



TerraSpan®
Lift & Slide Doors

KOLBE®
WINDOWS & DOORS



TerraSpan® Lift & Slide Doors

Create an expansive scenic addition to your design project with Kolbe's Ultra Series TerraSpan® lift & slide doors. TerraSpan doors open up rooms dramatically by extending the living space to the outdoors, and are ideal for many applications, from new residential projects to commercial buildings. Attention to visual details gives the TerraSpan the same aesthetics as our other Ultra Series products for a seamless match throughout an entire project.

Panels can either recess into a wall pocket or stack in various configurations within the opening. TerraSpan doors are also available as 90° corner units. The doors are designed to provide both versatility and durability while consuming less space by using 2-1/4" thick panels. The exterior is covered by a thick, extruded aluminum cladding, while the interior has the warmth and beauty of natural wood.

TerraSpan lift & slide doors can add to a sustainable design project with their ability to bring in large amounts of natural light, as well as help circulate air around the home when the unit is opened. A wide selection of choices are available to help you customize an opening to meet your needs. Many glass options, finish options and over 900 operational configurations make the possibilities nearly limitless. Talk to your local Kolbe dealer to learn more about all that Ultra Series TerraSpan lift & slide doors have to offer.



For specific performance criteria, Kolbe offers high performance and K-Force® impact performance product modifications to improve air, water, structural and/or sound transmittance ratings. K-Force impact products are unique because the performance level is achieved without sacrificing the beautiful appearance. TerraSpan units up to 10-feet tall can meet DP45 and be impact certified to IPD4.*

K-FORCE
IMPACT PRODUCTS



*Some limitations may apply; contact your Kolbe dealer for more information.



Construction Details & Sill Options

TerraSpan Lift & Slide Standard Features

- ▶ 2-1/4" thick panels with end caps to match color or wood species
- ▶ Panels can pocket into a wall or stack together
- ▶ 90° corner units are also available*
- ▶ 4-5/8" wide stiles and rails provide a large glass area
- ▶ 70% PVDF fluoropolymer finish on frame and sash exteriors (meets performance requirements of AAMA 2605-05)
- ▶ Tempered, 1" LoE²-270 insulating glass with argon gas**
- ▶ Glazed to the interior
- ▶ All interior wood panel parts are preservative-treated
- ▶ Stainless steel multi-point locking hardware channels provide corrosion resistance and increased security
- ▶ Wheel sets are constructed of 300 series stainless steel (drive bars, wheels, hubs and shafts, rivets, drive pins and link rods) to provide superior corrosion resistance
- ▶ Panels are available 30"-72" in width and 36"-144" in height
- ▶ LS100 removable handle set in Rustic Umber, Bright Brass, Satin Nickel or Oil-rubbed***
- ▶ Black anodized flush mount weep sill is thermally broken with 1/2" roller cap height
- ▶ Black anodized recessed weep sill option with 1/2" roller cap height
- ▶ Panels are thermally broken using a .090" thick extruded double-wall aluminum alloy frame press fit to a non-conductive fiberglass core finished on the interior with a solid wood cover
- ▶ Fully weatherstripped for a tight seal
- ▶ Interior pocket cover for all pocket doors
- ▶ No visible fasteners
- ▶ Traditional coped stile and rail joints on both interior and exterior
- ▶ Glazing bracket is inter-locked and screwed from the interior side of the core and hidden by the interior wood panel cover
- ▶ Removable handle
- ▶ Up to ten panels in a system

NOTES: All measurements are nominal. Numerous cross section details are shown on pages 9-10. Additional drawings are available on our website at www.kolbe-kolbe.com.
 * Curved units are also available; contact your Kolbe dealer for further information and to ask about the availability of other options not shown in this brochure.
 ** Argon gas may not be included with units to be installed in or shipped through high altitude areas.
 ***The Oil-Rubbed finish is a living finish, which means that it will change appearance over time with use.

Sill Options

Recessed



Recessed sills have a black anodized finish and feature a stainless steel roller cap that is 1/2" tall. The sill can either be a weep or non-weep design. An optional 3/16" tall roller cap sill that is non-weeping is also available. These sill designs are intended for use in applications where a minimal threshold height is desired. Units with a recessed sill are limited to 60' in width.

NOTE: The recessed sill shown above has been field-finished with wood. Recessed sills may be finished during installation in a variety of materials.

Flush



Weep



Non-weep

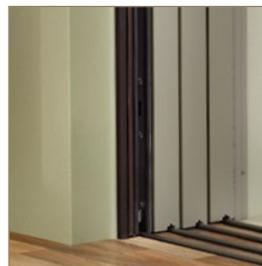
The thermally broken flush sills have a black anodized finish and feature a stainless steel roller cap that is 1/2" tall. The sills can either be a weep or non-weep design. Optional interior flush sill nosing extensions are available to meet various performance requirements or special floor conditions. Units with a flush sill are limited to 28' in width.



Expandable, thermally broken head and side jambs



Interior panel head end cover will blend with color or wood species



Panels in pocketing configurations recess flush to the wall



Thermally broken panels with architecturally-correct coped corners where stile meets rail

Hardware Options

As standard, a stainless steel multi-point locking system provides corrosion resistance and increased security. Standard on the TerraSpan is the interior LS100 removable handle set, which is available in Rustic Umber, Bright Brass, Satin Nickel or Oil Rubbed* finishes. The interior LS300 is an optional handle, also available in Rustic Umber, Bright Brass, Satin Nickel or Oil Rubbed* finishes. Double fixed handles (fixed handles on interior and exterior) or single fixed handles (on interior) can be utilized in some designs. Finger pulls are an option that can be included on the exterior. Finger pulls are available in Rustic Umber, Bright Brass, Satin Nickel or Oil Rubbed* finishes, and can be a different color than the interior handle set, if desired.

LS100 Handle Sets (standard)



LS300 Handle Sets (optional)



Escutcheons



Finger Pulls



Edge Pull



An optional edge pull on the edge of the innermost panel of TerraSpan doors provides ease of operation. Edge pulls are available in Black.

Pocket Cover



An interior pocket cover will be supplied for all pocket doors to conceal the wall opening when doors are in the closed position. It will match the interior finish, unless requested otherwise.

Wall Holding Plate for Removable Handle



An optional wall holding plate is ideal for easy placement and storage of the removable handle. It will match the escutcheon plate installed on the door.

Glass & Divided Lite Options

Glass Options

LoE²-270

Standard tempered insulating glass with strong protection against heat loss and UV damage.

LoE²-240

Tinted insulating glass recommended for very warm climates where maximum solar control is necessary.

LoE³-366

Insulating glass recommended for all climates with maximum protection against heat loss and UV damage.

ThermaPlus LoE

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

Preserve

Available on units to help keep the glass clean and debris free. The film is applied to the interior and exterior of the glass, protecting it through travel, installation and in field finishing. Any mess stays on the film which is easily removed once the job is completed. This option is highly recommended.

Triple-Pane Glass

Triple pane glass helps provide ultimate energy performance in windows. We construct triple pane windows with three panes of glass, argon gas, Thermo-Edge spacer bars, and the LoE coatings that best suit your climate's needs.

Performance Divided Lites

Kolbe's performance divided lite (PDL) glazing system gives the appearance of true divided lites without sacrificing energy efficiency. Extruded aluminum bars are adhered to the exterior and wood bars to the interior of the single lite of insulating glass.* Aesthetically pleasing spacer bars are installed within the insulating glass unit. Together, these bars create the illusion of true divided lites. PDL bars are available in 5/8", 7/8", 1-1/8", 1-3/4", 2-1/4" or 4-1/2" bar widths. The exterior finish of the aluminum bars will match the exterior finish on the unit. Variations on the PDL option may include custom divided lite patterns, custom bar widths or no spacer bars.

* Some intricate radius designs may have a composite material for the exterior PDL bar.

Interior Panel Sticking

TerraSpan lift & slide doors have a beveled profile interior panel sticking as standard. So that TerraSpan lift & slide doors can match aesthetics of a variety of projects, from traditional to contemporary, and ovolo profile or a square profile are also available.

Laminated

Provides the ultimate in UV blockage.

Impact

Glazing utilized to withstand harsh environmental conditions, especially in coastal regions. Combined with an impact product, such as K-Force®, this product offers the highest level of security.

Bronze/Gray tinted

Provides shading to interiors.

Patterned or Colored

Creates visual interest and can also provide privacy.

Finely Crafted Glass*

Finely crafted glass is held within clear, insulating glass, which provides protection to the decorative elements and makes for easy cleaning. Available with brass, lead or zinc caming.

*Not available with LoE, argon gas or Thermo-Edge spacers.

Neat®

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



Beveled

Ovolo

Square



Exterior Finish Options

Aluminum Cladding

Ultra Series TerraSpan lift & slide doors are finished on the exterior with a commercial-grade, 70% PVDF fluoropolymer coating that meets the requirements of AAMA 2605-05 specifications – the highest level in the industry. This finish carries up to a 30-year warranty, with many color options (as well as custom colors) available. Mica finishes are also available for TerraSpan lift & slide doors, to add dimension and interest to the exterior look. In addition, doors can be specified with a variety of unique, anodized exterior finishes.

			Ultra Pure White	White	Abalone	Alabaster
Rustic	Sand	Mudpie	Beige	Spiced Vinegar	Camel	Natural Cotton
Gingersnap	Truffle	Coal Black	Slate	Frosted Jade	Kiwi	Bay Leaf
Pumpkin Spice	Butterscotch	Hartford Green	Mystic Ivy	Green Tea Leaf	Basil	Manchester
Chutney	Antique Red	Merlot	Patriotic Blue	Cape Cod	Waterford	Timberwolf
Clear Anodized	Champagne Anodized	Light Bronze Anodized	Medium Bronze Anodized	Dark Bronze Anodized	Black Anodized	Auburn Anodized
Cashmere Pearl Mica	Driftwood Mica	Hazelnut Mica	Espresso Mica	Autumn Spice Mica	Golden Harvest Mica	Pesto Mica
Pearlescent White Mica	Galaxy Silver Mica	Silverstorm Mica	Night Sky Mica	Cosmic Gray Mica	Café Noir Mica	

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

Interior Wood & Finish Options

Interior Wood Options

In addition to the standard pine, Kolbe offers other optional wood species to enhance the look of a TerraSpan unit. Kolbe also offers FSC-certified wood species for your green building projects (FSC® license code FSC-C019541). Ask about the availability of additional wood species.

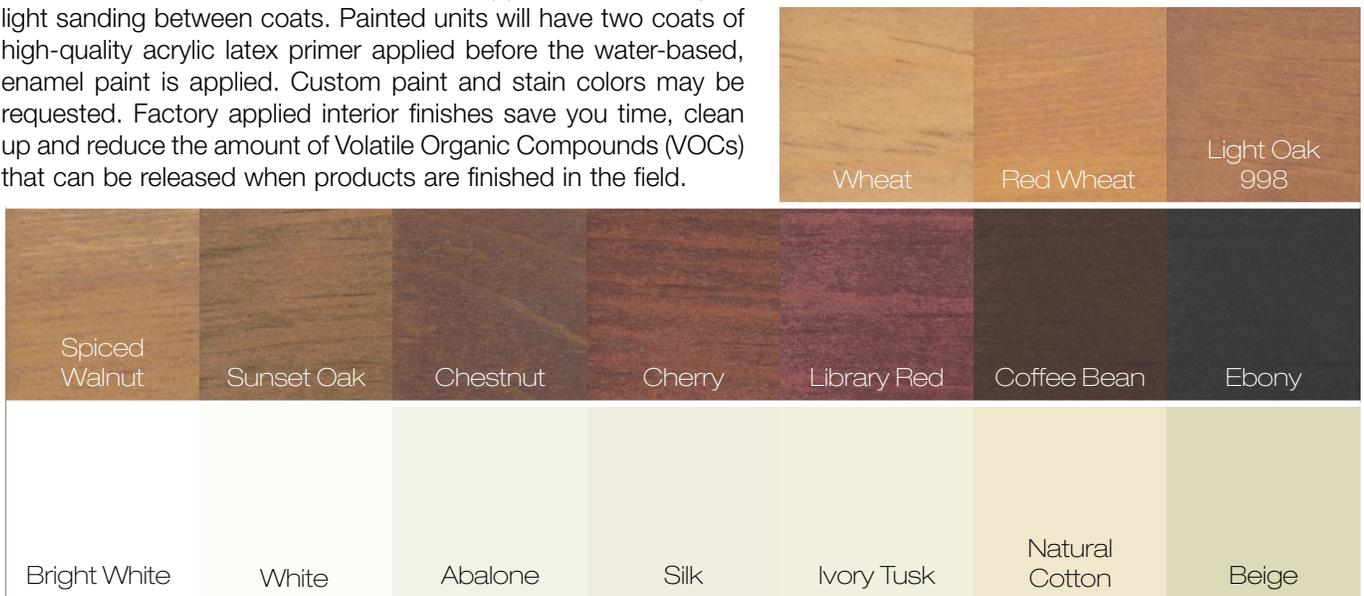


* Pine is the standard wood species for TerraSpan lift & slide doors. Wood species, including mahogany, are sourced from managed forests.

** Sourced from companies such as Lamboo, Inc.

Interior Finish Options

TerraSpan lift & slide doors may be prefinished on the interior with one of the available water-based stains or paints. On stained units, a water-based stain is applied, followed by two coats of clear, water-based satin finish sealer with light sanding between coats. Painted units will have two coats of high-quality acrylic latex primer applied before the water-based, enamel paint is applied. Custom paint and stain colors may be requested. Factory applied interior finishes save you time, clean up and reduce the amount of Volatile Organic Compounds (VOCs) that can be released when products are finished in the field.



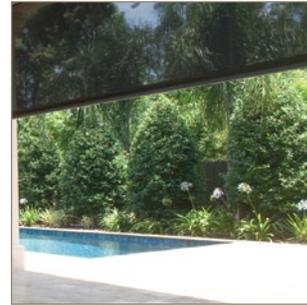
Stain colors are shown on pine. A double coat clear finish is also offered. Since no two trees are identical, wood can be expected to differ both in color and graining. These factors will influence the stain's final color. Custom stain matching is also available; please supply your Kolbe dealer with a sample (minimum 3" x 3") with the stain color on the wood species you would like matched. Printed images of stain options, paint options and wood species will vary slightly from actual colors. Selections should be made based on actual color samples available from your Kolbe dealer.

Screen Options

There are four different types of screens available for TerraSpan lift & slide doors. Due to the uniqueness of this product and its installation, we recommend contacting your local Kolbe dealer when considering a screen. They can provide more information and assist in the ordering of your screen.

Phantom® Motorized Executive Screens

- ▶ Screen remains out of sight until needed
- ▶ Full ventilation and protection from insects and UV rays
- ▶ A variety of finish options, including wood grain
- ▶ A wide variety of mesh options
- ▶ Programmable control options allow the oversized screens to be fully automated, providing solar protection when required
- ▶ Maximum opening up to 25' wide x 16' high



Genius Screens

- ▶ Frames are available in White, Almond, Adobe Grey and Brownstone
- ▶ Can be installed on the interior or the exterior
- ▶ Screens can be manually operated or motorized
- ▶ Screens operate from the top of the unit towards the bottom
- ▶ Charcoal-colored screen mesh
- ▶ Maximum opening up to 16' wide x 8' high



Centor Screens

- ▶ Frames are available in custom colors or wood veneer
- ▶ Installed on the exterior
- ▶ Screens operate from the side
- ▶ Single and double units available
- ▶ PVC-coated polyester screen mesh
- ▶ Maximum opening for 8' high single units is 12' wide and for double units is 24' wide; maximum opening for 10' high single units is 8' wide and for double units is 16' wide



Accordion Screens

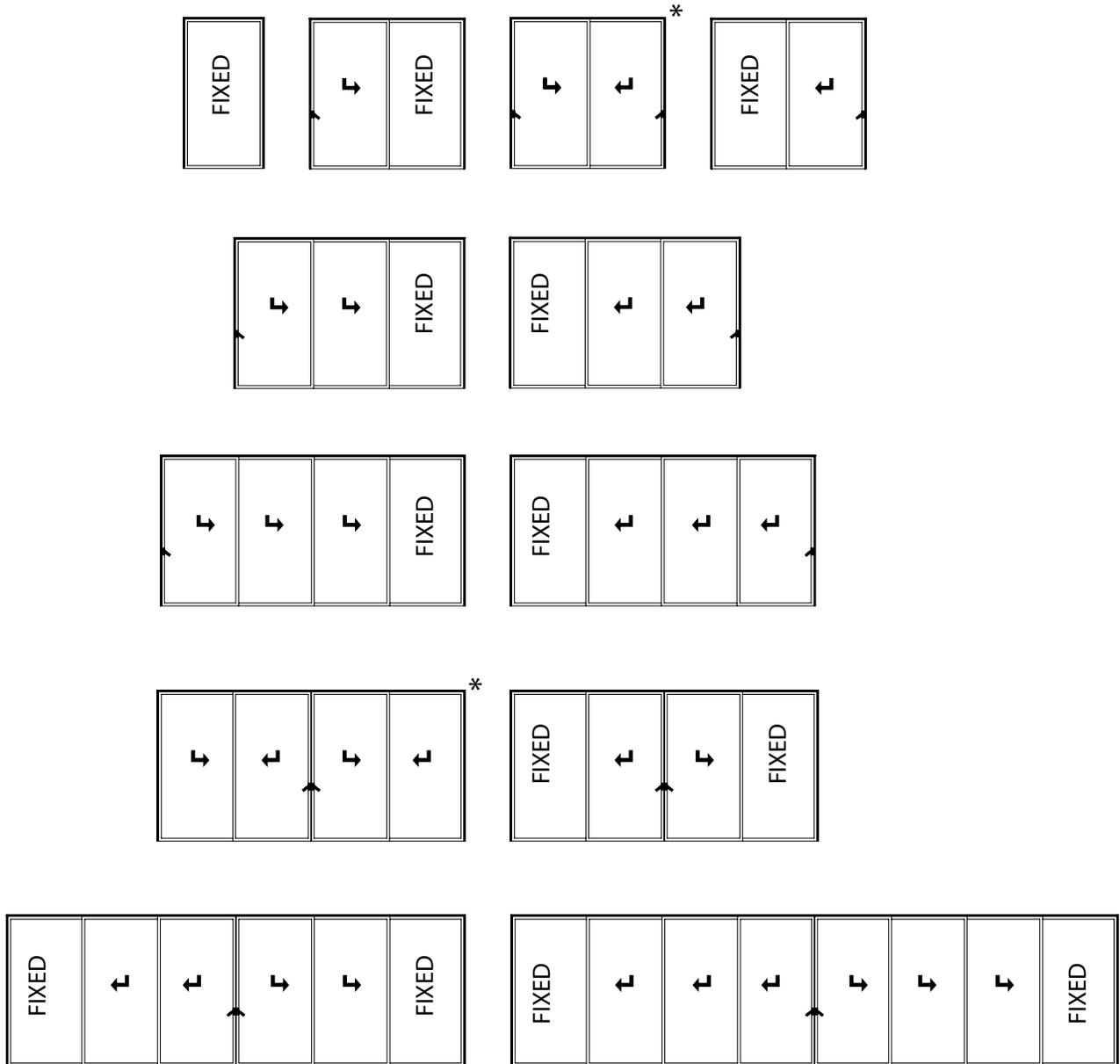
- ▶ Frames are available in colors to match most Kolbe colors
- ▶ Can be installed on the interior or the exterior
- ▶ Screens are in panels with operation similar to the doors
- ▶ Screens operate from the side
- ▶ Accordion pleated polyester insect screen mesh

Maximum opening up to 40' wide x 10' 5" high



Panel Operational Configurations

There are over 900 different operational configurations available for TerraSpan lift & slide doors. Only a few are illustrated below (viewed from the interior). There is a maximum of 10 panels per unit. Panel width is a minimum of 30" with a maximum of 72", while panel height is a minimum of 36" with a maximum of 144". Pocketing doors will not have a stationary panel on the end(s) of the operating unit. Talk with your local Kolbe dealer to learn about the different possibilities.



TerraSpan Size Options

- ▶ Maximum number of panels per unit: 10
- ▶ Panel width is a minimum of 30" with a maximum of 72". Contact Kolbe if you need panels wider than 72".
- ▶ Panel height is a minimum of 36" with a maximum of 144".

Dimension Calculations

Dimension calculation formulas for TerraSpan units vary depending on the unit and application. Please contact your Kolbe supplier if formulas are needed.

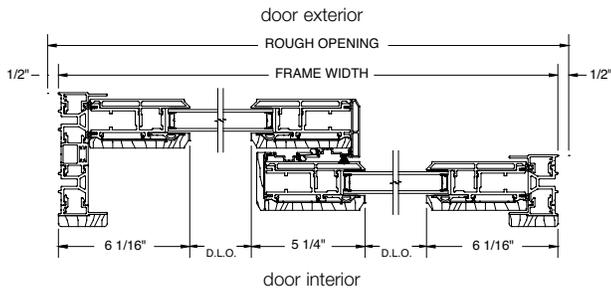
* Panel design is not available in a pocketing lift & slide.

NOTE: Drawings are not to scale.

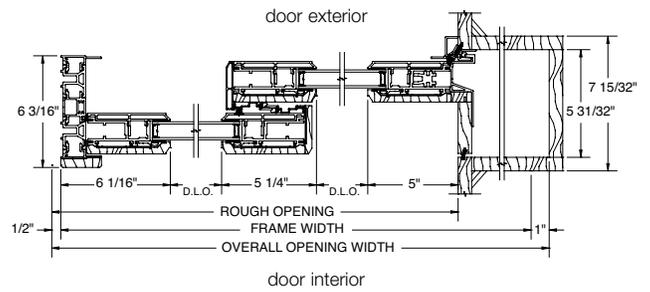
Cross Section Details

Horizontal Section

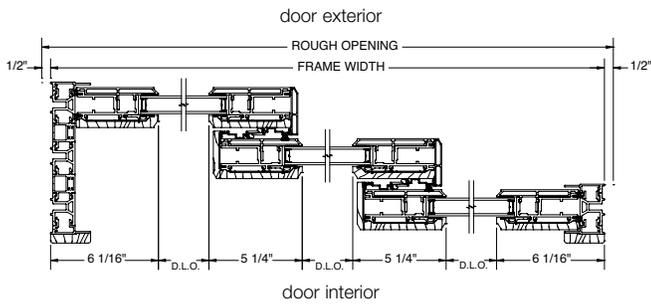
2-Wide Stacking, Recessed Sill Detail



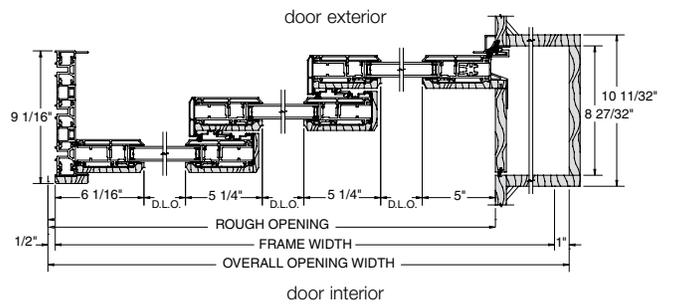
2-Wide Pocketing, Flush Sill Detail



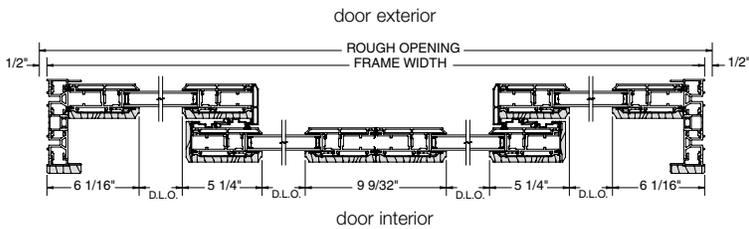
3-Wide Stacking, Recessed Sill Detail



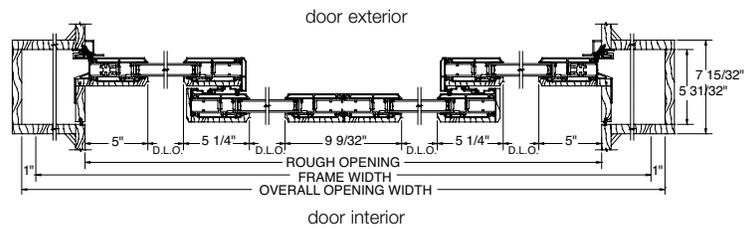
3-Wide Pocketing, Flush Sill Detail



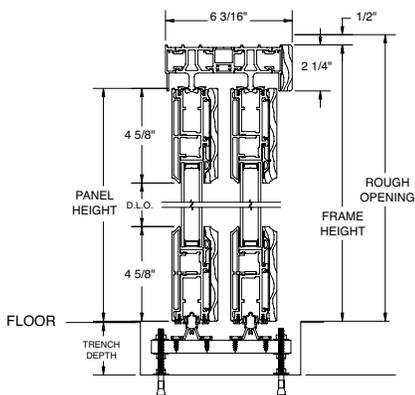
4-Wide Stacking, Center-Opening*



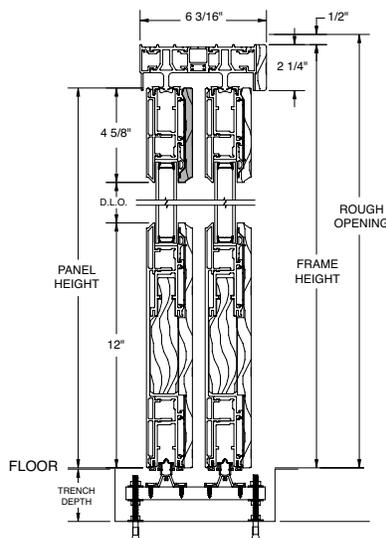
4-Wide Pocketing, Center-Opening*



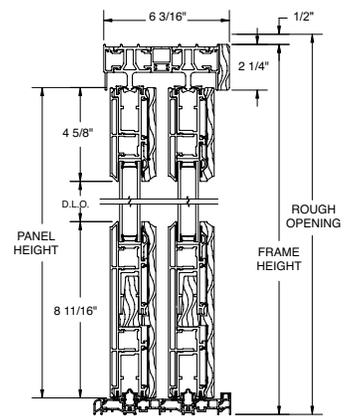
Recessed Sill (4-5/8" Bottom Rail Height)



Recessed Sill (12" Bottom Rail Height)



Flush Sill (8-11/16" Bottom Rail Height)



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

NOTE: Drawings are not to scale. Additional and the most current drawings are available at www.kolbe-kolbe.com.



For professionals: www.kolbe-kolbe.com
For homeowners: www.kolbewindows.com

KOLBE
WINDOWS & DOORS

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