16"	28-9/16"	32-9/
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' 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
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' 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
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
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
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' 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
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' 6"	6' 6-1/2"	74-9/16"	1-4 x 6-6	1-8 x 6-6	2-0 x 6-6	2-4 x 6-6	2-6 x 6-6	2-8 x 6-6	3-0 x

Awnings (ve	nting)											
Frame Size		Width	1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	3' 0"	3' 6"	4' 0"	4' 6"	5' 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"	4' 6-1/2"	5' 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"	50-9/16"	56-9/16"
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*	5-0 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	5-0 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	5-0 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	5-0 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	5-0 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	5-0 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	5-0 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 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	5-0 x 5-0

Size Limitations for Picture Casements/Awnings: Minimum Width: 1' 4" Maximum Width: 10' 0" Minimum Height: 1' 4"

Maximum Height: 8' 0"

Picture Ca	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"	6' 0"
	Rough Op	ening	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"	6' 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"	38-9/16"	44-9/16"	50-9/16"	56-9/16"	62-9/16"	68-9/16"
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	6-0 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	6-0 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	6-0 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	3-6 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"	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	6-0 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	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"	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	6-0 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	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"	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	6-0 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	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"	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	6-0 x 6-0
6' 6"	6' 6-1/2"	74-9/16"	1-4 x 6-6	1-8 x 6-6	2-0 x 6-6	2-4 x 6-6	2-6 x 6-6	2-8 x 6-6	3-0 x 6-6	3-6 x 6-6	4-0 x 6-6	4-6 x 6-6	5-0 x 6-6	5-6 x 6-6	6-0 x 6-6

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 Direct Sets: Minimum Width: 1' 4" Maximum Width: 8' 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 Op	ening	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
6' 6"	6' 6-1/2"	76-1/32"	1-4 x 6-6	1-8 x 6-6	2-0 x 6-6	2-4 x 6-6	2-6 x 6-6	2-8 x 6-6	3-0 x 6-6	3-4 x 6-6	3-6 x 6-6	4-0 x 6-6	4-6 x 6-6	5-0 x 6-6	5-6 x 6-6	6-0 x 6-6

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 c	ut of matching do.	ar upit	Fo	r Mulling Abc	ve Single Do	ors	Fo	or Mulling Abo	ve Double Doo	rs			
Call-C	out of matching do	or unit	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" 2' 6-1/2" 28-1/32"			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.

Sizing & Limitations

Size Limitations for Swinging Doors: Minimum Width: 1' 6" Maximum Width: 3' 6"

Minimum Height: 1' 6"

Maximum Height: 10' 0"

Inswing	Doors (with sta	ndard sills)											
		Call-	out				Single I	Doors		French Doors (Double-wide Opening)			
			2-0	2-6	2-8	3-0	4-0	5-0	5-4	6-0			
Nominal F	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 ^s	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 × 7-0	4-0 × 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 × 8-0	3-0 × 8-0	4-0 × 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 × 9-0	3-0 × 9-0	4-0 × 9-0	5-0 x 9-0	5-4 x 9-0	6-0 x 9-0
10' 0"**	122-11/16"	104-15/16"	2-0 x 10-0	2-6 x 10-0	2-8 x 10-0	3-0×10-0	4-0 x 10-0	5-0 x 10-0	5-4 x 10-0	6-0 x 10-0			

Outswir	ng Doors (with st	tandard sills)										
		Call	out				Single	Doors		Frenc	h Doors (Dou	uble-wide Op	ening)
			2-0	2-6	2-8	3-0	4-0	5-0	5-4	6-0			
Nominal F	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 ^s	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	Inswing Door Sidelites (sash set)												
Nominal F	anel Size / Call-o	ut		1-0	1-2	1-4	1-6						
	Rough Opening	5	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						

Outswir	Outswing Door Sidelites (sash set)												
Nominal F	Panel Size / Call-o	ut		1-0	1-2	1-4	1-6						
	Rough Opening	5	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.

* 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.

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"

Folding Windows:

Minimum Jamb Size: 6-9/16" Minimum Panel Width: 12" Maximum Panel Width: 42" Minimum Panel Height: 24" Maximum Panel Height: 72" Maximum Panels per Side: 8

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 Doors:

Minimum Jamb Size: 6-9/16" Minimum Panel Width: 23-3/4" Maximum Panel Width: 42" 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

Pivot Doors:

Minimum Jamb Size: 6-9/16" Minimum Panel Width: 36" Maximum Panel Width: 60" Minimum Panel Height: 80" Maximum Panel Height: 120"

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	Sq. Ft.	Clea	ar Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.
Casement	s with Dy	ad or Dual-	Arm Operato	rs & Adjus	table 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	2.3	3.33
1'4" x 3'0"	1.83	8-7/32"	32-3/32"	2.53	2.83	4
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"	3.5	3.88	5.33
1'4" x 4'6"	2.86	8-7/32"	50-3/32"	3.98	4.41	6
1'4" x 5'0"	3.2	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	8
1'8" x 1'8"	1.37	12-7/32"	16-3/32"	1.68	1.87	2.78
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
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	7.5
1'8" x 5'0"	4.76	12/7/32"	56-3/32"	6	6.5	8.33
1'8" x 5'6"	5.27	12-7/32"	62-3/32"	6.65	7.2	9.17
1'8" x 6'0"	5.78	12-7/32"	68-3/32"	7.3	7.89	10
2'0" x 1'8"	1.81	16-7/32"	16-3/32"	2.11	2.31	3.33
2'0" x 2'0"	2.26	16-7/32"	20-3/32"	2.66	2.89	4

Chandand	Sq. Ft.	Clea	ar Opg.	Cr. Ft	C . Et	Sq. Ft. of
Standard Sizes	Clear Opg.	Width	Height	Sq. Ft. D.L.O.	Sq. Ft. Vent	Frame Dim.
Casements	1	d or Dual-Ar	m Operators 8	k Adjustabl	e Bar Hing	es (cont.)
2'0" x 2'6"	2.94	16-7/32"	26-3/32"	3.47	3.75	5
2'0" x 3'0"	3.61	16-7/32"	32-3/32"	4.29	4.61	6
2'0" x 3'6"	4.29	16-7/32"	38-3/32"	5.1	5.47	7
2'0" x 4'0"	4.97	16-7/32"	44-3/32"	5.92	6.33	8
2'0" x 4'6"	5.64	16-7/32"	50-3/32"	6.73	7.2	9
2'0" x 5'0"	6.32	16-7/32"	56-3/32"	7.55	8.06	10
2'0" x 5'6"	6.99	16-7/32"	62-3/32"	8.36	8.92	11
2'0" x 6'0"	7.67	16-7/32"	68-3/32"	9.18	9.78	12
2'4" x 1'8"	2.26	20-7/32"	16-3/32"	2.55	2.76	3.89
2'4" x 2'0"	2.82	20-7/32"	20-3/32"	3.2	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	5.5	7
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	10.5
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
2'6" x 1'8"	2.48	22-7/32"	16-3/32"	2.76	2.98	4.17
2'6" x 2'0"	3.1	22-7/32"	20-3/32"	3.47	3.72	5
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"	5.6	5.95	7.5
2'6" x 3'6"	5.88	22-7/32"	38-3/32"	6.67	7.06	8.75
2'6" x 4'0"	6.8	22-7/32"	44-3/32"	7.73	8.17	10
2'6" x 4'6"	7.73	22-7/32"	50-3/32"	8.8	9.28	11.25
2'6" x 5'0"	8.66	22-7/32"	56-3/32"	9.86	10.4	12.5
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
2'8" x 1'8"	2.5	22-11/32"	16-3/32"	2.98	3.21	4.44
2'8" x 2'0"	3.12	22-11/32"	20-3/32"	3.74	4	5.33
2'8" x 2'6"	4.05	22-11/32"	26-3/32"	4.89	5.2	6.67
2'8" x 3'0"	4.98	22-11/32"	32-3/32"	6.04	6.39	8
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
2'8" x 5'0"	8.7	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
3'0" x 1'8"	2.94	26-11/32"	16-3/32"	3.41	3.65	5
3'0" x 2'0"	3.68	26-11/32"	20-3/32"	4.29	4.56	6
3'0" x 2'6"	4.77	26-11/32"	26-3/32"	5.6	5.92	7.5
3'0" x 3'0"	5.87	26-11/32"	32-3/32"	6.92	7.29	9
3'0" x 3'6"	6.97	26-11/32"	38-3/32"	8.23	8.65	10.5
3'0" x 4'0"	8.07	26-11/32"	44-3/32"	9.55	10.01	12
3'0" x 4'6"	9.16	26-11/32"	50-3/32"	10.86	11.37	13.5
3'0" x 5'0"	10.26	26-11/32"	56-3/32"	12.18	12.73	15
3'0" x 5'6"	11.36	26-11/32"	62-3/32"	13.49	14.1	16.5
3'0" x 6'0"	12.46	26-11/32"	68-3/32"	14.81	15.46	18

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.

Standard	Sq. Ft.	Clea	r Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.
Awnings v	vith Adju	istable Bar	Hinges			
1'8" x 1'4"	0.95	16-11/16"	8-7/32"	1.25	1.4	2.22
1'8" x 1'6"	1.18	16-11/16"	10-7/32"	1.47	1.63	2.5
1'8" x 1'8"	1.42	16-11/16"	12-7/32"	1.68	1.87	2.78
1'8" x 2'0"	1.88	16-11/16"	16-7/32"	2.11	2.33	3.33
1'8" x 2'6"	2.57	16-11/16"	22-7/32"	2.76	3.02	4.17
1'8" x 3'0"	3.27	16-11/16"	28-7/32"	3.41	3.72	5
1'8" x 3'6"	3.97	16-11/16"	34-7/32"	4.06	4.41	5.83
1'8" x 4'0"	4.66	16-11/16"	40-7/32"	4.71	5.11	6.67
2'0" x 1'4"	1.18	20-11/16"	8-7/32"	1.57	1.74	2.67
2'0" x 1'6"	1.47	20-11/16"	10-7/32"	1.84	2.02	3
2'0" x 1'8"	1.76	20-11/16"	12-7/32"	2.11	2.31	3.33
2'0" x 2'0"	2.33	20-11/16"	16-7/32"	2.66	2.89	4
2'0" x 2'6"	3.19	20-11/16"	22-7/32"	3.47	3.75	5
2'0" x 3'0"	4.05	20-11/16"	28-7/32"	4.29	4.61	6
2'0" x 3'6"	4.92	20-11/16"	34-7/32"	5.1	5.47	7
2'0" x 4'0"	5.78	20-11/16"	40-7/32"	5.92	6.33	8
2'4" x 1'4"	1.41	24-11/16"	8-7/32"	1.89	2.07	3.11
2'4" x 1'6"	1.75	24-11/16"	10-7/32"	2.22	2.42	3.5
2'4" x 1'8"	2.09	24-11/16"	12-7/32"	2.55	2.76	3.89
2'4" x 2'0"	2.78	24-11/16"	16-7/32"	3.2	3.44	4.67
2'4" x 2'6"	3.81	24-11/16"	22-7/32"	4.18	4.47	5.83
2'4" x 3'0"	4.84	24-11/16"	28-7/32"	5.16	5.5	7
2'4" x 3'6"	5.87	24-11/16"	34-7/32"	6.15	6.53	8.17
2'4" x 4'0"	6.9	24-11/16"	40-7/32"	7.13	7.56	9.33
2'6" x 1'4"	1.52	26-11/16"	8-7/32"	2.05	2.24	3.33
2'6" x 1'6"	1.89	26-11/16"	10-7/32"	2.41	2.61	3.75
2'6" x 1'8"	2.26	26-11/16"	12-7/32"	2.76	2.98	4.17
2'6" x 2'0"	3.01	26-11/16"	16-7/32"	3.47	3.72	5
2'6" x 2'6"	4.12	26-11/16"	22-7/32"	4.54	4.84	6.25
2'6" x 3'0"	5.23	26-11/16"	28-7/32"	5.6	5.95	7.5
2'6" x 3'6"	6.34	26-11/16"	34-7/32"	6.67	7.06	8.75
2'6" x 4'0"	7.45	26-11/16"	40-7/32"	7.73	8.17	10
2'8" x 1'4"	1.64	28-11/16"	8/7/32"	2.21	2.41	3.56

Standard	Sq. Ft.	Clea	r Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.
Awnings w	vith Adju	istable Bar	Hinges (cont	.)		
2'8" x 1'6"	2.04	28-11/16"	10-7/32"	2.6	2.81	4
2'8" x 1'8"	2.43	28-11/16"	12-7/32"	2.98	3.21	4.44
2'8" x 2'0"	3.23	28-11/16"	16-7/32"	3.74	4	5.33
2'8" x 2'6"	4.43	28-11/16"	22-7/32"	4.89	5.2	6.67
2'8" x 3'0"	5.62	28-11/16"	28-7/32"	6.04	6.39	8
2'8" x 3'6"	6.82	28-11/16"	34-7/32"	7.19	7.59	9.33
2'8" x 4'0"	8.01	28-11/16"	40-7/32"	8.34	8.78	10.67
3'0" x 1'4"	1.87	32-11/16"	8-7/32"	2.53	2.75	4
3'0" x 1'6"	2.32	32-11/16"	10-7/32"	2.97	3.2	4.5
3'0" x 1'8"	2.77	32-11/16"	12-7/32"	3.41	3.65	5
3'0" x 2'0"	3.68	32-11/16"	16-7/32"	4.29	4.56	6
3'0" x 2'6"	5.04	32-11/16"	22-7/32"	5.6	5.92	7.5
3'0" x 3'0"	6.41	32-11/16"	28-7/32"	6.92	7.29	9
3'0" x 3'6"	7.77	32-11/16"	34-7/32"	8.23	8.65	10.5
3'0" x 4'0"	9.13	32-11/16"	40-7/32"	9.55	10.01	12
3'6" x 1'4"	2.21	38-11/16"	8-7/32"	3.02	3.25	4.67
3'6" x 1'6"	2.75	38-11/16"	10-7/32"	3.54	3.79	5.25
3'6" x 1'8"	3.28	38-11/16"	12-7/32"	4.06	4.32	5.83
3'6" x 2'0"	4.36	38-11/16"	16-7/32"	5.1	5.4	7
3'6" x 2'6"	5.97	38-11/16"	22-7/32"	6.67	7.01	8.75
3'6" x 3'0"	7.58	38-11/16"	28-7/32"	8.23	8.62	10.5
3'6" x 3'6"	9.19	38-11/16"	34-7/32"	9.8	10.23	12.25
3'6" x 4'0"	10.81	38-11/16"	40-7/32"	11.36	11.85	14
4'0" x 1'4"	2.55	44-11/16"	8-7/32"	3.5	3.75	5.33
4'0" x 1'6"	3.17	44-11/16"	10-7/32"	4.1	4.37	6
4'0" x 1'8"	3.79	44-11/16"	12-7/32"	4.71	4.99	6.67
4'0" x 2'0"	5.03	44-11/16"	16-7/32"	5.92	6.24	8
4'0" x 2'6"	6.9	44-11/16"	22-7/32"	7.73	8.1	10
4'0" x 3'0"	8.76	44-11/16"	28-7/32"	9.55	9.96	12
4'0" x 3'6"	10.62	44-11/16"	34-7/32"	11.36	11.82	14
4'0" x 4'0"	12.48	44-11/16"	40-7/32"	13.18	13.68	16

Clear Opening Dimensions

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.

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		. Clear pg.	Clear Op	og. Width	Clear	Sq. Ft.	Sq. Ft.	Sq. Ft. of Unit	Standard		. Clear pg.	Clear Op	g. Width	Clear Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft. of Unit
Size	1 Open	2 Open	1 Open	2 Open	Opg. Ht.	D.L.O.	Vent	Frame Dim.	Size	1 Open	2 Open	1 Open	2 Open	Ht.	D.L.O.	Vent	Frame Dim.
Inswing Doors with	1-3/4"	Thick P	anels*, 1-w	vide					Outswing Doors with 1-3/4" or 2-1/4" Thick Panels, 1-wide								
2'2" x 6'10-3/16"	11.77	-	21-11/32"	-	79-13/32"	8.88	12.82	14.84	2'2" x 6'10"	11.69	-	21-9/32"	-	79-1/8"	8.95	12.78	14.81
2'2" x 7'2-3/16"	12.36	-	21-11/32"	-	83-13/32"	9.38	13.47	15.56	2'2" x 7'2"	12.28	-	21-9/32"	-	83-1/8"	9.44	13.42	15.53
2'2" x 8'2-3/16"	14.14	-	21-11/32"	-	95-13/32"	10.87	15.4	17.73	2'2" x 8'2"	14.06	-	21-9/32"	-	95-1/8"	10.94	15.36	17.69
2'8" x 6'10-3/16"	15.08	-	27-11/32"	-	79-13/32"	11.86	16.13	18.26	2'8" x 6'10"	14.99	-	27-9/32"	-	79-1/8"	11.94	16.07	18.22
2'8" x 7'2-3/16"	15.84	-	27-11/32"	-	83-13/32"	12.53	16.94	19.15	2'8" x 7'2"	15.75	-	27-9/32"	-	83-1/8"	12.6	16.88	19.11
2'8" x 8'2-3/16"	18.12	-	27-11/32"	-	95-13/32"	14.52	19.38	21.82	2'8" x 8'2"	18.02	-	27-9/32"	-	95-1/8"	14.6	19.32	21.78
2'10" x 6'10-3/16"	16.18	-	29-11/32"	-	79-13/32"	12.86	17.23	19.41	2'10" x 6'10"	16.09	-	29-9/32"	-	79-1/8"	12.93	17.17	19.36
2'10" x 7'2-3/16"	17	-	29-11/32"	-	83-13/32"	13.58	18.1	20.35	2'10" x 7'2"	16.9	-	29-9/32"	-	83-1/8"	13.66	18.04	20.31
2'10" x 8'2-3/16"	19.44	-	29-11/32"	-	95-13/32"	15.73	20.7	23.18	2'10" x 8'2"	19.34	-	29-9/32"	-	95-1/8"	15.82	20.64	23.14
3'2" x 6'10-3/16"	18.39	-	33-11/32"	-	79-13/32"	14.85	19.44	21.69	3'2" x 6'10"	18.29	-	33-9/32"	-	79-1/8"	14.93	19.37	21.64
3'2" x 7'2-3/16"	19.31	-	33-11/32"	-	83-13/32"	15.68	20.42	22.74	3'2" x 7'2"	19.21	-	33-9/32"	-	83-1/8"	15.76	20.35	22.69
3'2" x 8'2-3/16"	22.09	-	33-11/32"	-	95-13/32"	18.17	23.35	25.91	3'2" x 8'2"	21.99	-	33-9/32"	-	95-1/8"	18.26	23.29	25.86
Inswing Doors with	1-3/4"	Thick P	anels*, 2-w	/ide (Frenc	h)				Outswing Doors	s with 1	-3/4" or	2-1/4" Thi	ck Panels,	2-wide (F	rench)		
4'2-25/32" x 6'10-3/16"	11.77	24.38	21-11/32"	44-7/32"	79-13/32"	17.77	26.49	28.98	4'2-25/32" x 6'10"	11.69	24.23	21-9/32"	44-3/32"	79-1/8"	17.89	26.39	28.92
4'2-25/32" x 7'2-3/16"	12.36	25.61	21-11/32"	44-7/32"	83-13/32"	18.76	27.82	30.39	4'2-25/32" x 7'2"	12.28	25.45	21-9/32"	44-3/32"	83-1/8"	18.89	27.73	30.33
4'2-25/32" x 8'2-3/16"	14.14	29.3	21-11/32"	44-7/32"	95-13/32"	21.74	31.82	34.63	4'2-25/32" x 8'2"	14.06	29.13	21-9/32"	44-3/32"	95-1/8"	21.88	31.73	34.56
5'2-25/32" x 6'10-3/16"	15.08	31	27-11/32"	56-7/32"	79-13/32"	23.73	33.1	35.83	5'2-25/32" x 6'10"	14.99	30.82	27-9/32"	56-3/32"	79-1/8"	23.88	32.99	35.75
5'2-25/32" x 7'2-3/16"	15.84	32.56	27-11/32"	56-7/32"	83-13/32"	25.06	34.77	37.58	5'2-25/32" x 7'2"	15.75	32.38	27-9/32"	56-3/32"	83-1/8"	25.21	34.65	37.49
5'2-25/32" x 8'2-3/16"	18.12	37.25	27-11/32"	56-7/32"	95-13/32"	29.04	39.77	42.81	5'2-25/32" x 8'2"	18.02	37.05	27-9/32"	56-3/32"	95-1/8"	29.19	39.66	42.73
5'6-25/32" x 6'10-3/16"	16.18	33.21	29-11/32"	60-7/32"	79-13/32"	25.72	35.31	38.12	5'6-25/32" x 6'10"	16.09	33.02	29-9/32"	60-3/32"	79-1/8"	25.87	35.18	38.03
5'6-25/32" x 7'2-3/16"	17	34.88	29-11/32"	60-7/32"	83-13/32"	27.16	37.09	39.97	5'6-25/32" x 7'2"	16.9	34.69	29-9/32"	60-3/32"	83-1/8"	27.31	36.96	39.88
5'6-25/32" x 8'2-3/16"	19.44	39.9	29-11/32"	60-7/32"	95-13/32"	31.47	42.42	45.54	5'6-25/32" x 8'2"	19.34	39.7	29-9/32"	60-3/32"	95-1/8"	31.63	42.3	45.45
6'2-25/32" x 6'10-3/16"	18.39	37.62	33-11/32"	68-7/32"	79-13/32"	29.69	39.72	42.68	6'2-25/32" x 6'10"	18.29	37.42	33-9/32"	68-3/32"	79-1/8"	29.86	39.58	42.58
6'2-25/32" x 7'2-3/16"	19.31	39.51	33-11/32"	68-7/32"	83-13/32"	31.35	41.72	44.76	6'2-25/32" x 7'2"	19.21	39.31	33-9/32"	68-3/32"	83-1/8"	31.52	41.58	44.66
6'2-25/32" x 8'2-3/16"	22.09	45.2	33-11/32"	68-7/32"	95-13/32"	36.33	47.72	50.99	6'2-25/32" x 8'2"	21.99	44.98	33-9/32"	68-3/32"	95-1/8"	36.51	47.58	50.89

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

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.

Standard	Sq. Ft.	Clear	Opg.	Sa Et	Sa Et	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	Sq. Ft. D.L.O.	Sq. Ft. Vent	Frame Dim.
Compleme		ngle & Dou		Windov	vs	Dim.
2'0" x 2'0"	1.17	8-53/64"	19-1/16"	1.72	1.17	3.82
2'0" x 2'6"	1.17		25-1/16"	2.37	1.54	
		8-53/64"				4.8
2'0" x 3'0"	1.9	8-53/64"	31-1/16"	3.02	1.9	5.78
2'0" x 3'6"	2.27	8-53/64"	37-1/16"	3.67	2.27	6.76
2'0" x 4'0"	2.64	8-53/64"	43-1/16"	4.32	2.64	7.74
2'0" x 4'6"	3.01	8-53/64"	49-1/16"	4.97	3.01	8.72
2'0" x 5'0"	3.38	8-53/64"	55-1/16"	5.62	3.38	9.7
2'0" x 5'6"	3.74	8-53/64"	61-1/16"	6.27	3.74	10.68
2'0" x 6'0"	4.11	8-53/64"	67-1/16"	6.92	4.11	11.66
3'0" x 2'0"	1.96	14-53/64"	19-1/16"	3.03	1.96	5.78
3'0" x 2'6"	2.58	14-53/64"	25-1/16"	4.18	2.58	7.26
3'0" x 3'0"	3.2	14-53/64"	31-1/16"	5.34	3.2	8.74
3'0" x 3'6"	3.82	14-53/64"	37-1/16"	6.49	3.82	10.22
3'0" x 4'0"	4.43	14-53/64"	43-1/16"	7.64	4.43	11.69
3'0" x 4'6"	5.05	14-53/64"	49-1/16"	8.79	5.05	13.17
3'0" x 5'0"	5.67	14-53/64"	55-1/16"	9.94	5.67	14.65
3'0" x 5'6"	6.29	14-53/64"	61-1/16"	11.09	6.29	16.13
3'0" x 6'0"	6.91	14-53/64"	67-1/16"	12.24	6.91	17.61
4'0" x 2'0"	2.76	20-53/64"	19-1/16"	4.35	2.76	7.73
4'0" x 2'6"	3.63	20-53/64"	25-1/16"	6	3.63	9.71
4'0" x 3'0"	4.49	20-53/64"	31-1/16"	7.65	4.49	11.69
4'0" x 3'6"	5.36	20-53/64"	37-1/16"	9.3	5.36	13.67
4'0" x 4'0"	6.23	20-53/64"	43-1/16"	10.96	6.23	15.65
4'0" x 4'6"	7.1	20-53/64"	49-1/16"	12.61	7.1	17.63
4'0" x 5'0"	7.96	20-53/64"	55-1/16"	14.26	7.96	19.61
4'0" x 5'6"	8.83	20-53/64"	61-1/16"	15.91	8.83	21.59
4'0" x 6'0"	9.7	20-53/64"	67-1/16"	17.56	9.7	23.56
5'0" x 2'0"	3.55	26-53/64"	19-1/16"	5.67	3.55	9.68
5'0" x 2'6"	4.67	26-53/64"	25-1/16"	7.82	4.67	12.16
5'0" x 3'0"	5.79	26-53/64"	31-1/16"	9.97	5.79	14.64
5'0" x 3'6"	6.9	26-53/64"	37-1/16"	12.12	6.9	17.12
5'0" x 4'0"	8.02	26-53/64"	43-1/16"	14.27	8.02	19.6
5'0" x 4'6"	9.14	26-53/64"	49-1/16"	16.42	9.14	22.08
5'0" x 5'0"	10.26	26-53/64"	55-1/16"	18.58	10.26	24.56
5'0" x 5'6"	11.38	26-53/64"	61-1/16"	20.73	11.38	27.04
5'0" x 6'0"	12.49	26-53/64"	67-1/16"	22.88	12.49	29.52
6'0" x 2'0"	4.35	32-53/64"	19-1/16"	6.99	4.35	11.64
6'0" x 2'6"	5.71	32-53/64"	25-1/16"	9.64	5.71	14.62
6'0" x 3'0"	7.08	32-53/64"	31-1/16"	12.29	7.08	17.6
6'0" x 3'6"	8.45	32-53/64"	37-1/16"	14.94	8.45	20.57
6'0" x 4'0"	9.82	32-53/64"	43-1/16"	17.59	9.82	23.55
6'0" x 4'6"	11.18	32-53/64"	49-1/16"	20.24	11.18	26.53
6'0" x 5'0"	12.55	32-53/64"	55-1/16"	22.89	12.55	29.51
6'0" x 5'6"	13.92	32-53/64"	61-1/16"	25.54	13.92	32.49
6'0" x 6'0"	15.29	32-53/64"	67-1/16"	28.19	15.29	35.47
7'0" x 2'0"	5.14	38-53/64"	19-1/16"	8.3	5.14	13.59
7'0" x 2'6"	6.76	38-53/64"	25-1/16"	11.46	6.76	17.07
. 0 . 20	0.70	50 55/04	23 1/10	11.40	0.70	17.07

Standard	Sq. Ft.	Clear	Opg.	Sq. Ft.	Sg. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.
Compleme	entary Si	ngle & Dou	ıble Sliding	; Windov	vs (cont	.)
7'0" x 3'0"	8.38	38-53/64"	31-1/16"	14.61	8.38	20.55
7'0" x 3'6"	9.99	38-53/64"	37-1/16"	17.76	9.99	24.03
7'0" x 4'0"	11.61	38-53/64"	43-1/16"	20.91	11.61	27.51
7'0" x 4'6"	13.23	38-53/64"	49-1/16"	24.06	13.23	30.99
7'0" x 5'0"	14.85	38-53/64"	55-1/16"	27.21	14.85	34.47
7'0" x 5'6"	16.46	38-53/64"	61-1/16"	30.36	16.46	37.94
7'0" x 6'0"	18.08	38-53/64"	67-1/16"	33.51	18.08	41.42
8'0" x 2'0"	5.93	44-53/64"	19-1/16"	9.62	5.93	15.54
8'0" x 2'6"	7.8	44-53/64"	25-1/16"	13.27	7.8	19.52
8'0" x 3'0"	9.67	44-53/64"	31-1/16"	16.92	9.67	23.5
8'0" x 3'6"	11.54	44-53/64"	37-1/16"	20.58	11.54	27.48
8'0" x 4'0"	13.41	44-53/64"	43-1/16"	24.23	13.41	31.46
8'0" x 4'6"	15.27	44-53/64"	49-1/16"	27.88	15.27	35.44
8'0" x 5'0"	17.14	44-53/64"	55-1/16"	31.53	17.14	39.42
8'0" x 5'6"	19.01	44-53/64"	61-1/16"	35.18	19.01	43.4
8'0" × 6'0"	20.88	44-53/64"	67-1/16"	38.83	20.88	47.38

Standard	Sq. Ft.	Clear	Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Frame Dim.
Compleme	entary T	riple Sliding	Windows		<u>.</u>	<u>.</u>	
4'0" x 2'0"	1.26	9-31/64"	19-1/16"	4.08	1.26	2.52	7.73
4'0" x 2'6"	1.65	9-31/64"	25-1/16"	5.63	1.65	3.30	9.71
4'0" x 3'0"	2.05	9-31/64"	31-1/16"	7.18	2.05	4.10	11.69
4'0" x 3'6"	2.44	9-31/64"	37-1/16"	8.73	2.44	4.88	13.67
4'0" x 4'0"	2.84	9-31/64"	43-1/16"	10.28	2.84	5.68	15.65
4'0" x 4'6"	3.23	9-31/64"	49-1/16"	11.83	3.23	6.46	17.63
4'0" x 5'0"	3.63	9-31/64"	55-1/16"	13.38	3.63	7.26	19.61
4'0" x 5'6"	4.02	9-31/64"	61-1/16"	14.93	4.02	8.04	21.59
4'0" x 6'0"	4.42	9-31/64"	67-1/16"	16.48	4.42	8.84	23.56
5'0" x 2'0"	1.65	12-31/64"	19-1/16"	5.40	1.65	3.30	9.68
5'0" x 2'6"	2.17	12-31/64"	25-1/16"	7.45	2.17	4.34	12.16
5'0" x 3'0"	2.69	12-31/64"	31-1/16"	9.50	2.69	5.38	14.64
5'0" x 3'6"	3.21	12-31/64"	37-1/16"	11.55	3.21	6.42	17.12
5'0" x 4'0"	3.73	12-31/64"	43-1/16"	13.60	3.73	7.46	19.60
5'0" x 4'6"	4.25	12-31/64"	49-1/16"	15.65	4.25	8.50	22.08
5'0" x 5'0"	4.77	12-31/64"	55-1/16"	17.70	4.77	9.54	24.56
5'0" x 5'6"	5.29	12-31/64"	61-1/16"	19.75	5.29	10.58	27.04
5'0" x 6'0"	5.81	12-31/64"	67-1/16"	21.80	5.81	11.62	29.52
6'0" x 2'0"	2.05	15-31/64"	19-1/16"	6.72	2.05	4.10	11.64
6'0" x 2'6"	2.69	15-31/64"	25-1/16"	9.27	2.69	5.38	14.62
6'0" x 3'0"	3.34	15-31/64"	31-1/16"	11.82	3.34	6.68	17.60
6'0" x 3'6"	3.99	15-31/64"	37-1/16"	14.37	3.99	7.98	20.57
6'0" x 4'0"	4.63	15-31/64"	43-1/16"	16.92	4.63	9.26	23.55
6'0" x 4'6"	5.28	15-31/64"	49-1/16"	19.47	5.28	10.56	26.53
6'0" x 5'0"	5.92	15-31/64"	55-1/16"	22.02	5.92	11.84	29.51

Clear Opening Dimensions

Standard	Sq. Ft.	Clear	Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Frame Dim.
Compleme	entary Ti	riple Sliding	Windows	(cont.)			
6'0" x 5'6"	6.57	15-31/64"	61-1/16"	24.57	6.57	13.14	32.49
6'0" x 6'0"	7.21	15-31/64"	67-1/16"	27.11	7.21	14.42	35.47
7'0" x 2'0"	2.45	18-31/64"	19-1/16"	8.04	2.45	4.90	13.59
7'0" x 2'6"	3.22	18-31/64"	25-1/16"	11.09	3.22	6.44	17.07
7'0" x 3'0"	3.99	18-31/64"	31-1/16"	14.14	3.99	7.98	20.55
7'0" x 3'6"	4.76	18-31/64"	37-1/16"	17.19	4.76	9.52	24.03
7'0" x 4'0"	5.53	18-31/64"	43-1/16"	20.23	5.53	11.06	27.51
7'0" x 4'6"	6.30	18-31/64"	49-1/16"	23.28	6.30	12.60	30.99
7'0" x 5'0"	7.07	18-31/64"	55-1/16"	26.33	7.07	14.14	34.47
7'0" x 5'6"	7.84	18-31/64"	61-1/16"	29.38	7.84	15.68	37.94
7'0" x 6'0"	8.61	18-31/64"	67-1/16"	32.43	8.61	17.22	41.42
8'0" x 2'0"	2.84	21-31/64"	19-1/16"	9.35	2.84	5.68	15.54
8'0" x 2'6"	3.74	21-31/64"	25-1/16"	12.90	3.74	7.48	19.52
8'0" x 3'0"	4.63	21-31/64"	31-1/16"	16.45	4.63	9.26	23.50
8'0" x 3'6"	5.53	21-31/64"	37-1/16"	20.00	5.53	11.06	27.48
8'0" x 4'0"	6.42	21-31/64"	43-1/16"	23.55	6.42	12.84	31.46
8'0" x 4'6"	7.32	21-31/64"	49-1/16"	27.10	7.32	14.64	35.44
8'0" x 5'0"	8.22	21-31/64"	55-1/16"	30.65	8.22	16.44	39.42
8'0" x 5'6"	9.11	21-31/64"	61-1/16"	34.20	9.11	18.22	43.40
8'0" x 6'0"	10.01	21-31/64"	67-1/16"	37.75	10.01	20.02	47.38
9'0" x 2'0"	3.24	24-31/64"	19-1/16"	10.67	3.24	6.48	17.50
9'0" x 2'6"	4.26	24-31/64"	25-1/16"	14.72	4.26	8.52	21.98
9'0" x 3'0"	5.28	24-31/64"	31-1/16"	18.77	5.28	10.56	26.46
9'0" x 3'6"	6.30	24-31/64"	37-1/16"	22.82	6.30	12.60	30.93
9'0" x 4'0"	7.32	24-31/64"	43-1/16"	26.87	7.32	14.64	35.41
9'0" x 4'6"	8.34	24-31/64"	49-1/16"	30.92	8.34	16.68	39.89
9'0" x 5'0"	9.36	24-31/64"	55-1/16"	34.97	9.36	18.72	44.37
9'0" x 5'6"	10.38	24-31/64"	61-1/16"	39.02	10.38	20.76	48.85
9'0" x 6'0"	11.40	24-31/64"	67-1/16"	43.07	11.40	22.80	53.33
10'0" x 2'0"	3.64	27-31/64"	19-1/16"	11.99	3.64	7.28	19.45
10'0" x 2'6"	4.78	27-31/64"	25-1/16"	16.54	4.78	9.56	24.43
10'0" x 3'0"	5.93	27-31/64"	31-1/16"	21.09	5.93	11.86	29.41
10'0" x 3'6"	7.07	27-31/64"	37-1/16"	25.64	7.07	14.14	34.39
10'0" x 4'0"	8.22	27-31/64"	43-1/16"	30.19	8.22	16.44	39.37
10'0" x 4'6"	9.36	27-31/64"	49-1/16"	34.74	9.36	18.72	44.35
10'0" x 5'0"	10.51	27-31/64"	55-1/16"	39.29	10.51	21.02	49.32
10'0" x 5'6"	11.65	27-31/64"	61-1/16"	43.84	11.65	23.30	54.30
10'0" x 6'0"	12.80	27-31/64"	67-1/16"	48.39	12.80	25.60	59.28

Chara I I	Sq. Ft.	Clear	Opg.	6 m Fr	C - F	C	Sq. Ft. of
Standard Sizes	Clear Opg.	Width	Height	Sq. Ft. D.L.O.	Sq. Ft. Vent 1	Sq. Ft. Vent 2	Frame Dim.
Complem		riple Sliding	-	Equal Cl	ass Widt	h Ontio	
4'0" x 2'0"	0.65	4-57/64"	19-1/16"	4.08	0.65	1.30	7.73
4'0" x 2'6"	0.85	4-57/64"	25-1/16"	5.62	0.85	1.70	9.71
4'0" x 3'0"	1.05	4-57/64"	31-1/16"	7.17	1.05	2.10	11.69
4'0" x 3'6"	1.26	4-57/64"	37-1/16" 43-1/16"	8.72	1.26	2.52	13.67 15.65
4'0" x 4'0"	1.46	4-57/64"		10.26	1.46	2.92	
4'0" x 4'6"	1.67	4-57/64"	49-1/16"	11.81	1.67	3.34	17.63
4'0" x 5'0"	1.87	4-57/64"	55-1/16"	13.36	1.87	3.74	19.61
4'0" x 5'6"	2.07	4-57/64"	61-1/16"	14.90	2.07	4.14	21.59
4'0" x 6'0"	2.28	4-57/64"	67 -1/16"	16.45	2.28	4.56	23.56
5'0" x 2'0"	0.91	6-57/64"	19-1/16"	5.39	0.91	1.82	9.68
5'0" x 2'6"	1.20	6-57/64"	25-1/16"	7.44	1.20	2.40	12.16
5'0" x 3'0"	1.49	6-57/64"	31-1/16"	9.49	1.49	2.98	14.64
5'0" x 3'6"	1.77	6-57/64"	37-1/16"	11.53	1.77	3.54	17.12
5'0" x 4'0"	2.06	6-57/64"	43-1/16"	13.58	2.06	4.12	19.60
5'0" x 4'6"	2.35	6-57/64"	49-1/16"	15.63	2.35	4.70	22.08
5'0" x 5'0"	2.63	6-57/64"	55-1/16"	17.68	2.63	5.26	24.56
5'0" x 5'6"	2.92	6-57/64"	61-1/16"	19.72	2.92	5.84	27.04
5'0" x 6'0"	3.21	6-57/64"	67-1/16"	21.77	3.21	6.42	29.52
6'0" x 2'0"	1.18	8-57/64"	19-1/16"	6.71	1.18	2.36	11.64
6'0" x 2'6"	1.55	8-57/64"	25-1/16"	9.26	1.55	3.10	14.62
6'0" x 3'0"	1.92	8-57/64"	31-1/16"	11.81	1.92	3.84	17.60
6'0" x 3'6"	2.29	8-57/64"	37-1/16"	14.35	2.29	4.58	20.57
6'0" x 4'0"	2.66	8-57/64"	43-1/16"	16.90	2.66	5.32	23.55
6'0" x 4'6"	3.03	8-57/64"	49-1/16"	19.45	3.03	6.06	26.53
6'0" x 5'0"	3.40	8-57/64"	55-1/16"	21.99	3.40	6.80	29.51
6'0" x 5'6"	3.77	8-57/64"	61-1/16"	24.54	3.77	7.54	32.49
6'0" x 6'0"	4.14	8-57/64"	67-1/16"	27.09	4.14	8.28	35.47
7'0" x 2'0"	1.44	10-57/64"	19-1/16"	8.03	1.44	2.88	13.59
7'0" x 2'6"	1.90	10-57/64"	25-1/16"	11.08	1.90	3.80	17.07
7'0" x 3'0"	2.35	10-57/64"	31-1/16"	14.12	2.35	4.70	20.55
7'0" x 3'6"	2.80	10-57/64"	37-1/16"	17.17	2.80	5.60	24.03
7'0" x 4'0"	3.26	10-57/64"	43-1/16"	20.22	3.26	6.52	27.51
7'0" x 4'6"	3.71	10-57/64"	49-1/16"	23.26	3.71	7.42	30.99
7'0" x 5'0"	4.16	10-57/64"	55-1/16"	26.31	4.16	8.32	34.47
7'0" x 5'6"	4.62	10-57/64"	61-1/16"	29.36	4.62	9.24	37.94
7'0" x 6'0"	5.07	10-57/64"	67-1/16"	32.40	5.07	10.14	41.42
8'0" x 2'0"	1.71	12-57/64"	19-1/16"	9.35	1.71	3.42	15.54
8'0" x 2'6"	2.24	12-57/64"	25-1/16"	12.89	2.24	4.48	19.52
8'0" x 3'0"	2.78	12-57/64"	31-1/16"	16.44	2.78	5.56	23.50
8'0" x 3'6"	3.32	12-57/64"	37-1/16"	19.99	3.32	6.64	27.48
8'0" x 4'0"	3.85	12-57/64"	43-1/16"	23.53	3.85	7.70	31.46
8'0" x 4'6"	4.39	12-57/64"	49-1/16"	27.08	4.39	8.78	35.44
8'0" x 5'0"	4.93	12-57/64"	55-1/16"	30.63	4.93	9.86	39.42
8'0" x 5'6"	5.47	12-57/64"	61-1/16"	34.18	5.47	10.94	43.40
8'0" x 6'0"	6.00	12-57/64"	67-1/16"	37.72	6.00	12.00	47.38
9'0" x 2'0"	1.97	14-57/64"	19-1/16"	10.67	1.97	3.94	17.50
9'0" x 2'6"					2.59		
20 X 20	2.59	14-57/64"	25-1/16"	14.71	2.59	5.18	21.98

Standard	Sq. Ft.	Clear	Opg.	Sa. Ft.	Sg. Ft.	Sg. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Frame Dim.
Compleme	entary Ti	riple Sliding	Windows	– Equal Gl	ass Widt	th Optio	n (cont.)
9'0" x 3'0"	3.21	14-57/64"	31-1/16"	18.76	3.21	6.42	26.46
9'0" x 3'6"	3.83	14-57/64"	37-1/16"	22.81	3.83	7.66	30.93
9'0" x 4'0"	4.45	14-57/64"	43-1/16"	26.85	4.45	8.90	35.41
9'0" x 4'6"	5.07	14-57/64"	49-1/16"	30.90	5.07	10.14	39.89
9'0" x 5'0"	5.69	14-57/64"	55-1/16"	34.95	5.69	11.38	44.37
9'0" x 5'6"	6.31	14 -57/64"	61-1/16"	38.99	6.31	12.62	48.85
9'0" x 6'0"	6.93	14-57/64"	67-1/16"	43.04	6.93	13.86	53.33
10'0" x 2'0"	2.24	16-57/64"	19-1/16"	11.98	2.24	4.48	19.45
10'0" x 2'6"	2.94	16-57/64"	25-1/16"	16.53	2.94	5.88	24.43
10'0" x 3'0"	3.64	16-57/64"	31-1/16"	21.08	3.64	7.28	29.41
10'0" x 3'6"	4.35	16-57/64"	37-1/16"	25.62	4.35	8.70	34.39
10'0" x 4'0"	5.05	16-57/64"	43-1/16"	30.17	5.05	10.10	39.37
10'0" x 4'6"	5.75	16-57/64"	49-1/16"	34.72	5.75	11.50	44.35
10'0" x 5'0"	6.46	16-57/64"	55-1/16"	39.26	6.46	12.92	49.32
10'0" x 5'6"	7.16	16-57/64"	61-1/16"	43.81	7.16	14.32	54.30
10'0" x 6'0"	7.87	16-57/64"	67-1/16"	48.36	7.87	15.74	59.28

Standard	Sq. Ft.	Clear	Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Frame Dim.
Complem	entary Q	uad Sliding	Windows -	- Active-Fi	xed-Fixe	d-Active	(AFFA)
6'0" x 2'0"	2.05	15-31/64"	19-1/16"	6.29	2.05	4.10	11.64
6'0" x 2'6"	2.69	15-31/64"	25-1/16"	8.67	2.69	5.38	14.62
6'0" x 3'0"	3.34	15-31/64"	31-1/16"	11.06	3.34	6.68	17.60
6'0" x 3'6"	3.99	15-31/64"	37-1/16"	13.44	3.99	7.98	20.57
6'0" x 4'0"	4.63	15-31/64"	43-1/16"	15.83	4.63	9.26	23.55
6'0" x 4'6"	5.28	15-31/64"	49-1/16"	18.21	5.28	10.56	26.53
6'0" x 5'0"	5.92	15-31/64"	55-1/16"	20.60	5.92	11.84	29.51
6'0" x 5'6"	6.57	15-31/64"	61-1/16"	22.98	6.57	13.14	32.49
6'0" x 6'0"	7.21	15-31/64"	67-1/16"	25.37	7.21	14.42	35.47
7'0" x 2'0"	2.45	18-31/64"	19-1/16"	7.60	2.45	4.90	13.59
7'0" x 2'6"	3.22	18-31/64"	25-1/16"	10.49	3.22	6.44	17.07
7'0" x 3'0"	3.99	18-31/64"	31-1/16"	13.38	3.99	7.98	20.55
7'0" x 3'6"	4.76	18-31/64"	37-1/16"	16.26	4.76	9.52	24.03
7'0" x 4'0"	5.53	18-31/64"	43-1/16"	19.15	5.53	11.06	27.51
7'0" x 4'6"	6.30	18-31/64"	49-1/16"	22.03	6.30	12.60	30.99
7'0" x 5'0"	7.07	18-31/64"	55-1/16"	24.92	7.07	14.14	34.47
7'0" x 5'6"	7.84	18-31/64"	61-1/16"	27.80	7.84	15.68	37.94
7'0" x 6'0"	8.61	18 -31/64"	67-1/16"	30.69	8.61	17.22	41.42
8'0" x 2'0"	2.84	21-31/64"	19-1/16"	8.92	2.84	5.68	15.54
8'0" x 2'6"	3.74	21-31/64"	25-1/16"	12.31	3.74	7.48	19.52
8'0" x 3'0"	4.63	21-31/64"	31-1/16"	15.69	4.63	9.26	23.50
8'0" x 3'6"	5.53	21-31/64"	37-1/16"	19.08	5.53	11.06	27.48
8'0" x 4'0"	6.42	21-31/64"	43-1/16"	22.46	6.42	12.84	31.46
8'0" x 4'6"	7.32	21-31/64"	49-1/16"	25.85	7.32	14.64	35.44
8'0" x 5'0"	8.22	21-31/64"	55-1/16"	29.23	8.22	16.44	39.42

Standard	Sq. Ft.	Clear	Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Frame Dim.
Complem		uad Sliding	Windows -	– AFFA (co	nt.)		1
8'0" x 5'6"	9.11	21-31/64"	61-1/16"	32.62	9.11	18.22	43.40
8'0" x 6'0"	10.01	21-31/64"	67-1/16"	36.01	10.01	20.02	47.38
9'0" x 2'0"	3.24	24-31/64"	19-1/16"	10.24	3.24	6.48	17.50
9'0" x 2'6"	4.26	24-31/64"	25-1/16"	14.13	4.26	8.52	21.98
9'0" x 3'0"	5.28	24-31/64"	31-1/16"	18.01	5.28	10.56	26.46
9'0" x 3'6"	6.30	24-31/64"	37-1/16"	21.90	6.30	12.60	30.93
9'0" x 4'0"	7.32	24-31/64"	43-1/16"	25.78	7.32	14.64	35.41
9'0" x 4'6"	8.34	24-31/64"	49-1/16"	29.67	8.34	16.68	39.89
9'0" x 5'0"	9.36	24-31/64"	55-1/16"	33.55	9.36	18.72	44.37
9'0" x 5'6"	10.38	24-31/64"	61-1/16"	37.44	10.38	20.76	48.85
9'0" x 6'0"							53.33
10'0" x 2'0"	11.40	24-31/64"	67-1/16"	41.32	11.40	22.80	
	3.64	27-31/64"	19-1/16"	11.56	3.64	7.28	19.45
10'0" x 2'6"	4.78	27-31/64"	25-1/16"	15.94	4.78	9.56	24.43
10'0" x 3'0"	5.93	27-31/64"	31-1/16"	20.33	5.93	11.86	29.41
10'0" x 3'6"	7.07	27-31/64"	37-1/16"	24.71	7.07	14.14	34.39
10'0" x 4'0"	8.22	27-31/64"	43-1/16"	29.10	8.22	16.44	39.37
10'0" x 4'6"	9.36	27-31/64"	49-1/16"	33.48	9.36	18.72	44.35
10'0" x 5'0"	10.51	27-31/64"	55-1/16"	37.87	10.51	21.02	49.32
10'0" x 5'6"	11.65	27-31/64"	61-1/16"	42.26	11.65	23.30	54.30
10'0" x 6'0"	12.80	27-31/64"	67-1/16"	46.64	12.80	25.60	59.28
11'0" x 2'0"	4.04	30-31/64"	19-1/16"	12.88	4.04	8.08	21.40
11'0" x 2'6"	5.31	30-31/64"	25-1/16"	17.76	5.31	10.62	26.88
11'0" x 3'0"	6.58	30-31/64"	31-1/16"	22.65	6.58	13.16	32.36
11'0" x 3'6"	7.85	30-31/64"	37-1/16"	27.53	7.85	15.70	37.84
11'0" x 4'0"	9.12	30-31/64"	43-1/16"	32.42	9.12	18.24	43.32
11'0" x 4'6"	10.39	30-31/64"	49-1/16"	37.30	10.39	20.78	48.80
11'0" x 5'0"	11.66	30-31/64"	55-1/16"	42.19	11.66	23.32	54.28
11'0" x 5'6"	12.93	30-31/64"	61-1/16"	47.07	12.93	25.86	59.76
11'0" x 6'0"	14.20	30-31/64"	67-1/16"	51.96	14.20	28.40	65.24
12'0" x 2'0"	4.43	33-31/64"	19-1/16"	14.19	4.43	8.86	23.36
12'0" x 2'6"	5.83	33-31/64"	25-1/16"	19.58	5.83	11.66	29.34
12'0" x 3'0"	7.22	33-31/64"	31-1/16"	24.96	7.22	14.44	35.31
12'0" x 3'6"	8.62	33-31/64"	37-1/16"	30.35	8.62	17.24	41.29
12'0" x 4'0"	10.01	33-31/64"	43-1/16"	35.73	10.01	20.02	47.27
12'0" x 4'6"	11.41	33-31/64"	49-1/16"	41.12	11.41	22.82	53.25
12'0" x 5'0"	12.80	33-31/64"	55-1/16"	46.51	12.80	25.60	59.23
12'0" x 5'6"	14.20	33-31/64"	61-1/16"	51.89	14.20	28.40	65.21
12'0" x 6'0"	15.59	33-31/64"	67-1/16"	57.28	15.59	31.18	71.19
13'0" x 2'0"	4.83	36-31/64"	19-1/16"	15.51	4.83	9.66	25.31
13'0" x 2'6"	6.35	36-31/64"	25-1/16"	21.40	6.35	12.70	31.79
13'0" x 3'0"	7.87	36-31/64"	31-1/16"	27.28	7.87	15.74	38.27
13'0" x 3'6"	9.39	36-31/64"	37-1/16"	33.17	9.39	18.78	44.75
13'0" x 4'0"	10.91	36-31/64"	43-1/16"	39.05	10.91	21.82	51.23
13'0" x 4'6"	12.43	36-31/64"	49-1/16"	44.94	12.43	24.86	57.71
13'0" x 5'0"	13.95	36-31/64"	55-1/16"	50.82	13.95	27.90	64.18
13'0" x 5'6"	15.47	36-31/64"	61-1/16"	56.71	15.47	30.94	70.66
13'0" x 6'0"	16.99	36-31/64"	67-1/16"	62.59	16.99	33.98	77.14

Clear Opening Dimensions

Standard	Sq. Ft. Clear	Clear	Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft. of Frame
Sizes	Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Dim.
Compleme	entary Q	uad Sliding	Windows -	- AFFA (co	nt.)		
14'0" x 2'0"	5.23	39-31/64"	19-1/16"	16.83	5.23	10.46	27.26
14'0" x 2'6"	6.87	39-31/64"	25-1/16"	23.21	6.87	13.74	34.24
14'0" x 3'0"	8.52	39-31/64"	31-1/16"	29.60	8.52	17.04	41.22
14'0" x 3'6"	10.16	39-31/64"	37-1/16"	35.98	10.16	20.32	48.20
14'0" x 4'0"	11.81	39-31/64"	43-1/16"	42.37	11.81	23.62	55.18
14'0" x 4'6"	13.45	39-31/64"	49-1/16"	48.76	13.45	26.90	62.16
14'0" x 5'0"	15.10	39-31/64"	55-1/16"	55.14	15.10	30.20	69.14
14'0" x 5'6"	16.74	39-31/64"	61-1/16"	61.53	16.74	33.48	76.12
14'0" x 6'0"	18.39	39-31/64"	67-1/16"	67.91	18.39	36.78	83.10

Standard	Sq. Ft.	Clear	Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent 1	Vent 2	Frame Dim.
Compleme	entary Q	uad Sliding	Windows -	- Fixed-Ac	tive-Acti	ve-Fixed	l (FAAF)
6'0" x 2'0"	2.09	15-25/32"	19-1/16"	6.29	2.09	4.18	11.64
6'0" x 2'6"	2.75	15-25/32"	25-1/16"	8.67	2.75	5.50	14.62
6'0" x 3'0"	3.40	15-25/32"	31-1/16"	11.06	3.40	6.80	17.60
6'0" x 3'6"	4.06	15-25/32"	37-1/16"	13.44	4.06	8.12	20.57
6'0" x 4'0"	4.72	15-25/32"	43-1/16"	15.83	4.72	9.44	23.55
6'0" x 4'6"	5.38	15-25/32"	49-1/16"	18.21	5.38	10.76	26.53
6'0" x 5'0"	6.03	15-25/32"	55-1/16"	20.60	6.03	12.06	29.51
6'0" x 5'6"	6.69	15-25/32"	61-1/16"	22.98	6.69	13.38	32.49
6'0" x 6'0"	7.35	15-25/32"	67-1/16"	25.37	7.35	14.70	35.47
7'0" x 2'0"	2.49	18-25/32"	19-1/16"	7.60	2.49	4.98	13.59
7'0" x 2'6"	3.27	18-25/32"	25-1/16"	10.49	3.27	6.54	17.07
7'0" x 3'0"	4.05	18-25/32"	31-1/16"	13.38	4.05	8.10	20.55
7'0" x 3'6"	4.83	18-25/32"	37-1/16"	16.26	4.83	9.66	24.03
7'0" x 4'0"	5.62	18-25/32"	43-1/16"	19.15	5.62	11.24	27.51
7'0" x 4'6"	6.40	18-25/32"	49-1/16"	22.03	6.40	12.80	30.99
7'0" x 5'0"	7.18	18-25/32"	55-1/16"	24.92	7.18	14.36	34.47
7'0" x 5'6"	7.96	18-25/32"	61-1/16"	27.80	7.96	15.92	37.94
7'0" x 6'0"	8.75	18-25/32"	67-1/16"	30.69	8.75	17.50	41.42
8'0" x 2'0"	2.88	21-25/32"	19-1/16"	8.92	2.88	5.76	15.54
8'0" x 2'6"	3.79	21-25/32"	25-1/16"	12.31	3.79	7.58	19.52
8'0" x 3'0"	4.70	21-25/32"	31-1/16"	15.69	4.70	9.40	23.50
8'0" x 3'6"	5.61	21-25/32"	37-1/16"	19.08	5.61	11.22	27.48
8'0" x 4'0"	6.51	21-25/32"	43-1/16"	22.46	6.51	13.02	31.46
8'0" x 4'6"	7.42	21-25/32"	49-1/16"	25.85	7.42	14.84	35.44
8'0" x 5'0"	8.33	21-25/32"	55-1/16"	29.23	8.33	16.66	39.42
8'0" x 5'6"	9.24	21-25/32"	61-1/16"	32.62	9.24	18.48	43.40
8'0" x 6'0"	10.14	21-25/32"	67-1/16"	36.01	10.14	20.28	47.38
9'0" x 2'0"	3.28	24-25/32"	19-1/16"	10.24	3.28	6.56	17.50
9'0" x 2'6"	4.31	24-25/32"	25-1/16"	14.13	4.31	8.62	21.98
9'0" x 3'0"	5.35	24-25/32"	31-1/16"	18.01	5.35	10.70	26.46
9'0" x 3'6"	6.38	24-25/32"	37-1/16"	21.90	6.38	12.76	30.93
9'0" x 4'0"	7.41	24-25/32"	43-1/16"	25.78	7.41	14.82	35.41

Sq. Ft. Clear Opg. Sq. Ft. of Standard Sq. Ft. D.L.O. Sa. Ft. Sa. Ft. Clear Frame Vent 1 Vent 2 Sizes Width Height Opg. Dim. Complementary Quad Sliding Windows - FAAF (cont.) 9'0" x 4'6' 8.44 24-25/32" 49-1/16" 29.67 8.44 16.88 39.89 9'0" x 5'0' 9.48 24-25/32 55-1/16" 33.55 9.48 18.96 44.37 9'0" x 5'6" 10.51 24-25/32" 61-1/16" 37.44 10.51 21.02 48.85 9'0" x 6'0" 11.54 24-25/32" 67-1/16" 41.32 11.54 23.08 53.33 3.68 11.56 7.36 19.45 10'0" x 2'0' 27-25/32" 19-1/16 3.68 10'0" x 2'6" 4.84 27-25/32" 25-1/16" 15.94 4.84 9.68 24.43 10'0" x 3'0" 5.99 27-25/32" 31-1/16" 20.33 5.99 11.98 29.41 10'0" x 3'6" 7.15 27-25/32" 37-1/16" 24.71 7.15 14.30 34.39 10'0" x 4'0" 27-25/32" 43-1/16" 29.10 16.62 39.37 8.31 8.31 10'0" x 4'6" 9.47 27-25/32" 49-1/16" 33.48 9.47 18.94 44.35 10'0" x 5'0" 27-25/32" 55-1/16" 37.87 21.24 49.32 10.62 10'0" x 5'6" 11.78 27-25/32" 61-1/16" 42.26 11.78 23.56 54.30 10'0" x 6'0" 12.94 27-25/32" 67-1/16" 46.64 12.94 25.88 59.28 11'0" x 2'0" 4.07 30-25/32" 19-1/16" 4.07 8.14 21.40 12.88 11'0" x 2'6" 5.36 30-25/32" 25-1/16" 17.76 5.36 10.72 26.88 11'0" x 3'0" 6.64 30-25/32" 31-1/16" 22.65 13.28 32.36 6.64 11'0" x 3'6" 30-25/32" 37-1/16" 27.53 37.84 7.92 7.92 15.84 11'0" x 4'0" 43-1/16" 32.42 9.20 30-25/32" 9.20 18.40 43.32 49-1/16" 11'0" x 4'6" 10.49 30-25/32" 37.30 10.49 20.98 48.80 11'0" x 5'0" 11.77 30-25/32" 55-1/16" 42.19 11.77 23.54 54.28 11'0" x 5'6" 13.05 30-25/32" 61-1/16" 47.07 13.05 26.10 59.76 11'0" x 6'0" 14.34 65.24 30-25/32" 67-1/16" 51.96 28.68 14.34 12'0" x 2'0' 4.47 33-25/32' 19-1/16' 14.19 4.47 8.94 23.36 12'0" x 2'6" 33-25/32" 25-1/16" 19.58 11.76 29.34 5.88 5.88 12'0" x 3'0" 7.29 33-25/32" 31-1/16" 24.96 7.29 14.58 35.31 12'0" x 3'6" 8.69 33-25/32" 37-1/16" 30.35 17.38 41.29 8.69 43-1/16" 35.73 47.27 12'0" x 4'0" 10.10 33-25/32" 10.10 20.20 12'0" x 4'6" 11.51 33-25/32" 49-1/16" 41.12 11.51 23.02 53.25 12'0" x 5'0" 12.92 33-25/32" 55-1/16" 46.51 12.92 25.84 59.23 12'0" x 5'6" 14.32 33-25/32" 61-1/16" 51.89 14.32 28.64 65.21 15.73 12'0" x 6'0" 33-25/32" 67-1/16" 57.28 15.73 31.46 71.19 13'0" x 2'0" 4.87 36-25/32" 19-1/16" 15.51 4.87 9.74 25.31 13'0" x 2'6" 6.40 36-25/32" 25-1/16" 21.40 6.40 12.80 31.79 13'0" x 3'0" 793 36-25/32" 31-1/16" 27.28 7.93 15.86 38.27 36-25/32" 33 17 18 94 13'0" x 3'6" 947 37-1/16" 947 44 75 13'0" x 4'0" 11.00 36-25/32" 43-1/16" 39.05 11.00 22.00 51.23 13'0" x 4'6" 12.53 36-25/32" 49-1/16" 44.94 12.53 25.06 57.71 13'0" x 5'0" 14.06 36-25/32" 55-1/16" 50.82 14.06 28.12 64.18 15.60 13'0" x 5'6" 15.60 36-25/32" 61-1/16" 56.71 31.20 70.66 13'0" x 6'0" 17.13 36-25/32" 67-1/16" 62.59 17.13 34.26 77.14 14'0" x 2'0' 5.27 39-25/32" 19-1/16" 16.83 5.27 10.54 27.26 14'0" x 2'6" 6.92 39-25/32" 25-1/16" 23.21 6.92 13.84 34.24 39-25/32" 31-1/16" 29.60 17.16 41 22 14'0" x 3'0" 8 5 8 8 5 8 10.24 14'0" x 3'6' 10.24 39-25/32 37-1/16" 35.98 20.48 48.20 43-1/16" 14'0" x 4'0' 11.90 39-25/32" 42.37 11.90 23.80 55.18 14'0" x 4'6" 13.55 39-25/32" 49-1/16" 48.76 13.55 27.10 62.16 55.14 14'0" x 5'0' 15 21 39-25/32" 55-1/16" 15.21 30.42 69.14 14'0" x 5'6" 16 87 39-25/32" 61-1/16" 61 53 16.87 33 74 76 12 18.53 67-1/16" 67.91 18.53 14'0" x 6'0' 39-25/32 37.06 83.10

Standard	Sq. Ft.	Clea	ır Opg.	Opg. Sq. Ft.		Sq. Ft. of
Sizes	Clear Opg.	Width	Height	D.L.O.	Sq. Ft. Vent	Frame Dim.
Complementary Sli		rs. Narrow	-	ide		
2'8" x 6'7-1/2"	_	_	_	11.21	-	17.67
2'8" x 7'11-1/2"		_	_	13.82	_	21.22
2'8-1/2" x 6'10-7/16"		_	_	11.94	_	18.61
2'8-1/2" x 7'2-7/16"				12.6	_	19.51
2'8-1/2" x 8'2-7/16"				14.6	_	22.22
2'8-1/2" x 9'2-7/16"				16.6		24.93
2'8-1/2" x 10'2-7/16"				18.6	_	27.63
3'2" x 6'7-1/2"				14.07		20.98
3'2" x 7'11-1/2"			_	17.35	_	25.2
3'2-1/2" x 6'10-7/16"		_	_	14.92	_	22.04
3'2-1/2" x 7'2-7/16"			_	15.76	_	23.11
3'2-1/2" x 8'2-7/16"		_	_	18.26	_	26.32
3'2-1/2" x 9'2-7/16"			_	20.76	_	29.53
3'2-1/2" x 10'2-7/16"		_	_	23.26	_	32.74
3'5-1/4" x 6'7-1/2"			_	15.62	_	22.74
3'5-1/4" x 7'11-1/2"				19.26		27.36
4'2" x 6'7-1/2"				19.20		27.50
4'2" x 7'11-1/2"				24.41		33.16
4'2-1/2" x 6'10-7/16"				20.89		28.91
4'2-1/2" x 7'2-7/16"	-			22.06	_	30.31
4'2-1/2" x 8'2-7/16"	-	_	_	25.56		34.52
4'2-1/2" x 9'2-7/16"	-	_	-	29.06	-	38.73
4'2-1/2" x 10'2-7/16"	-	-	-	32.56	-	42.94
4'8-1/2" x 6'10-7/16"	-			23.88	_	32.35
4'8-1/2" x 7'2-7/16"	-			25.21	_	33.91
4'8-1/2" x 8'2-7/16"	-		_	29.21	_	38.62
4'8-1/2" x 9'2-7/16"	-			33.21	_	43.33
4'8-1/2" x 10'2-7/16"	-	_	_	37.21		48.04
5'2-1/2" x 6'10-7/16"	-			26.86	_	35.78
5'2-1/2" x 7'2-7/16"	-	-	-	28.36	-	37.52
	-	-	_	32.86	-	42.72
5'2-1/2" x 8'2-7/16" 5'2-1/2" x 9'2-7/16"	-	-	-		-	
5'2-1/2" x 10'2-7/16"	-	-	-	37.36	-	47.93
	-			41.86	-	53.14
Complementary Sli 4'11" x 6'7-1/2"	-		1	1	11.2	22.57
4'11' x 7'11-1/2"	11.3 13.69	21-1/2"	75-11/16"	22.42	11.3	32.57
5'0" x 6'10-7/16"		21-1/2"	91-11/16" 78-5/8"	27.64 23.88	13.69 12.01	39.13 34.35
	12.01					
5'0" x 7'2-7/16"	12.62	22"	82-5/8"	25.21	12.62	36.02
5'0" x 8'2-7/16"	14.46	22"	94-5/8"	29.21 33.21	14.46	41.02
5'0" x 9'2-7/16"	16.29	22"	106-5/8"		16.29	46.02
5'0" x 10'2-7/16"	18.12	22" 27-1/2"	118-5/8"	37.21	18.12	51.02 20.2
5'11" x 6'7-1/2"	14.45		75-11/16"	28.14	14.45	39.2
5'11" x 7'11-1/2" 6'0" x 6'10-7/16"	17.51	27-1/2"	91-11/16"	34.7	17.51	47.09
	15.29	28"	78-5/8"	29.84	15.29	41.22
6'0" x 7'2-7/16"	16.07	28"	82-5/8"	31.51	16.07	43.22

Standard	Sq. Ft.	Clea	ır Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft. of	
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.	
Complementary Sl	iding Doo	rs, Narrow	/ Stile – 2-wi	de (cont.))		
6'0" x 8'2-7/16"	18.4	28"	94-5/8"	36.51	18.4	49.22	
6'0" x 9'2-7/16"	20.73	28"	106-5/8"	41.51	20.73	55.22	
6'0" x 10'2-7/16"	23.07	28"	118-5/8"	46.51	23.07	61.22	
6'5-1/2" x 6'7-1/2"	16.16	30-3/4"	75-11/16"	31.24	16.16	42.79	
6'5-1/2" x 7'11-1/2"	19.58	30-3/4"	91-11/16"	38.52	19.58	51.4	
7'11" x 6'7-1/2"	20.76	39-1/2"	75-11/16"	39.59	20.76	52.45	
7'11" x 7'11-1/2"	25.15	39-1/2"	91-11/16"	48.81	25.15	63	
8'0" x 6'10-7/16"	21.84	40"	78-5/8"	41.78	21.84	54.96	
8'0" x 7'2-7/16"	22.95	40"	82-5/8"	44.11	22.95	57.63	
8'0" x 8'2-7/16"	26.28	40"	94-5/8"	51.11	26.28	65.63	
8'0" x 9'2-7/16"	29.62	40"	106-5/8"	58.11	29.62	73.63	
8'0" x 10'2-7/16"	32.95	40"	118-5/8"	65.11	32.95	81.63	
9'0" x 6'10-7/16"	25.12	46"	78-5/8"	47.75	25.12	61.83	
9'0" x 7'2-7/16"	26.39	46"	82-5/8"	50.42	26.39	64.83	
9'0" x 8'2-7/16"	30.23	46"	94-5/8"	58.42	30.23	73.83	
9'0" x 9'2-7/16"	34.06	46"	106-5/8"	66.42	34.06	82.83	
9'0" x 10'2-7/16"	37.89	46"	118-5/8"	74.42	37.89	91.83	
10'0" x 6'10-7/16"	28.39	52"	78-5/8"	53.72	28.39	68.7	
10'0" x 7'2-7/16"	29.84	52"	82-5/8"	56.72	29.84	72.03	
10'0" x 8'2-7/16"	34.17	52"	94-5/8"	65.72	34.17	82.03	
10'0" x 9'2-7/16"	38.5	52"	106-5/8"	74.72	38.5	92.03	
10'0" x 10'2-7/16"	42.84	52"	118-5/8"	83.72	42.84	102.03	
			1		1		

Standard	Sq. Ft.	Clea	Sq. Ft.	Sq. Ft.	Sq. Ft. of		
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.	
Complementary Slid	Complementary Sliding Doors, Narrow Stile – 3-V						
7'7" x 6'7-1/2"	11.3	21-1/2"	75-11/16"	33.63	11.3	50.24	
7'7" x 7'11-1/2"	13.69	21-1/2"	91-11/16"	41.46	13.69	60.35	
7'8-1/2" x 6'10-7/16"	12.01	22"	78-5/8"	35.81	12.01	52.95	
7'8-1/2" x 7'2-7/16"	12.62	22"	82-5/8"	37.81	12.62	55.52	
7'8-1/2" x 8'2-7/16"	14.46	22"	94-5/8"	43.81	14.46	63.23	
7'8-1/2" x 9'2-7/16"	16.29	22"	106-5/8"	49.81	16.29	70.94	
7'8-1/2" x 10'2-7/16"	18.12	22"	118-5/8"	55.81	18.12	78.65	
9'1" x 6'7-1/2"	14.45	27-1/2"	75-11/16"	42.21	14.45	60.18	
9'1" x 7'11-1/2"	17.51	27-1/2"	91-11/16"	52.05	17.51	72.29	
9'2-1/2" x 6'10-7/16"	15.29	28"	78-5/8"	44.77	15.29	63.26	
9'2-1/2" x 7'2-7/16"	16.07	28"	82-5/8"	47.27	16.07	66.33	
9'2-1/2" x 8'2-7/16"	18.4	28"	94-5/8"	54.77	18.4	75.54	
9'2-1/2" x 9'2-7/16"	20.73	28"	106-5/8"	62.27	20.73	84.75	
9'2-1/2" x 10'2-7/16"	23.07	28"	118-5/8"	69.77	23.07	93.95	
9'5-7/8" x 6'10-7/16"	12.01	22"	78-5/8"	48.87	12.01	65.19	
9'5-7/8" x 7'2-7/16"	12.62	22"	82-5/8"	51.6	12.62	68.35	
9'5-7/8" x 8'2-7/16"	14.46	22"	94-5/8"	59.79	14.46	77.84	
9'5-7/8" x 9'2-7/16"	16.29	22"	106-5/8"	67.97	16.29	87.33	

Clear Opening Dimensions

Standard	Sq. Ft.				Sq. Ft.	Sq. Ft. of	
Sizes	Clear Opg.	Width	Height	Sq. Ft. D.L.O.	Vent	Frame Dim.	
Complementary Slid	ling Doo	rs, Narrow	/ Stile – 3-Wi	de (cont	.)		
9'5-7/8" x 10'2-7/16"	18.12	22"	111-5/8"	76.16	18.12	96.82	
9'10-3/4" x 6'7-1/2"	16.16	30-3/4"	75-11/16"	46.86	16.16	65.56	
9'10-3/4" x 7'11-1/2"	19.58	30-3/4"	91-11/16"	57.78	19.58	78.75	
11'5-7/8" x 6'10-7/16"	15.29	28"	78-5/8"	60.81	15.29	78.93	
11'5-7/8" x 7'2-7/16"	16.07	28"	82-5/8"	64.2	16.07	82.76	
11'5-7/8" x 8'2-7/16"	18.4	28"	94-5/8"	74.39	18.4	94.25	
11'5-7/8" x 9'2-7/16"	20.73	28"	106-5/8"	84.58	20.73	105.74	
11'5-7/8" x 10'2-7/16"	23.07	28"	111-5/8"	94.76	23.07	117.23	
12'1" x 6'7-1/2"	20.76	39-1/2"	75-11/16"	59.39	20.76	80.05	
12'1" x 7'11-1/2"	25.15	39-1/2"	91-11/16"	73.22	25.15	96.16	
12'2-1/2" x 6'10-7/16"	21.84	40"	78-5/8"	62.67	21.84	83.87	
12'2-1/2" x 7'2-7/16"	22.95	40"	82-5/8"	66.17	22.95	87.94	
12'2-1/2" x 8'2-7/16"	26.28	40"	94-5/8"	76.67	26.28	100.15	
12'2-1/2" x 9'2-7/16"	29.62	40"	106-5/8"	87.17	29.62	112.35	

Standard			ar Opg.	Sq. Ft.	Sq. Ft.	Sq. Ft. of	
Sizes	Clear Opg.	Width	Height	D.L.O.	Vent	Frame Dim.	
Complementary Slid	ling Doo	rs, Narrow	/ Stile – 3-Wi	de (cont	.)		
12'2-1/2" x 10'2-7/16"	32.95	40"	118-5/8"	97.67	32.95	124.56	
13'8-1/2" x 6'10-7/16"	25.12	46"	78-5/8"	71.63	25.12	94.17	
13'8-1/2" x 7'2-7/16"	26.39	46"	82-5/8"	75.63	26.39	98.74	
13'8-1/2" x 8'2-7/16"	30.23	46"	94-5/8"	87.63	30.23	112.45	
13'8-1/2" x 9'2-7/16"	34.06	46"	106-5/8"	99.63	34.06	126.16	
13'8-1/2" x 10'2-7/16"	37.89	46"	118-5/8"	111.63	37.89	139.87	
15'2-1/2" x 6'10-7/16"	28.39	52"	78-5/8"	80.58	28.39	104.48	
15'2-1/2" x 7'2-7/16"	29.84	52"	82-5/8"	85.08	29.84	109.55	
15'2-1/2" x 8'2-7/16"	34.17	52"	94-5/8"	98.58	34.17	124.76	
15'2-1/2" x 9'2-7/16"	38.5	52"	106-5/8"	112.08	38.5	139.96	
15'2-1/2" x 10'2-7/16"	42.84	52"	118-5/8"	125.58	42.84	155.17	
15'5-7/8" x 6'10-7/16"	21.84	40"	78-5/8"	84.68	21.84	106.41	
15'5-7/8" x 7'2-7/16"	22.95	40"	82-5/8"	89.41	22.95	111.57	

Standard	Sq. Ft. Clear Opg.		Clear C	Clear Opg. Width		C . Et	C . Et	Sq. Ft.
Sizes	1 Open	2 Open	1 Open	2 Open	Clear Opg. Ht.	Sq. Ft. D.L.O.	Sq. Ft. Vent	Frame Dim.
Complementary Slidi	ng Door	s, Narrov	v Stile – 4-	Wide				
9'10-9/16" x 6'10-7/16"	13.45	24.38	24-5/8"	44-21/32"	78-5/8"	47.75	24.38	67.87
9'10-9/16" x 7'2-7/16"	14.13	25.62	24-5/8"	44-21/32"	82-5/8"	50.42	25.62	71.17
9'10-9/16" x 8'2-7/16"	16.18	29.34	24-5/8"	44-21/32"	94-5/8"	58.42	29.34	81.05
9'10-9/16" x 9'2-7/16"	18.23	33.07	24-5/8"	44-21/32"	106-5/8"	66.42	33.07	90.93
9'10-9/16" x 10'2-7/16"	20.29	36.79	24-5/8"	44-21/32"	118-5/8"	74.42	36.79	100.81
11'10-9/16" x 6'10-7/16"	16.72	30.93	30-5/8"	56-21/32"	78-5/8"	59.69	30.93	81.61
11'10-9/16" x 7'2-7/16"	17.57	32.51	30-5/8"	56-21/32"	82-5/8"	63.02	32.51	85.57
11'10-9/16" x 8'2-7/16"	20.12	37.23	30-5/8"	56-21/32"	94-5/8"	73.02	37.23	97.45
11'10-9/16" x 9'2-7/16"	22.68	41.95	30-5/8"	56-21/32"	106-5/8"	83.02	41.95	109.34
11'10-9/16" x 10'2-7/16"	25.23	46.67	30-5/8"	56-21/32"	118-5/8"	93.02	46.67	121.22
15'10-9/16" x 6'10-7/16"	23.27	44.04	42-5/8"	80-21/32"	78-5/8"	83.56	44.04	109.09
15'10-9/16" x 7'2-7/16"	24.46	46.28	42-5/8"	80-21/32"	82-5/8"	88.23	46.28	114.39
15'10-9/16" x 8'2-7/16"	28.01	53	42-5/8"	80-21/32"	94-5/8"	102.23	53	130.27
15'10-9/16" x 9'2-7/16"	31.56	59.72	42-5/8"	80-21/32"	106-5/8"	116.23	59.72	146.15
15'10-9/16" x 10'2-7/16"	35.11	66.44	42-5/8"	80-21/32"	118-5/8"	130.23	66.44	162.03
17'10-9/16" x 6'10-7/16"	26.55	50.59	48-5/8"	91-21/32"	78-5/8"	95.5	50.59	122.83
17'10-9/16" x 7'2-7/16"	27.9	53.16	48-5/8"	92-21/32"	82-5/8"	100.83	53.16	128.79
17'10-9/16" x 8'2-7/16"	31.95	60.89	48-5/8"	92-21/32"	94-5/8"	116.83	60.89	146.67
17'10-9/16" x 9'2-7/16"	36	68.61	48-5/8"	92-21/32"	106-5/8"	132.83	68.61	164.55
17'10-9/16" x 10'2-7/16"	40.06	76.33	48-5/8"	92-21/32"	118-5/8"	148.83	76.33	182.43
19'10-9/16" x 6'10-7/16"	29.83	57.14	54-5/8"	104-21/32"	78-5/8"	107.44	57.14	136.57
19'10-9/16" x 7'2-7/16"	31.34	60.05	54-5/8"	104-21/32"	82-5/8"	113.44	60.05	143.2
19'10-9/16" x 8'2-7/16"	35.9	68.77	54-5/8"	104-21/32"	94-5/8"	131.44	68.77	163.08
19'10-9/16" x 9'2-7/16"	40.45	77.49	54-5/8"	104-21/32"	106-5/8"	149.44	77.49	182.96
19'10-9/16" x 10'2-7/16"	45.00	86.21	54-5/8"	104-21/32"	118-5/8"	167.44	86.21	202.84



Energy Performance Data

ENERGY STAR[®] – United States

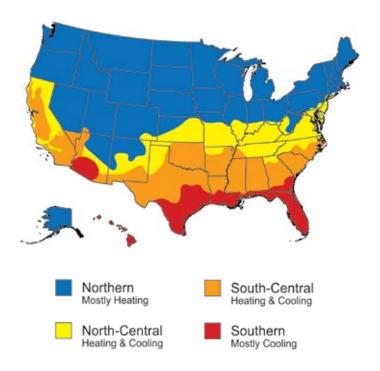


Energy Star is a government-regulated program that was created by the Environmental Protection Agency (EPA), and the U.S. Department of Energy (DOE), to help consumers quickly and easily identify energy saving products. The Energy Star program uses energy

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 specific climate zones are shown in the charts provided. Note that this information is per criteria that took effect in 2015 and 2016.



2015 & 2016 ENERGY STAR – Qualification Criteria for Windows*

Climate Zones – U.S.	U-Factor	SHGC
Northern**	<u>≤</u> 0.27	Any
Northern**	= 0.28	≥ 0.32
Northern**	= 0.29	≥ 0.37
Northern**	= 0.30	≥ 0.42
North-Central	<u>≤</u> 0.30	<u>≤</u> 0.40
South-Central	<u>≤</u> 0.30	<u>≤</u> 0.25
Southern	<u>≤</u> 0.40	<u>≤</u> 0.25

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

**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	SHG	Ĵ
Opaque	≤0.17	No rating	
≤ 1/2-Lite	≤ 0.25	≤ 0.25	
> 1/2 Lita	< 0.20	Northern North-Central	≤0.40
> 1/2-Lite	≤0.30	Southern South-Central	≤0.25

California's Title 24

Kolbe's VistaLuxe WD LINE windows and doors can meet the strict California Title 24 Building Energy Efficiency Standards. Talk to your dealer about VistaLuxe WD LINE products with glass options that help meet these stringent energy efficiency requirements.

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 on window labels. 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

Fenestration 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 is shown in the chart provided. For Kolbe products that qualify for Canada's Energy Star Program, search their website at **www.oee.nrcan.gc.ca/energystar.**



2020 ENERGY STAR – Qualification Criteria for Windows & Doors in Canada⁺

Minimum Energy Rating (ER)	or	Maximum U-Factor
34	or	≤0.21

U-Factor Equivalency – Qualification Criteria for Windows & Doors in Canada⁺

Imperial	Metric
0.35	2.00
0.32	1.80
0.28	1.60
0.25	1.40
0.21	1.20

†Criteria shown applies to windows, sliding doors, and swinging doors.

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.

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 on window labels.

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





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www.kolbewindows.com

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