ASSEMBLY INSTRUCTIONS

Lightline® Architectural Wall

May 2024

KIWALL

Parts Identification

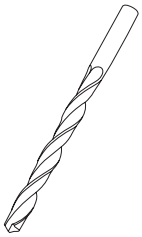
Panel Installation

Doors

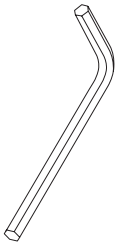
Misc

CAUTION

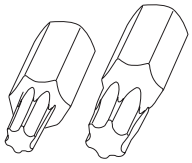
Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



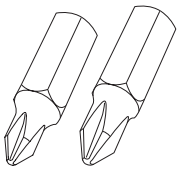
Drill Bits
($^{5}/_{32}$", $^{3}/_{16}$", $^{9}/_{32}$")



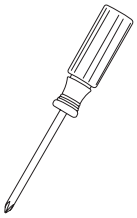
Allen Wrenches
($^{1}/_{16}$, $^{1}/_{8}$)



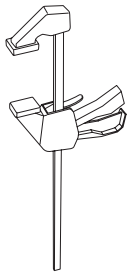
Torx Bits
(T20, T25, T30)



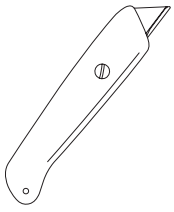
Phillips Bits
(#2, #3)



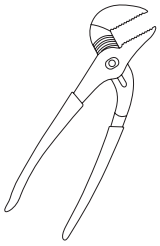
Phillips Screw Driver



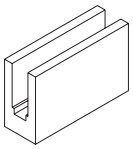
Clamp



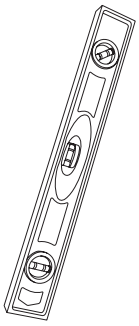
Utility Knife



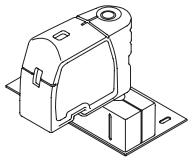
Channel Locks



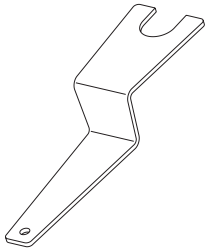
Rigid Seal Alignment Tool



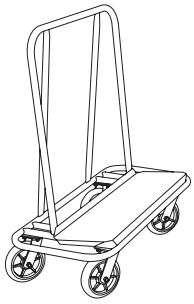
Level
(2', 4' and 6')



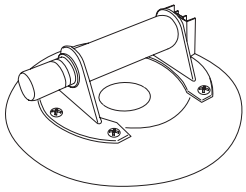
Laser Alignment Tool



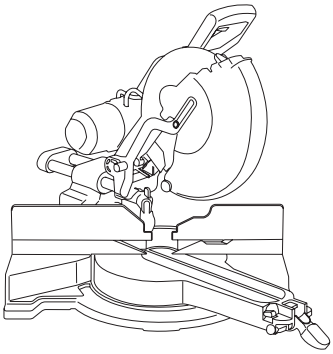
Panel Height Adjustment Tool
(50.1857)



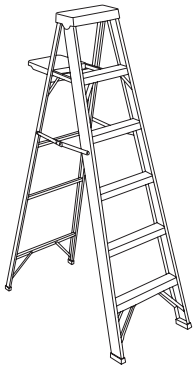
Padded Drywall Cart



Woods Powr-Grip® N-Series
Vacuum Cup



Miter Saw with Non-Ferrous Blade
Note: Cut station must be equipped with stands, tarps and a shop vac.



Ladder - OSHA approved
Note: Two ladders for every three persons doing install is required

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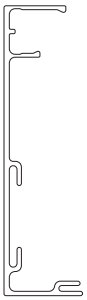
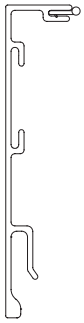
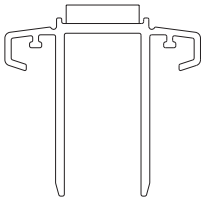


Horizontal Ceiling Trim
(50.1814)



3¼" Horizontal Floor Trim
(50.1085)

4" Horizontal Floor Trim
(50.1087)



Ceiling Rail
(50.1816)

½" Angled Panel Glazing Seal Extrusion
(50.1708)

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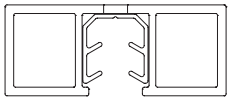
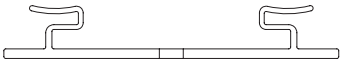
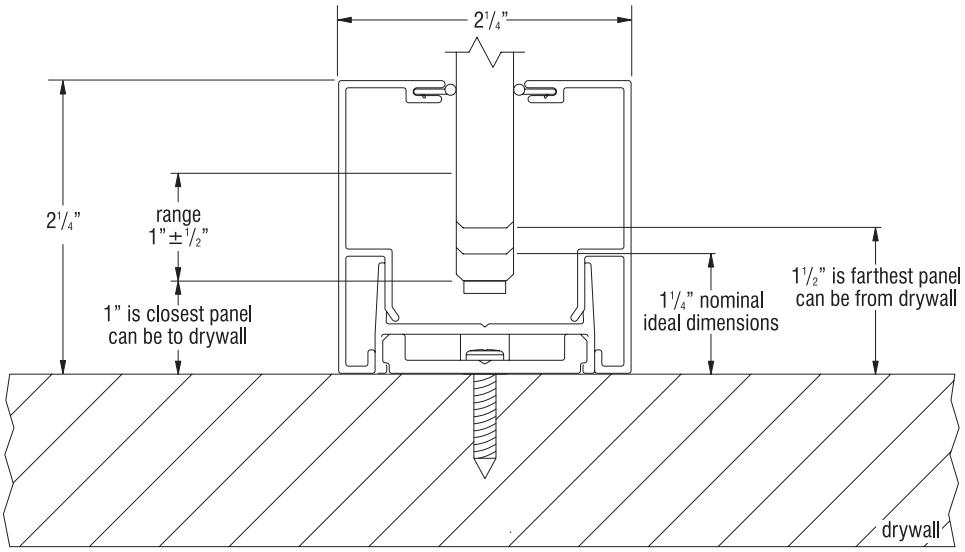


End Post - Butt Glass
(50.1121)



Inline Genius to Butt Glass Post
(50.1117)



Wall Start Kit
(50.1896)

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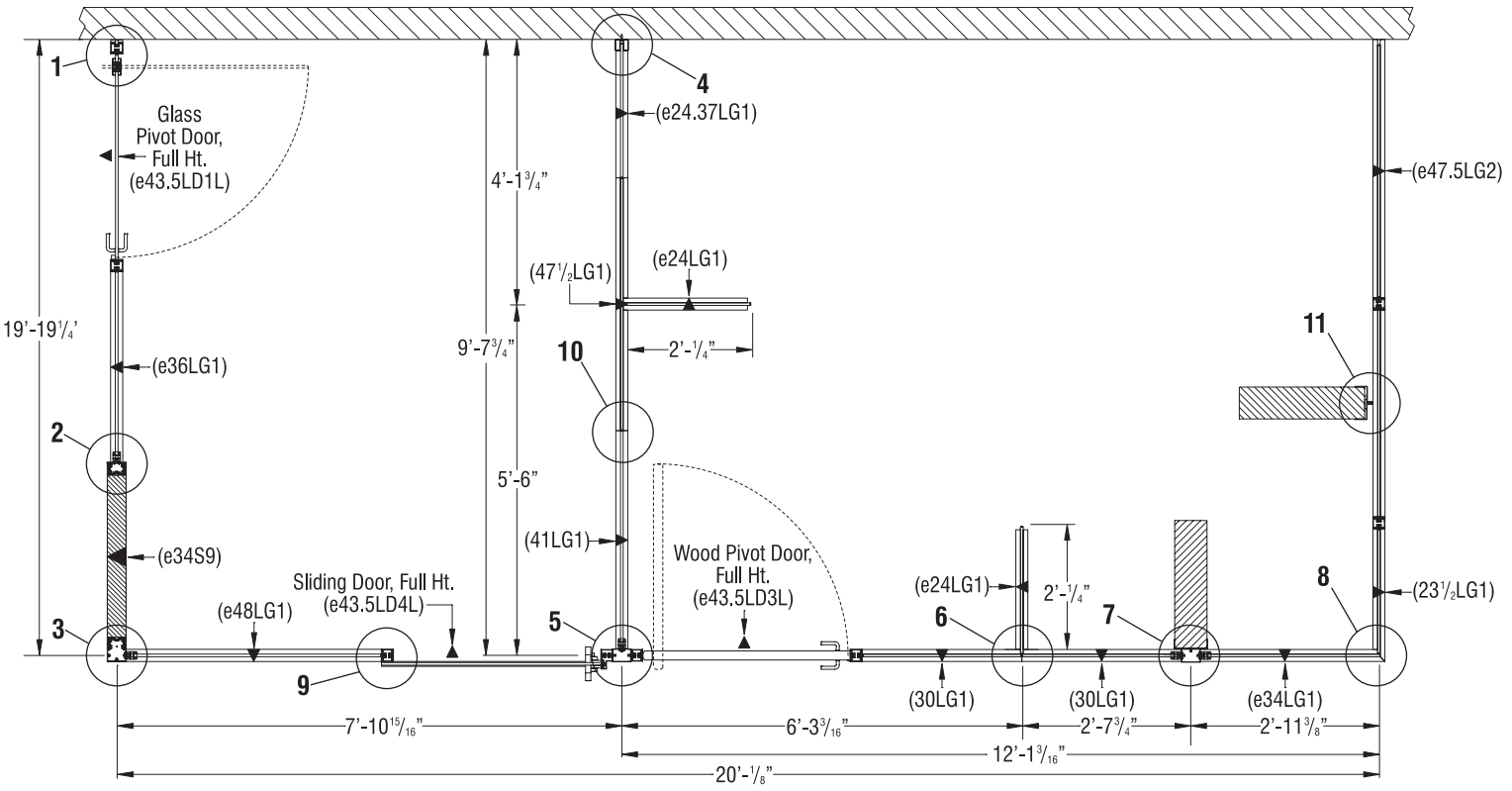
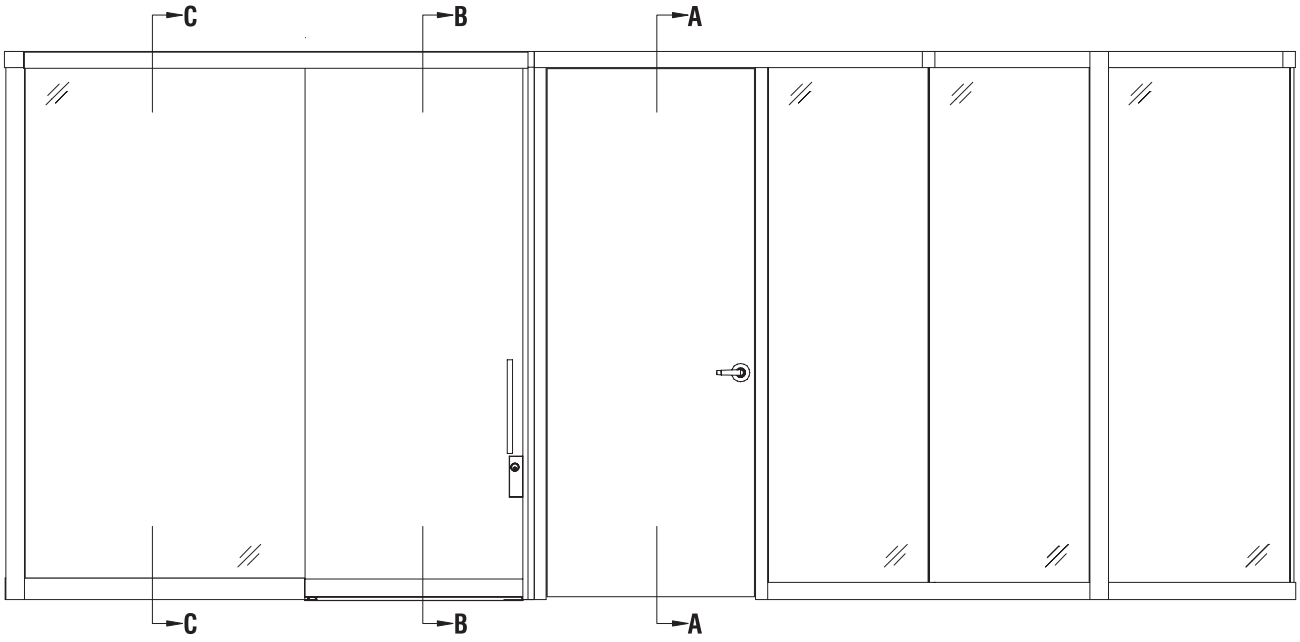


Layout Typical - Plan View



Layout Typical - Elevation View

CAUTION

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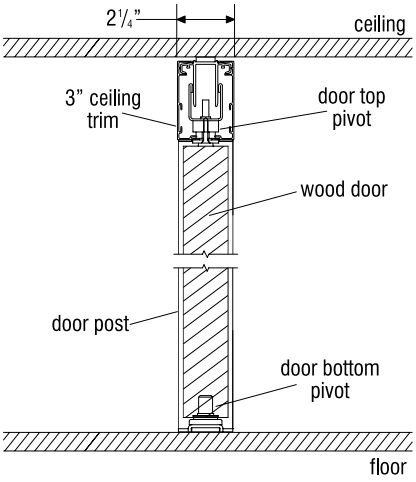
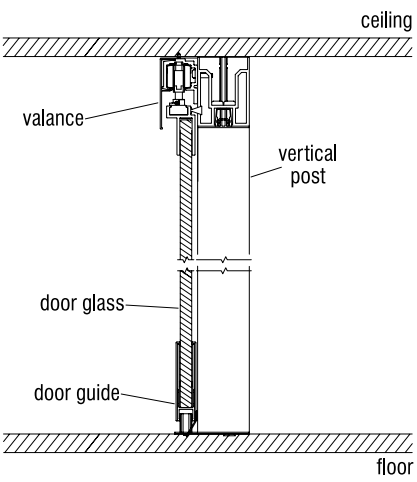


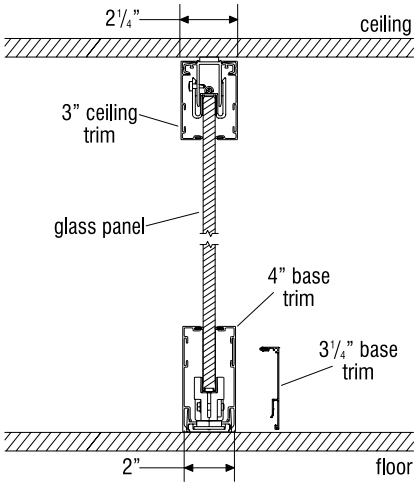
Full-Height
Wood Pivot Door

A



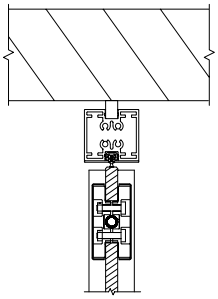
Full-Height
Sliding Door

B



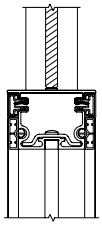
Glass Panel,
Ceiling & Base Trim

C



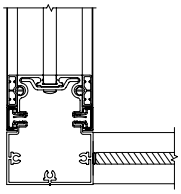
Lightline
Pivot Door

1



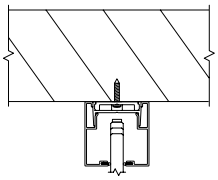
Lightline
to Genius

2



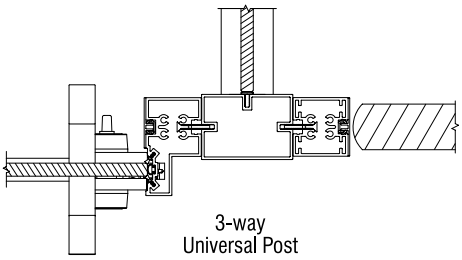
Genius to Lightline
90° Angle Post

3



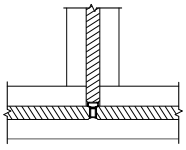
Lightline
to Drywall

4



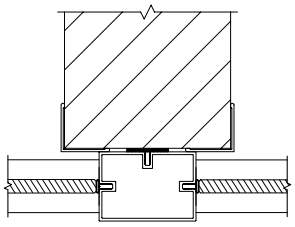
3-way
Universal Post

5



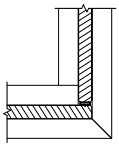
3-way
Panel Intersection

6



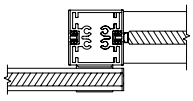
Universal Post
to Drywall

7



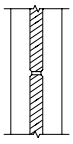
Lightline
Corner

8



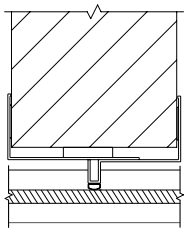
Lightline Glass
Sliding Door Guide
(at floor)

9



Lightline Glass
In-Line Connection

10



Lightline Drywall
Bypass Mullion

11

CAUTION

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Ceiling Rail Installation

1. Many ceiling grids accept standard 9/16" and 15/16" wide Caddy® style ceiling clips. When ceiling clips are used in a recessed grid, spring spacers and closed cell foam must be used. Use backer plates by KI to prevent scratching of the grid (Figure 1). Fineline® 9/16" grids with a 1/4" reveal use 1/4 -20 T-bolts and 9/16" grids with a 1/8" reveal use 1/8 -20 T-bolts (Figure 2). Drywall and hidden grid ceilings require direct attachment of the rail with screws or anchors (Figure 2).

   Note: A ceiling rail layout must be completed to verify fit of Lightline components. Ceiling rail must be securely in place before positioning the various components. Accurate installation of ceiling rail per the final KI Installation Drawings (shop prints) is critical to a satisfactory installation. If any discrepancies exist, please contact your KI project coordinator.

   Important: Ceiling rails leading to a drywall wall must be installed with a 3" gap between the end of the ceiling rail and the wall. See page 19, Figure 1 for more information.

2. Using the final KI Installation Drawings (shop prints) for reference and working in teams of two, fasten the ceiling rail hardware to the ceiling grid securely. For 15/16" grids, install the backer plate inside the clip, then twist the clip onto the grid. If the ceiling grid is recessed, add in the spacer and/or shims as needed. For Fineline 9/16" grids, slide the T-bolt into the grid and install the washer and nut to secure the T-bolt into position (Figures 2 & 4).

   Caution: Do not over tighten ceiling clips, screws or anchors. Only install with hand drivers.

3. On drywall and hidden grid ceilings, mark location of channel centerline or edge.

4. On straight runs, the ceiling rail is spliced with an in-line splice plate. Next, attach the in-line splice plate to the ceiling rails using four #10-16 x ½" self-drilling Torx head screws (Figure 3). Refer to "Ceiling Corner Brackets" instructions (page 15) for assembly of corner conditions.

5. Measure from wall, column or other starting point to the first attachment point. Cut ceiling rail accordingly so that the slots in the rail match the grid layout (Figure 4).

6. After positioning and securing the ceiling rail with flanged lock nuts (Figures 2 & 5), ensure that it cannot slide, does not push up ceiling tiles and that there are no light gaps between the ceiling and rail. Once the panels are up, adjustments to the ceiling rail location cannot be made without removing the panels.

7. Check fit and strength. Verify accuracy of all measurements. Plumb-bob down for panel centerline and snap chalk lines. Or, you may plumb panels later using a level as they are connected.

   Note: If ceiling is not stable, reinforcement may be necessary through use of suitable materials above the tiles. This work is not included in the installation bid.

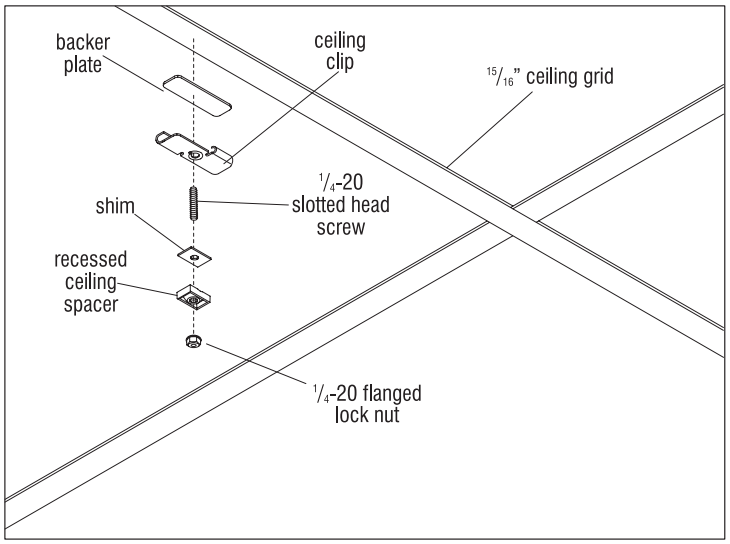

Figure 1 - 9/16" Ceiling Grid with Caddy Clips

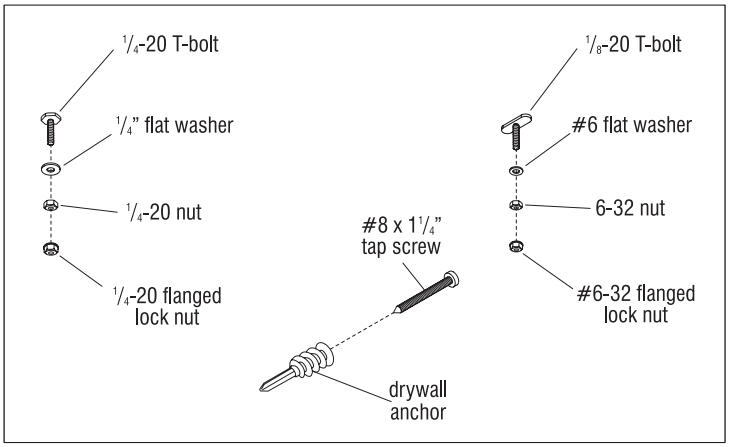

Figure 2 - Types of T-bolts & Anchor Assemblies

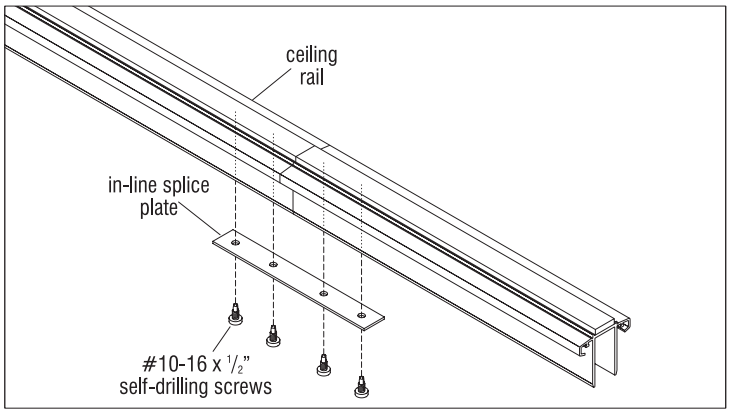

Figure 3

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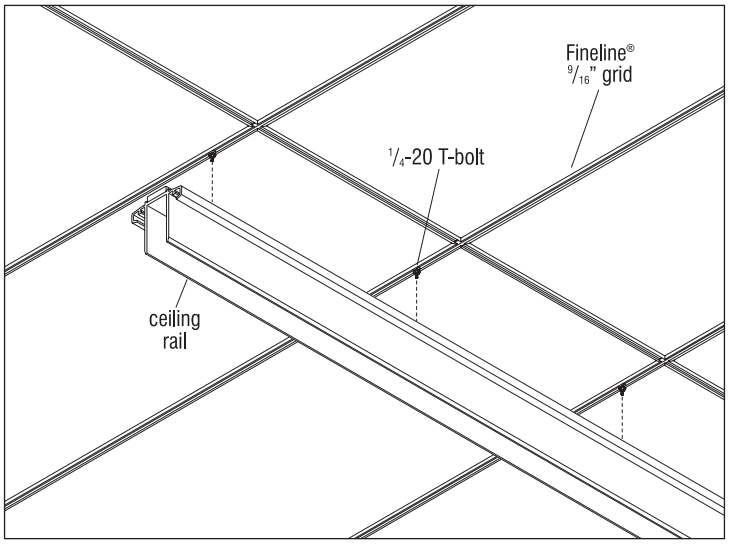

Figure 4

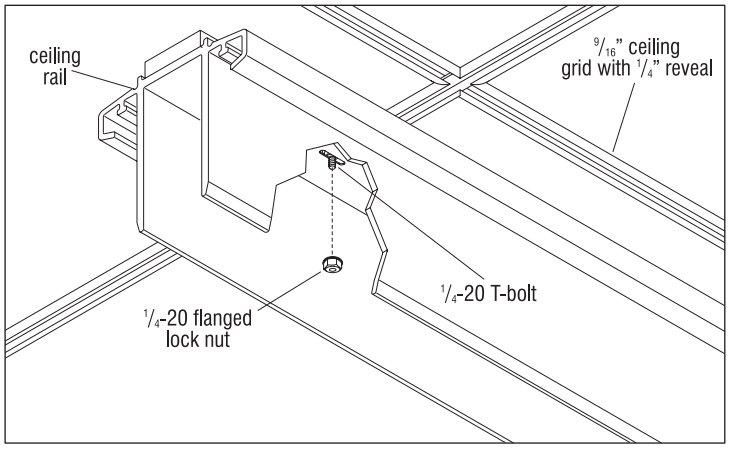

Figure 5

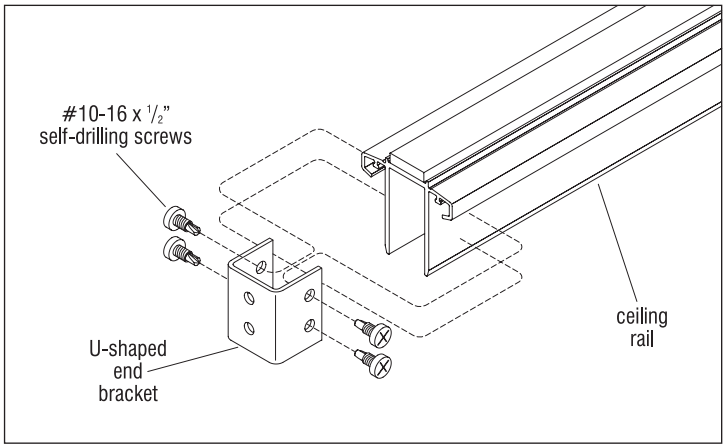

Figure 6

8. Ceiling rail end-of-run conditions can be secured to intersecting walls with the ceiling rail end bracket kit. Using the #10-16 x 1/2" self-drilling Torx head screws supplied with the kit, secure the U-shaped end bracket to the ceiling rail (Figure 6). If attaching to door frame at corner see step 9.

9. Align ceiling rail so trim sits flush when installed. Use the supplied #10-16 x 1/2" self-drilling screws to attach the ceiling rail to the door frame header (Figure 7).

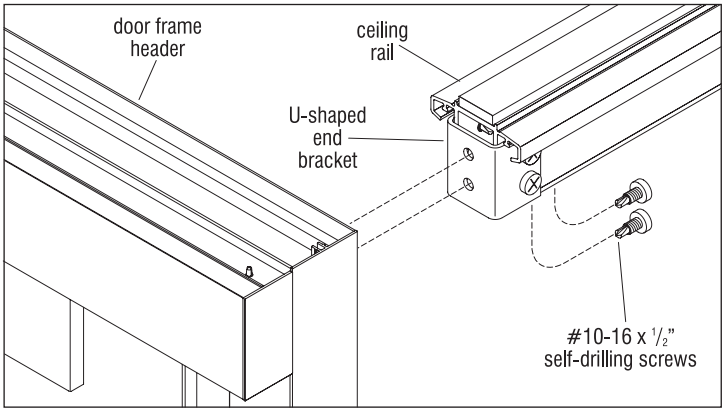

Figure 7

CAUTION

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Seismic Conditions
Due to the varied seismic conditions around the world, please refer to KI seismic documents, site specific documents, or final KI-Installation Drawings (shop prints) for information.

Lightline is a custom product and additional technical information may be required. For additional information please contact:

KI
Green Bay, WI 54302
Tel (800) 424-2432
www.ki.com

Removable Ceiling Grid Clips
Removable ceiling grid clips are used to temporarily attach the ceiling rail to the ceiling grid until seismic bracing assemblies are installed.

See Final KI-Installation Drawings for approved floor and ceiling anchorage details. Approval can vary by jurisdiction.

Note: Four ceiling grid clip kit types are available for various ceiling grid and ceiling tile applications

- 50.1661 - Used on $^{3}/_{8}$" drop reveal tile with $^{15}/_{16}$" ceiling grid
- 50.1663 - Used on $^{3}/_{8}$" drop reveal tile with $^{9}/_{16}$" ceiling grid
- 50.1665 - Used on $^{1}/_{4}$" drop reveal tile with $^{9}/_{16}$" or $^{15}/_{16}$" ceiling grid
- 50.1667 - Used on a flat ceiling tile with $^{9}/_{16}$" or $^{15}/_{16}$" ceiling grid

Note: Shimming of the ceiling rail may be required. Use appropriate ceiling clip kit for proper fitment.

1. Shape the ceiling grid clip by pressing down on edges and bending at the bend perforations in metal to form the clip as illustrated (Figure 1).
2. Place the clip over the top of the main ceiling grid at the ceiling rail (Figure 2).

   Caution: Do not screw up through the ceiling grid. Always screw from the top to allow the clip to be removed if required, after panels are installed.
3. Secure clip to ceiling rail using two #10-16 x $^{3}/_{4}$" self-drilling screws (Figures 3 & 4).
4. Secure clip to ceiling grid using one #10-16 x $^{3}/_{4}$" self-drilling screw (Figures 3 & 4).
5. Repeat the installation procedure to install the remaining clips as required.
6. Once ceiling rail and clips are in place, see KI Installation Drawings for Approved Seismic Bracing Design and the following Seismic Bracing Assembly Instructions.
7. Clips need to be removed once seismic bracing assemblies are installed.

Seismic Bracing
Note: For simplicity only one style of seismic bracket is required, but two different options are available. Snip kicker flange kicker assembly, and off-center assembly, to avoid obstructions in ceiling plenum.

Removable ceiling grid clips can be used to temporarily hold the ceiling rail in place until the seismic brackets are installed. Ceiling grid clips must be removed once seismic brackets are installed.

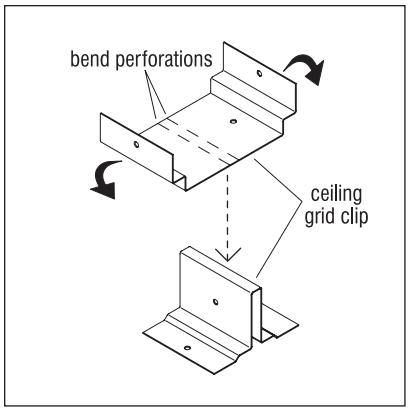


Figure 1

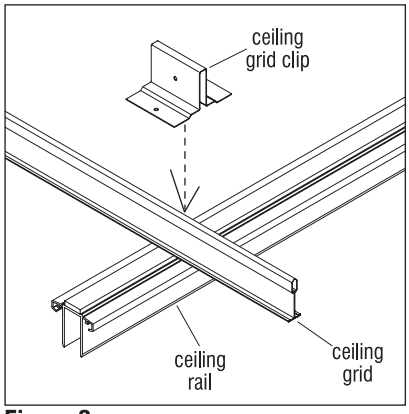


Figure 2

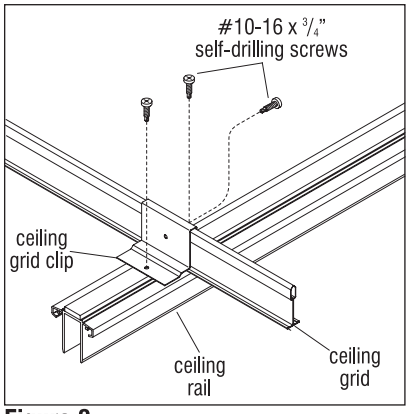


Figure 3

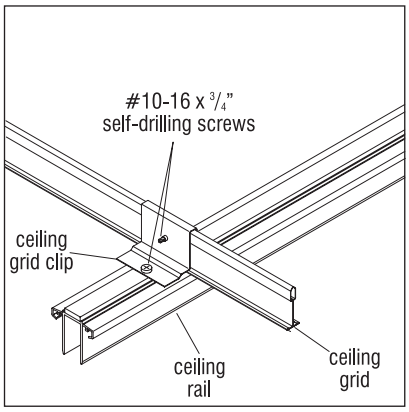


Figure 4

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

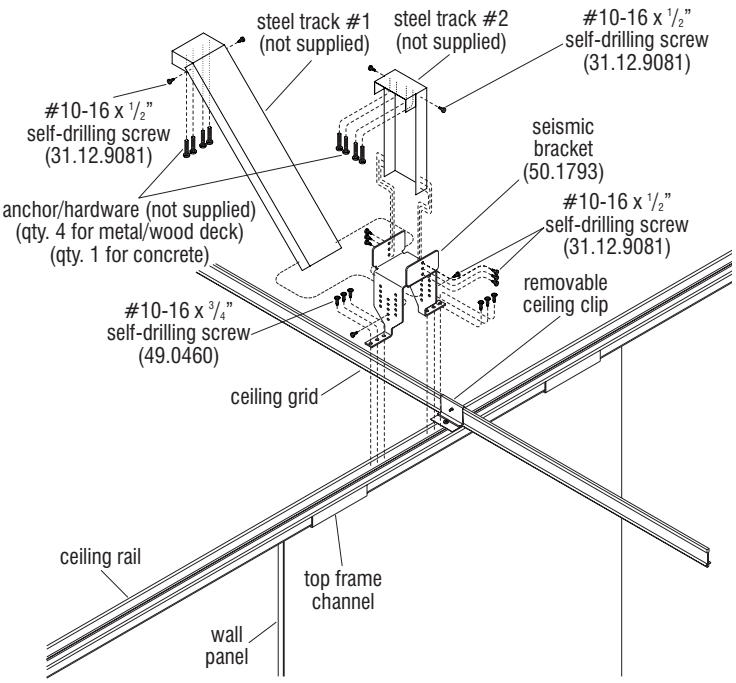


Figure 1 - Seismic Bracing - Kicker Assembly

Seismic Bracing - Kicker Assembly

Note: Steel tracks and anchor bolts are not supplied.

1. Determine a suitable location to install the seismic bracket (50.1793) to the top of the ceiling rail. The bracket will install directly below the top structure that steel track #2 will attach to above. When locating the seismic bracket, also account for where steel track #1 can attach to appropriate structure off at an angle from the bracket. Secure the seismic bracket (50.1793) to the top of the ceiling rail as illustrated using six #10-16 x 3/4" self-drilling screws (49.0460) (Figure 1 & Detail A).

2. Next, create both #1 and #2 steel tracks. Take an appropriate length steel track section for each (final length will be trimmed precisely in step 3) and measure a 2 3/8" minimum length back from one end, snip the flange at both sides, then bend the minimum end sections of each as illustrated (one up to 45° and one at 90°), allowing the flanges to fold over (Figure 1 & Detail A).

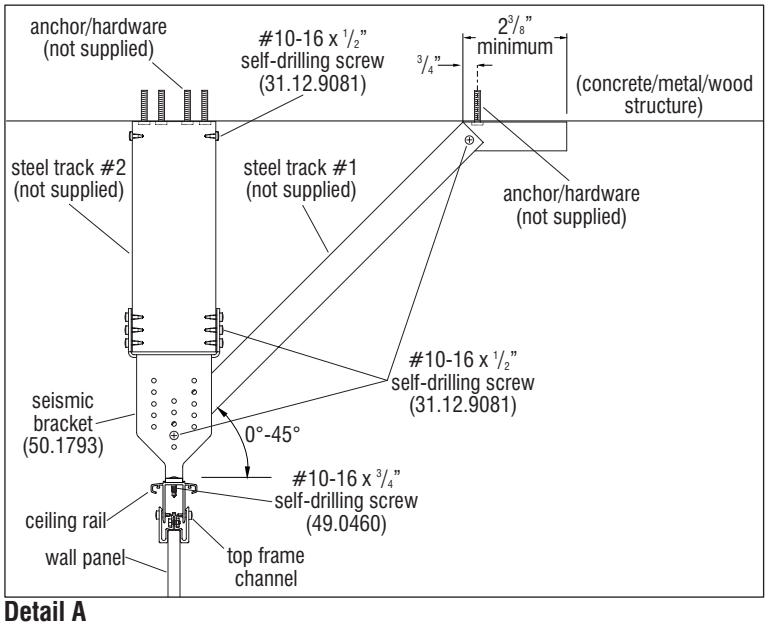
3. With the assistance of a second person, dry-fit both steel track sections, from the top structure mounting location to the installed seismic bracket (50.1793) and trim tracks to length for correct fitment. Steel track #1 will meet inside the seismic bracket at an angle, while steel track #2 will mount vertical between the top structure and the seismic bracket (Figure 1 & Detail A).

4. Once both tracks are pre-fit between the upper structure and seismic bracket, attach each steel track to the upper structure (concrete/metal/wood) using appropriate hardware. Four anchors must be used for track to metal/wood structure and one anchor/hardware is required for concrete. All hardware must be installed 3/4" away from the bend as illustrated. Follow anchor bolt manufacturer's instructions (Figure 1 & Detail A).

5. Make final alignment of #1 and #2 lower steel track ends to the appropriate mounting holes in the seismic bracket on the ceiling rail. Use six #10-16 x 1/2" self-drilling screws (31.12.9081) to attach steel track #2 and two screws to attach steel track #1 to the seismic bracket as illustrated (Figure 1 & Detail A).

6. At the top bend of both steel tracks, where the flanges overlap, install one #10-16 x 1/2" self-drilling screw (31.12.9081) into each overlapping pair of flanges to secure (Figure 1 & Detail A).

7. Repeat the procedures above to install remaining seismic bracing kicker assemblies as required and remove seismic ceiling clips as required by local codes.



Detail A

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Off-Center Seismic Bracing - Kicker Assembly

Note: Steel tracks and anchor bolts are not supplied.

1. Determine a suitable location to install the seismic bracket (50.1793) to the top of the ceiling rail. The seismic bracket should be positioned to allow steel track #3 to reach a suitable structure directly above itself when mounted to steel track #1 which is mounted off the seismic bracket (see Figure 4 for assembly reference). When locating the seismic bracket for installation, also account for where steel track #2 can attach from track #1 and reach up to appropriate structure at an angle (see Figure 4 for assembly reference). Secure the seismic bracket (50.1793) to the top of the ceiling rail as illustrated using six #10-16 x 3/4" self-drilling screws (49.0460) (Figure 2).

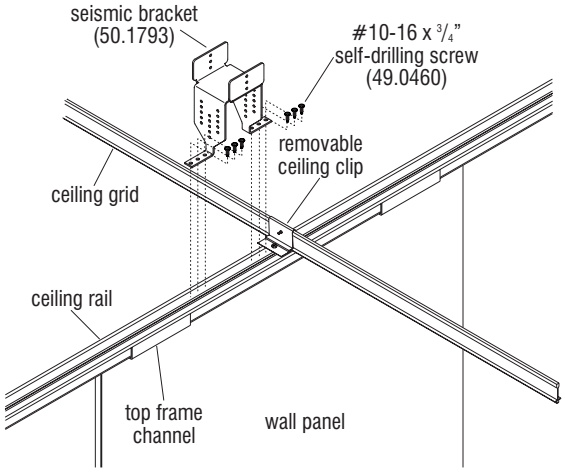
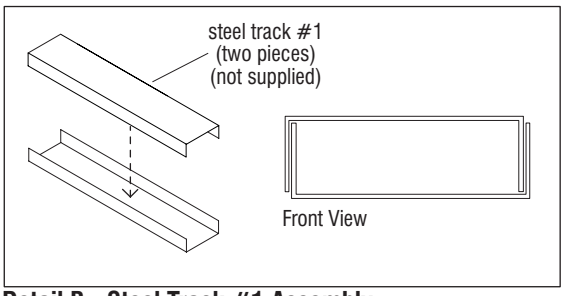


Figure 2 - Off-Center Seismic Bracing - Seismic Bracket Assembly

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.



Detail B - Steel Track #1 Assembly

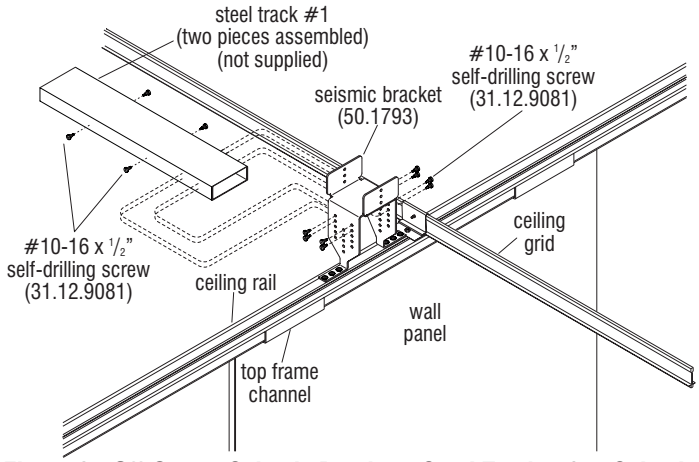


Figure 3 - Off-Center Seismic Bracing - Steel Track #1 to Seismic Bracket

2. Create steel track #1 length first to reach from the installed seismic bracket, over to a location where steel track #3 can reach vertically up to structure above (see Figure 4 for assembly reference). Steel track #1 will be made of two identically cut lengths of track fastened together and will not require any cuts for a bend (Detail B). It must extend horizontally from the seismic bracket to the location where steel track #2 can attach to it. Take into account that steel track #2 will bend up at an angle to the appropriate structure above (see Figure 4 for assembly reference). Once the length is determined for steel track #1, cut two pieces of the track material to equal size and nest them together. The open "channel" sides should be facing each other and will fit together with their side flanges offset from each other (Detail B). Secure both tracks together at the side flanges with #10-16 x 1/2" self-drilling screws (31.12.9081) (Figure 3). **Note:** Screw quantity will be determined by length of track and site conditions.

3. Install steel track #1 to the seismic bracket by placing one end inside the installed seismic bracket such that the side flanges of the tracks mate inside the bracket at the top four mounting holes on each side. This allows for maximum room to re-install ceiling tiles. Secure steel track #1 to the seismic bracket with eight #10-16 x 1/2" self-drilling screws (31.12.9081) as illustrated (Figure 3 & Detail C).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

4. Next, create both steel tracks #2 and #3 to mount between structure above and to the installed steel track #1. To create each, take an appropriate length steel track section (final length will be trimmed precisely in steps 5 & 6) and measure a $2^{3}/_{8}$" minimum length back from one end, snip the flange at both sides, then bend the minimum end sections of each as illustrated (one up to 45° and one at 90°), allowing the flanges to fold over (Figure 4 & Detail C).

5. With the assistance of a second person, perform a dry-fit of steel track #3 from top structure mounting location, down to the installed steel track #1 and trim steel track #3 to length as necessary for correct fitment (Figure 4).

6. Next, align steel track #2 to the top structure it will mount to, and align the opposite end of track to the exposed end of the previously mounted steel track #1. Trim to size, but allow enough material to make an attachment flange for attaching track #2 to #1. Once cut to size, create the attachment flange by cutting into the end that will mate with steel track #1 about 1" at each side flange crease and bend up. Steel track #2 attachment flange will now meet on top of the horizontally mounted steel track #1 at an angle, while steel track #3 will mount vertically, from top structure straight down to steel track #1 (Figure 4 & Detail C).

7. Once tracks #2 and #3 are pre-fitted between the upper structure and steel track #1, first attach each steel track to the upper structure (concrete/metal/wood) using appropriate hardware. Four anchors must be used for track to metal/wood structure and one anchor/hardware is required for concrete. All hardware must be installed $^{3}/_{4}$" away from the bend as illustrated. Follow anchor bolt manufacturers instructions (Figure 4 & Detail C).

8. Make final alignment of both lower steel track ends #2 and #3 to the appropriate mounting locations on the steel track #1. Use four #10-16 x $^{1}/_{2}$" self-drilling screws (31.12.9081) to attach both steel track #3 and steel track #2 to the horizontally mounted steel track #1 as illustrated (Figure 4 & Detail C).

9. At the top bends of the structure mounted ends of steel tracks #2 and #3, where the flanges overlap, install one #10-16 x $^{1}/_{2}$" self-drilling screw (31.12.9081) into each overlapping pair of flanges to secure (Figure 4 & Detail C).

10. Repeat the procedures above to install remaining seismic bracing kicker assemblies as required and remove seismic ceiling clips as required by local codes.

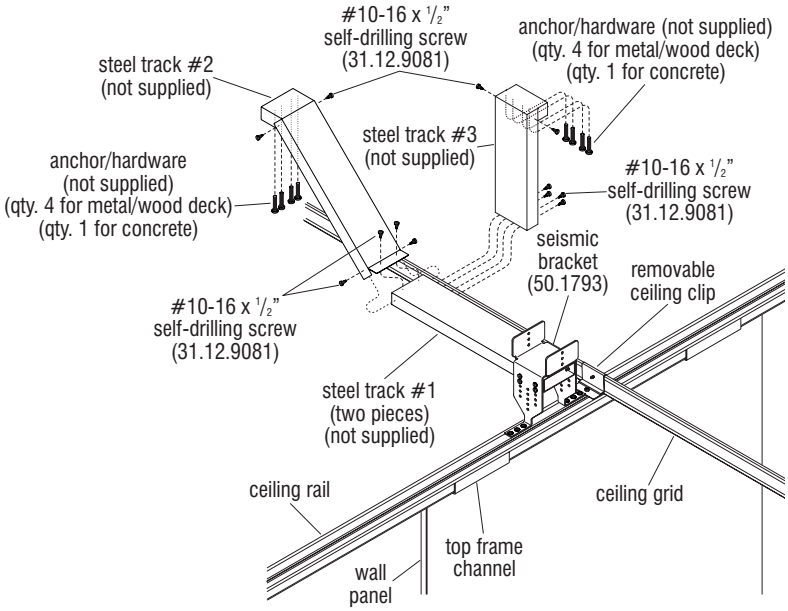
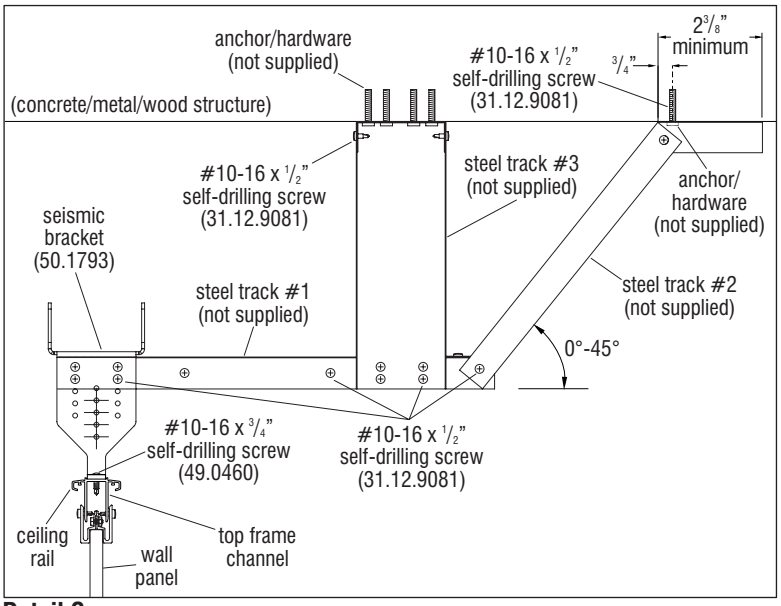


Figure 4 - Off-Center Seismic Bracing - Kicker Assembly



Detail C

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

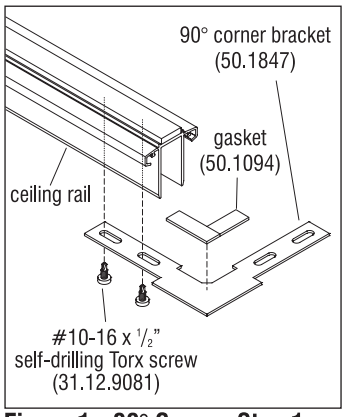


Figure 1 - 90° Corner, Step 1

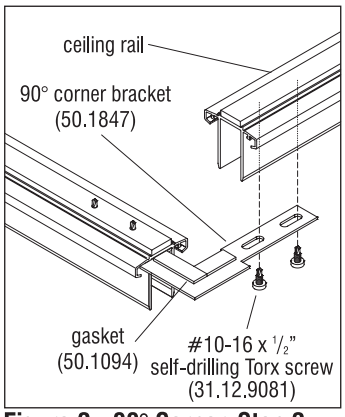


Figure 2 - 90° Corner, Step 2

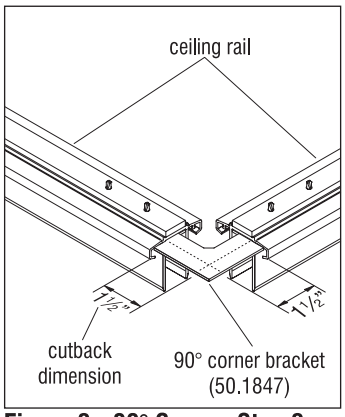


Figure 3 - 90° Corner, Step 3
Note: Gasket not shown so that cutback dimension can be visible.

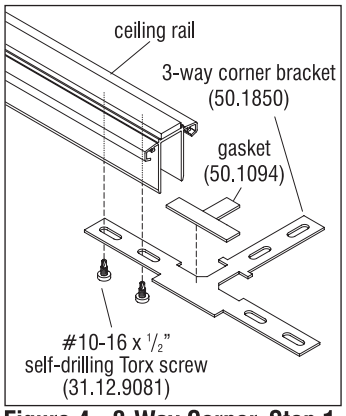


Figure 4 - 3-Way Corner, Step 1

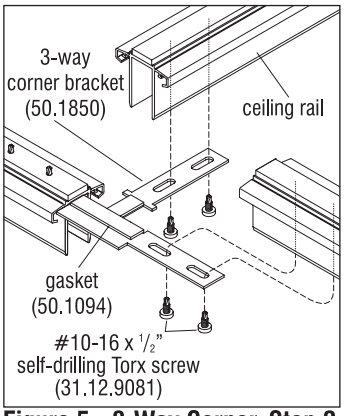


Figure 5 - 3-Way Corner, Step 2

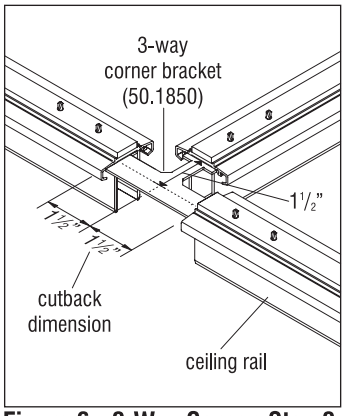


Figure 6 - 3-Way Corner, Step 3
Note: Gasket not shown so that cutback dimension can be visible.

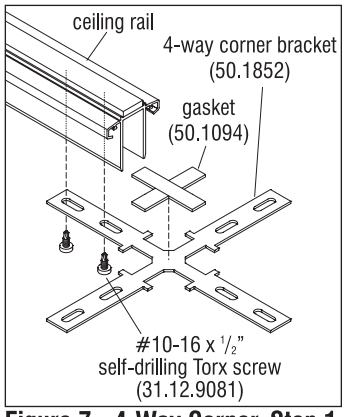


Figure 7 - 4-Way Corner, Step 1

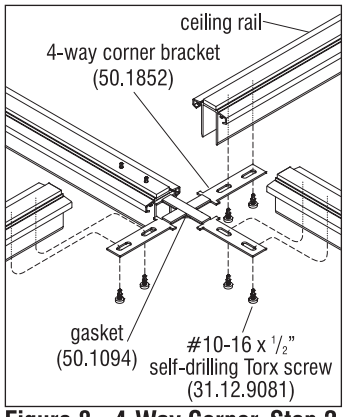


Figure 8 - 4-Way Corner, Step 2

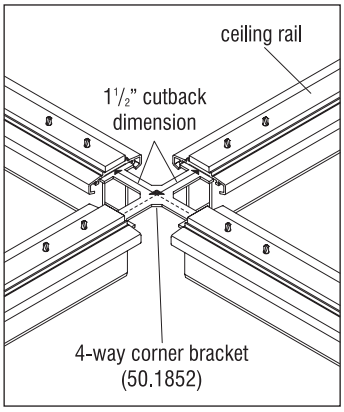


Figure 9 - 4-Way Corner, Step 3
Note: Gasket not shown so that cutback dimension can be visible.

Ceiling Corner Brackets
The figures on this page show the installation process of different ceiling corner brackets.

Note: The splice kits will create the proper offset dimension for correct ceiling rail installation.

1. Ceiling rail 90° corner conditions are spliced using the 50.1846 splice kit (includes corner bracket 50.1847) (Figures 1, 2 & 3).
2. Ceiling rail 3-way conditions are spliced using the 50.1849 splice kit (includes corner bracket 50.1850) (Figures 4, 5 & 6).
3. Ceiling rail 4-way conditions are spliced using the 50.1851 splice kit (includes corner bracket 50.1852) (Figures 7, 8 & 9).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Unloading

Warning: Shipping skids are designed to be moved with a pallet jack or slid along the floor using a fork lift. If no dock available to remove the skid at grade with the bed of the trailer, the panels must be unloaded by hand one at a time. FAILURE TO COMPLY MAY RESULT IN DAMAGED PRODUCTS AND/OR INJURY.

1. It's highly recommended that the panels be staged with factory edge protectors on and other protection between the panels. Lean panels vertically against a wall at a slight angle. If panels must be leaned on edge, no more than 12 panels of like size should be in one leaning stack. Stack panels with padding against the wall or on floor to prevent damage.

2. As each Lightline panel or component is unloaded, it should be checked against the packing list and/or drawing to ensure completeness of order. All items are identified by both a part number sticker and a carton number sticker.

3. Use suction cups to lift panels from skid or truck. Inspect each panel for shipping damage as it is removed from the truck. If damage exists, notify KI of carton number, type of damage and probable cause of damage within 24 hours of unloading. Full product information is located on KI labels on the top clamp.

   Note: Please avoid lifting panel by any clamps.

4. **Damage must be indicated on bill of lading to file a freight claim. Report all other on-site damage as soon as possible to ensure prompt replacements. To transport panels on site, use a well-padded drywall cart to eliminate damage of edges and of glass.**

5. It is recommended to install the ceiling rail prior to the panel/frame delivery. This allows the panels/ frames to move directly from the truck to the office location and alleviates double handling.

Floor Channel Installation

Note: Ceiling rails must be installed prior to the floor channel installation. Refer to ceiling rail instructions before proceeding.

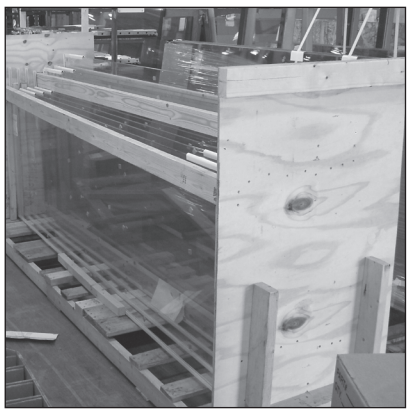
1. Using a laser alignment tool, align the lasers with the ceiling rail (Figures 1 & 2).

   Note: If it helps to keep the floor channel from moving, use two square pieces of hook & loop (with an adhesive back) and attach them to the underside of the floor channel centered on both ends.

2. Place the floor channel on the laser alignment mark (Figure 2).

3. Pre-drill attachment screw holes by determined distance on space planning layout. Use supplied screws that are specified per space planning layout and attach floor channel to the surface.

4. Repeat steps one and two for installing additional floor channels, directly below ceiling rails (Figure 2).



Detail A

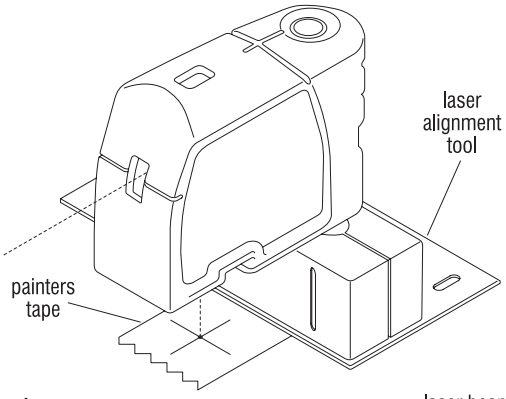


Figure 1

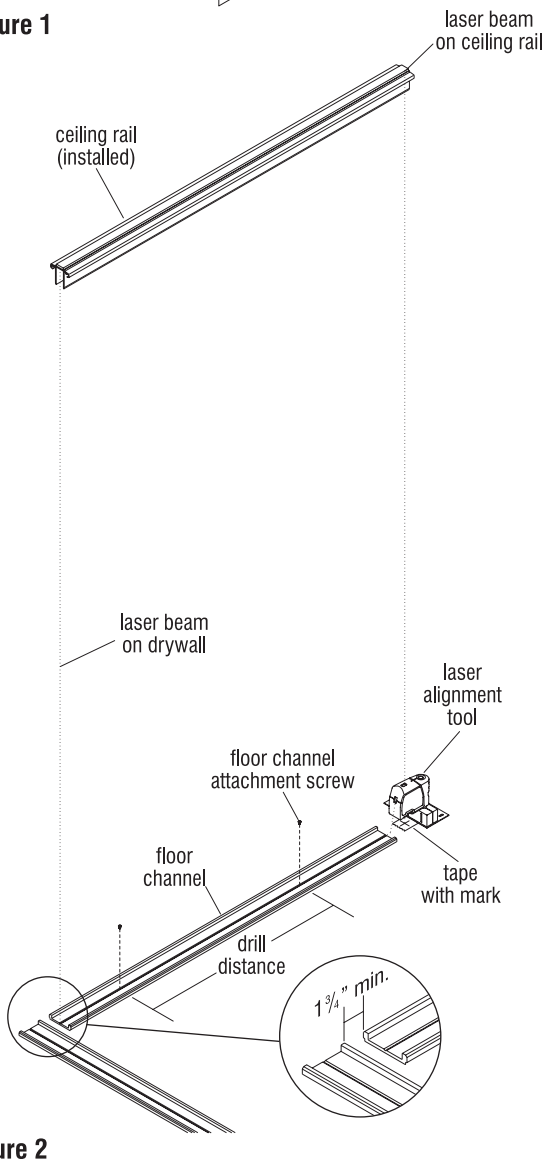


Figure 2

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

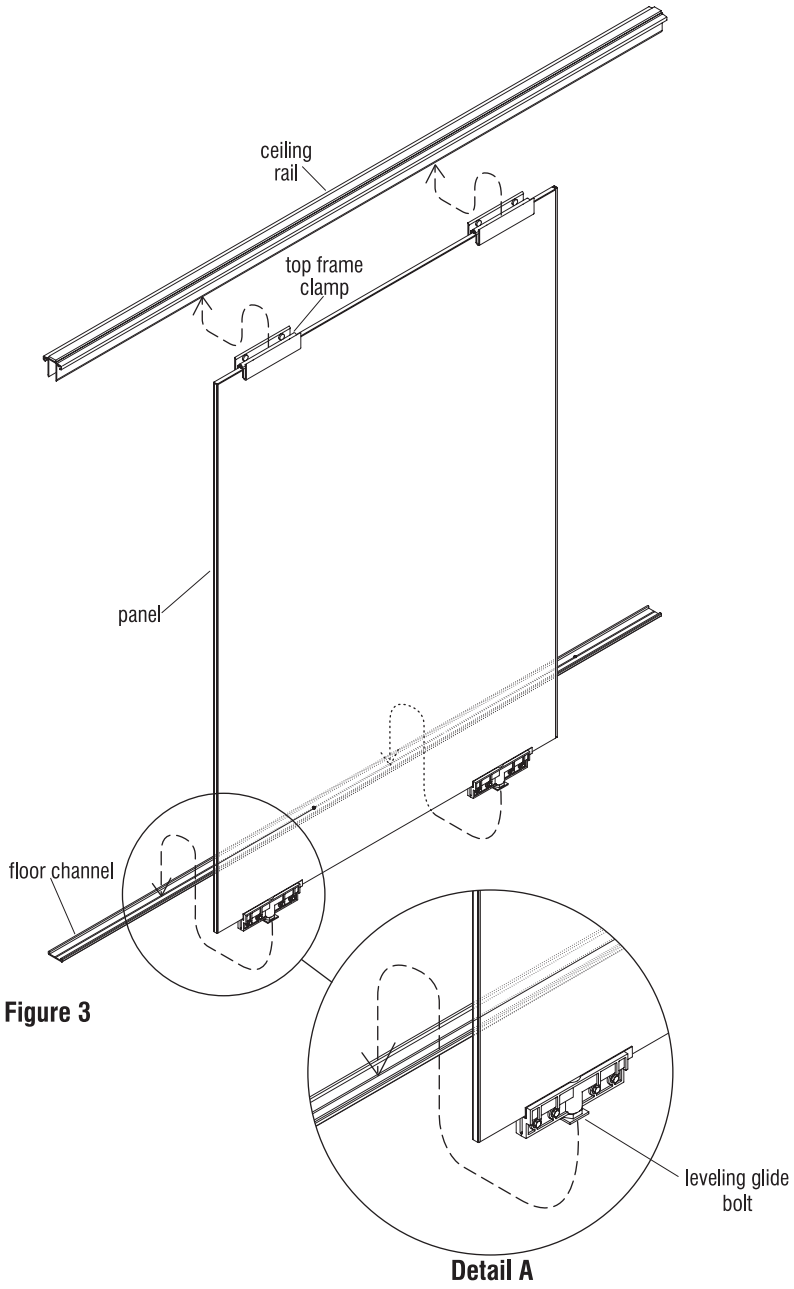


Figure 3

Initial Panel Installation and Positioning

Important: Ceiling rails and floor channels must be installed prior to panel installation. Refer to ceiling rail and floor channel instructions before proceeding.

Note: To save time and space, stage all panels into sequence. If possible, do this as the panels are unloaded from the truck, eliminating double handling and potential damage.

Important: Any panels being installed, which per the space-planning layout will install next to a sliding door, where the sliding door will pass next to a panel or two (panel length dependent), those panel(s) will require that "additional top clamps" be installed to the top (see page 42). If panel(s) are installed without adding additional top clamps, disassembly and re-assembly will be required.

1. Before setting panel into position make sure the leveling glide bolt is loose on each end before standing the panel into position (Detail A).

2. With assistance of a second person, using rubber suction cups, set the panel upright next to the ceiling rail it will install to. Carefully tip the top of the panel frame toward the ceiling rail and nest the top frame clamp onto the ceiling rail. Then lifting the top up under the rail, set the bottom of the panel frame onto the floor channel and hold plumb securely (Figure 3).

3. With a second person holding the panel upright and stable, adjust the panel height up enough to nest up into the ceiling rail. **Follow "Panel Height Adjustment" instructions on page 21 to properly level panels and secure to top frame channel** (Figure 3).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Door Post To Drywall Connection

Note: In addition to the standard door frame, a door post to drywall kit is provided when a door frame starts directly from drywall. The bottom end of the frame that the kit is attached to must be cut 1/16" shorter to make room for the attachment plate at the bottom of the post (Figure 1).

1. Start by removing the outer center cap (not shown) from the frame that butts up to the drywall. This can be put into stock because it will not be needed in this condition (Figure 1).

2. **Make sure the frame bottom is cut 1/16" shorter before installing the attachment plate.** Screw the attachment plate (50.1390) to the bottom of the door post using two 1/4-20 x 1 1/2" self-tapping screws (12.2709) (Figure 1).

3. Next, apply gasket (50.1332) into the groove in the post where the outer center cap was removed (Figure 1).

4. Remove the inner center cap from the door post. Stand the door frame following the instructions for that frame. Install a #10 x 3/8" carpet gripper screw (50.1784) into the attachment plate hole visible inside the groove in the post (Figure 1).

5. Cut a notch in the fins at the bottom of the removed inner center cap, which will otherwise interfere with the carpet gripper screw head. Reinstall the notched inner center cap (Figure 1).

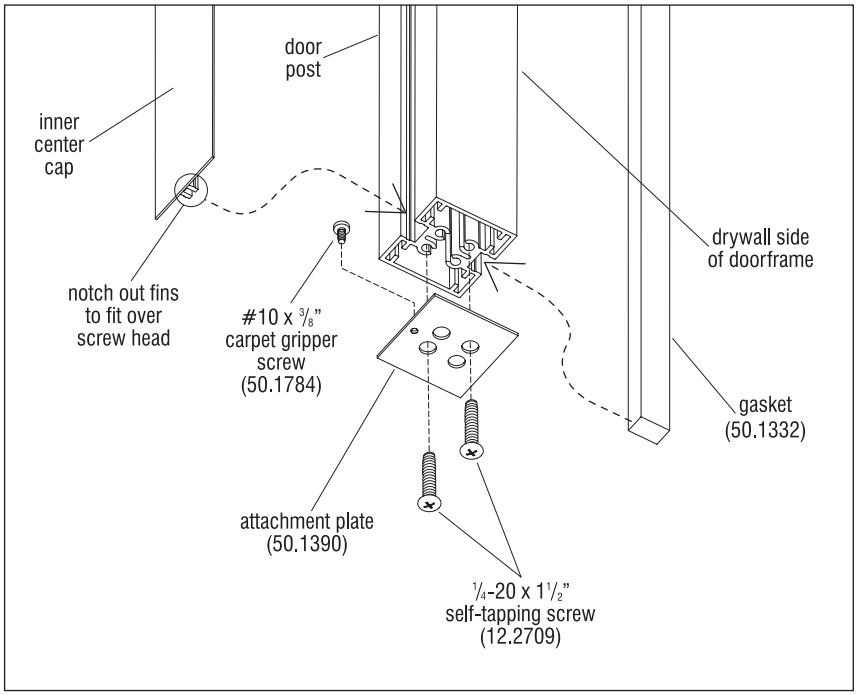


Figure 1 - Door Post To Drywall Connection

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

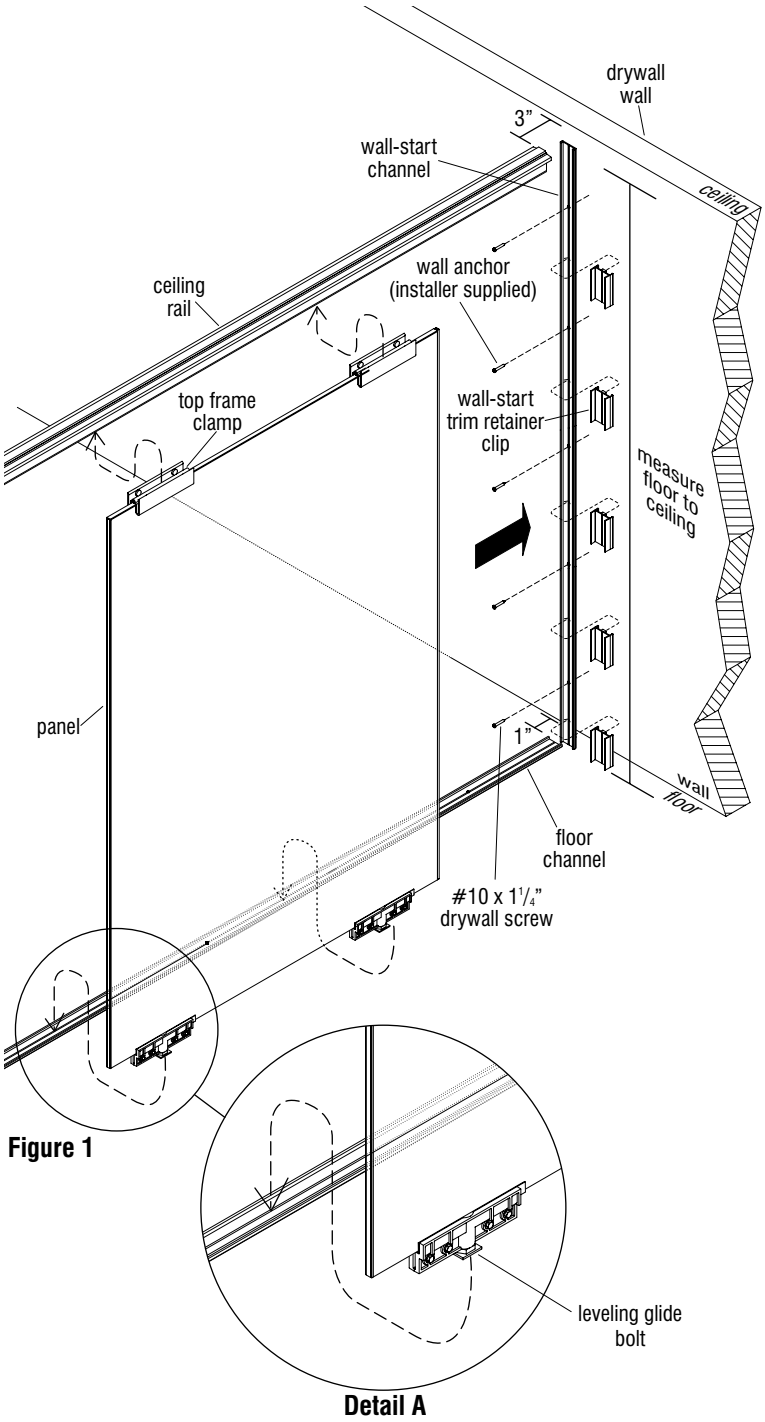


Figure 1

Wall Mounted Glass Panels

Important: Any panels being installed, which per the space-planning layout will install next to a sliding door, where the sliding door will pass next to a panel or two (panel length dependent), those panel(s) will require that "additional top clamps" be installed to the top (see page 42). If panel(s) are installed without adding additional top clamps, disassembly and re-assembly will be required.

1. Where the installed ceiling rail meets the wall to receive the wall-start channel, make sure the ceiling rail is at least 3" away from the wall and the floor channel is at least 1" away from the wall. Once confirmed, measure from the floor, up along the wall to the bottom of the ceiling, making allowance for how far the wall-start channel will sink into the carpet.
2. Transfer the measurement to the wall-start channel and cut the channel to size (Figure 1).
3. Position the wall-start channel plum against the wall centered under the ceiling rail. Using the pre-drilled holes in the channel as a guide, drill five pilot holes into the building wall using the appropriate drill bit size for the site supplied wall anchors. Secure the channel to the building wall using installer supplied anchors (Figure 1).
4. Once wall-start channel is in position, attach wall-start trim retainer clip to the wall-start channel. Place the retainer clip onto the channel and push down to snap it into position (Figure 1). **Note:** If retainer clip wants to slide down, tape can be applied in the field to hold up.

Positioning Glass Panels

Note: To save time and space, move all panels into installation sequence. If possible, do this as the panels are unloaded from the truck, eliminating double handling and potential damage.

Note: Make sure the leveling glide bolt is loose on each end before standing the panel into position (Detail A).

5. With assistance of a second person, using rubber suction cups, set the panel upright next to the ceiling rail and wall-start post it will install into (Figure 1).
6. Carefully tip the top of the panel toward the ceiling rail and nest the top frame clamp onto the ceiling rail. Then, lifting the top into the rail, set the bottom of the panel frame onto the floor channel and hold plumb securely, preparing to nest it into the wall-start post, next page step 6 (Figure 1).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Wall-Mounted Glass Panels (cont.)

7. Position glass panel and slide it in near the wall-start trim retainer clips (Figure 2, Detail B). Adjust the position of the glass panel as needed (Detail C).

8. To install wall-start covers, begin by measuring the distance between the floor and the ceiling. Cut both covers to that dimension (Figure 2).

9. Once cut to size, install the covers to the wall-start trim retainer clips installed on wall-start channel (Figure 2, Details B & C)

10. Continue setting panels into position following appropriate instructions in this manual (as in pages 22 through 28).

11. **Follow "Panel Height Adjustment" instructions on page 21 to properly level panels and secure to top frame channel.**

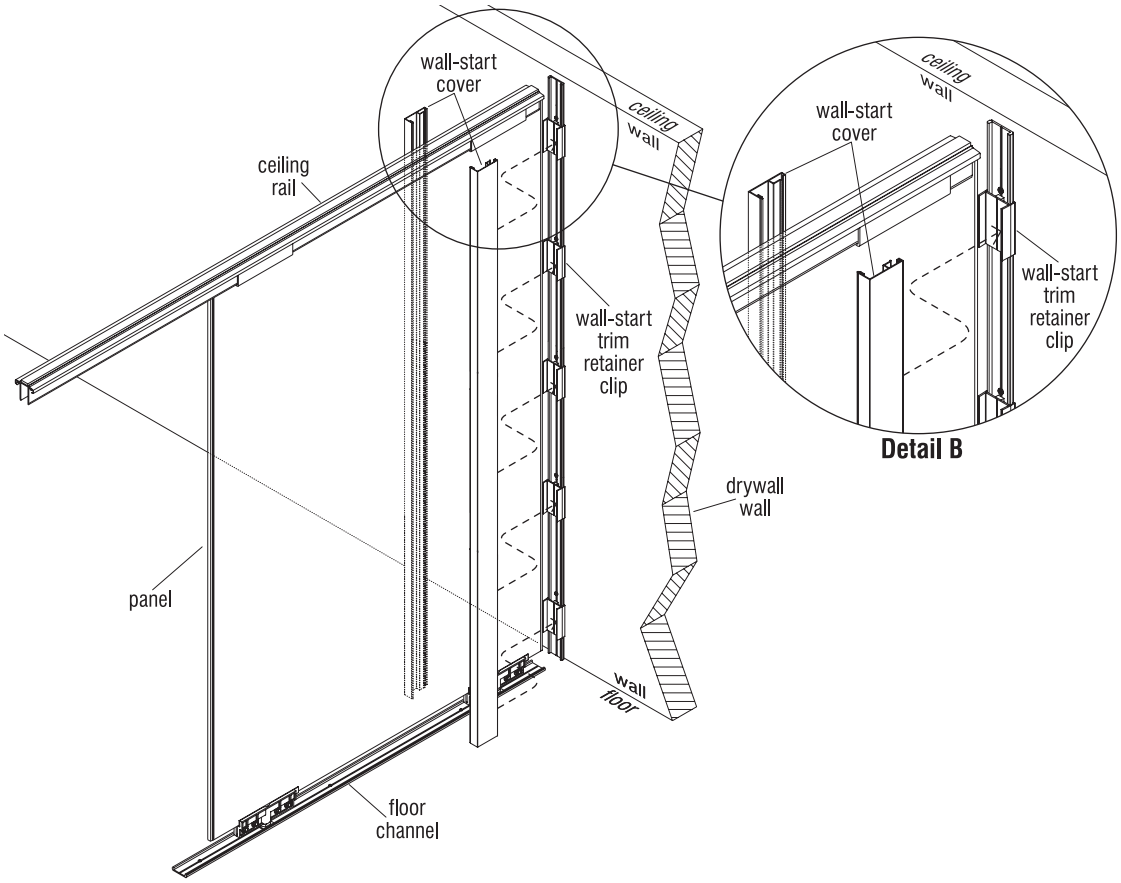
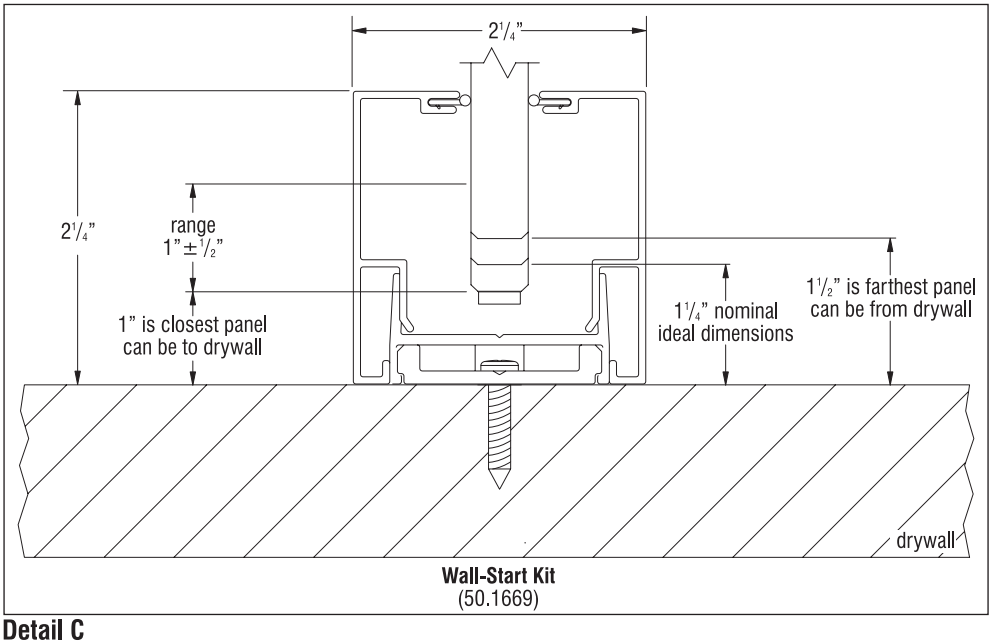


Figure 2



Detail C

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

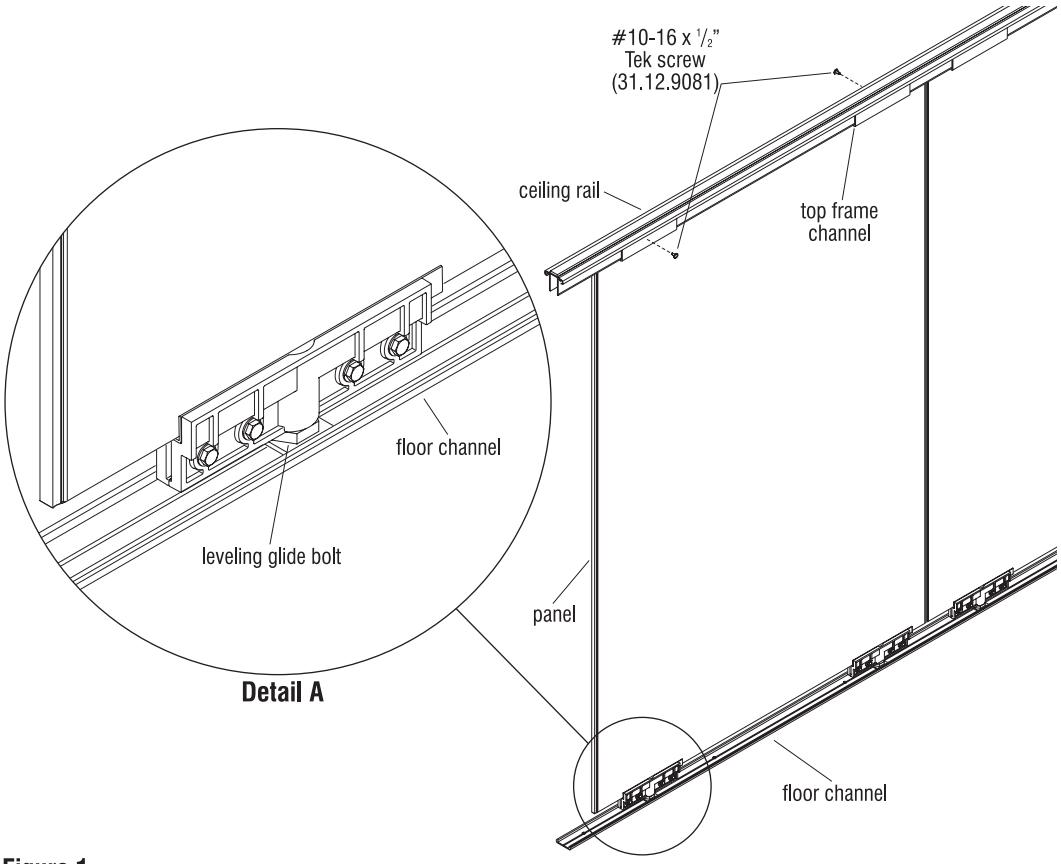


Figure 1

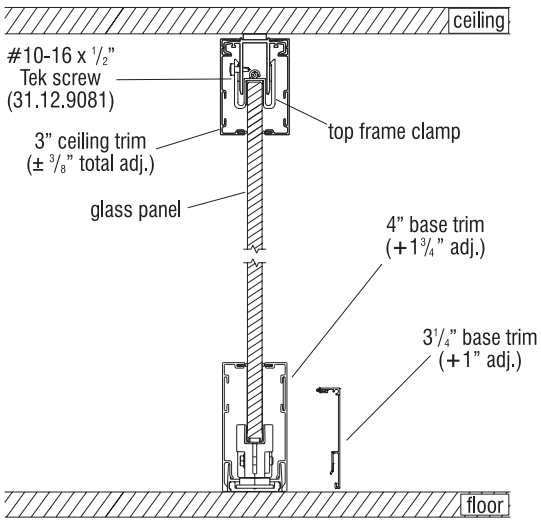


Figure 2 - Base Trim & Ceiling Adjustment

Panel Height Adjustment

Note: Make sure the leveling glide bolt is loose on each end before standing the panel up to position (Detail A).

1. Using supplied wrench (50.1857), re-adjust the level and height of the panel as required by turning the leveling glide bolts at both ends of the panel (Figure 1 & Detail A).

2. Ensure that panels are properly plumb by leveling in both the horizontal and vertical directions (Figure 2).

3. After the first panel is positioned and leveled, subsequent adjustment can be made visually by aligning adjacent panels to the first leveled panel.

   Important: Figure 2 shows the maximum adjustment using different available base trim sizes.

4. As panel heights are adjusted, periodically use a test section of ceiling and base trim to confirm that heights are within adjustment limits for the base and ceiling trim of the specific job site.

5. Once all panels are in place plumb, and heights are adjusted, secure the top frame channel of each panel to the ceiling rail using two #10-16 x 1/2" Tek screws (31.12.9081), one screw on each side of the top frame channel as illustrated (Figures 1 & 2).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Glass-To-Glass Panel Joint Configurations

The figures on this page show the layout of different glass panel joints. Reference the appropriate instructions in pages to follow, to make appropriate panel connections

Important: All flexible and rigid seals must be properly cleaned just prior to installation. Using a clean, lint-free cloth with the supplied solution (Silane Glass Treatment AP115), clean the seal(s) being installed to glass.

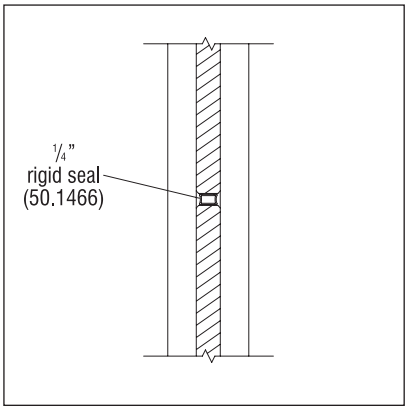


Figure 1 - In-line Connection (Page 21)

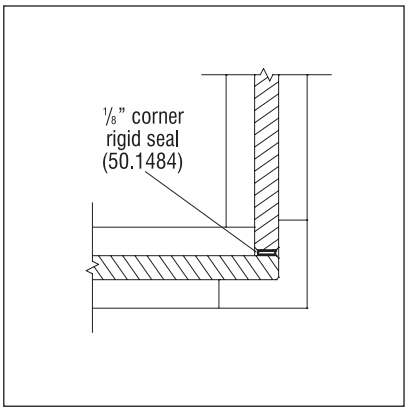


Figure 2 - Corner Connection (Page 22)

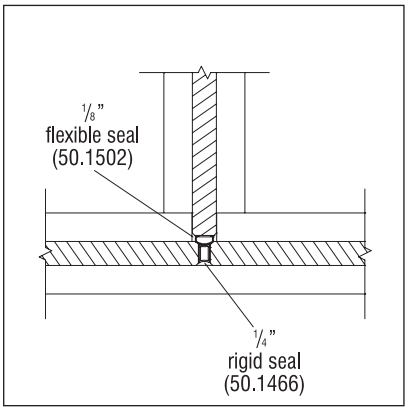


Figure 3 - 3-Way Connection (Page 23)

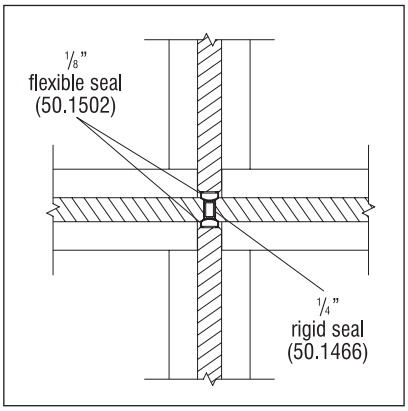


Figure 4 - 4-Way Connection (Page 24)

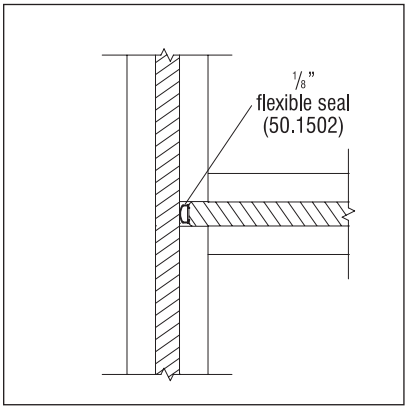


Figure 5 - Off Module 3-Way Connection (Page 25)

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

In-line Panel Connection - Glazing Seal

Important: Follow the instructions in this manual (pages 8 through 16) to install the ceiling rails and floor channel per the final KI-Installation Drawings. As instructed below, it is important to stage, level and plumb the glass panels at their final installation location prior to connecting panels together with glazing seal.

Important: Before connecting panels together, at any location where the space-planning layout specifies installation of a sliding door, where the sliding door will pass next to a panel or two (panel length dependent), those panel(s) will require that "additional top clamps" be installed to the top (see page 42). If panels are installed without adding additional top clamps, disassembly and re-assembly will be required.

Note: The glass panels come from the factory with adhesive tape pre-applied to both edges of the glass.

1. Remove the protective shipping channel from both panel side edges to expose the tape. Stand and level the panels.
2. Slide one of the panels to the side, opening up the sealed joint to approximately 2" (Figure 1).
3. Dry-fit the 1/4" rigid seal (50.1466) between the glass by sliding the glass together and pinching the rigid seal between the glass panels. Make sure there are no gaps between the glass and the rigid seal (Figure 2). If there are gaps, re-level the panels.
4. Clean the 1/4" rigid seal (50.1466) using a clean, lint-free cloth with the supplied solution (Silane Glass Treatment AP115). Follow directions on the bottle.
5. Pull the panels back apart approximately 1/2". Remove the release backing from the tape on one edge of the glass (Figure 3).
6. Apply the 1/4" rigid seal (50.1466) to the tape using the rigid seal alignment tool (Figure 4).
7. Remove the release backing from the second piece of tape on the panel to be joined to. Align the pieces of glass and hold them in-plane with a large straight edge making sure that any bow in the glass does not make an uneven joint. Carefully slide the panels together to form a bond. Force the panels tightly together using suction cups and a clamp to fully nip the tape (Figure 5).
8. Follow the instructions in this manual to complete installing the panels, posts and trim.

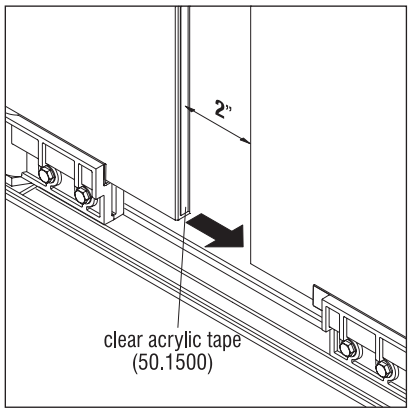


Figure 1 - Spread Panels

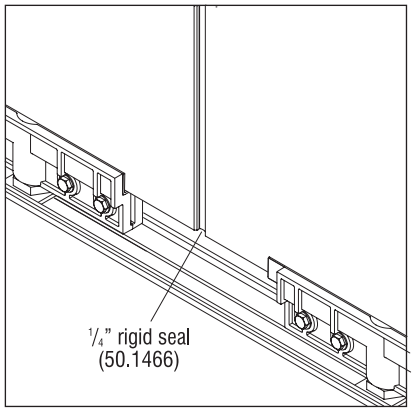


Figure 2 - Dry-fit Seal

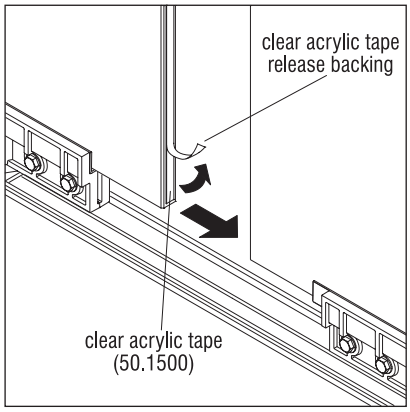


Figure 3 - Remove Release Backing

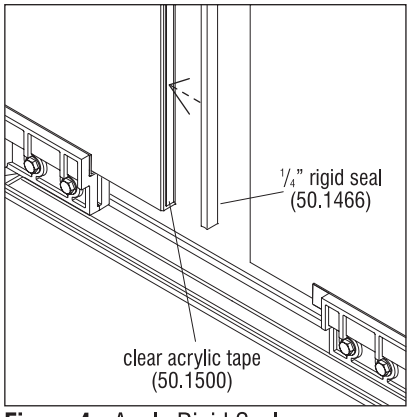


Figure 4 - Apply Rigid Seal

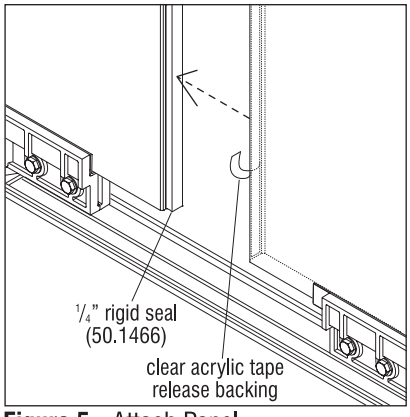


Figure 5 - Attach Panel

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Corner Panel Connection - Glazing Seal

Important: Follow the instructions in this manual (pages 8 through 16) to install the ceiling rails and floor channel per the final KI-Installation Drawings. As instructed below, it is important to stage, level and plumb the glass panels at their final installation location prior to connecting panels together with glazing seal.

Note: The glass panels come from the factory with adhesive tape pre-applied to both edges of the glass.

1. Remove the protective shipping channel from both panel edges to expose the tape. Stand and level the panels.
2. Since the glass corner requires one panel to butt into the face of the other panel, the factory applied tape must be removed from the edge of the adjoining panel. This can be done with a plastic scrapper and a light oil or by using a decal eraser wheel (Whizzy Wheel®) and drill (Figure 1).
3. Using a clean, lint-free cloth with the supplied solution (Silane Glass Treatment AP115), clean the 1/8" corner rigid seal (50.1484) and the surface of the glass where the overlapping panel will contact to form the corner. Follow the directions on the bottle.
4. Dry-fit the 1/8" corner rigid seal (50.1484) between the glass by sliding the glass closer together and pinching the seal between the glass panels. Make sure there are no gaps between the glass and the rigid seal. If there are gaps, re-level the panels (Figure 2).
5. Apply clear acrylic tape to one side of the 1/8" corner rigid seal (50.1484) (Figure 3).
6. Move the butting panel back about 1/2". Remove the release backing from the tape on the butting panel edge (Figure 4).
7. Apply the 1/8" corner rigid seal (non-taped side) to the exposed tape on the butting panel edge using the seal alignment tool (Figure 4).
8. Remove the release backing from the 1/8" corner rigid seal which will butt to the adjoining panel. Align the pieces of glass and hold them in-plane with a large straight edge making sure that any bow in the glass does not make an uneven joint. Carefully slide the panels together to form a bond. Force the panels tightly together to fully nip the tape (Figure 5).
9. Follow the instructions in this manual to complete installing the panels, posts and trim.

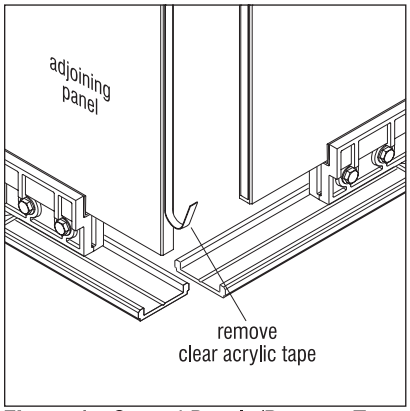


Figure 1 - Spread Panels/Remove Tape

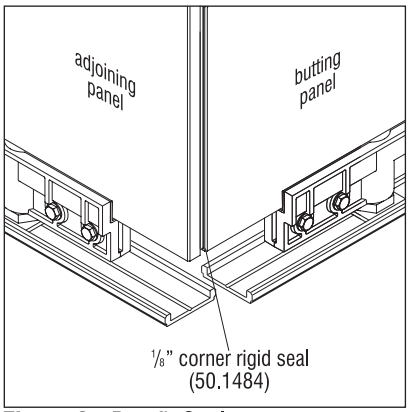


Figure 2 - Dry-fit Seal

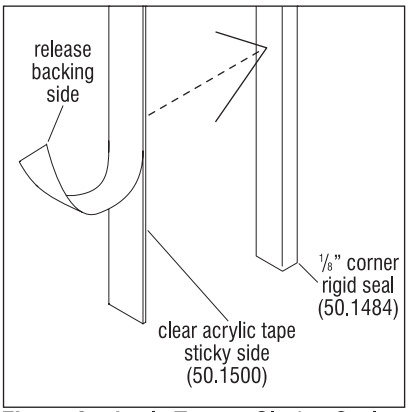


Figure 3 - Apply Tape to Glazing Seal

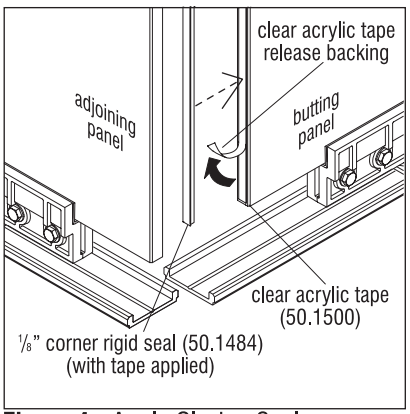


Figure 4 - Apply Glazing Seal

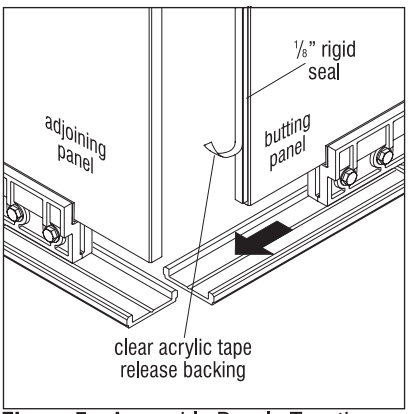


Figure 5 - Assemble Panels Together

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

3-Way Panel Connection - Glazing Seal

Important: Follow the instructions in this manual (pages 8 through 16) to install the ceiling rails and floor channel per the final KI-Installation Drawings. As instructed below, it is important to stage, level and plumb the glass panels at their final installation location prior to connecting panels together with glazing seal.

Note: The glass panels come from the factory with adhesive tape pre-applied to both edges of the glass.

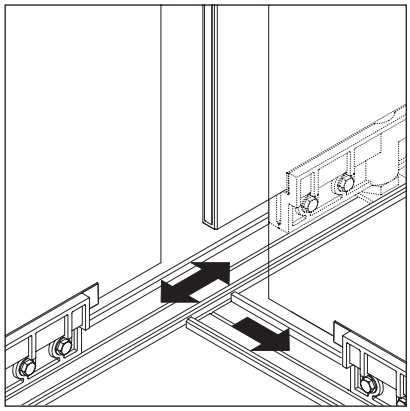


Figure 1 - Spread Panels

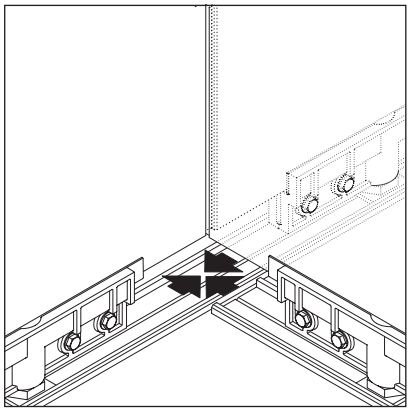


Figure 2 - Dry-fit Seals

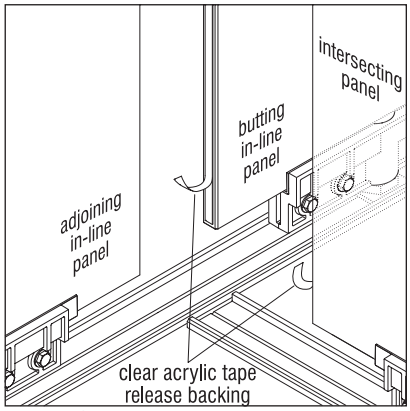


Figure 3 - Remove Release Backing

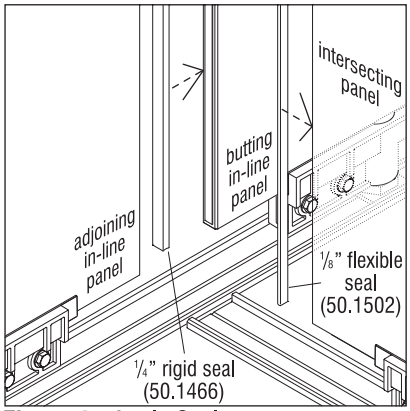


Figure 4 - Apply Seals

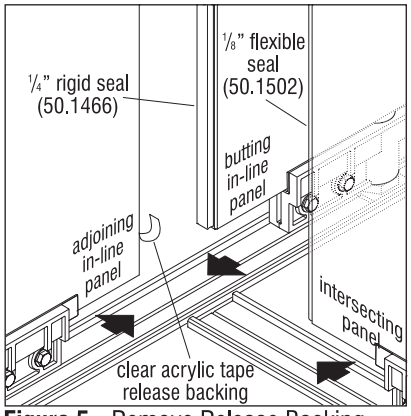


Figure 5 - Remove Release Backing

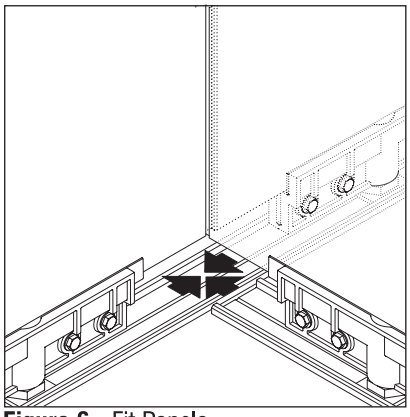


Figure 6 - Fit Panels

1. Remove the protective shipping channel from all edges to expose the tape. Stand and level the panels. Slide the panels to the side, opening up the joints to approximately 2" (Figure 1).

2. Dry-fit the ¼" rigid (50.1466) and ⅛" flexible (50.1502) seals between the glass by sliding the panels closer together and pinching the seals between the glass panels. Make sure there are no gaps between the glass and the seals (Figure 2). If there are gaps, re-level the panels.

3. Using a clean, lint free cloth with the supplied solution (Silane Glass Treatment AP115), clean both seals before installation. Follow directions on the bottle.

4. Pull the panels back apart by about ½". Remove the release backing from the tape on the intersecting in-line panel edge and from the butting in-line panel edge (Figure 3).

5. Apply the ¼" rigid seal (50.1466) to the tape on the butting in-line panel, then apply the flat side of the ⅛" flexible seal (50.1502) to the tape on the intersecting panel using the seal alignment tool (Figure 4).

6. Remove the release backing from the adjoining in-line panel (Figure 5). Align the pieces of glass and hold them in-plane with a large straight edge and a corner square making sure that any bow in the glass does not make an uneven joint. Slide the panels together to form a bond. Force the panels tightly together to fully nip the tape (Figure 6).

7. Follow the instructions in this manual to complete installing the panels, posts and trim.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

4-Way Panel Connection - Glazing Seal

Important: Follow the instructions in this manual (pages 8 through 16) to install the ceiling rails and floor channel per the final KI-Installation Drawings. As instructed below, it is important to stage, level and plumb the glass panels at their final installation location prior to connecting panels together with glazing seal.

Note: The glass panels come from the factory with adhesive tape pre-applied to both edges of the glass.

1. Remove the protective shipping channel from all edges to expose the tape. Stand and level the panels. Slide the panels to the side, opening up the joints to approximately 2" (Figure 1).

2. Dry-fit the 1/4" rigid (50.1466) and two 1/8" flexible (50.1502) seals between the glass by sliding the panels closer together and pinching the seals between the glass panels. Make sure there are no gaps between the glass and the seals (Figure 2). If there are gaps, re-level the panels.

3. Pull the panels back apart by about 1/2". Remove the release backing from the tape on both intersecting panel edges, and also from the butting in-line panel edge (Figure 3).

4. Using a clean, lint free cloth with the supplied solution (Silane Glass Treatment AP115), clean both seals before installation. Follow directions on the bottle.

5. Apply the 1/4" rigid seal (50.1466) to the tape on the butting in-line panel and apply the 1/8" flexible seals (50.1502) to the tape on both intersecting panels using the seal alignment tool (Figure 4).

6. Remove the release backing from the adjoining in-line panel (Figure 5). Align the pieces of glass and hold them in-plane with a large straight edge and a corner square making sure that any bow in the glass does not make an uneven joint. Slide the panels together to form a bond. Force the panels tightly together to fully nip the tape (Figure 6).

7. Follow the instructions in this manual to complete installing the panels, posts and trim.

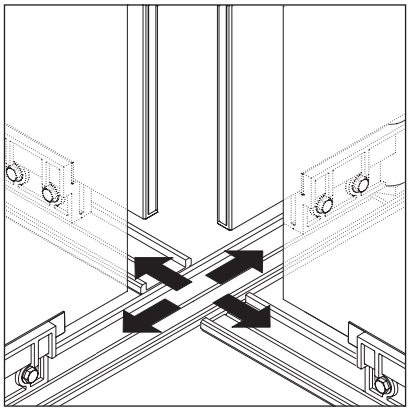


Figure 1 - Spread Panels

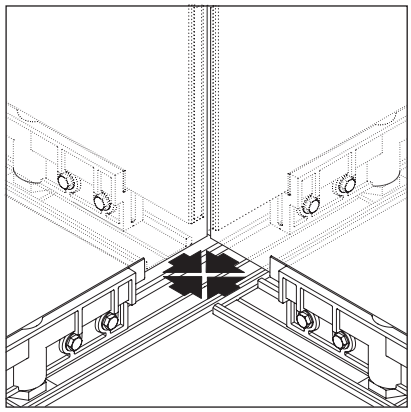


Figure 2 - Dry-fit Seals

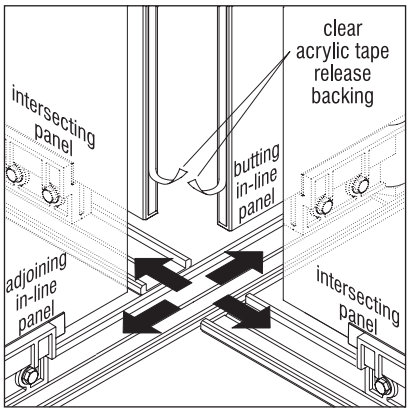


Figure 3 - Remove Release Backing

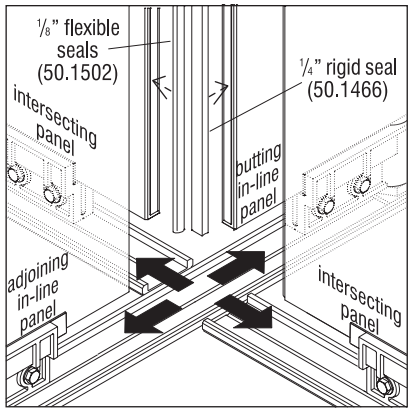


Figure 4 - Apply Seals

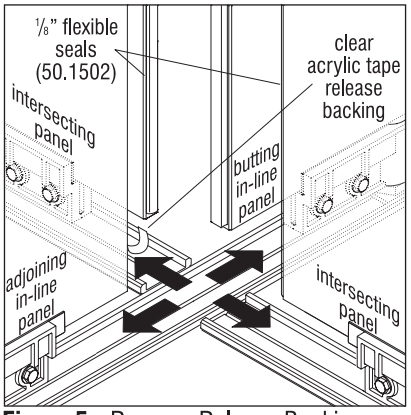


Figure 5 - Remove Release Backing

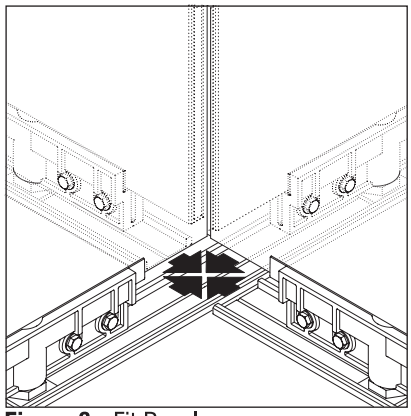


Figure 6 - Fit Panels

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Off-Module 3-Way Connection

Note: Where one panel intersects the middle of another panel, the top frame channel and ceiling rail of the panel being intersected will need to be modified. For additional ceiling corner bracket information, see "Ceiling Corner Brackets" on page 15.

Note: Off module connections are allowed under conditions where the intersecting panel does not meet at the top clamp of an adjoining panel. Space planning will account for and avoid this situation.

1. Cut the intersecting panel ceiling rail into two parts and remove a 3" section to fit the 3-way corner bracket (50.1850), where the intersection is being made (Figure 1).
2. Position and secure the ceiling rail to the ceiling grid (see "Ceiling Rail Installation", beginning on page 8).
3. Add a gasket section to the top of the 3-way corner bracket (50.1850), then install the bracket to all three of the ceiling rails using six #10-16 x $^1/_2$" self-drilling Torx screws (Figure 1).
4. Stand the "panel being intersected" back under the now-divided ceiling rail, then stand the "intersecting panel" under its ceiling rail and check panels for level and a tight joint. Re-level if necessary. Press the intersecting panel against the panel being intersected, compressing the flexible seal slightly (Figure 2).
5. Using a clean, lint free cloth with the supplied solution (Silane Glass Treatment AP115), clean both seals before installation. Follow directions on the bottle.
6. Remove the release backing from the tape on the intersecting panel and apply a $^1/_8$" flexible seal (50.1502) to the tape, using the seal alignment tool. Do not let the bottom of the seal touch the tape before it is guided precisely into position (Figure 3).
7. Once seal is installed stand the "panel being intersected" back under the now-divided ceiling rail, then stand the "intersecting panel" under its ceiling rail and check panels for level and a tight joint. Re-level if necessary. Press the intersecting panel against the panel being intersected, compressing the flexible seal slightly (Figure 2).
8. Install the ceiling and base trim (see "Inside Corner Trim - Ceiling" and "Inside Corner Trim - Floor" instructions on page 33) (Figure 6).

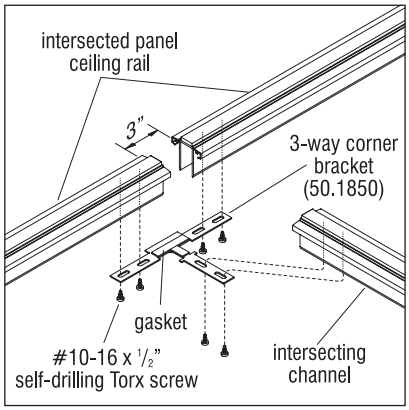


Figure 1 - Install 3-Way Bracket

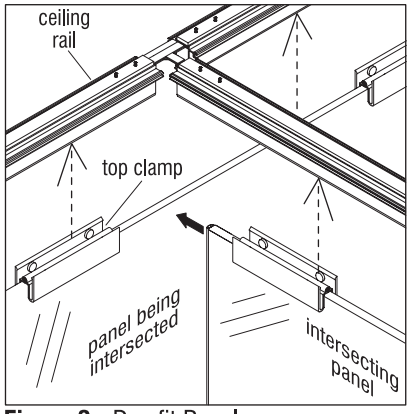


Figure 2 - Dry-fit Panels

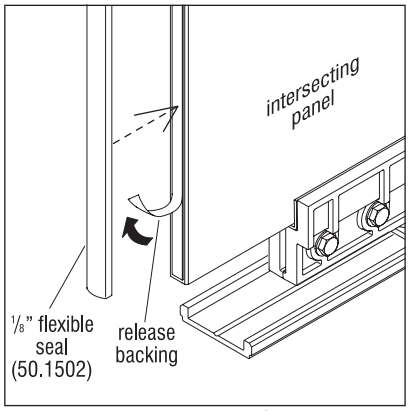


Figure 3 - Install Flexible Seal

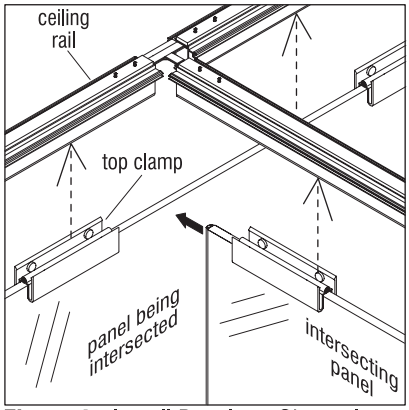


Figure 4 - Install Panels to Channels

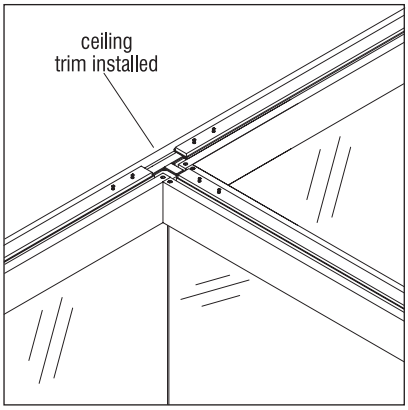


Figure 5 - Install Trim

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Flexible Glazing Seal at Door Frame and Posts

Important: Follow the instructions in this manual (pages 8 through 16) to install the ceiling rails and floor channels per the final KI-Installation Drawings. Then follow all appropriate instructions to stage and/or install glass panels to posts with glazing seal. Door frames and/or posts may be installed before or after glass panels are installed. Follow appropriate door frame installation instructions in this manual. Also reference page 36 for universal post conditions.

Note: The glass panels come from the factory with adhesive tape pre-applied to both edges of the glass.

1. Remove the protective shipping channel from both panel edges to expose the tape. Stand and level the panels.

2. Using a clean, lint-free cloth with the supplied solution (Silane Glass Treatment AP115) clean the flexible seal (50.1502) prior to installation. Follow the directions on the bottle.

3. Apply the flexible seal to the tape using the seal alignment tool. Don't let the bottom of the flexible seal touch the tape at the bottom before it is guided properly into position (Figure 2).

4. Once, the flexible seal is installed to the edges of the panel, the panel may be mated to the installed door frame (or post) or the door frame may be moved into position against the flexible seal on the panel, and secured as per instructions in this manual (Figures 3 & 4). Reference page 36 for universal post conditions as each configuration may vary.

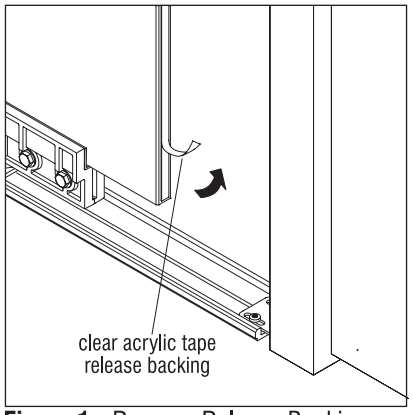


Figure 1 - Remove Release Backing

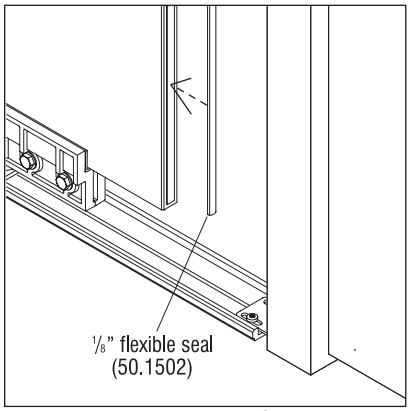


Figure 2 - Install Flexible Seal

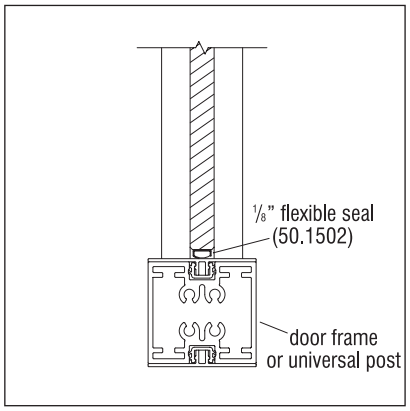


Figure 3 - Flexible Seal to Door Frame/ Universal Post Condition

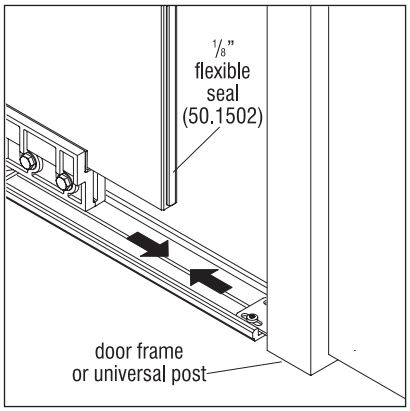


Figure 4 - Attach Panel To Door Frame/ Universal Post Condition

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

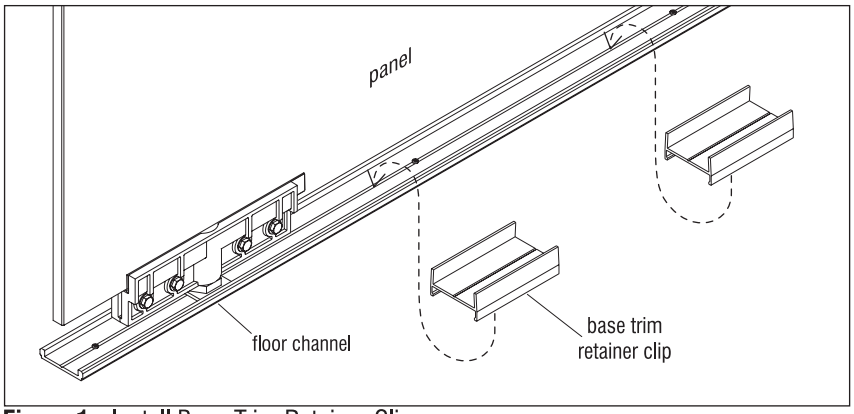
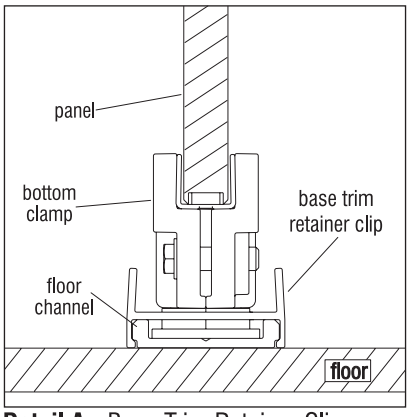


Figure 1 - Install Base Trim Retainer Clip



Detail A - Base Trim Retainer Clip

Base Trim Retainer Clip Installation

1. Once all panels are in position, attach base trim retainer clip to the floor channel. Place the retainer clip onto the floor channel and push down to snap it into position (Figure 1 & Detail A).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

In-Line Trim Splicing - Ceiling or Floor

1. Measure and cut ceiling and floor trim to proper length. The most desirable splice is at a panel seam. In-Line splices are held together with the Lightline trim splice plates (50.1496) (Figures 1 & 2) .

2. To splice two trim sections together (either floor or ceiling), first press a splice plate (50.1496) into the splice plate slot of one trim piece (Figure 1 & 2). Then press the trim together tightly, so the splice plate of the first trim inserts into the splice plate slot of the adjacent trim (Detail A).

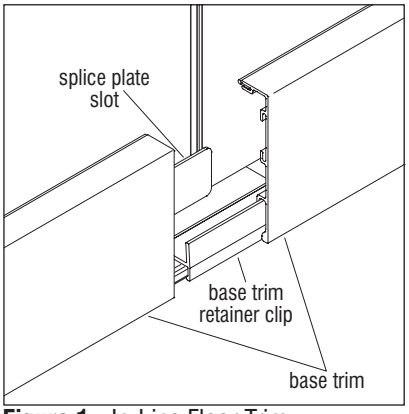


Figure 1 - In-Line Floor Trim

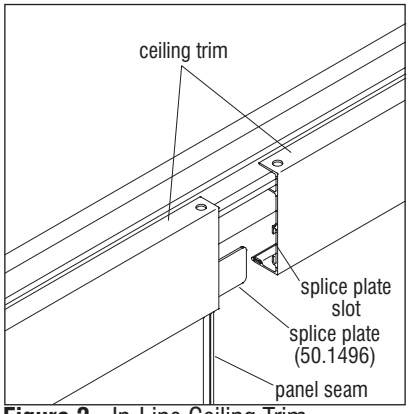
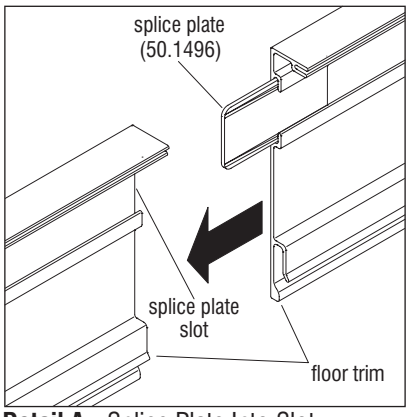


Figure 2 - In-Line Ceiling Trim



Detail A - Splice Plate Into Slot

Outside Corner Mitered Trim - Floor

1. Floor trim outside corners are made by miter cutting the trim ends where they meet, then connecting them using a steel splice plate (50.1734) bent to a 90° angle.

2. Measure from the outside edge of the glass panel to the furthest panel seam that the 10' trim will reach or to a wall or post where it will end. Add the thickness of the floor trim (0.688") and seal (0.085") to the measurement. Cut trim to that dimension and miter cut the end where the corner will be (Figure 3).

3. Repeat step 2 for the other mitered corner trim. Continue to step 4 on the next page.

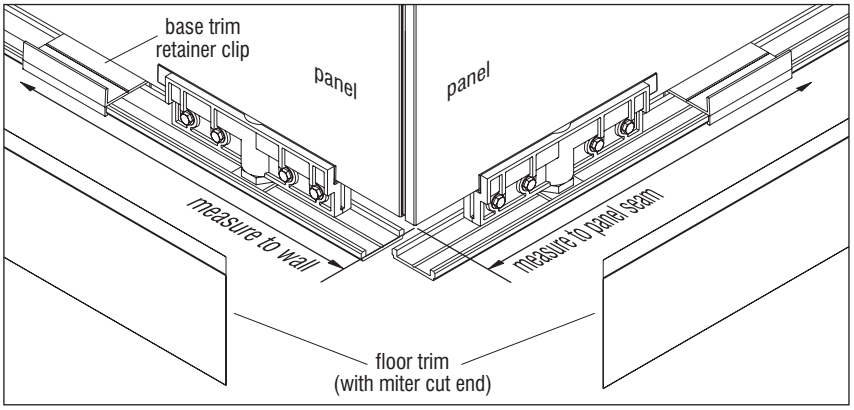


Figure 3 - Measure and Cut Floor Trim

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

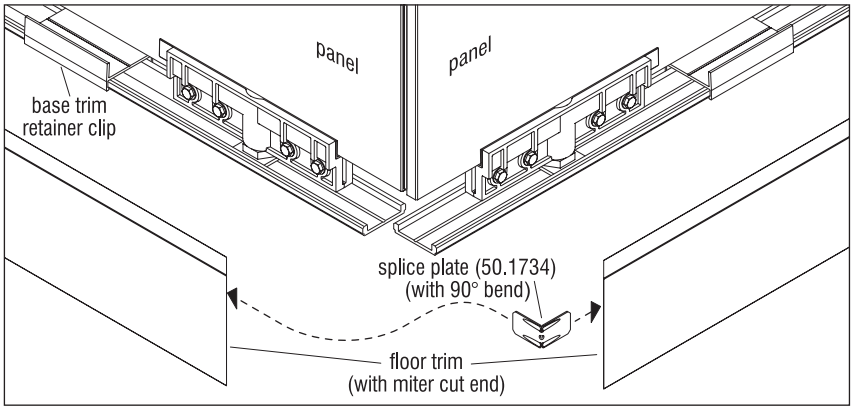


Figure 4 - Install Splice Plate

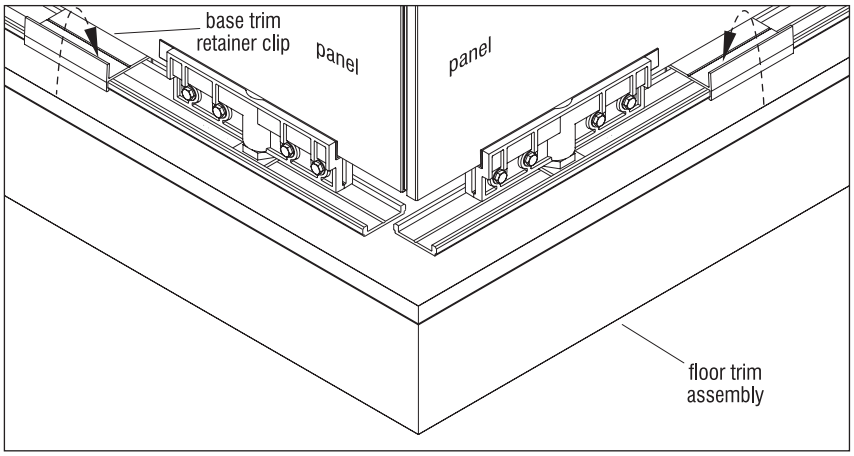
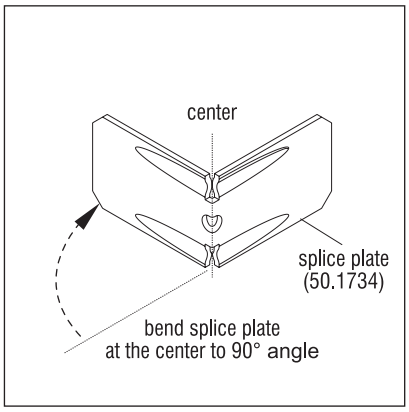


Figure 5 - Install Floor Trim Assembly



Detail B - Bend Splice Plate

Outside Corner Mitered Trim - Floor (cont.)

4. Dry fit both pieces of trim to make sure the pieces fit and that the corner gap is tight.

5. To connect the mitered trims, bend the metal splice plate (50.1734) at the center to approximately 90° (Detail B).

6. Slide the splice plate into one trim then slide the other trim into the splice. Adjust all pieces so that the corner gap is tight (Figures 4 & 5).

7. Install the trim assembly onto the floor channel (Figure 5).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Outside Corner Mitered Trim - Ceiling

1. Ceiling trim outside corners are made by miter cutting ceiling trim at the trim ends where they meet, then connecting them using a steel splice plate (50.1734) bent to a 90° angle (Figure 1 & Detail A).

2. Measure from the outside edge of the glass panel to the furthest panel seam that the 10' trim will reach or to a wall or post where it will end. Add the thickness of the opposing ceiling trim (0.813") and seal (0.085") to the measurement. Cut trim to that dimension and miter cut the end where the corner will be (Figure 1)

3. Repeat step 3 for the other mitered corner trim.

4. Dry fit both pieces of ceiling trim to make sure the trim pieces fit and that the corner gap is tight. If applicable, at the trim end away from the miter joint, remove any seal where the trim rests on a wall channel (Detail C).

5. To connect the mitered trims, bend the splice at the center to approximately 90° (Detail A).

6. Slide the metal splice plate (50.1734) into one trim then slide the other trim into the splice. Adjust all pieces so that the corner gap is tight (Detail B).

7. Install the trim assembly onto the ceiling rail (Figure 3).

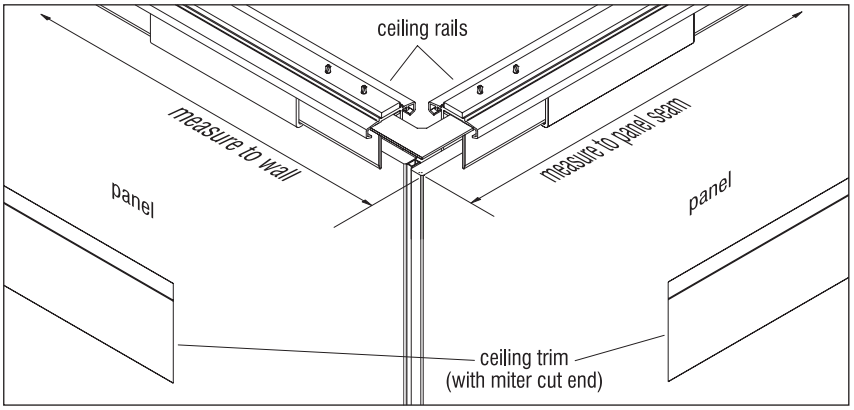
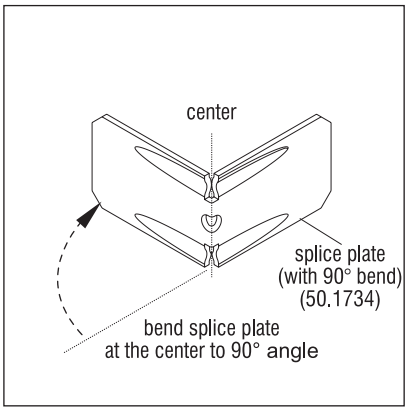
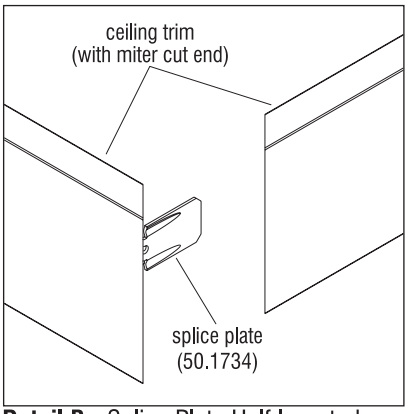


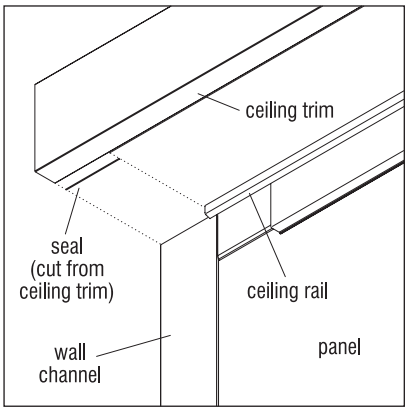
Figure 1 - Measure and Cut Ceiling Trim



Detail A - Bend Splice Plate



Detail B - Splice Plate Half Inserted



Detail C - Cut Seal From Ceiling Trim

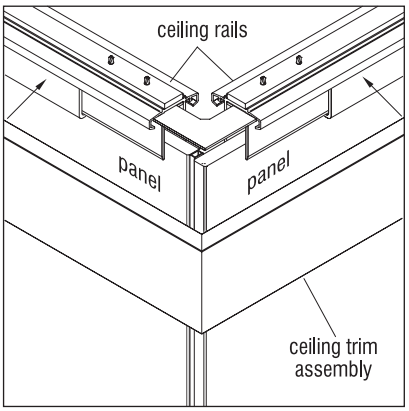


Figure 3 - Install Ceiling Trim Assembly

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

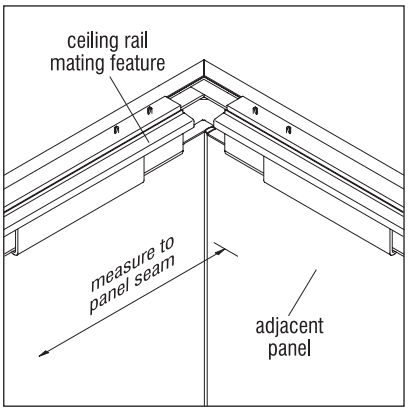


Figure 1 - Measure To Panel Seam

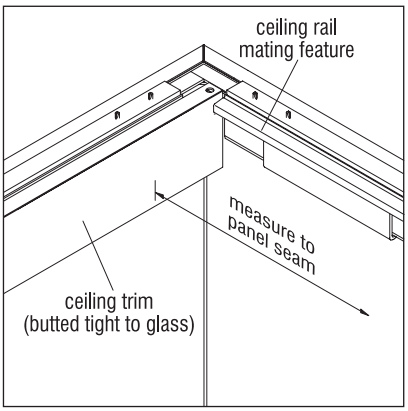


Figure 2 - Measure To Panel Seam

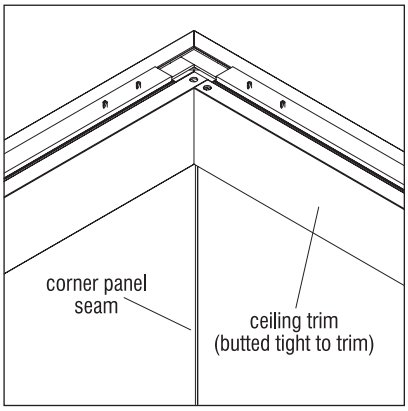


Figure 3 - Completed Ceiling Trim

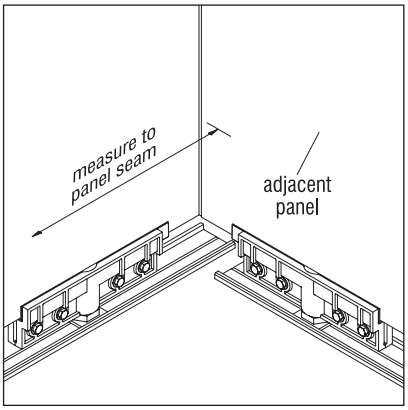


Figure 4 - Measure To Panel Seam

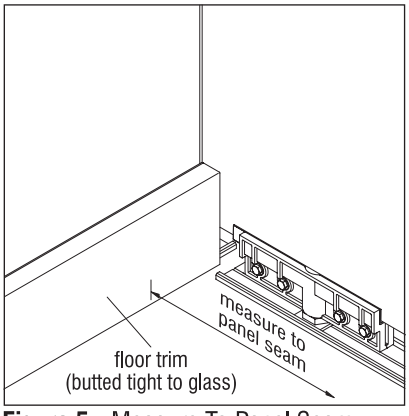


Figure 5 - Measure To Panel Seam

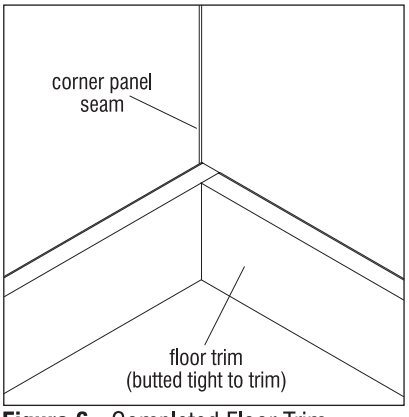


Figure 6 - Completed Floor Trim

Inside Corner Trim - Ceiling

1. Begin by measuring the length for the first side of the ceiling trim, from the surface of the adjacent glass panel to the furthest panel seam that the 10' trim section can reach. Cut trim to that dimension (Figure 1).

2. Position the cut section of trim to the ceiling rail, butting it tight to the surface of the adjacent glass panel, then press it onto the mating feature of the ceiling rail (Figure 2).

3. Next, measure from the inside surface of the previously installed trim to the furthest panel seam that the 10' trim section can reach. Cut trim to that dimension (Figure 2).

4. Position the second side of trim up to the ceiling rail, butting it tight the inside surface of the previously installed trim, then press it onto the mating feature of the ceiling rail (Figure 3).

Inside Corner Trim - Floor

1. Begin by measuring the length for the first side of the floor trim from the surface of the adjacent glass panel to the furthest panel seam that the 10' trim section can reach. Cut trim to that dimension (Figure 4).

2. Install the first cut trim to the base trim retainer clip installed on floor channel (see page 29), butting it tight to the surface of the adjacent glass panel (Figure 5).

3. Measure from the inside surface of the previously installed trim to the furthest panel seam that the 10' trim section can reach. Cut trim to that dimension (Figure 5).

4. Install the second cut trim to the base trim retainer clip installed on floor channel (see page 29), butting it tight to the inside surface of the previously installed trim (Figure 6).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Ceiling Trim To Door Header Splicing

1. Ceiling trim is spliced to the door header using the ceiling trim to door header splice plate (50.1503). To splice the trim, slide the splice plate into the splice slot in the ceiling trim (Figure 1).

2. Next, slide the trim with splice plate in it into the door header until the trim is tight to the door header while snapping the trim onto the mating feature on the ceiling rail (Figures 2 & 3).

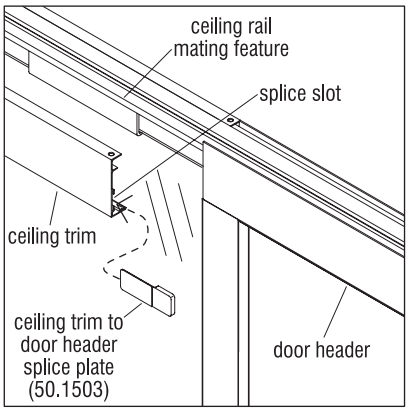


Figure 1

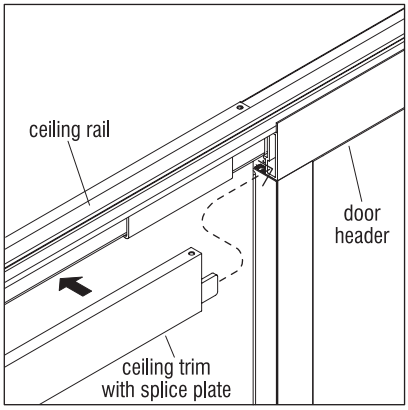


Figure 2

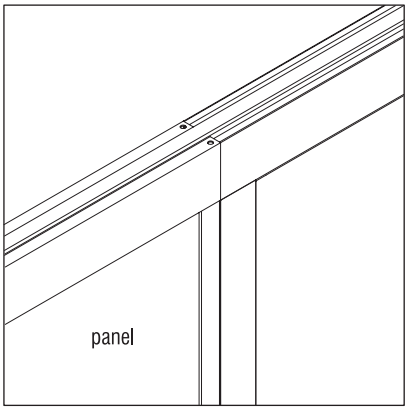


Figure 3

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

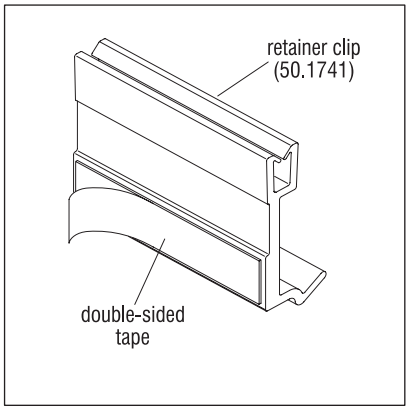


Figure 1

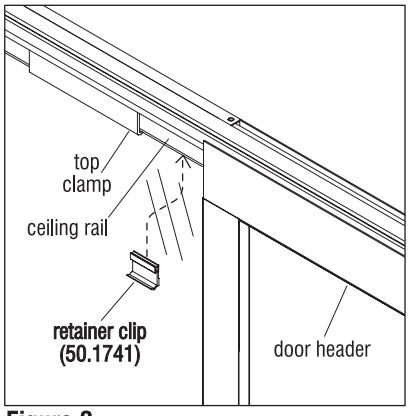


Figure 2

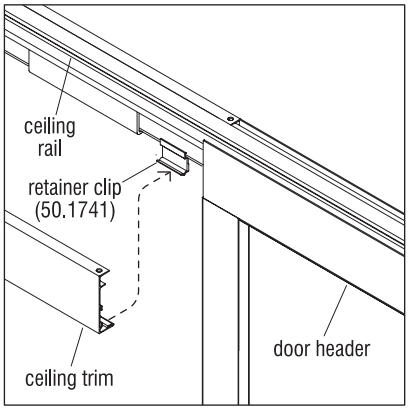


Figure 3

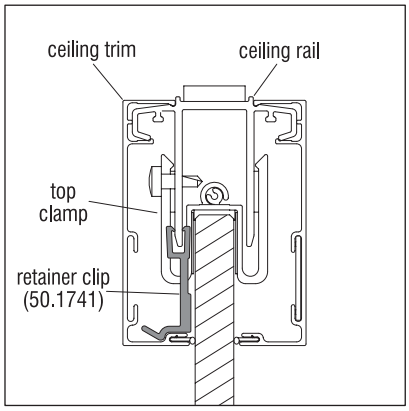


Figure 4

Ceiling Trim Retainer Clip

Note: Ceiling trim pieces less than ten feet long are less flexible. The ceiling trim retainer clip (50.1741) is used to help aid installation of these pieces.

1. Before installing the retainer clip (50.1741), first remove the protective backing from the double-sided tape on the backside of the clip (Figure 1).
2. To install, position the clip as illustrated and push the top of the clip into the exposed ceiling rail located in the space between the door frame header and the panel top clamp. Make sure the adhesive back is facing the glass of the panel and press clip to glass (Figure 2).
3. Snap ceiling trim onto ceiling rail and onto retainer clip (Figures 3 & 4).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Universal Posts Identification

1. Details A through I on this page illustrate Universal Post uses. Your final KI Installation Drawings (shop prints) determine layout, and specific instructions in this manual cover door frame installation more completely. The instructions on page 37-41 cover the proper set-up and cutting to size of the universal post which applies generally the same for all details A through I this page.

Note: Maximum distance between Lightline or Evoke floor channel and post is 1".

A. Lightline Corner at Universal Corner Post

B. Lightline Drywall Start at Universal Corner Post

C. Lightline & Genius Corner at Universal Corner Post

D. Lightline Junction at Universal 3-Way Post

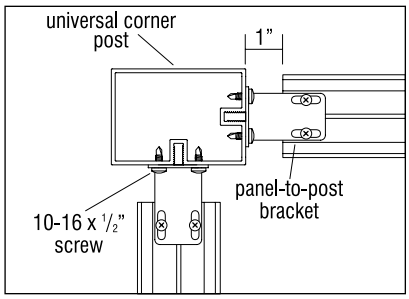
E. Lightline In-Line Drywall Start with Universal 3-Way Post

F. Lightline In-Line to Genius with Universal 3-Way Post

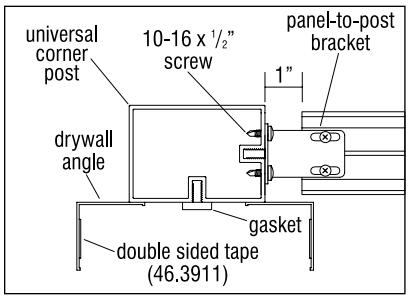
G. Lightline In-Line Door Frame Attachment with Universal 3-Way Post and Evoke Dividing Panel

H. Lightline & Evoke Corner at Universal Corner Post

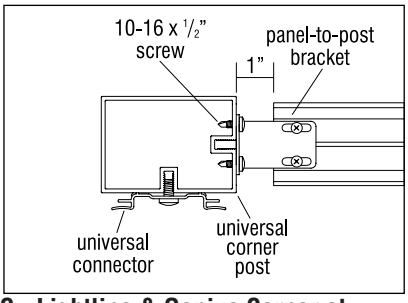
I. Lightline Pivot Door Corner at 2 1/2" Corner Post



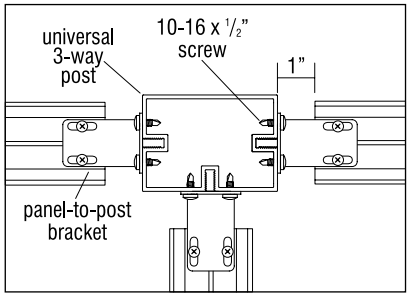
A. Lightline Corner at Universal Corner Post



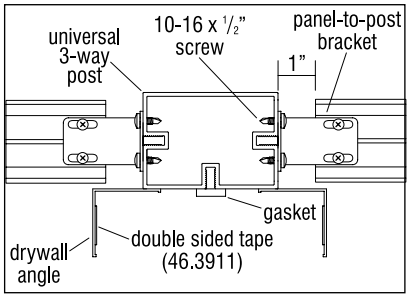
B. Lightline Drywall Start at Universal Corner Post



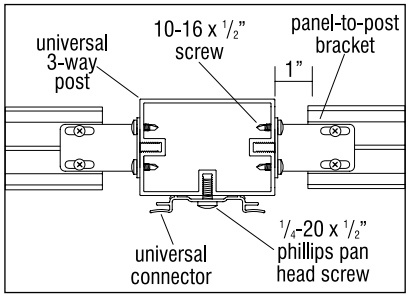
C. Lightline & Genius Corner at Universal Corner Post



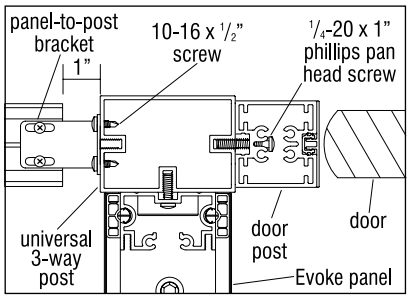
D. Lightline Junction at Universal 3-Way Post



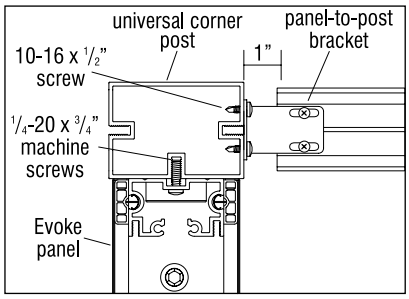
E. Lightline In-Line Drywall Start with Universal 3-Way Post



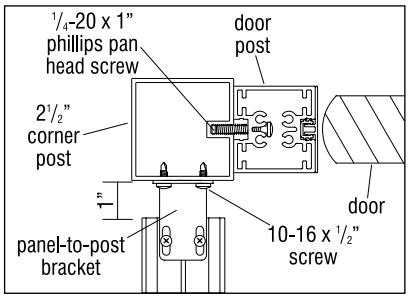
F. Lightline In-Line to Genius with Universal 3-Way Post



G. Lightline In-Line Door Frame Attachment with Universal 3-Way Post and Evoke Dividing Panel



H. Lightline & Evoke Corner at Universal Corner Post



I. Lightline Pivot Door Corner at 2 1/2" Corner Post

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Lightline & Genius Corner at Universal Post

Note: The instructions on this page is for assembling one Lightline panel to a Genius panel via a Universal Corner Post (Detail C, page 36). The in-line, 3-way and 4-way post connection types with Genius panels assemble in a similar way.

1. Lightline and Genius ceiling rail and the Lightline floor channel must be installed per the final KI Installation Drawings (shop prints). **Note:** Maximum distance between Lightline floor channel and post is 1".

2. Position the corner splice bracket between the Genius and Lightline ceiling rails. Then secure the bracket to both ceiling rails using four #10-16 x $^1/_2$" self-drilling screws (Figure 1 & Detail A).

3. To determine the length that a universal post must be cut to, first place a piece of ceiling trim onto the ceiling rail and measure from the top of the trim, down to the floor at post location. Make allowance for how far the universal post will sink into the carpet (if present), then cut the bottom of the post to that dimension. Stand the universal post up under the ceiling rail and confirm that the top of the post lines up with the top of the ceiling trim (Figure 1, page 38).

4. Position the universal connector flush to the top of the wider side of the universal corner post and secure using four $^1/_4$-20 x $^3/_4$" machine screws evenly spaced (Figure 1).

5. Make sure all panels have been properly height adjusted. To adjust height on Evoke panel, see "Evoke Architectural Wall Assembly Instructions (KI-62760). For Lightline panel height adjustment, the supplied $^{15}/_{16}$" wrench can be used to turn the leveling glide bolts at both ends of the panel. For more information, see page 21). To finish installing the Lightline panel, refer to panel installation steps in this manual.

6. To connect, position a properly aligned and adjusted Genius panel to the universal connector, leaving about $^1/_{16}$" gap between the two parts (Figure 1).

7. Insert two Genius panel connectors (one at each side) even with the top of the panel. Then, with your thumb, zip each connector firmly around the panel or post flanges, pressing down to the base (Figure 1).

   Note: Do not use a steel hammer on the Genius panel connectors or damage will result. Use a rubber mallet and/or a block if necessary.

8. If using a flush Genius panel connector, visually or by touch, ensure the connector is installed smooth to the surface of the panels.

9. Next, prepare Lightline panel with flexible glazing seal. See Lightline Assembly Instructions "Flexible Glazing Seal at Door Frame and Posts" (Figures 1 through 4, page 28). Once seal is installed, position a properly aligned and adjusted Lightline panel against the corner post (Figure 1).

10. Secure Lightline panel to universal post using a panel-to-post bracket. Position the panel-to-post bracket onto the continuous floor channel of the Lightline panel as illustrated. Align the bracket holes with the floor channel and secure with two screws. If securing over hard floor, use two #10-24 x $^1/_4$" hard floor screws (V.12.0910) (shown). If installing over carpet, use two #14 x $^1/_2$" carpet gripper screws (46.2799). Then secure the panel-to-post bracket to the corner post with two 10-16 x $^1/_2$" screws into the post (Figure 1 & Detail B).

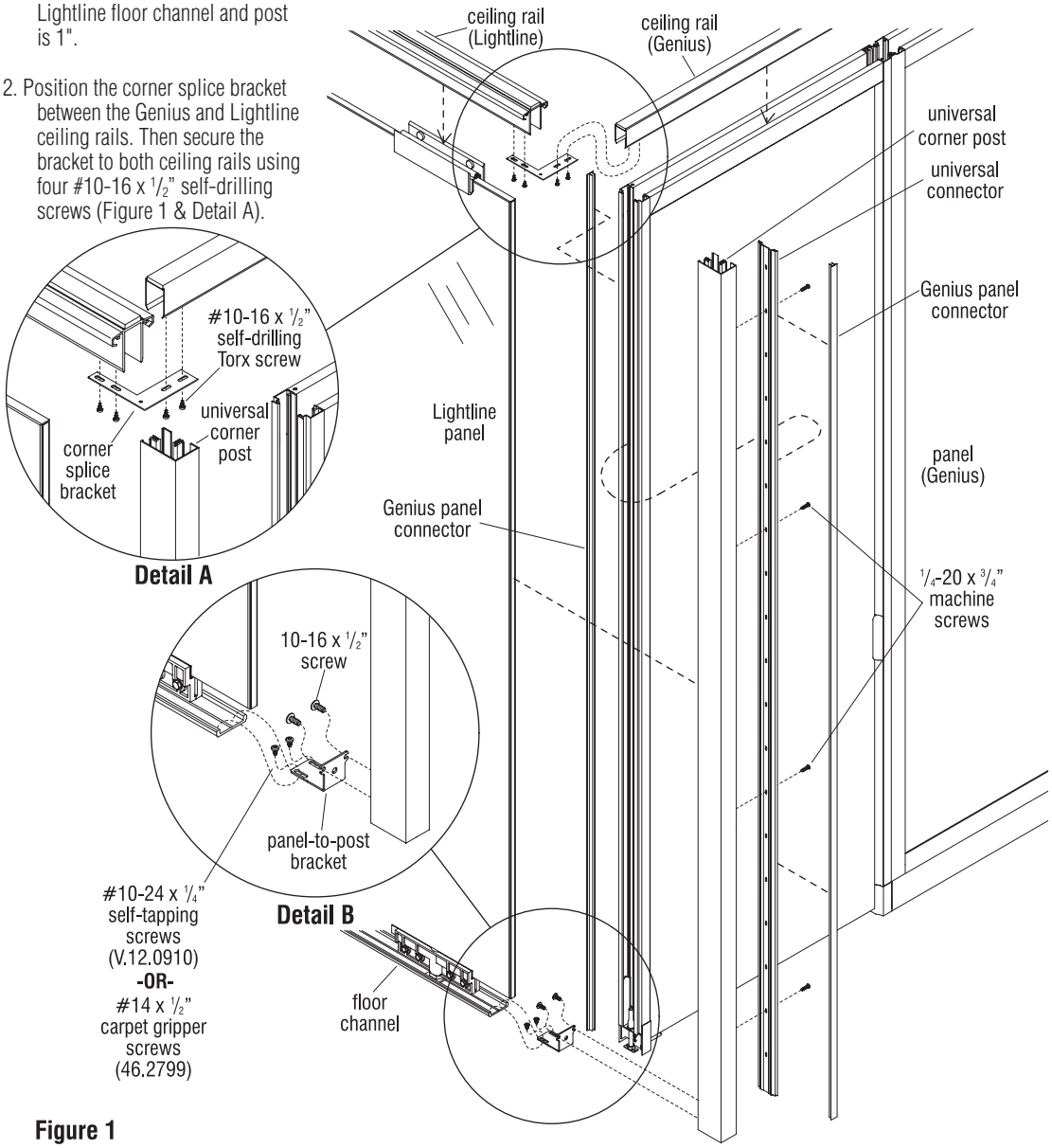


Figure 1

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Universal 3-Way Post - Lightline In-Line with Door Frame and Evoke Dividing Wall

Note: The Universal 3-Way Post instructions below illustrates a Lightline In-line configuration, with door frame at the universal post and Evoke dividing wall perpendicular to Lightline with door frame (Detail G, page 36). Details A through H, page 36 all use variations of the universal post, so the instructions below outline proper preparation of universal posts for all page 36 details.

Note: When installing Evoke or Genius ceiling rail perpendicular to Lightline in-line, the end of the Evoke or Genius ceiling rail must be held back 1 1/8" from the centerline of the Lightline ceiling rail. This is so the Universal Post has room to fit in front of the Evoke or Genius dividing wall ceiling rail (Figure 1).

1. Lightline and Evoke ceiling rail and floor channels must be installed per the final KI Installation Drawings (shop prints). **Note:** Maximum distance between floor channels and post is 1".

2. Position the 3-way splice bracket between the Evoke and Lightline ceiling rails. Then secure the bracket to both ceiling rails using six #10-16 x 1/2" self-drilling screws. (Figure 2, page 39).

3. To determine the length that a universal post must be cut to, first place a piece of ceiling trim onto the ceiling rail and measure from the top of the trim, down to the floor at post location. Make allowance for how far the universal post will sink into the carpet (if present), then cut the bottom of the post to that dimension. Stand the universal post up under the ceiling rail and confirm that the top of the post lines up with the top of the ceiling trim (Figure 1).

4. Follow appropriate instructions in this manual for the other components (i.e. panels and/or door frames), and begin to prepare to install those items next to the universal post

   Note: For door frames, the door post will secure to the universal post with screws that pass through the door post, then thread into the vertical threaded groove in the universal post.

5. Prepare the door post which must install next to the universal post. Do so with a block and a mallet and carefully tap off both the pre-assembled inner and outer center caps. Tap on one end of each until it slides out of the post. The outer center cap may be put into stock, but the inner cap must be kept for re-installation after the door frame is connected to the universal post (Detail A).

6. Follow instructions in this manual appropriate for door frame installation.

7. Once door frame is installed, notice the door post has four holes drilled all the way through the post. The inside face of the post has larger clearance holes that will allow the entire screw to pass through, and the outside face of the post has smaller clearance holes where just the shank of the screw will fit through. With a fully assembled door frame (see appropriate door instructions beginning on page 43) up against the universal post, pass a screw through the clearance hole in the inside face of the door post using a magnetic bit. Twist the screw into the vertical threaded groove in the universal post. Continue to attach the door post to the universal post by installing and tightening the three remaining screws (Figure 2).

8. Reinstall the inner door center cap to conceal the holes and install door leaf. (Figure 2).

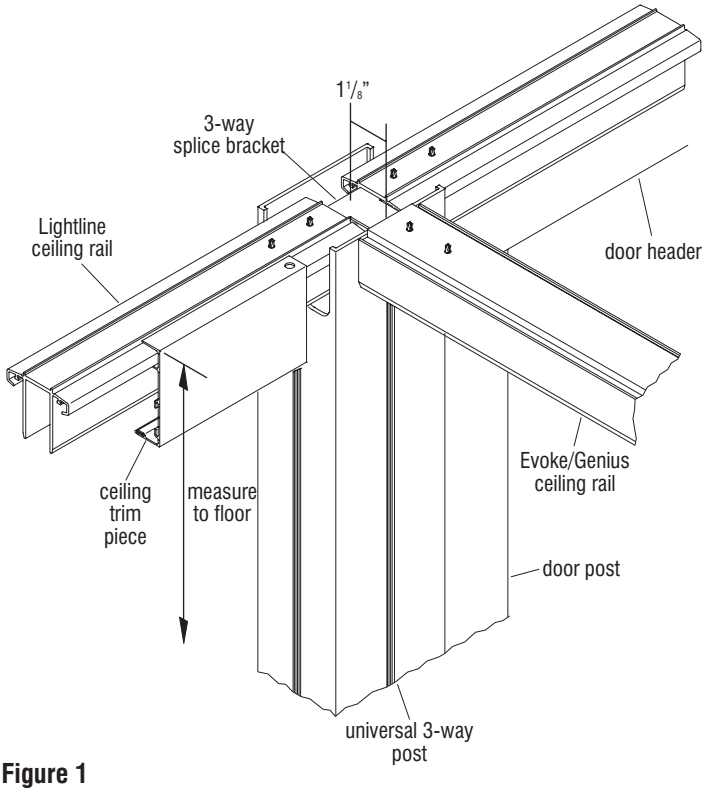
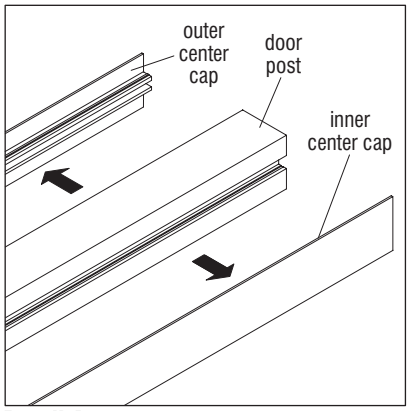


Figure 1



Detail A

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

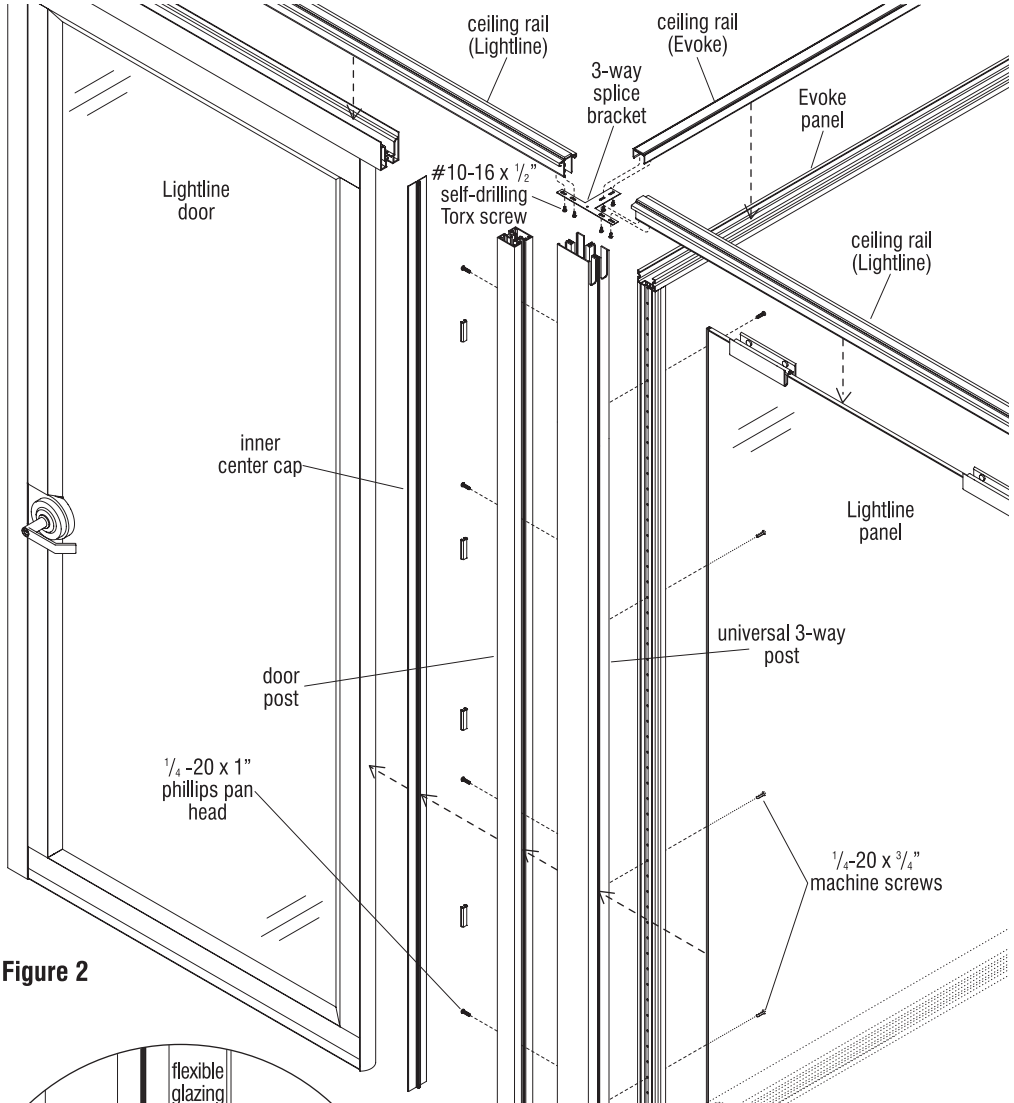
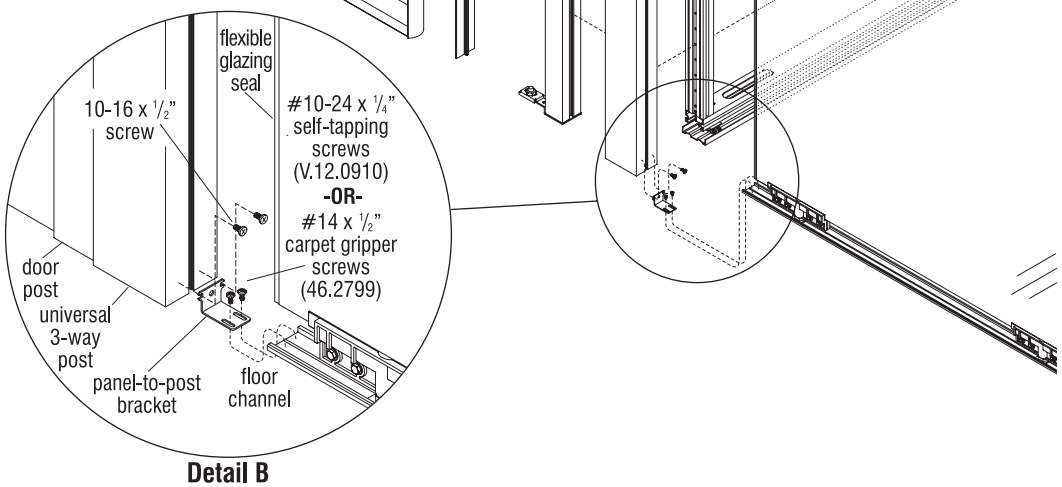


Figure 2



Detail B

9. Make sure all panels have been properly height adjusted. To adjust height on Evoke panel, see "Evoke Architectural Wall Assembly Instructions (KI-62760). For Lightline panel height adjustment, the supplied $^{15}/_{16}$" wrench can be used to turn the leveling glide bolts at both ends of the panel. For more information, see page 21.

10. Next, prepare Lightline panel with flexible seal. See Lightline Assembly Instructions "Flexible Glazing Seal at Door Frame and Posts" (Figures 1 through 4, page 28). Once seal is installed, position a properly aligned and adjusted Lightline panel against the universal 3-way post (Figure 2).

11. Secure Lightline panel to universal post using a panel-to-post bracket. Position the panel-to-post bracket onto the floor channel of the Lightline panel as illustrated. Align the bracket holes with the floor channel and secure with two screws. If securing over hard floor, use two #10-24 x $^1/_4$" hard floor screws (V.12.0910) (shown). If installing over carpet, use two #14 x $^1/_2$" carpet gripper screws (46.2799). Then secure the panel-to-post bracket to the corner post with two 10-16 x $^1/_2$" screws into the post (Figure 2 & Detail B).

12. Next, the panel shell from one side of the Evoke panel must be removed to access the screw holes for panel to post assembly. To remove panel shells, see "Evoke Architectural Wall Assembly Instructions (KI-62760).

13. Position the Evoke panel to the universal post and secure using four $^1/_4$-20 x $^3/_4$" machine screws evenly spaced (Figure 2).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Lightline & Evoke Corner at Universal Post

Note: Different post types may be required depending on the connection choice. Refer to Intersection Identification on page 36. This instruction is for assembling one Lightline panel to a Evoke panel via a Universal Corner Post (Detail H, page 36). The in-line, 3-way and 4-way post connection types with Lightline and Evoke panels assemble the same way.

Note: Make sure the Lightline ceiling rail is aligned with the end of the Evoke panel ceiling rail, so that both panels and the post will install properly.

1. Lightline and Evoke ceiling rail and floor channels must be installed per the final KI Installation Drawings (shop prints). **Note:** Maximum distance between Lightline floor channel and post is 1".

2. Position the corner splice bracket between the Evoke and Lightline ceiling rails. Then secure the bracket to both ceiling rails using four #10-16 x $^1/_2$" self-drilling screws. (Figure 1 & Detail A).

3. The panel shell from one side of the Evoke panel must be removed to access the screw holes for panel to post assembly. To remove panel shells, see "Evoke Architectural Wall Assembly Instructions" (KI-62760).

4. Make sure all panels have been properly height adjusted. To adjust height on Evoke panel, see "Evoke Architectural Wall Assembly Instructions" (KI-62760). For Lightline panel height adjustment, use the supplied $^{15}/_{16}$" wrench to turn the leveling glide bolts at both ends of the floor panel. For more information, see page 21.

5. To determine the length that a universal post must be cut to, first place a piece of ceiling trim onto the ceiling rail and measure from the top of the trim, down to the floor at post location. Make allowance for how far the universal post will sink into the carpet (if present), then cut the bottom of the post to that dimension. Stand the universal post up under the ceiling rail and confirm that the top of the post lines up with the top of the ceiling trim (Figure 1, page 38).

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6. Position the universal corner post to the Evoke panel and secure using four $^1/_4$-20 x $^3/_4$" machine screws evenly spaced (Figure 1).

7. Prepare Lightline panel with flexible seal. See Lightline Assembly Instructions "Flexible Glazing Seal at Door Frame and Posts" (Figures 1 through 4, page 28). Once seal is installed, position a properly aligned and adjusted Lightline panel against the corner post (Figure 1).

8. Position the lower mounting bracket onto the floor channel of the Lightline panel as illustrated. Align the bracket holes with the floor channel and secure with two screws. If securing over hard floor, use two #10-24 x $^1/_4$" hard floor screws (V.12.0910) (shown). If installing over carpet, use two #14 x $^1/_2$" carpet gripper screws (46.2799). Then secure the panel-to-post bracket to the corner post with two 10-16 x $^1/_2$" screws into the post (Figure 1 & Detail B).

9. To finish installing the Lightline panel, refer to panel installation steps in this manual.

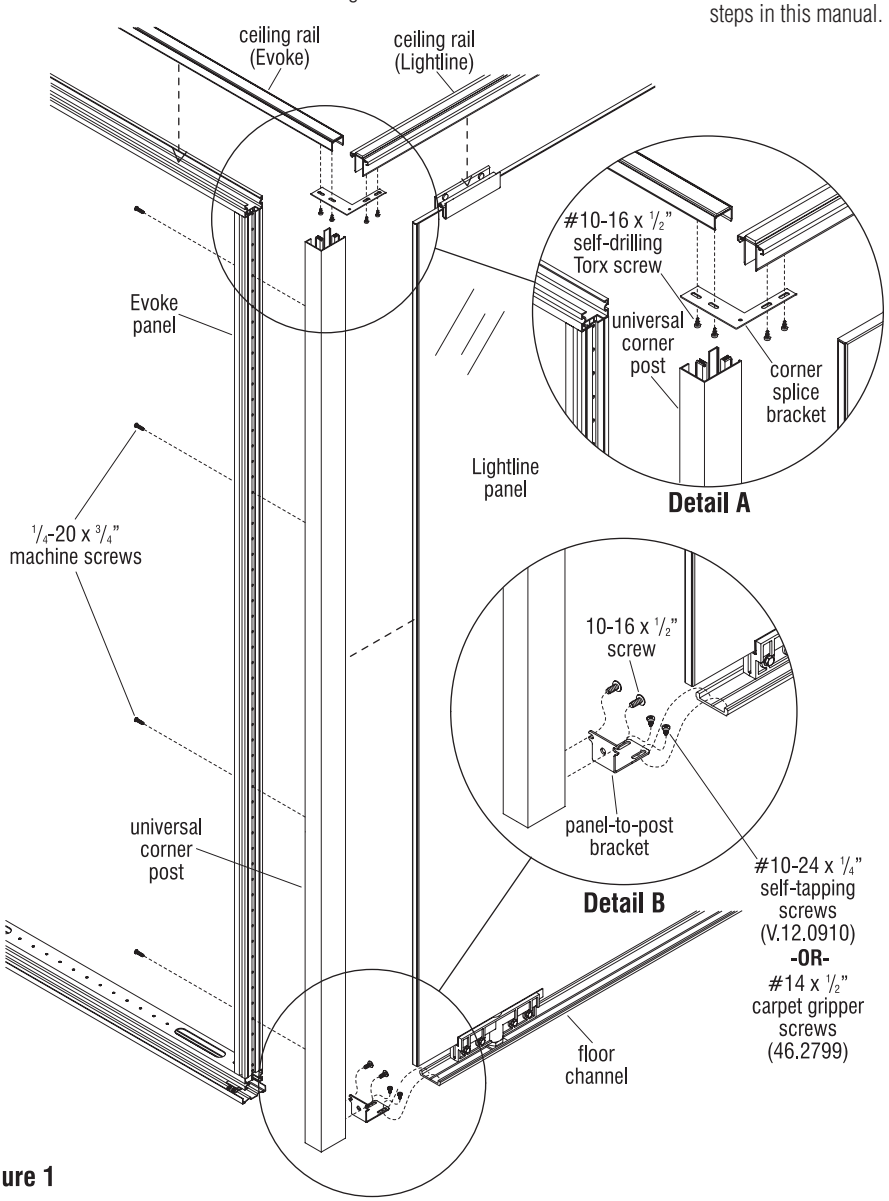


Figure 1

Lightline Pivot Door Corner at 2½" Corner Post

Note: The Lighline 2½" Post instructions below illustrates a Lightline panel corner configuration with door frame, where an extra 2½" post is required to help clearance the door handle from hitting the panel.

1. Lightline ceiling rail and floor channels must be installed per the final KI Installation Drawings (shop prints). **Note:** Maximum distance between Lightline floor channel and post is 1".

2. Position the corner splice bracket between the Lightline ceiling rails. Then secure the bracket to both ceiling rails using four #10-16 x ½" self-drilling screws. (Figure 1 & Detail A).

3. To determine the length that a 2½" corner post must be cut to, first place a piece of ceiling trim onto the ceiling rail and measure from the top of the trim, down to the floor at the post location. Make allowance for how far the post will sink into the carpet (if present), then cut the designated bottom of the post to that dimension. Stand the 2½" corner post up under the ceiling rail and confirm that the top of the post lines up with the top of the ceiling trim (Figure 1).

4. Follow appropriate instructions in this manual for the other components (i.e. panels and/or door frames), and begin to prepare to install those items next to the 2½" corner post.

   Note: For door frames, the door post will secure to the 2½" corner post with screws that pass through the door post, then thread into the vertical threaded groove in the 2½" post.

5. Prepare the door post which must install next to the 2½" corner post. Do so with a block and a mallet and carefully tap off both the pre-assembled inner and outer center caps. Tap on one end of each until it slides out of the post. The outer center cap may be put into stock, but the inner cap must be kept for re-installation after the door frame is connected to the 2½" post (Detail A).

6. Follow instructions in this manual appropriate for door frame installation (see page 43).

7. Once door frame is installed, notice the door post has four holes drilled all the way through the post. The inside face of the post has larger clearance holes that will allow the entire screw to pass through, and the outside face of the post has smaller clearance holes where just the shank of the screw will fit through. With a fully assembled door frame (see appropriate door instructions beginning on page 43) up against the 2½" corner post, pass a screw through the clearance hole in the inside face of the door post using a magnetic bit. Twist the screw into the vertical threaded groove in the 2½" post. Continue to attach the door post to the 2½" post by installing and tightening the three remaining screws (Figure 2).

8. Reinstall the inner door center cap to conceal the holes and install door leaf. (Figure 2).

9. Make sure all panels have been properly height adjusted. To adjust height on Lightline panel height adjustment, use the supplied 15/16" wrench to turn the leveling glide bolts at both ends of the floor panel. For more information, see page 21.

10. Next, prepare Lightline panel with flexible seal. See Lightline Assembly Instructions "Flexible Glazing Seal at Door Frame and Posts" (Figures 1 through 4, page 28). Once seal is installed, position a properly aligned and adjusted Lightline panel against the 2½" corner post (Figure 2).

11. Secure Lightline panel to 2½" corner post using a panel-to-post bracket. Position the panel-to-post bracket onto the floor channel of the Lightline panel as illustrated. Align the bracket holes with the floor channel and secure with two screws. If securing over hard floor, use two #10-24 x ¼" hard floor screws (V.12.0910) (shown). If installing over carpet, use two #14 x ½" carpet gripper screws (46.2799). Then secure the panel-to-post bracket to the corner post with two 10-16 x ½" screws into the post (Figure 2 & Detail B).

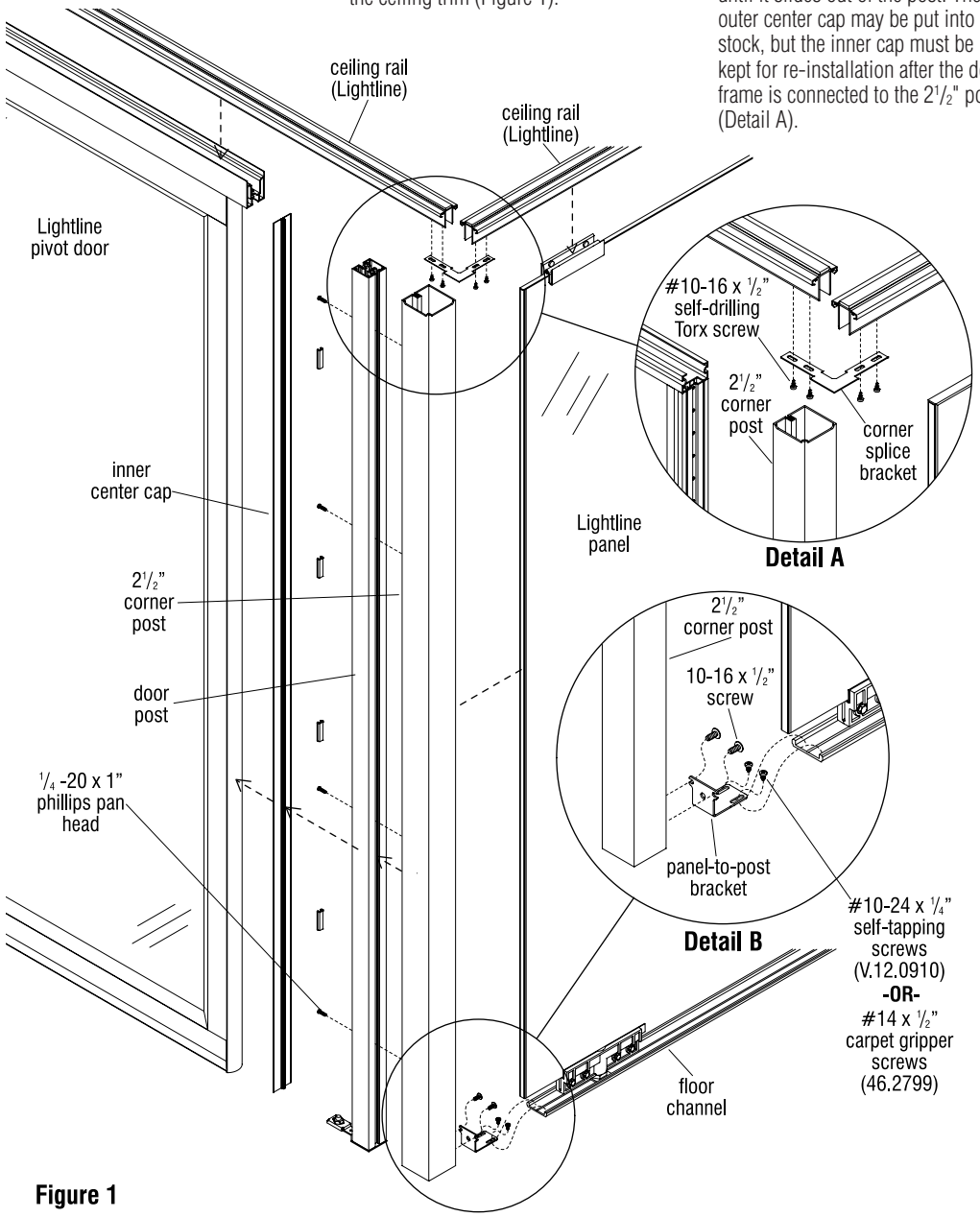


Figure 1

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Floor Channel to Door Post Measurement

1. Maximum distance floor channel to door post is 1". This is to account for the panel-to-panel bracket that must be installed (Figure 1).

Additional Top Clamp Installation

Note: Additional top clamps must be installed to the top of a panel (or two, size dependent) adjacent to a sliding door installation. The additional top clamps to the adjacent panel(s) are required for support of the door track channel (which may span more than one panel). Removal of the panel(s) will be required, if previously installed without required additional top clamps included.

1. If panel(s) next to a sliding door installation have been installed without "additional top clamps", reverse the installation process of page 17, and with two people, carefully remove the panel from the ceiling rail and floor channel and hold securely upright.

   Important: Site dependent on the panel widths adjacent to the location where a sliding door will install, if the length of the channel (50.1294) (Figure 1, page 42 & Figure 4, page 44) extends longer than one panel width (such as with narrower panels), the second panel will also require use of "additional top clamps" for support of the channel. Four clamps are provided per sliding door, so two each "additional top clamps" should be used for each of the two panels requiring the additional top clamps. In the case of one wider panel where channel (50.1294) does not extend to another panel, use three extra additional top clamps as illustrated in Figure 2.

2. Locate the additional top clamps provided and remove the release backing from both strips of VHB tape inside of the clamps. This tape is used to adhere the clamp to the top of the panel (Detail A).

3. One at a time, hold the top clamp at the top and squeeze the bottom open slightly. Carefully position and slip the top clamp onto the glass panel as illustrated. Assure that all three top clamps are evenly spaced (Figure 2).

4. Once clamps are installed onto panel top. Use hand clamp to compress top clamp on to panel. Make sure to apply five seconds of pressure at minimum on each end of clamp (Figure 3).

5. Install panel into floor channel and ceiling rail and proceed onto door installation steps (Figure 3).

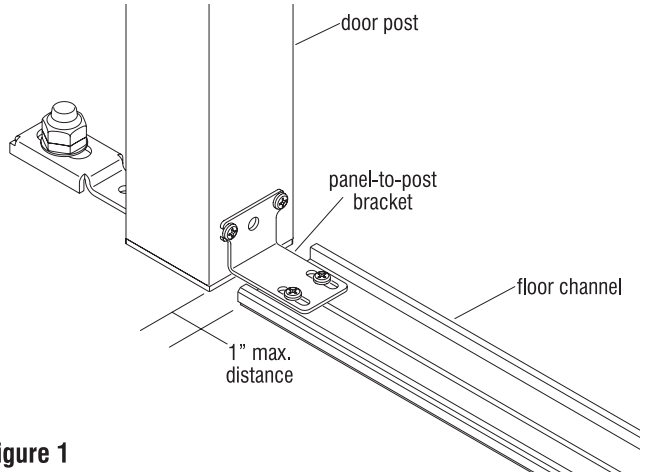
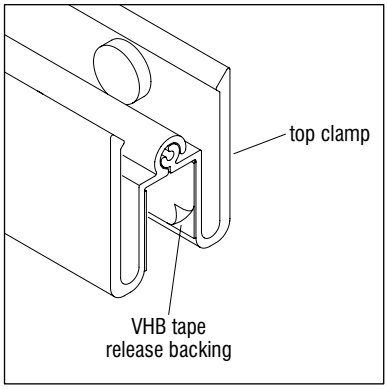


Figure 1



Detail A - Remove VHB Tape Backing

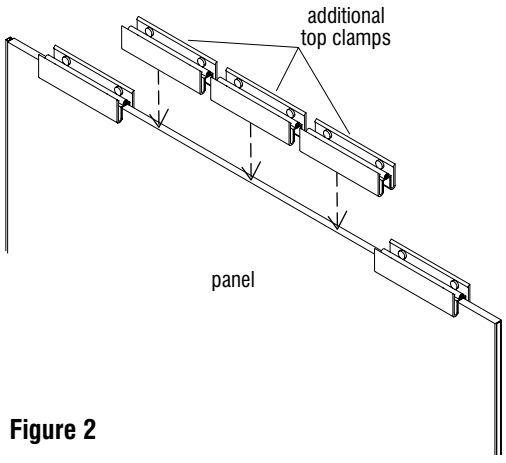


Figure 2

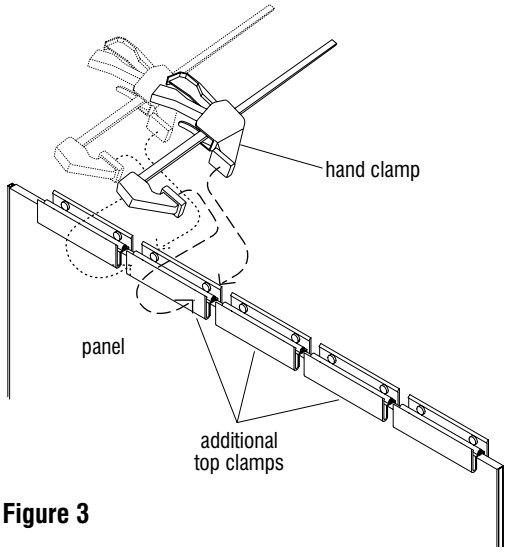


Figure 3

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

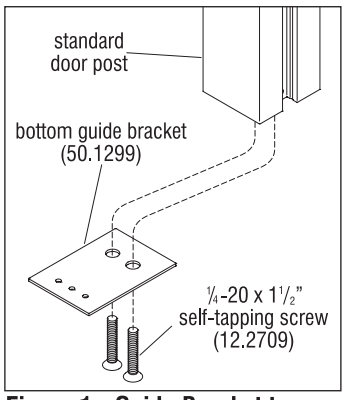


Figure 1 - Guide Bracket to Door Post Detail

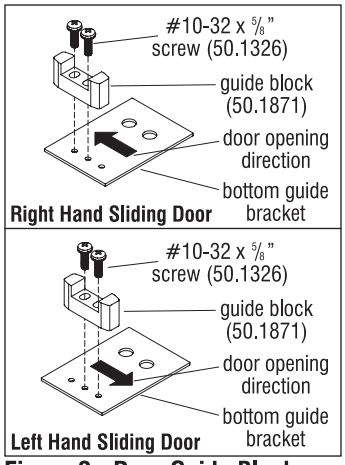


Figure 2 - Door Guide Block Placement Detail

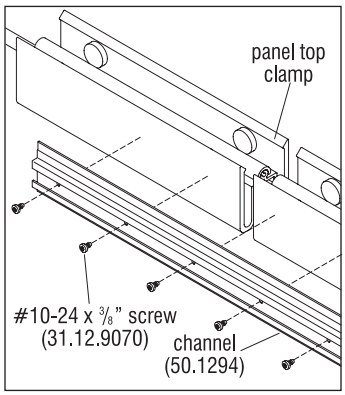


Figure 3 - Channel to Panel Clamp Detail

LJS-G Full-Height Glass Sliding Door Installation

Door Frame Assembly & Installation

Note: At one side of the door frame will be standard non-locking door post (50.1287.NL), and at the other side will be a sliding door strike post (50.1686. NL). Per the space-planning layout, the standard non-locking door post will receive a bottom guide bracket (50.1299) and the other will not. Each must be cut accurately to size, to fit their installation locations by following the instructions below.

1. To determine what length the "standard non-locking door post" must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the 1/16" thickness of the bottom guide bracket (50.1299) (Figure 4).

2. Locate the standard non-locking door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 4).

3. To determine what length the "sliding door strike post", follow step 1 above (Figure 4).

4. Locate the standard sliding door strike post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 4).

5. Stand both door posts up under the ceiling rail at their respective installation locations, take into account the bottom guide bracket which will be installed to the standard non-locking door post later, and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 4).

6. Lay the standard and sliding door strike posts with the top frame channel onto a soft protective surface on the floor in the correct orientation. Secure three pieces together using four 1/4 -20 x 2" Torx screws (50.1780) (Figure 4).

7. Install the guide block on the bottom guide bracket in the correct position using two #10-32 x 5/8" Torx screws (50.1326) (Figure 2).

8. Install the bottom guide bracket onto the door post using two 1/4 -20 x 1 1/2" self-tapping screws (12.2709) (Figures 1 & 4).

9. Stand the door frame assembly up and into the ceiling rail.

Sliding Door Track Installation

10. To mount the sliding door track (50.1900), if not previously completed, start by installing the additional top clamps (study page 42) to the top of the adjacent panel(s) which will receive the channel and door track, then re-install the panel(s). Identify and locate the channel (50.1294) which will install to the additional panel top clamps on the adjacent panel (Figures 3 & 4).

11. Position the channel (50.1294) onto the additional panel clamps and push it up until it fully seats against the ceiling rail and against the sliding door frame. Secure the channel to the clamps using twelve #10-24 x 3/8" screws (31.12.9070). Assure the screws secure into the clamps and not into gaps between them (Figure 4).

12. Install the ceiling trim (50.1814) over the installed channel (50.1294), butting it against the top frame channel (50.1291) (Figure 4).

13. Locate the sliding door track (50.1900) and assure it is clean and free of debris. With the assistance of two people, position the track against the top frame channel and the ceiling trim about 1 1/8" from the bottom of the top frame channel to the bottom of the track (Figure 4). Mark each screw hole.

    Note: The valance should be flush with the bottom of the top frame channel when installed.

14. Remove the track and center punch each marked screw hole. Then drill pilot holes using a 5/32" drill bit.

15. Position the track over the pilot holes and secure using eight #10-24 x 3/4" self-tapping screws (50.1833) (Figure 4).

16. Insert the trolley assembly (soft stop trolley assembly, 50.1909 or bumper stop trolley assembly, 50.1680 - not shown) into the door track (Figure 4). See separate instructions included with the door stops and trolleys.

Sliding Door Leaf Assembly

17. To hang the sliding door leaf, begin by attaching the continuous hanger assembly (50.1682) to the top of the door leaf. First, apply a strip of seal (50.1659) across the top of the door leaf aligning the non-taped edge to the top edge of the door leaf (Figure 4 & Detail A).

    Note: Seal can be applied to either side of door leaf. The seal will act as a shim between the continuous hanger assembly and the glass.

18. Next, remove the M6 x 30mm screws from the glass holder inserts (50.1660) and place the glass holder inserts into the notches at the top of door leaf. Then, slide the continuous hanger assembly over the top of the door leaf (Figure 4, Detail A).

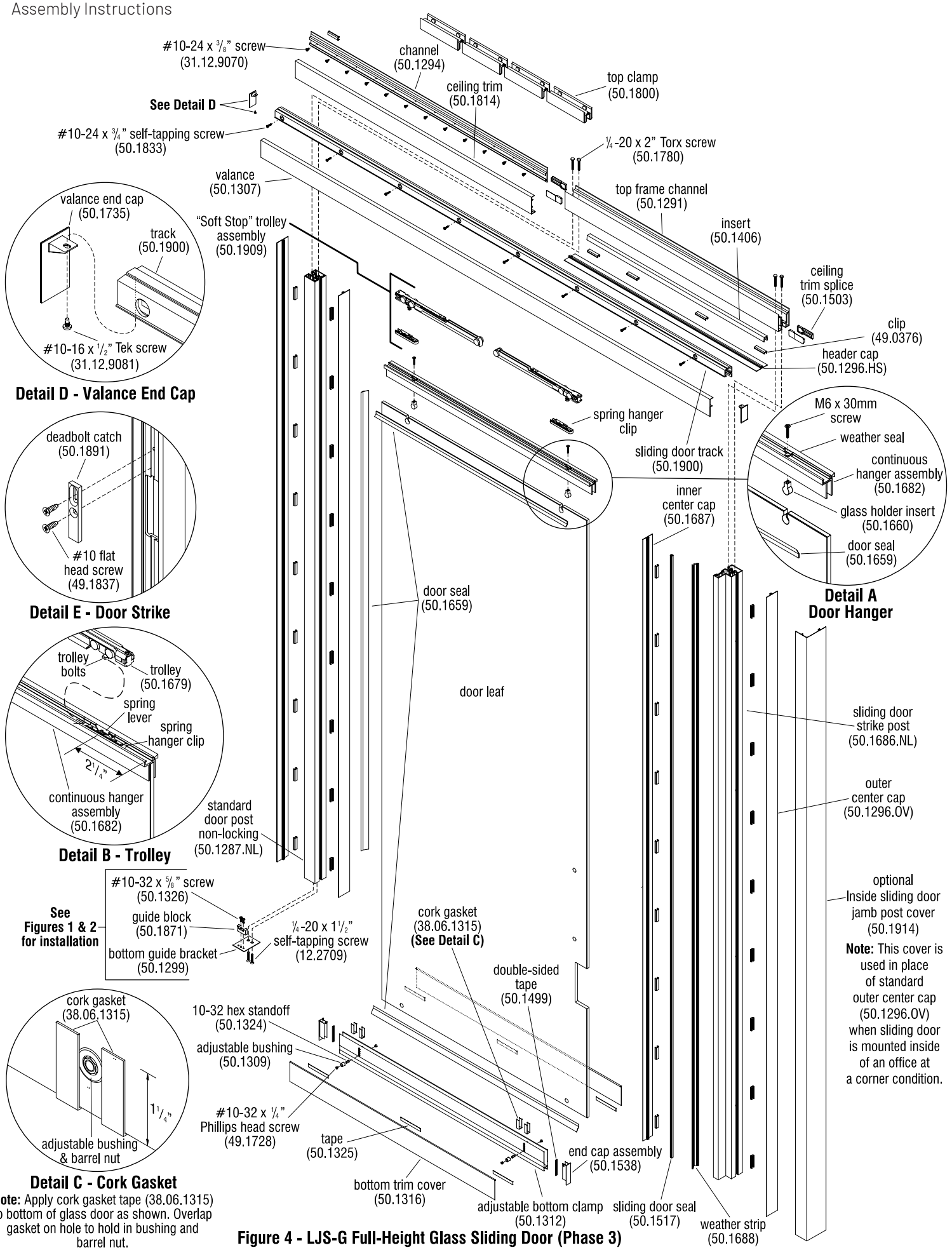


Figure 4 - LJS-G Full-Height Glass Sliding Door (Phase 3)

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

19. Orientate the continuous hanger assembly so the weather seal faces the door frame. Attach the hanger to the glass using the M6 x 30mm screws through the countersunk holes in the top of the hanger.

    Note: Spring hanger clips are handed so be sure to orientate the spring hanger clips so the spring lever always faces the outside of the door leaf and pivots away from the door frame.

20. Slide the spring hanger clips into the slot in the continuous hanger assembly to the dimension shown in Detail B and tighten screws.

21. With the assistance of a second person, hang the door by first aligning the trolley bolts with the spring hanger clips. The trolley bolts slide into spring hanger clips and lock into place with spring levers (Figure 1 & Detail B).

Adjustable Bottom Clamp Installation

22. To attach the adjustable bottom clamp (50.1312), make sure the door leaf is partially positioned over the door opening. Then insert two adjustable bushings (50.1309) into the two holes in the bottom of the door leaf (Figure 4).

23. Apply four strips of gasket cork (38.06.1315), two on each side of the two holes, overlapping the hole a little to retain the bushing at each side. Start at the top of the hole and go down around the bottom edge of the glass, and up to the top of the hole on the opposite side of the glass (Figure 4 & Detail C). Note the cork height of 1¼" at each side.

24. Slide the adjustable bottom clamp on the door leaf and over the guide block from the opposite end of the sliding door strike post (Figure 4).

25. Spin a #10-32 hex standoff (50.1324) on one of the #10-32 x ¼" Phillips head screws (49.1728). Do the same for the second set (Figure 4).

26. Position the adjustable bottom clamp to approximately ½" off the floor and install both the screw and hex standoff through the two bushings (Figure 4).

27. Install both of the second screws into the opposite end of the hex standoffs (Figure 4). Do not fully tighten.

28. Install both end caps (50.1538) with double-sided tape (50.1499) on the adjustable bottom clamp. Push the end caps all of the way in so that the cap is tight up against the edge of the glass (Figure 4).

29. Tighten the #10-32 x ¼" Phillips head screws to secure the adjustable bottom clamp to the door leaf (Figure 4).

30. Mark and cut the bottom trim covers (50.1316) to the width of the glass, then remove the release paper from the adhesive tape pads on the outside of the clamp (Figure 4).

31. Hang the covers on the top of the clamp and rotate down. Press on the covers to make sure the covers and the tape are fully seated on the adjustable bottom clamp (Figure 4).

32. Adjust the height of the door leaf by adjusting the bolts and nuts on trolley assembly (50.1909) (Figure 4).

Valance Installation

33. Measure the distance from the outside of the door frame to the end of the adjacent panel(s) and cut the valance (50.1307) to length (Figure 4).

34. Position the valance end caps (50.1735) on both ends of the track and secure using one #10-16 x ½" Tek screw (31.12.9081) at each end cap (Figure 4 & Detail D).

35. Install the valance onto the track and end caps (Figure 4).

Door Handle Installation

36. Install door handle and lock hardware per handle instructions.

Locking Door Installation

37. For locking doors, remove sliding door seal (50.1517) from the slot in the sliding door strike post and set it aside (Figure 4).

38. Position the sliding door deadbolt catch (50.1891) into the cutout in the sliding door strike post. Adjust the position so that the slot of the deadbolt catch is over the pre-drilled hole and secure using a #10 flat head screw (49.1837) (Detail E).

39. Close the door and operate the lock to check the height of the catch. Re-open the door, loosen the screw and adjust the height of the catch accordingly for proper hook bolt engagement (Detail E).

40. Once the height of the catch is set, drill a pilot hole into the first wall of sliding door strike post through the bottom hole of the catch (Detail E).

41. Install a second #10 flat head screw to lock the catch in place (Detail E).

42. To re-install the bulb seal, first measure from the top of the catch to the top of strike post. Cut a section out of the bulb seal to that dimension and slide it back into the slot of the strike post from the top (Figure 4).

43. Next, measure from the bottom of the cutout to the floor and cut the remaining section of the seal to that length. Slide seal into the slot of the strike post from the bottom of cutout to the floor (Figure 1 & Detail E).

44. Follow other instructions in this manual to complete attaching the door frame to the adjacent panels, trim and sound seal.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LJS-A/LJS-W Full-Height Aluminum/Wood Sliding Door Installation

Door Frame Assembly & Installation

Note: At one side of the door frame will be standard non-locking door post (50.1287.NL), and at the other side will be a sliding door jamb post (50.1694.NL). Per the space-planning layout, the standard non-locking door post will receive a bottom guide bracket (50.1299) and the other will not. Each must be cut accurately to size, to fit their installation locations by following the instructions below.

1. To determine what length the "standard non-locking door post" must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the $^{1}/_{16}$" thickness of the bottom guide bracket (50.1299) which must be installed to this door post (Figure 4).

2. Locate the standard non-locking door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 4).

3. To determine what length the "sliding door jamb post", must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet (Figure 4).

4. Locate the sliding door jamb post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 4).

5. Stand both door posts up under the ceiling rail at their respective installation locations, take into account the bottom guide bracket which will be installed to the standard non-locking door post later, and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 4).

6. Lay the standard and sliding door jamb posts with the top frame channel onto a soft, protective surface on the floor in the correct orientation. Secure the three pieces together using four $^{1}/_{4}$ -20 x 2" Torx screws (50.1780) (Figure 4).

7. Install the guide block on the bottom guide bracket in the correct position using two #10-32 x $^{5}/_{8}$" Torx screws (Figure 2).

8. Install the bottom guide bracket onto the door post using two $^{1}/_{4}$ -20 x $1^{1}/_{2}$" self-tapping screws (Figure 2).

9. Stand the door frame assembly up and into the ceiling rail.

Sliding Door Track Installation

10. To mount the sliding door track (50.1903), if not previously completed, start by installing the additional top clamps (study page 42) to the top of the adjacent panel(s) which will receive the channel and door track, then re-install the panel(s). Identify and locate the channel (50.1294) which will install to the additional panel top clamps on the adjacent panel (Figures 3 & 4).

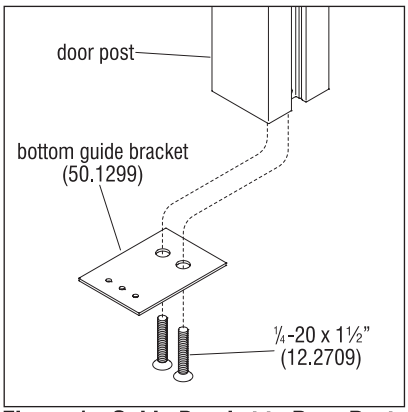


Figure 1 - Guide Bracket to Door Post Detail

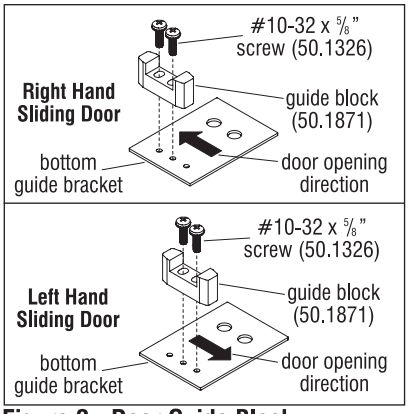


Figure 2 - Door Guide Block Placement Detail

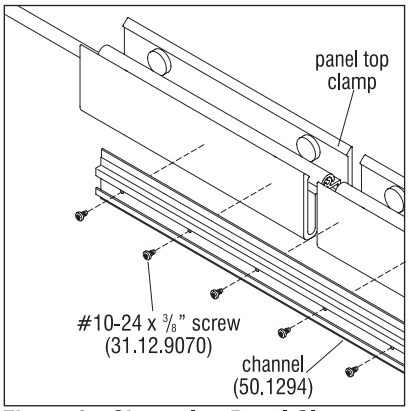


Figure 3 - Channel to Panel Clamp Detail

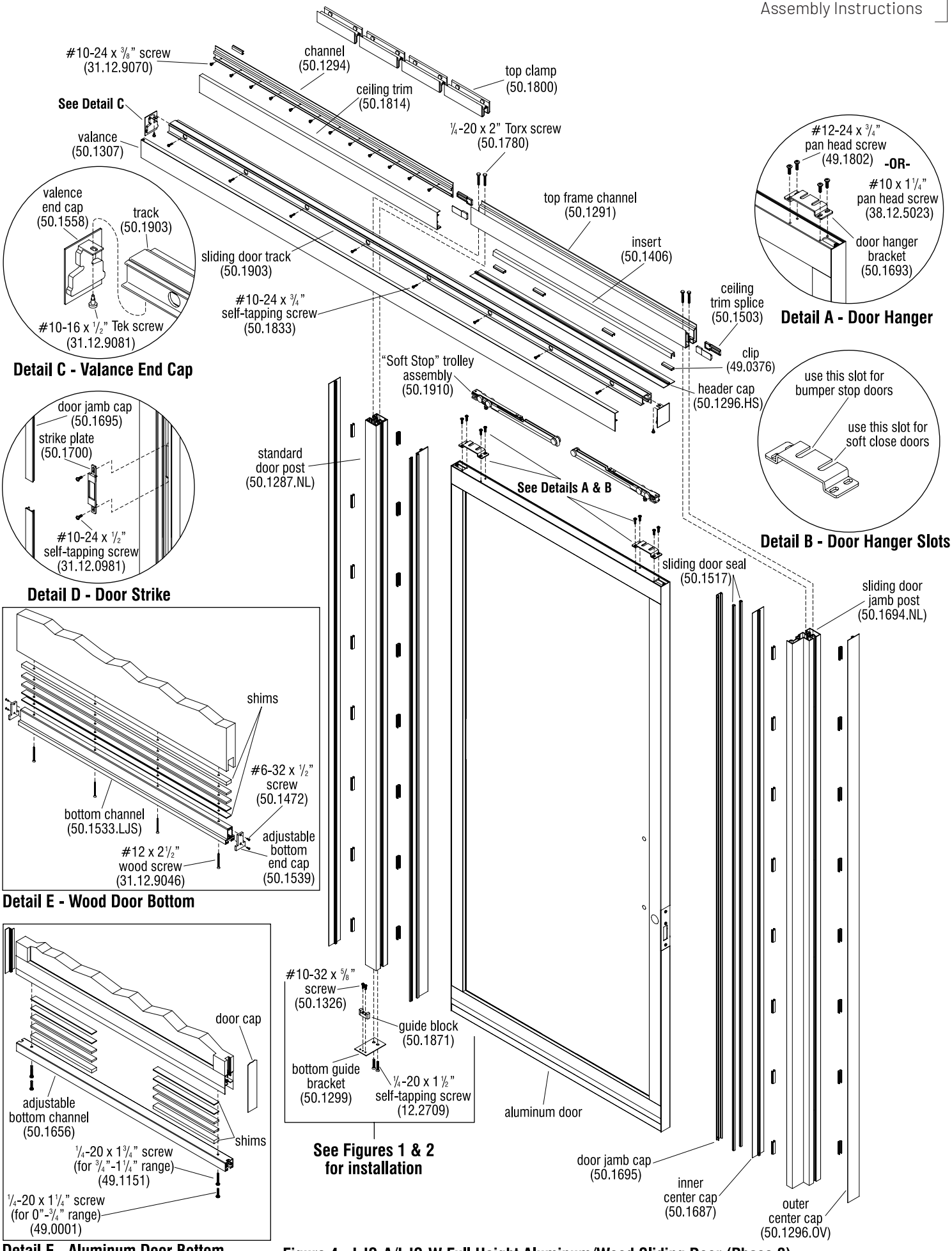


Figure 4 - LJS-A/LJS-W Full Height Aluminum/Wood Sliding Door (Phase 3)

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

11. Position the channel (50.1294) onto the additional panel clamps and push it up until it fully seats against the ceiling rail and against the sliding door frame. Secure the channel to the clamps using twelve #10-24 x 3/8" screws (31.12.9070). Assure the screws secure into the clamps and not into gaps between them (Figure 4).

12. Install the ceiling trim (50.1814) over the installed channel (50.1294), butting it against the top frame channel (50.1291) (Figure 4).

13. Locate the sliding door track (50.1903) and assure it is clean and free of debris. With the assistance of two people, position the track against the top frame channel and the ceiling trim about 1 1/8" from the bottom of the top frame channel to the bottom of the track (Figure 4). If needed, adjust the position of the track to match the level of the floor. Mark each screw hole.

    Note: The valance should be flush with the bottom of the top frame channel when installed.

14. Remove the track and center punch each marked screw hole. Then drill pilot holes using a 5/32" drill bit.

15. Position the track over the pilot holes and secure using eight #10-24 x 3/4" self-tapping screws (Figure 4).

16. Insert the trolley assembly (soft stop trolley assembly, 50.1910 or bumper stop trolley assembly, 50.1334.2 - not shown) into the door track (Figure 4). See separate instructions included with the door stops and trolleys.

Adjustable Bottom Channel Installation - Wood Door

17. To install the adjustable bottom channel for wood doors, first measure the height required for the door allowing for a ½" undercut. The door height should be measured from the bottom of the hanger bolt on the trolley assembly (50.1910) to the floor minus the ½" undercut.

18. Stack the appropriate amount of shims with the bottom channel to achieve the door height measurement noted (Detail E).

19. Attach the bottom channel (50.1533.LJS) to the door leaf using four #12 x 2 1/2" wood screws (31.12.9046) through the pre-drilled holes in the channel (Detail E).

20. To install the adjustable bottom end caps, measure from the bottom of the bottom channel to the top of the adjustable bottom notch in the door.

21. Cut the top portion of the adjustable bottom end caps (50.1539) to that measurement.

22. Position both adjustable bottom end caps on the bottom channel and secure using four #6-32 x 1/2" screws (50.1472) (Detail E).

23. Adjust the height of the door leaf by adjusting the bolts and nuts on "Soft Stop" trolley assembly (50.1910) (Figure 4).

Adjustable Bottom Channel Installation - Aluminum Door

24. To install the adjustable bottom channel (50.1656) for aluminum doors, first measure the height required for the door allowing for a 1/2" undercut. The door height should be measured from the bottom of the hanger bolt on the trolley assembly (50.1910) to the floor minus the 1/2" undercut (Figure 4 & Detail F).

25. Remove door caps from both edges of the door and set them aside (Detail F).

26. Remove two 1/4 -20 x 1 3/4" screws (49.1151), channel and shims from the bottom of the aluminum door (Detail F).

27. Re-stack the required amount of shims with the bottom channel to achieve the door height measurement noted (Detail F).

28. For a shim thickness of 0" to 3/4", use two 1/4 -20 x 1 1/4" screws (49.0001) to secure the bottom channel to the door. For a shim thickness of 3/4" to 1 1/4", use two 1/4 -20 x 1 3/4" screws (49.1151) to secure the bottom channel to the door (Detail F).

29. Cut door caps to the height of door and re-install (Detail F).

Sliding Door Hanger Assembly

30. To hang the sliding door leaf, begin by attaching the hanger brackets (50.1693) to top of door with the screws provided. For aluminum doors, use #12-24 x 3/4" pan head screws (49.1802). For wood doors, use #10 x 1 1/4" pan head screws (38.12.5023) (Figure 4, Detail A).

31. With the assistance of a second person, position the door leaf over the guide block and then slide the appropriate door hanger bracket slots into the hanger bolts on the trolley. Secure by tightening the retaining nuts on the hanger bolts (Figure 4 & Detail B).

Valance Installation

32. Measure the distance from the outside of the door frame to the end of the adjacent panel(s) and cut the valance (50.1307) to length (Figure 4).

33. Position the valance end caps (50.1558) on both ends of the track and secure using two #10-16 x 1/2" Tek screws (31.12.9081) (Figure 4 & Detail C).

34. Install the valance onto the track and end caps (Figure 4).

Door Handle Installation

35. Install door handle and lock hardware per handle instructions.

Locking Door Installation

36. For locking doors, remove the door jamb cap (50.1695) from the slot in the sliding door strike post and set it aside (Figure 4).

37. Position the sliding door strike plate (50.1700) over the cutout in the sliding door strike post. Adjust the position so that the holes of the strike plate are over the pre-drilled holes and secure using two #10-24 x 1/2" self-tapping screws (31.12.0981) (Detail D).

38. Close the door and operate the lock to check the height of the strike plate. Re-open the door, loosen the screws and adjust the height of the strike plate accordingly for proper hook bolt engagement (Detail D). Re-tighten screws to secure the strike plate in place.

39. To re-install the door jamb cap, first measure from the top of the strike plate to the top of strike post. Cut a section out of the door jamb cap to that dimension and install it back into the slot of the strike post (Figure 4 & Detail D).

40. Next, measure from the bottom of the strike plate to the floor and cut the remaining section of the door jamb cap to that length. Install the door jamb cap into the slot of the strike post (Figure 4 & Detail D).

41. Follow other instructions in this manual to complete attaching the door frame to the adjacent panels, trim and sound seal.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LUP-G Full-Height Glass Pivot Door Installation

Door Frame Assembly & Installation

Note: At one side of the door frame will be a standard strike-side door post (50.1401), and at the other, "pivot-side" will be a standard non-locking door post (50.1287.NL). The standard strike side door post comes pre-assembled with clips, molding, bulb seal, strike box and strike plate. The standard non-locking "pivot-side" door post comes pre-assembled with clips, molding, bulb seal and pivot door plate assembly at the bottom. Each must be cut accurately to size, to fit their installation locations by following the instructions below.

1. To determine what length the "standard strike-side door post" (50.1401) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet (Figure 1).

2. Locate the standard strike-side door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 1).

3. To determine what length the opposite side "standard non-locking door post" (50.1287.NL) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the $^1/_8$" thickness of the pivot door plate (50.1369) (Figure 1).

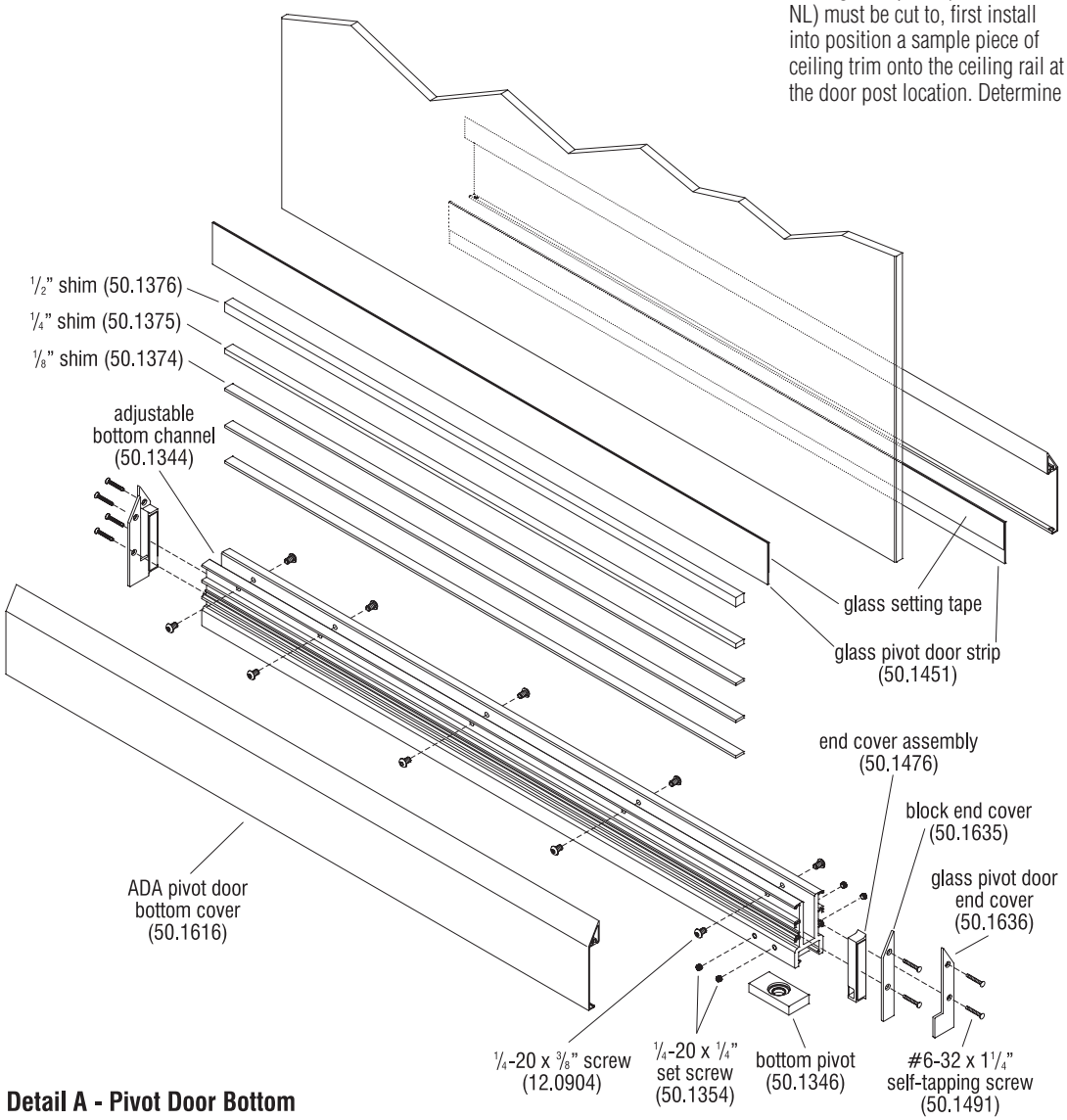
4. Locate the standard non-locking door post and remove the two ¼-20 x $1^1/_2$" screws attaching the pivot door plate (50.1369) to the underside of the door post. Then measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end (taking into account for carpet and the pivot door plate). Cut the bottom of the post off square at that length, then re-install the pivot door plate removed above in this step (Figure 1).

5. Stand both door posts up under the ceiling rail at their respective installation locations and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 1).

6. Lay the posts with the top frame channel onto a soft protective surface on the floor, in the correct orientation. Secure the pieces together using four $^1/_4$ -20 x 2" Torx screws (50.1780) (Figure 1).

7. If not already installed, position the pivot block assembly (50.1861) over the pre-drilled holes in the top frame channel and secure using two $^1/_4$ -20 x $^1/_2$" self-tapping screws (49.1270) (Figure 1).

8. Stand the door frame assembly up and into the ceiling rail. Make sure the door frame is plumb.



Detail A - Pivot Door Bottom

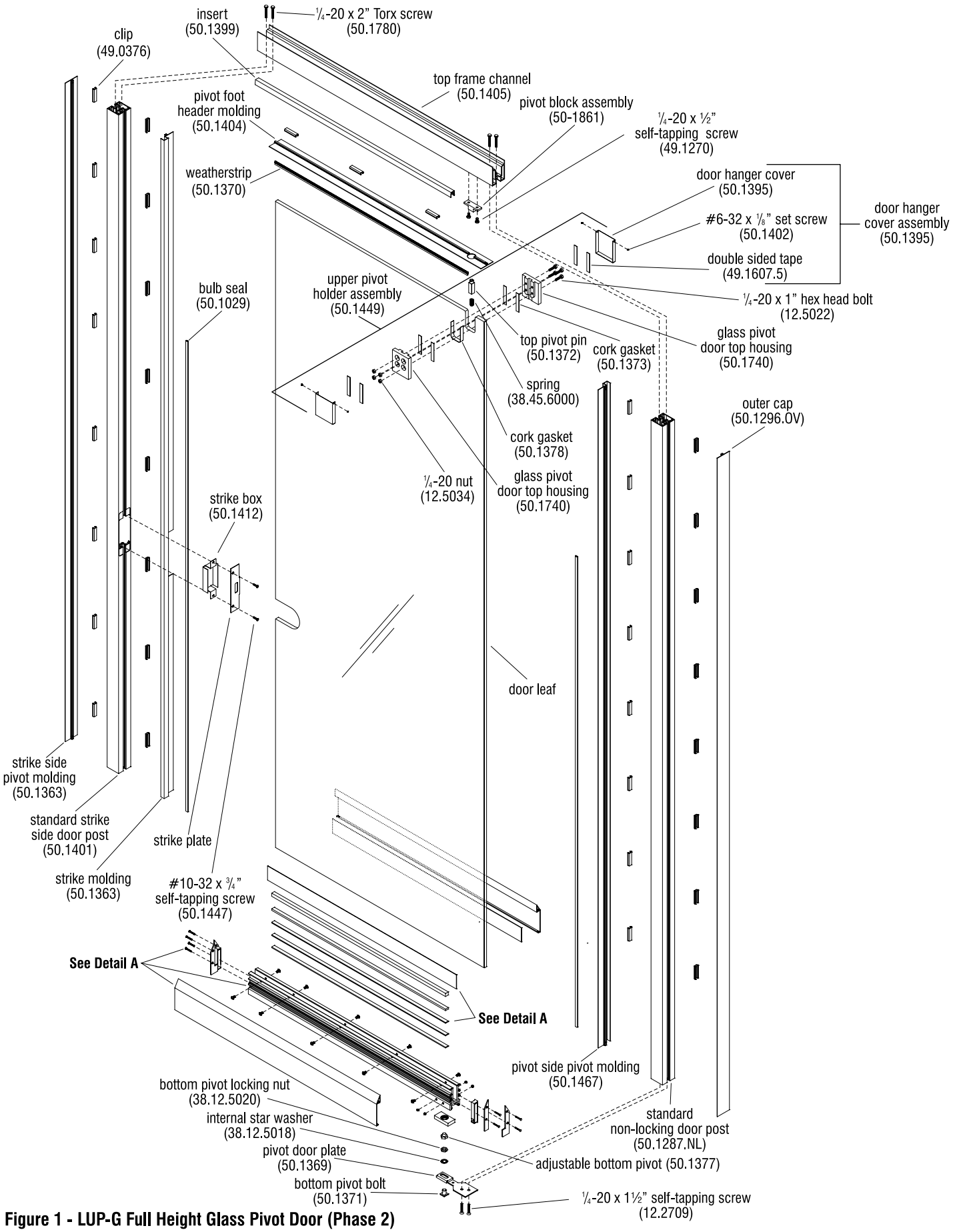


Figure 1 - LUP-G Full Height Glass Pivot Door (Phase 2)

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Door Leaf Pivot Installation

9. To prepare the pivot door leaf, begin by attaching the upper pivot holder assembly (50.1449). If you have closer housing kit (50.1730) please go to page 71 for instructions. Apply cork gasket (50.1378) around the perimeter of the notch in the top of the door leaf (Figure 1).

10. Apply two pieces of cork gasket (50.1373) to the inside of one half of the glass pivot door top housing (50.1740) (Figure 1). Repeat this step for the other half.

11. Place both glass pivot door top housing halves (50.1740) into the notch and secure using four $^1/_4$ -20 x 1" hex head bolts (12.5022) and $^1/_4$ -20 hex nuts (12.5034). Make sure the housing halves assembly is fully seated into the notch and tighten nuts firmly (Figure 1).

12. Check to see if the housing nuts and bolts are properly tightened by temporarily inserting the spring (38.45.6000) and top pivot pin (50.1372). It should not rattle, but still move freely. Remove the pivot pin and spring once the housing assembly is properly tightened. Do not install the spring, pivot pin and trim covers at this time (Figure 1).

Adjustable Bottom Channel Installation

13. To get an accurate door height measurement, first install the bottom pivot (50.1346) into the adjustable bottom channel (50.1344) and secure using four $^1/_4$ -20 x $^1/_4$" set screws (50.1354) (Detail A).

14. Next place the adjustable bottom channel with bottom pivot onto the adjustable bottom pivot (50.1377) (Figure 1).

15. With the assistance of a second person, measure from the bottom of the upper pivot bushing (50.1862) down to the inside bottom of the adjustable bottom channel. Note the measurement for the door height and for installing the right amount of shims (Detail A).

16. To attach the bottom channel assembly to the door leaf, begin by starting $^1/_4$ -20 x $^3/_8$" screws (12.0904) into the adjustable bottom channel (50.1344) (Detail A). Do not twist screws past the inner surface of the adjustable bottom channel.

17. Place the two glass pivot door strips (50.1451) into the adjustable bottom channel so that the glass setting tape is facing inward and toward the top of the channel (Detail A).

18. Place the adjustable bottom channel with the door strips onto the bottom of the door leaf making sure that a pivot door strip is positioned on both sides of the glass (Detail A).

19. Position the adjustable bottom channel onto the bottom of the door leaf. Adjust the distance of the bottom channel by using a flat head screw driver and pushing against the edge of the pivot door strip. Push down on the pivot door strip until the distance from the top of the door leaf to the inside bottom of the adjustable bottom channel matches the previously measured height (Detail A).

20. Measure the space between the adjustable bottom channel and door leaf for the required amount shims (50.1374, 50.1375 & 50.1376) (Detail A).

21. Slide the stack of shims inside the channel between the glass and the bottom of the channel. Make sure the adjustable bottom channel and shims sit firmly against the door leaf (Detail A).

22. Tighten ten $^1/_4$ -20 x $^3/_8$" screws (12.0904) (Detail A).

Door Assembly Installation

23. With the assistance of a second person, install the door assembly onto the adjustable bottom pivot (Figure 1).

24. Insert the spring (38.45.6000) and top pivot (50.1372) into the glass pivot door top housing. Using the supplied tool, compress the spring-loaded pivot down and move the door into position, then release the spring-loaded pivot into the upper pivot bushing (Figure 1).

25. Check the door for proper height and lock engagement. Adjust the height of the door as needed by turning the adjustable bottom pivot (Figure 1).

Pivot Door Bottom Cover Installation

26. Peel the tape backer off of the end cover assembly (50.1476) (Detail A).

27. Position the end cover assembly with the adhesive end against the block end cover (50.1635) while aligning the holes in the orientation illustrated (Detail A). Press both parts firmly together to make sure they are fully seated.

28. Position the end cover assembly with the block end cover on the adjustable bottom channel and secure using a #6-32 x $1^1/_4$" self-tapping screw (50.1491) through the bottom hole (Detail A). Do not install a screw in the top hole until the bottom cover is installed.

29. Position the glass pivot door end cover (50.1636) on the adjustable bottom channel and secure using a #6-32 x $1^1/_4$" self-tapping screw (50.1491) through the bottom hole (Detail A). Do not install a screw in the top hole until the bottom cover is installed.

30. Repeat steps to install the block end cover assembly and glass pivot door end cover on the opposite end of the adjustable bottom channel (Detail A).

31. Once the end covers are installed, measure between the end covers and cut the two bottom covers (50.1616) to that measurement so they fit tightly between the end covers (Detail A).

32. Install the bottom covers onto the bottom channel by snapping them into place (Detail A).

33. Secure the bottom covers by installing four #6-32 x $1^1/_4$" self-tapping screws (50.1491) through the top holes of the block end covers and glass pivot door end covers.

34. Follow other instructions in this manual to complete attaching the door handle/lock, the door frame to adjacent panels and trim.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LUP-AL Full-Height Wood Pivot Door Installation

Door Frame Assembly & Installation

Note: At one side of the door frame will be a standard strike-side door post (50.1401), and at the other, "pivot-side" will be a standard non-locking door post (50.1287.NL) (Figure 1, page 53). The standard strike side door post comes pre-assembled with clips, molding, bulb seal, strike box and lock strike. The standard non-locking "pivot-side" door post comes pre-assembled with clips, molding, bulb seal and pivot door plate assembly at the bottom. Each must be cut accurately to size, to fit their installation locations by following the instructions below.

1. To determine what length the "standard strike-side door post" (50.1401) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet (Figure 1).

2. Locate the standard strike-side door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 1).

3. To determine what length the opposite side "standard non-locking door post" (50.1287.NL) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the $^1/_8$" thickness of the pivot door plate (50.1369) (Figure 1).

4. Locate the standard non-locking door post and remove the two ¼-20 x 1$^1/_2$" screws attaching the pivot door plate (50.1369) to the underside of the door post. Then measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end (taking into account for carpet and the pivot door plate). Cut the bottom of the post off square at that length, then re-install the pivot door plate removed above in this step (Figure 1).

5. Stand both door posts up under the ceiling rail at their respective installation locations and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 1).

6. Lay the posts with the top frame channel onto a soft, protective surface on the floor, in the correct orientation. Secure the pieces together using four $^1/_4$ -20 x 2" Torx screws (50.1780) (Figure 1).

7. If not already installed, position the pivot block assembly (50.1861) over the pre-drilled holes in the top frame channel and secure using two $^1/_4$ -20 x $^1/_2$" self-tapping screws (49.1270) (Figure 1).

8. Stand the door frame assembly up and into the ceiling rail. Make sure the door frame is plumb.

Door Leaf Pivot Installation

9. To prepare the pivot door leaf, begin by installing the upper pivot housing (50.1772). Position the upper pivot housing into the cutout in the top of the door leaf and secure using four #10-24 x $^3/_4$" self-tapping screws (50.1447) (Figure 1). Do not install the spring and top pivot at this time.

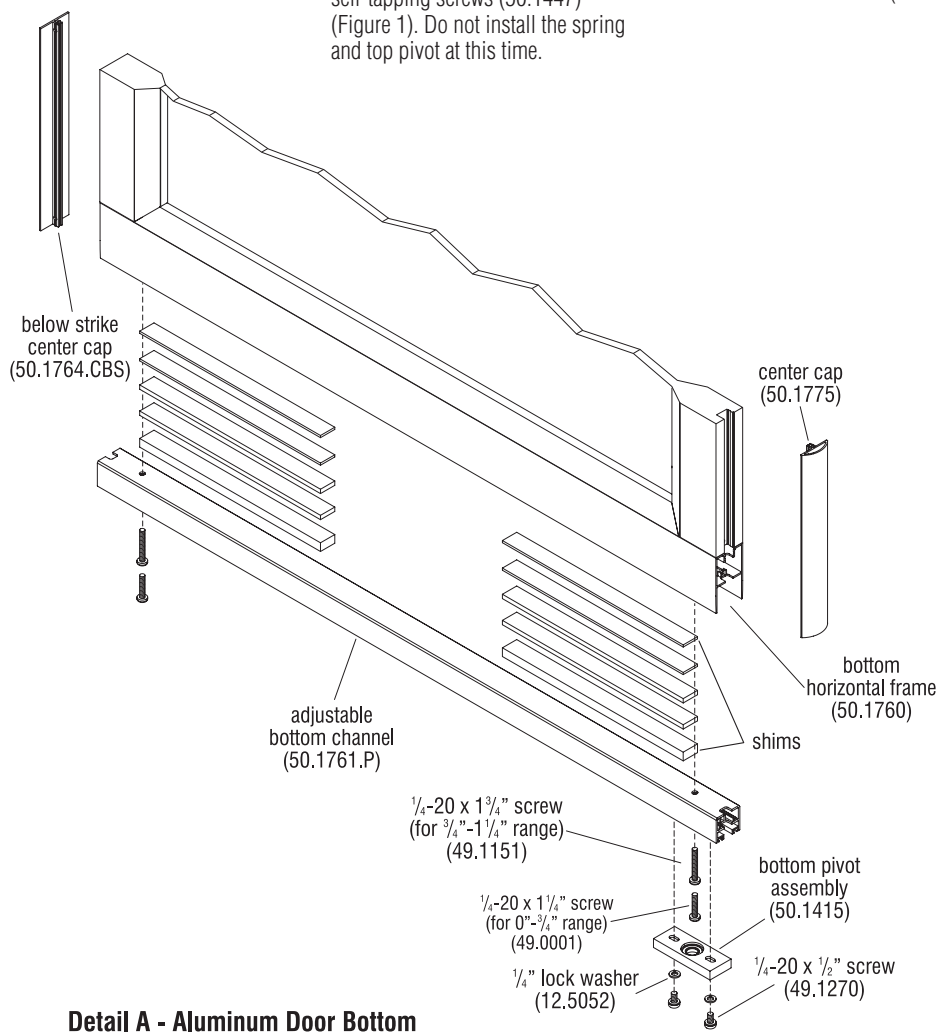
Adjustable Aluminum Pivot Channel Installation

10. To get an accurate door height measurement, slide the bottom pivot assembly (50.1415) into the adjustable bottom channel (50.1761.P) and secure using two $^1/_4$" lock washers (12.5052) and $^1/_4$ -20 x $^1/_2$" screws (49.1270) (Detail A).

11. Next, place the adjustable bottom channel, with installed bottom pivot assembly onto the adjustable bottom pivot (50.1377) (Figure 1).

12. With the assistance of a second person, measure from the bottom of the upper pivot bushing down to the top of the adjustable bottom channel. Note the measurement for the door height and for installing the right amount of shims (Detail A).

13. To attach the adjustable bottom channel to the door leaf, begin by placing the adjustable bottom channel into the bottom of the door leaf horizontal frame (Detail A).



Detail A - Aluminum Door Bottom

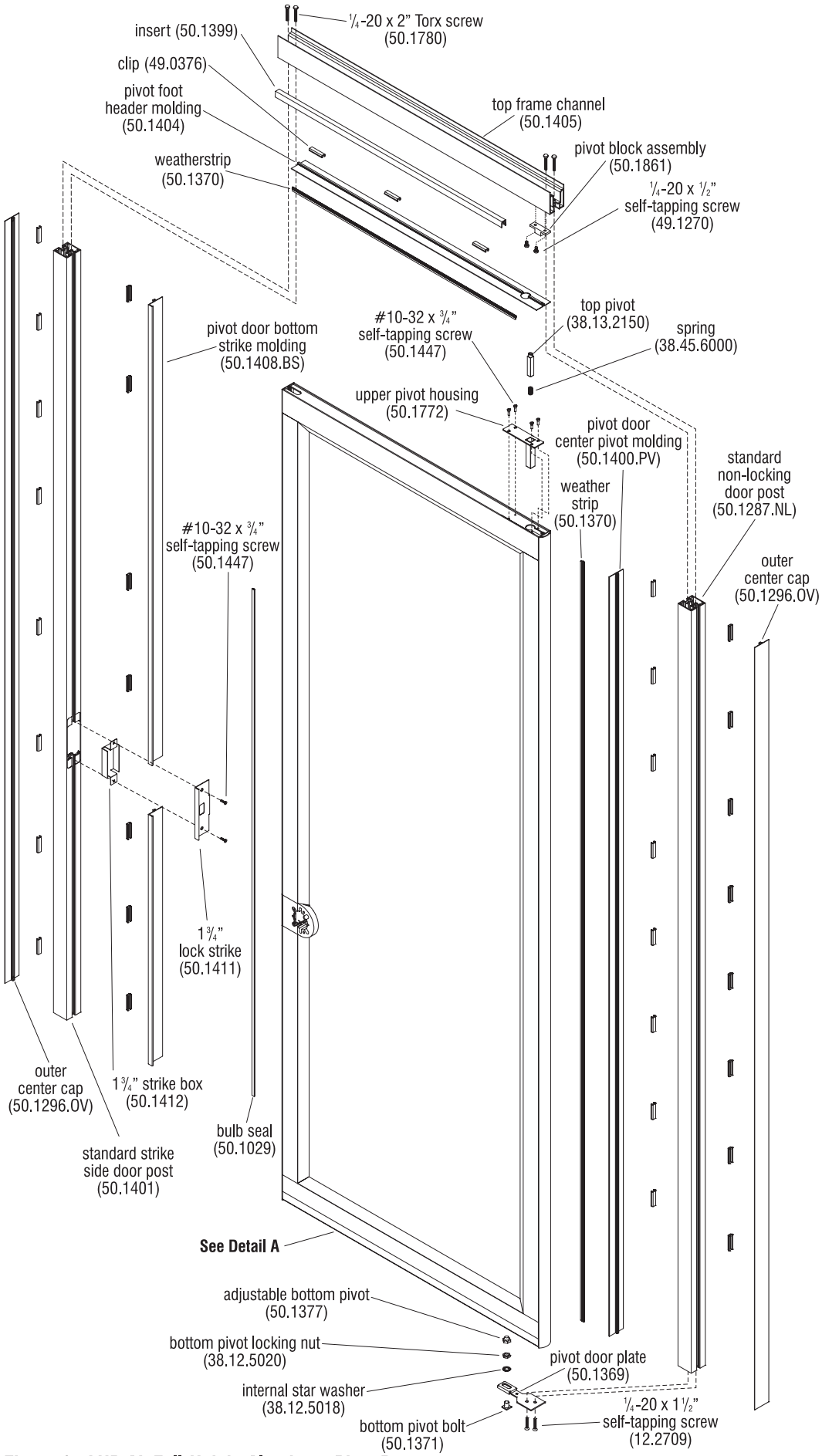


Figure 1 - LUP-AL Full-Height Aluminum Pivot Door

1. Measure the space between the adjustable bottom channel and horizontal frame for the required amount shims (Detail A).

2. Reposition the stack of shims with the channel into the horizontal frame. Make sure the adjustable bottom channel and shims sit firmly against the frame and secure using two ¼-20 x1¼" screws (49.0001 for 0"-¾" range) or ¼-20 x 1¾" screw (49.1151 for ¾"-1¼" range) (Detail A).

Door Assembly Installation

3. With the assistance of a second person, install the door assembly onto the adjustable bottom pivot (50.1377) (Figure 1).

4. Insert the spring (38.45.6000) and top pivot (38.13.2150) into the upper pivot housing. Using the supplied tool, compress the spring-loaded pivot down and move the door into position, then release the spring-loaded pivot into the upper pivot bushing (Figure 1).

5. Check the door for proper height and lock engagement. Adjust the height of the door as needed by turning the adjustable bottom pivot (Figure 1).

6. Follow other instructions in this manual to complete attaching the door frame to adjacent panels and trim. To install lock, use manufactures instructions supplied with lock.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LUP-W Full-Height Wood Pivot Door Installation

Door Frame Assembly & Installation

Note: At one side of the door frame will be a standard strike-side door post (50.1401), and at the other, "pivot-side" will be a standard non-locking door post (50.1287.NL). The standard strike side door post comes pre-assembled with clips, molding, bulb seal, strike box and strike plate. The standard non-locking "pivot-side" door post comes pre-assembled with clips, molding, bulb seal and pivot door plate assembly at the bottom. Each must be cut accurately to size, to fit their installation locations by following the instructions below.

1. To determine what length the "standard strike-side door post" (50.1401) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet (Figure 1).

2. Locate the standard strike-side door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 1).

3. To determine what length the opposite side "standard non-locking door post" (50.1287.NL) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the 1/8" thickness of the pivot door plate (50.1369) (Figure 1).

4. Locate the standard non-locking door post and remove the two ¼-20 x 1½" screws attaching the pivot door plate (50.1369) to the underside of the door post. Then measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end (taking into account for carpet and the pivot door plate). Cut the bottom of the post off square at that length, then re-install the pivot door plate removed above in this step (Figure 1).

5. Stand both door posts up under the ceiling rail at their respective installation locations and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 1).

6. Lay the posts with the top frame channel onto a soft, protective surface on the floor, in the correct orientation. Secure the pieces together using four 1/4 -20 x 2" Torx screws (50.1780) (Figure 1).

7. If not already installed, position the pivot block assembly (50.1861) over the pre-drilled holes in the top frame channel and secure using two 1/4 -20 x 1/2" self-tapping screws (49.1270) (Figure 1).

8. Stand the door frame assembly up and into the ceiling rail. Make sure the door frame is plumb.

Door Leaf Pivot Installation

9. To prepare the pivot door leaf, begin by installing the upper pivot housing (90.2407.BL). Position the upper pivot housing into the cutout in the top of the door leaf and secure using four #6 x 2" screws (38.12.5191) (Figure 1). Do not install the spring and top pivot at this time.

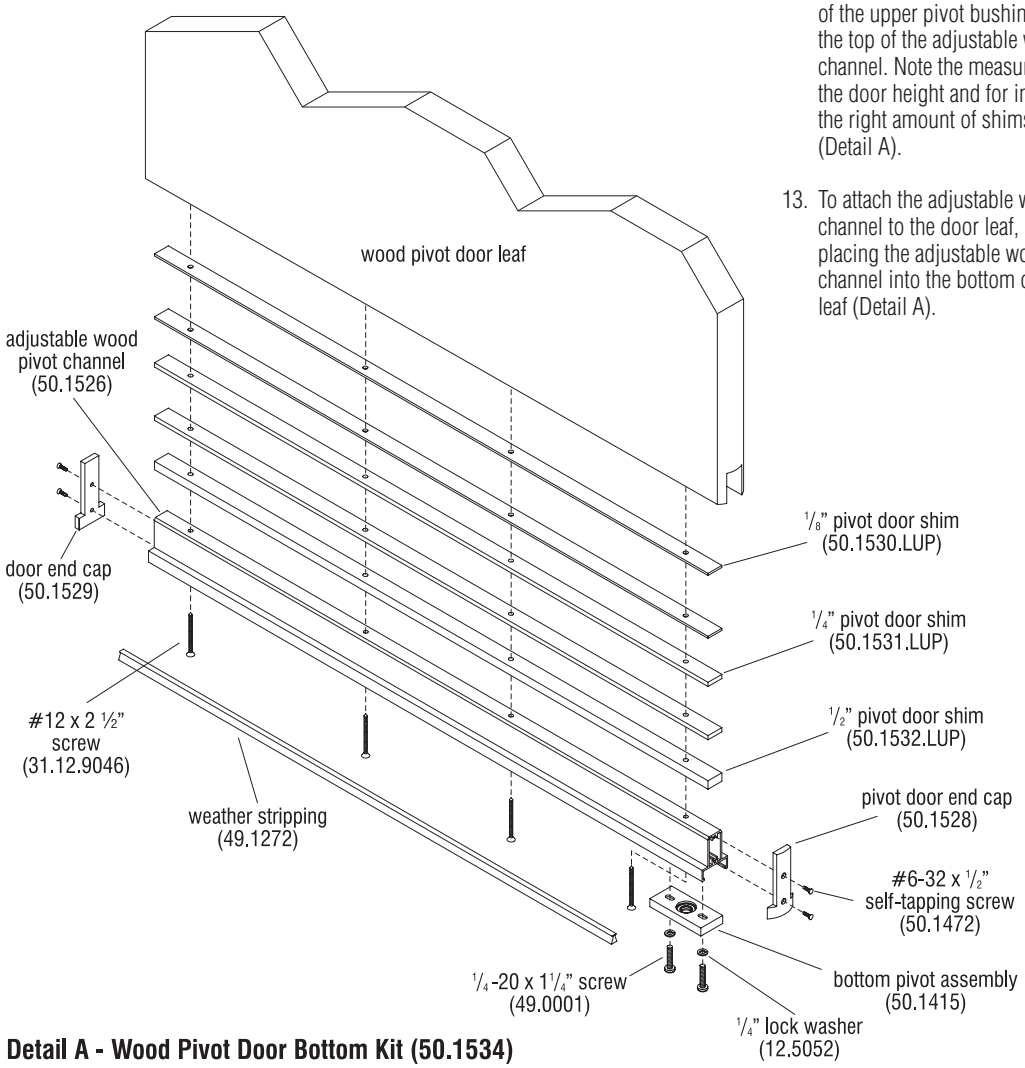
Adjustable Wood Pivot Channel Installation

10. To get an accurate door height measurement, slide the bottom pivot assembly (50.1415) into the adjustable wood pivot channel (50.1526) and secure using two 1/4" lock washers (12.5052) and 1/4 -20 x 1 1/4" screws (49.0001) (Detail A).

11. Next, place the adjustable wood pivot channel, with installed bottom pivot assembly onto the adjustable bottom pivot (50.1377) (Figure 1).

12. With the assistance of a second person, measure from the bottom of the upper pivot bushing down to the top of the adjustable wood pivot channel. Note the measurement for the door height and for installing the right amount of shims (Detail A).

13. To attach the adjustable wood pivot channel to the door leaf, begin by placing the adjustable wood pivot channel into the bottom of the door leaf (Detail A).



Detail A - Wood Pivot Door Bottom Kit (50.1534)

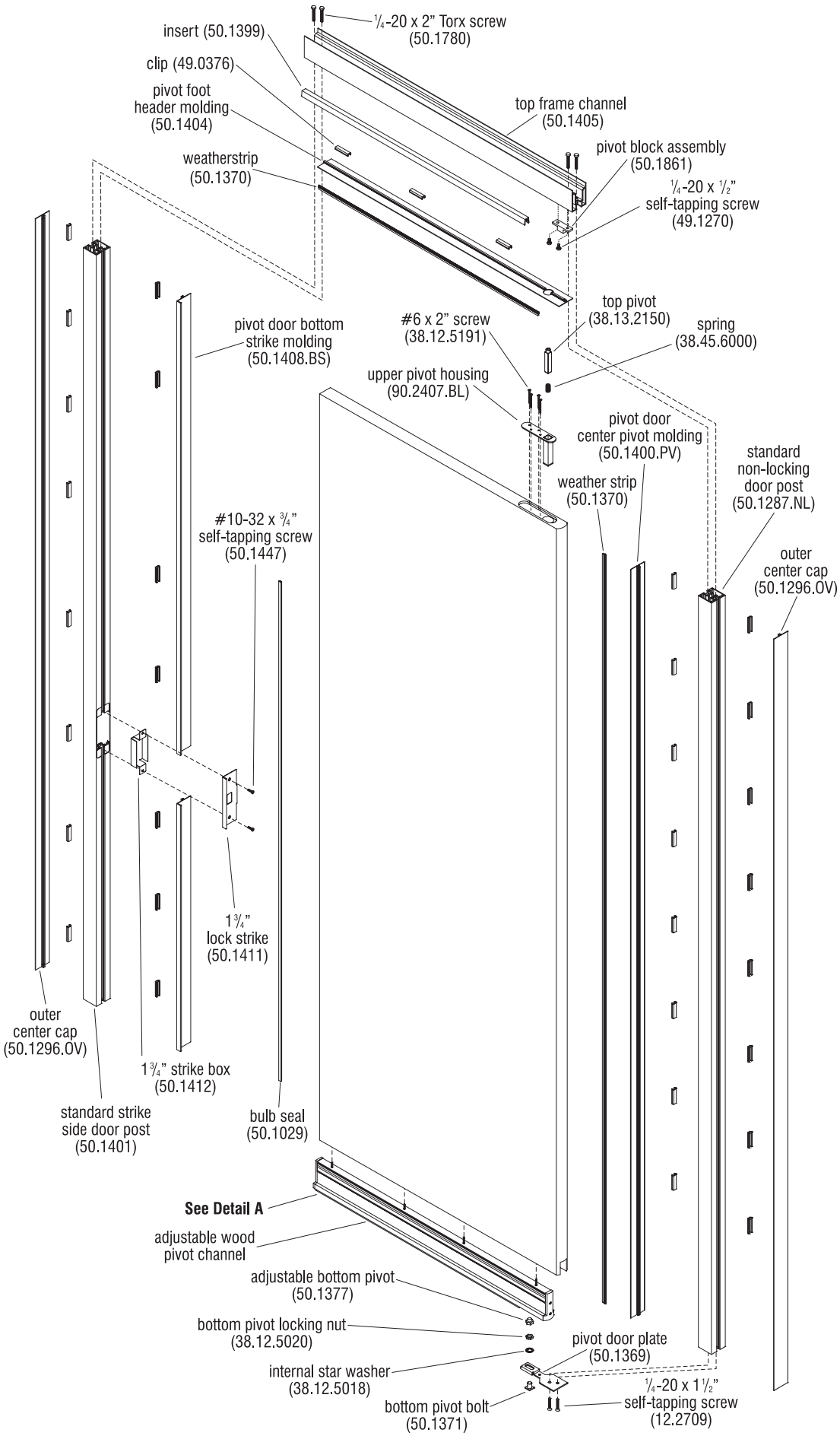


Figure 1 - LUP-W Full-Height Wood Pivot Door

14. Measure the space between the adjustable bottom channel and door leaf for the required amount shims (50.1530.LUP, 50.1531.LUP, 50.1532.LUP) (Detail A).

15. Reposition the stack of shims with the channel into the door leaf. Make sure the adjustable bottom channel and shims sit firmly against the door leaf and secure using four #12 x 2½" screws (Detail A).

16. To get the correct height for the pivot door end caps (50.1528 & 50.1529), measure from the bottom of the adjustable wood pivot channel to the end of the notch in the door leaf (Detail A).

    Note: Another way to get the correct height measurement for the pivot door end cap is to place the cap upside down over the notch and adjustable wood pivot channel. Then mark the cap from the bottom of the channel.

17. Cut the pivot door end caps to that measurement. Cut from the extended top portion of the cap.

18. Position the pivot door end cap over the adjustable wood pivot channel and secure using two #6-32 x ½" self-tapping screws. Repeat step to install the other cap (Detail A).

Door Assembly Installation

19. With the assistance of a second person, install the door assembly onto the adjustable bottom pivot (50.1377) (Figure 1).

20. Insert the spring (38.45.6000) and top pivot (38.13.2150) into the upper pivot housing. Using the supplied tool, compress the spring-loaded pivot down and move the door into position, then release the spring-loaded pivot into the upper pivot bushing (Figure 1).

21. Check the door for proper height and lock engagement. Adjust the height of the door as needed by turning the adjustable bottom pivot (Figure 1).

22. Follow other instructions in this manual to complete attaching the door handle/lock, the door frame to adjacent panels and trim.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LUCS Double Full-Height Glass Sliding Door Installation

Door Frame Assembly & Installation

Note: At both sides of the door frame will install a standard non-locking door post (50.1287.NL). Per the space-planning layout, both posts will receive a bottom guide bracket (50.1299) (Figure 1). Each post must be cut accurately to size, to fit their installation locations by following the instructions below.

1. To determine what length the first "standard non-locking door post" must be cut to, begin by installing into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the 1/16" thickness of the bottom guide bracket (50.1299) (Figure 4).

2. Locate the first standard non-locking door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 4).

3. To determine what length the second "standard non-locking door post" must be cut to, begin by installing into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the 1/16" thickness of the bottom guide bracket (50.1299) (Figures 1 & 4).

4. Locate the second standard sliding door strike post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 4).

5. Stand both door posts up under the ceiling rail at their respective installation locations, take into account the bottom guide brackets which will be installed to the standard non-locking door posts later, and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 4).

6. Lay the posts with the top frame channel onto a soft, protective surface on the floor in the correct orientation. Secure the pieces together using four 1/4 -20 x 2" Torx screws (50.1780) (Figure 4).

7. For both door posts, install the guide block on the bottom guide bracket in the correct position using two #10-32 x 5/8" screws (50.1326) (Figure 2).

8. For both door posts, install the bottom guide bracket onto each door post using two 1/4 -20 x 1 1/2" self-tapping screws (12.2709) (Figures 1 & 4).

9. Stand the door frame assembly up and into the ceiling rail.

Sliding Door Track Installation

10. To mount the sliding door track (50.1900), if not previously completed, start by installing the additional top clamps (study page 42) to the top of the adjacent panel(s) which will receive the channel and door track, then re-install the panel(s). Identify and locate the channel (50.1294) which will install to the additional panel top clamps on the adjacent panel (Figures 3 & 4).

11. Position the channel (50.1294) onto the additional panel clamps and push it up until it fully seats against the ceiling rail and against the sliding door frame. Secure the channel to the clamps using twelve #10-24 x 3/8" screws (31.12.9070). Assure the screws secure into the clamps and not into gaps between them (Figure 4).

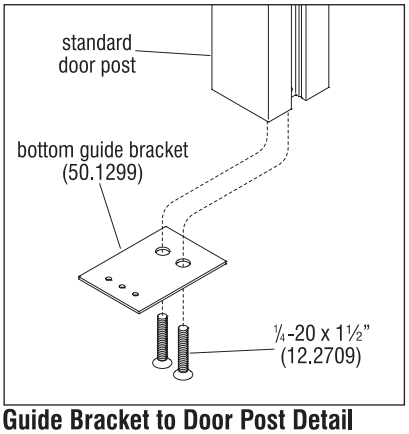
12. Install the ceiling trim (50.1814) over the installed channel (50.1294), butting it against the top frame channel (50.1291) (Figure 4).

13. Locate the sliding door track (50.1900) and assure it is clean and free of debris. With the assistance of two people, position the track against the top frame channel and the ceiling trim about 1 1/8" from the bottom of the top frame channel to the bottom of the track (Figure 4). Mark each screw hole.

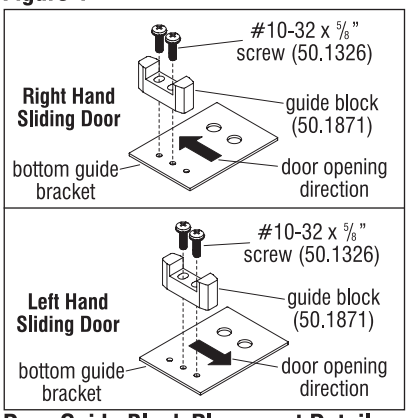
    Note: The valance should be flush with the bottom of the top frame channel when installed.

14. Remove the track and center punch each marked screw hole. Then drill pilot holes using a 5/32" drill bit.

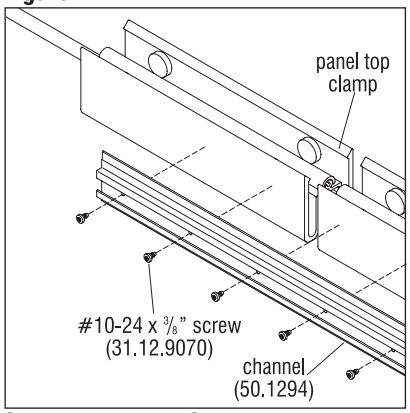
15. Position the track over the pilot holes and secure using eight #10-24 x 3/4" self-tapping screws (PC.12.0006) (Figure 4).



Guide Bracket to Door Post Detail Figure 1



Door Guide Block Placement Detail Figure 2



Channel to Panel Clamp Detail Figure 3

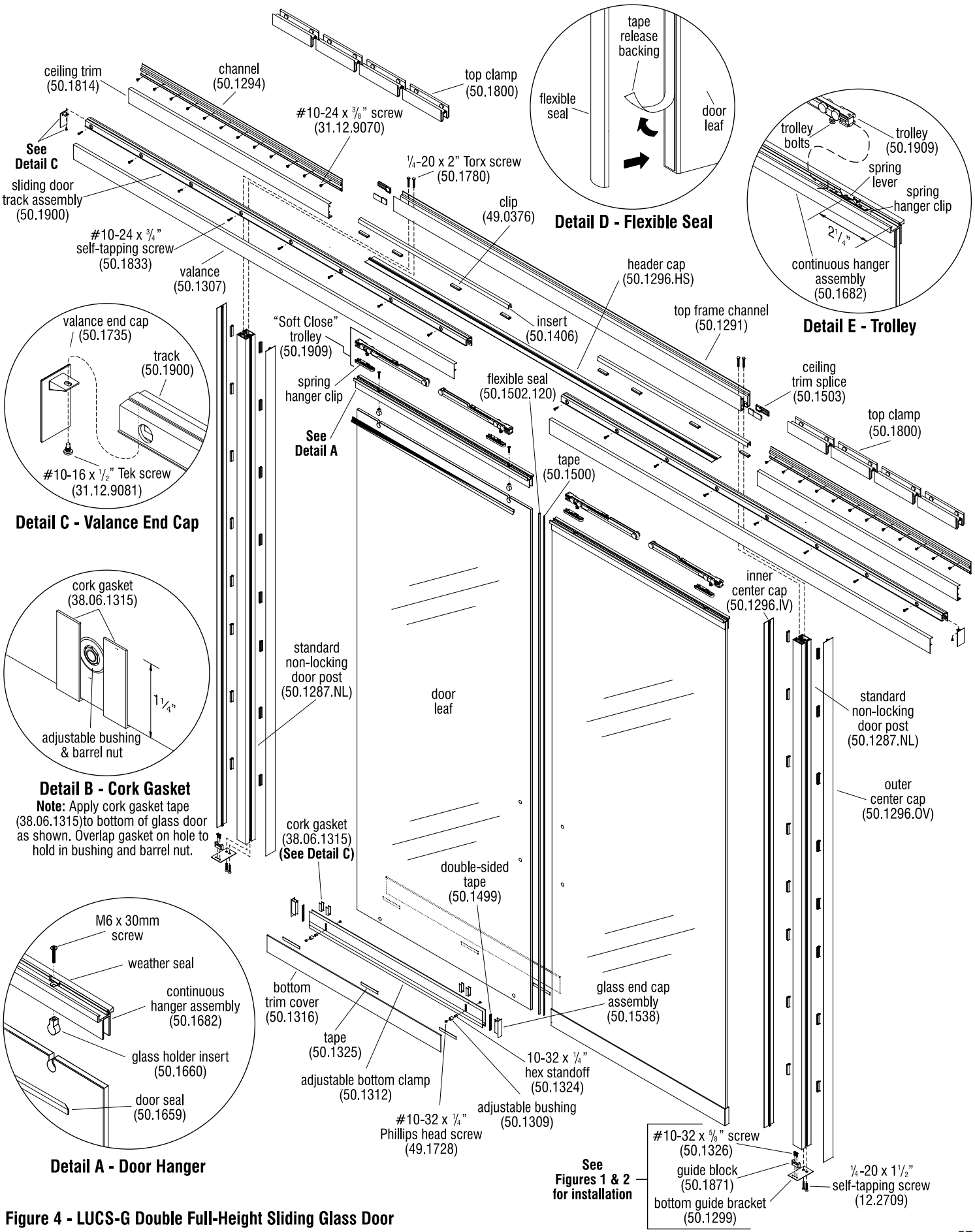


Figure 4 - LUCS-G Double Full-Height Sliding Glass Door

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

16. Insert the trolley assembly (soft close trolley assembly, 50.1909 or bumper stop trolley assembly, 50.1680 - not shown) into the door track (Figure 4). See separate instructions included with the door stops and trolleys.

Sliding Door Leaf Assembly

17. To hang the sliding door leaf, begin by attaching the continuous hanger assembly (50.1682) to the top of the door leaf. First, apply a strip of seal (50.1659) across the top of the door leaf aligning the non-taped edge to the top edge of the door leaf (Figure 4 & Detail A).

    Note: Seal can be applied to either side of door leaf. The seal will act as a shim between the continuous hanger assembly and the glass.

18. Next, remove the M6 x 30mm screws from the glass holder inserts (50.1660) and place the glass holder inserts into the notches at the top of door leaf. Then, slide the continuous hanger assembly over the top of the door leaf (Figure 4 & Detail A).

19. Orient the continuous hanger assembly so the weather seal side faces the door frame. Attach the hanger to the glass using the two M6 x 30mm screws through the countersunk holes in the top of the hanger assembly (Figure 4 & Detail A).

    Note: Spring hanger clips are handed, so be sure to orientate the spring hanger clips so the spring lever always faces to the outside of the door leaf and pivots away from the door frame.

20. Slide the spring hanger clips into the slot in the continuous hanger assembly to the dimension shown in Detail E and tighten screws.

21. With the assistance of a second person, hang the door by first aligning the trolley bolts with the spring hanger clips. The trolley bolts slide into the spring hanger clips and lock into place with spring levers (Figure 4 & Detail E).

Adjustable Bottom Clamp Installation

22. To attach the adjustable bottom clamp (50.1312), make sure the door leaf is partially positioned over the door opening. Then insert two adjustable bushings (50.1309) into the two holes in the bottom of the door leaf (Figure 4).

23. Apply four strips of gasket cork (38.06.1315) two on each side of the two holes, overlapping each hole a little to retain the bushing of each side. Start at the top of the hole and go down around the bottom edge of the glass to the top of the hole on the opposite side of the glass (Figure 4 & Detail B). Note the cork height of 1 1/4" at each side.

24. Slide the adjustable bottom clamp on the door leaf and over the guide block from the opposite end of the sliding door strike post (Figure 4).

25. Spin a 10-32 hex standoff (50.1324) on one of the #10-32 x 1/4" Phillips head screws (49.1728). Do the same for the second set (Figure 4).

26. Position the adjustable bottom clamp to approximately ½" off the floor and install both the screw and hex standoffs through the two bushings (Figure 4).

27. Install both the second screws into the opposite end of the hex standoffs (Figure 4). Do not fully tighten.

28. Install both end caps (50.1538) with double-sided tape (50.1499) on the adjustable bottom clamp. Push the end caps all of the way in so that the cap is tight up against the edge of the glass (Figure 4).

29. Tighten the #10-32 x 1/4" Phillips head screws to secure the adjustable bottom clamp to the door leaf (Figure 4).

30. Mark and cut the bottom trim covers (50.1316) to the width of the glass, then remove the release paper from the adhesive tape pads on the outside of the clamp (Figure 4).

31. Hang the covers on the top of the bottom clamp and rotate down. Press on the covers to make sure the covers and the tape are fully seated on the adjustable bottom clamp (Figure 4).

32. Adjust the height of the door leaf by adjusting the bolts and nuts on the trolley assembly (50.1909) as required (Figure 4).

Valance Installation

33. Measure the distance from the outside of the door frame to the end of the adjacent panel(s) and cut the valance (50.1307) to length (Figure 4).

34. Position the valance end caps (50.1735) on both ends of the track and secure using two #10-16 x 1/2" screws (31.12.9081) (Figure 4 & Detail C).

35. Install the valance onto the track and end caps (Figure 4).

Flexible Seal Installation

Note: Full-height double-sliding doors require that a flexible seal be installed to one of the door leafs where the double-sliding doors meet. Mounting tape and seal are supplied by the factory and must be installed.

36. At the edge of one glass door panel, where the two panels meet, use Silane Glass Treatment AP115 to clean the edge of one door leaf. Apply the mounting tape (50.1500) to the clean edge of the door leaf (Figure 4 & Detail D).

37. Before applying the seal to the edge with mounting tape, clean the mounting surface of the seal with Silane Glass Treatment AP115. Peel away the tape release backing from the glass edge and apply the flexible seal (50.1502.120) to the door leaf. Use the rigid seal alignment tool to install the flexible seal (Figure 4 & Detail D).

38. Follow other instructions in this manual to complete attaching the door handle, door lock, the door frame to adjacent panels, trim and sound seal.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LUPT-G Transom-Height Glass Pivot Door Installation

Door Frame Assembly & Installation

Note: The door frame comes pre-assembled from the factory and must be partially disassembled. At one side of the door frame will be a standard strike-side door post (50.1401), and at the other, "pivot-side" will be a standard non-locking door post (50.1287.NL). The standard strike side door post comes pre-assembled with clips, molding, bulb seal, strike box and strike plate. The standard non-locking "pivot-side" door post comes pre-assembled with clips, molding, bulb seal and pivot door plate assembly at the bottom. Each must disassembled and be cut accurately to size, to fit their installation locations by following the instructions below.

1. Reference Figure 1, page 60, to disassemble the transom height pivot door frame by removing four $^1/_4$-20 x 2" Torx screws (50.1780) at the top of the frame (two each side), and also remove four (two each side) $^1/_4$-20 x 1$^1/_4$" pan head screws (49.0001) (Figure 1). Items such as the insert (50.1399), clip (49.0376), pivot foot header molding (50.1404) and weatherstrip (50.1370) etc. are shown exploded from the bottom of the transom for reference, but do not need to be disassembled for step 2 below (Figure 1).

2. To determine what length the "standard strike-side door post" (50.1401) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet (Figure 1).

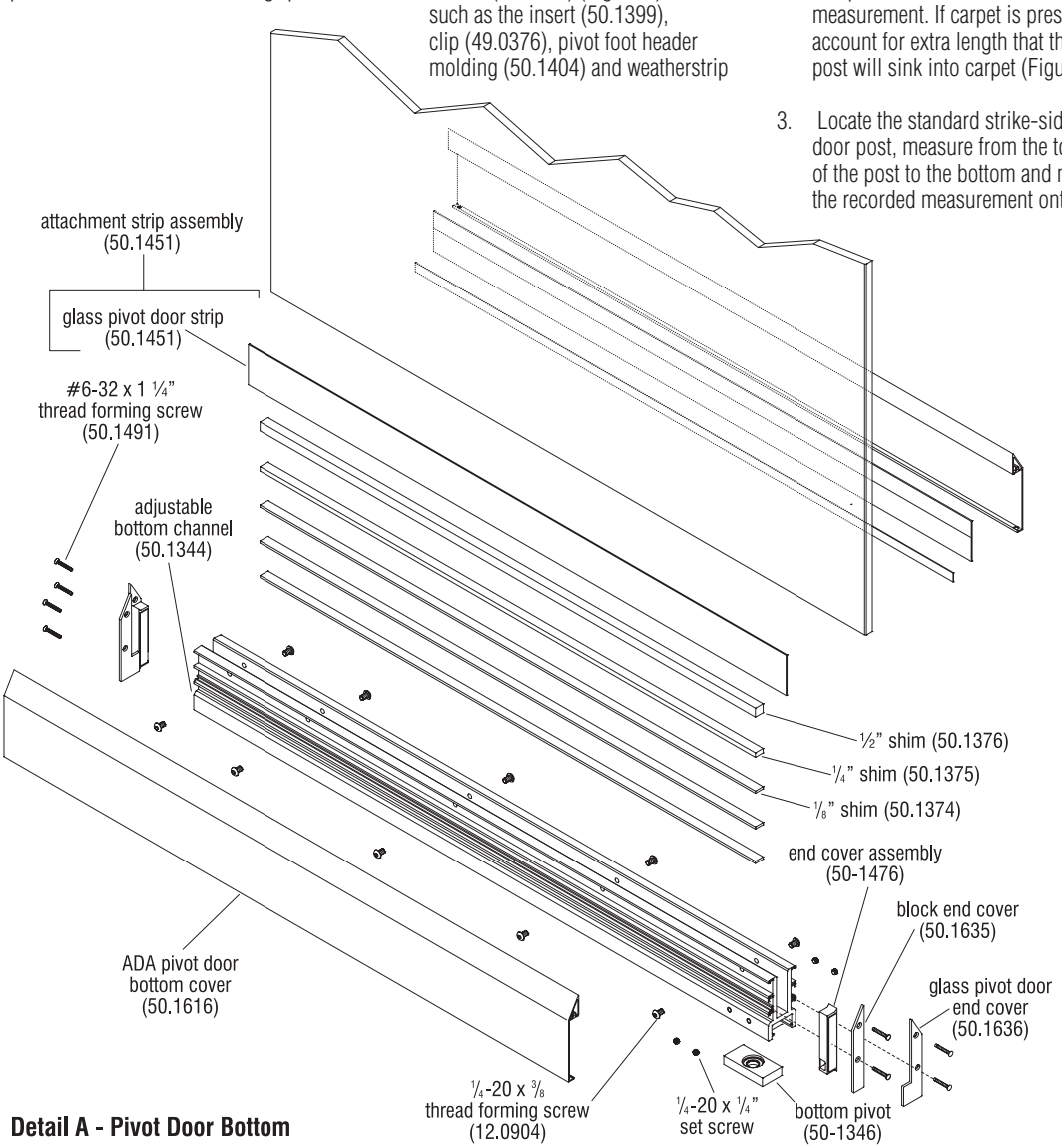
3. Locate the standard strike-side door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 1).

4. To determine what length the "standard non-locking door post" (50.1287.NL) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the $^1/_8$" thickness of the pivot door plate (50.1369) (Figure 1).

5. Locate the standard non-locking door post and remove the two $^1/_4$-20 x 1$^1/_2$" screws attaching the pivot door plate (50.1369) to the underside of the door post. Then measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end (taking into account for carpet and the pivot door plate). Cut the bottom of the post off square at that length, then re-install the pivot door plate removed above in this step (Figure 1).

6. Stand both door posts up under the ceiling rail at their respective installation locations and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 1).

7. Carefully lay the posts and the top glass assembly with the top frame channel (50.1291) and transom pivot door channel (50.1430) onto a soft, protective surface on the floor in the correct orientation. Secure the posts to the top frame channel using four $^1/_4$ -20 x 2" Torx screws (50.1780) and to the transom pivot door channel using four $^1/_4$ -20 x 1$^1/_4$" pan head screws (49.0001) (Figure 1).



Detail A - Pivot Door Bottom

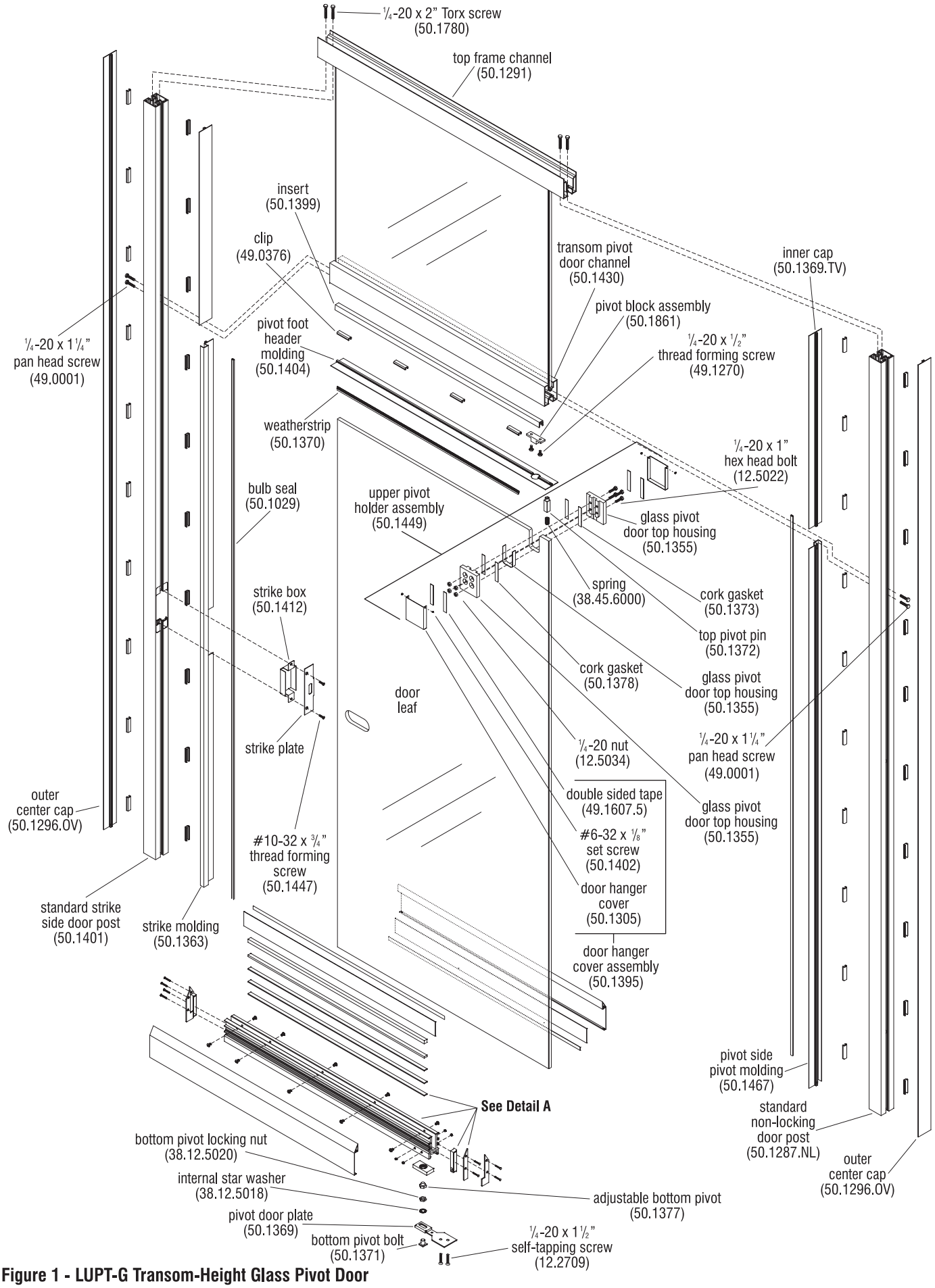


Figure 1 - LUPT-G Transom-Height Glass Pivot Door

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

8. If not already installed, position the pivot block assembly (50.1861) over the pre-drilled holes in the transom pivot channel and secure using two 1/4 -20 x 1/2" thread forming screws (49.1270) (Figure 1).

9. Stand the door frame assembly up and into the ceiling rail. Make sure the door frame is plumb.

Door Leaf Pivot Installation

10. To prepare the pivot door leaf, begin by attaching the upper pivot holder assembly (50.1449). If you have closer housing kit (50.1730) please go to page 71 for instructions. Apply cork gasket (50.1378) around the perimeter of the notch in the top of the door leaf (Figure 1).

11. Apply two pieces of cork gasket (50.1373) to the inside of one half of the glass pivot door top housing (50.1740) (Figure 1). Repeat this step for the other half.

12. Place both glass pivot door top housing halves (50.1740) into the notch and secure using four 1/4 -20 x 1" hex head bolts (12.5022) and 1/4 -20 hex nuts (12.5034). Make sure the housing halves assembly is fully seated into the notch and tighten nuts firmly (Figure 1).

13. Check to see if the housing nuts and bolts are properly tightened by temporarily inserting the spring (38.45.6000) and top pivot pin (50.1372). It should not rattle, but still move freely. Remove the top pivot pin and spring once the housing assembly is properly tightened. Do not install the spring, pivot pin and trim covers at this time (Figure 1).

Adjustable Bottom Channel Installation

14. To get an accurate door height measurement, install the bottom pivot (50.1346) into the adjustable bottom channel and secure using four 1/4 -20 x 1/4" set screws (50.1354) (Detail A).

15. Next, place the adjustable bottom channel with bottom pivot onto the adjustable bottom pivot (50.1377) (Figure 1 & Detail A).

16. With the assistance of a second person, measure from the bottom of the upper pivot bushing (50.1862) down to the inside bottom of the adjustable bottom channel. Note the measurement for the door height and for installing the right amount of shims (Detail A).

17. To attach the bottom channel assembly to the door leaf, begin by starting 1/4 -20 x 3/8" screws (12.0904) into the adjustable bottom channel (50.1344) (Detail A). Do not twist screws past the inner surface of the adjustable bottom channel.

18. Place the two glass pivot door strips (50.1451) into the adjustable bottom channel so that the glass setting tape is facing inward and toward the top of the channel (Detail A).

19. Place the adjustable bottom channel with the door strips onto the bottom of the door leaf making sure that a pivot door strip plate is positioned on both sides of the glass (Detail A).

20. Position the adjustable bottom channel onto the bottom of the door leaf. Adjust the distance of the bottom channel by using a flat head screw driver and pushing against the edge of the pivot door strip. Push down on the pivot door strip until the distance from the top of the door leaf to the inside bottom of the adjustable bottom channel matches the previously measured height (Detail A).

21. Measure the space between the adjustable bottom channel and door leaf for the required amount shims (50.1374, 50.1375 & 50.1376) (Detail A).

22. Slide the stack of shims inside the channel between the glass and the bottom of the channel. Make sure the adjustable bottom channel and shims sit firmly against the door leaf (Detail A).

23. Tighten ten 1/4 -20 x 3/8" screws (12.0904) (Detail A).

Door Assembly Installation

24. With the assistance of a second person, install the door assembly onto the adjustable bottom pivot (Figure 1).

25. Insert the spring (38.45.6000) and top pivot (50.1372) into the glass pivot door top housing. Using the supplied tool, compress the spring-loaded pivot down and move the door into position, then release the spring-loaded pivot into the upper pivot bushing (Figure 1).

26. Check the door for proper height and lock engagement. Adjust the height of the door as needed by turning the adjustable bottom pivot (Figure 1).

Pivot Door Bottom Cover Installation

27. Peel the tape backer off of the end cover assembly (50.1476) (Detail A).

28. Position the end cover assembly with the adhesive end against the block end cover (50.1635) while aligning the holes in the orientation illustrated (Detail A). Press both parts firmly together to make sure they are fully seated.

29. Position end cover assembly with block end cover on the adjustable bottom channel and secure using a #6-32 x 1 1/4" self-tapping screw (50.1491) through the bottom hole (Detail A). Do not install a screw in the top hole until the bottom cover is installed.

30. Position the glass pivot door end cover (50.1636) on the adjustable bottom channel and secure using a #6-32 x 1 1/4" self-tapping screw (50.1491) through the bottom hole (Detail A). Do not install a screw in the top hole until the bottom cover is installed.

31. Repeat steps to install the block end cover assembly and glass pivot door end cover on the opposite end of the adjustable bottom channel (Detail A).

32. Once the end covers are installed, measure between the end covers and cut the two bottom covers (50.1616) to that measurement so they fit tightly between the end covers (Detail A).

33. Install the bottom covers onto the bottom channel by snapping them into place (Detail A).

34. Secure the bottom covers by installing four #6-32 x 1 1/4" self-tapping screws (50.1491) through the top holes of the block end covers and glass pivot door end covers.

35. Follow other instructions in this manual to complete attaching the door handle/lock, the door frame to adjacent panels and trim.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

LUPT-W Transom-Height Wood Pivot Door Installation

Door Frame Assembly & Installation

Note: The door frame comes pre-assembled from the factory and must be partially disassembled. At one side of the door frame will be a standard strike-side door post (50.1401), and at the other, "pivot-side" will be a standard non-locking door post (50.1287.NL). The standard strike side door post comes pre-assembled with clips, molding, bulb seal, strike box and strike plate. The standard non-locking "pivot-side" door post comes pre-assembled with clips, molding, bulb seal and pivot door plate assembly at the bottom. Each must disassembled and be cut accurately to size, to fit their installation locations by following the instructions below.

1. Reference Figure 1, page 63, to disassemble the transom height pivot door frame by removing four $^1/_4$-20 x 2" Torx screws (50.1780) at the top of the frame (two each side), and also remove four (two each side) $^1/_4$-20 x $1^1/_4$" Pan head screws (49.0001) (Figure 1). Items such as the insert (50.1399), clip (49.0376), pivot foot header molding (50.1404) and weatherstrip (50.1370) etc. are shown exploded from the bottom of the transom for reference, but do not need to be disassembled for step 2 below (Figure 1).

2. To determine what length the "standard strike-side door post" (50.1401) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet (Figure 1).

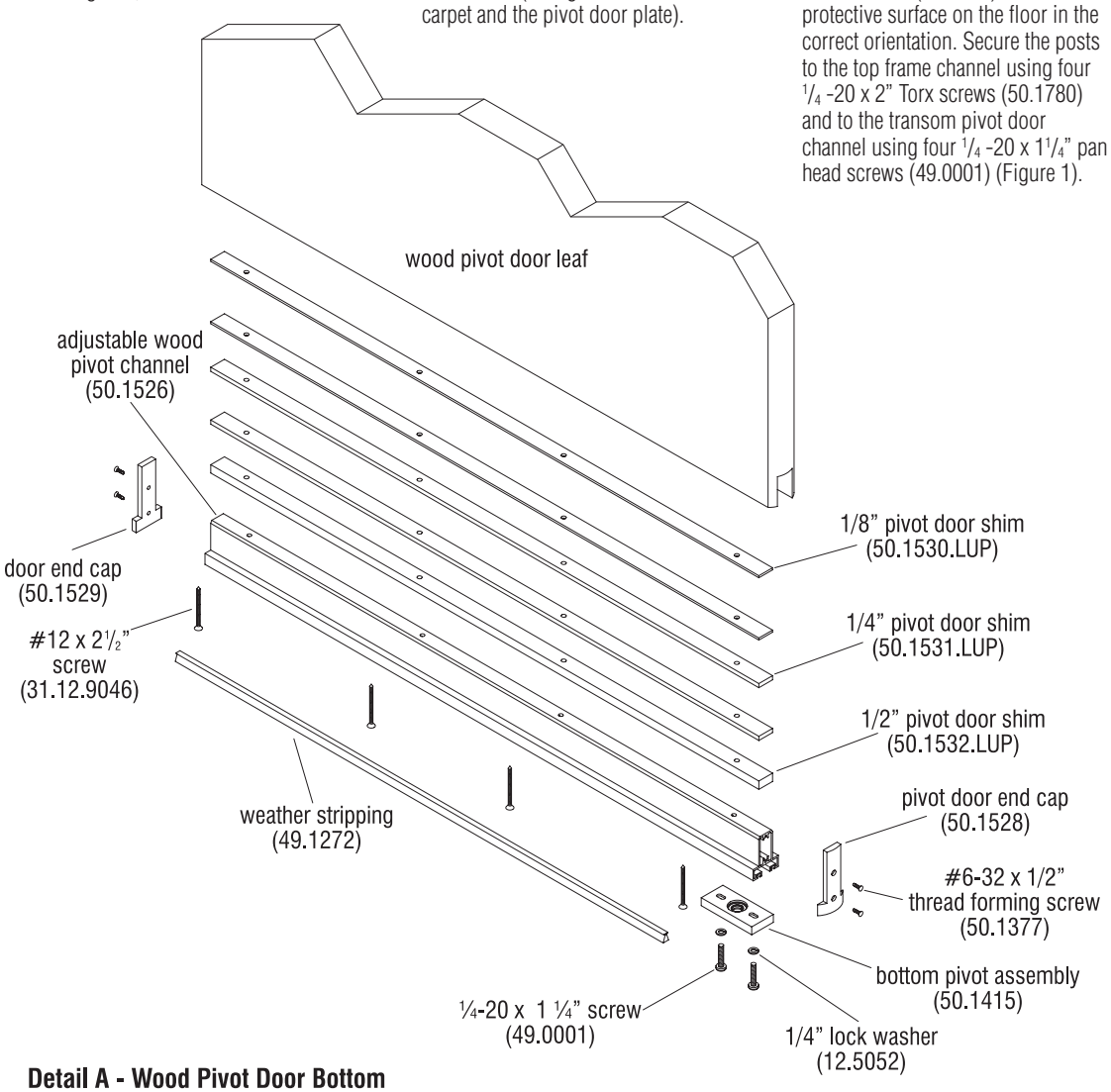
3. Locate the standard strike-side door post, measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end. Cut the bottom of the post off square at that length (Figure 1).

4. To determine what length the "standard non-locking door post" (50.1287.NL) must be cut to, first install into position a sample piece of ceiling trim onto the ceiling rail at the door post location. Determine the length by measuring from the bottom of the installed sample ceiling trim, down to the floor at that post location and record that measurement. If carpet is present, account for extra length that the post will sink into carpet, and also remove length for the $^1/_8$" thickness of the pivot door plate (50.1369) (Figure 1).

5. Locate the standard non-locking door post and remove the two $^1/_4$-20 x $1^1/_2$" screws attaching the pivot door plate (50.1369) to the underside of the door post. Then measure from the top of the post to the bottom and mark the recorded measurement onto the post at the bottom end (taking into account for carpet and the pivot door plate). Cut the bottom of the post off square at that length, then re-install the pivot door plate removed above in this step (Figure 1).

6. Stand both door posts up under the ceiling rail at their respective installation locations and check that the posts are cut to the correct height. Remove the sample ceiling trim once the posts are known to be the correct height (Figure 1).

7. Carefully lay the posts and the top glass assembly with the top frame channel (50.1405) and transom pivot door channel (50.1291) onto a soft protective surface on the floor in the correct orientation. Secure the posts to the top frame channel using four $^1/_4$ -20 x 2" Torx screws (50.1780) and to the transom pivot door channel using four $^1/_4$ -20 x $1^1/_4$" pan head screws (49.0001) (Figure 1).



Detail A - Wood Pivot Door Bottom

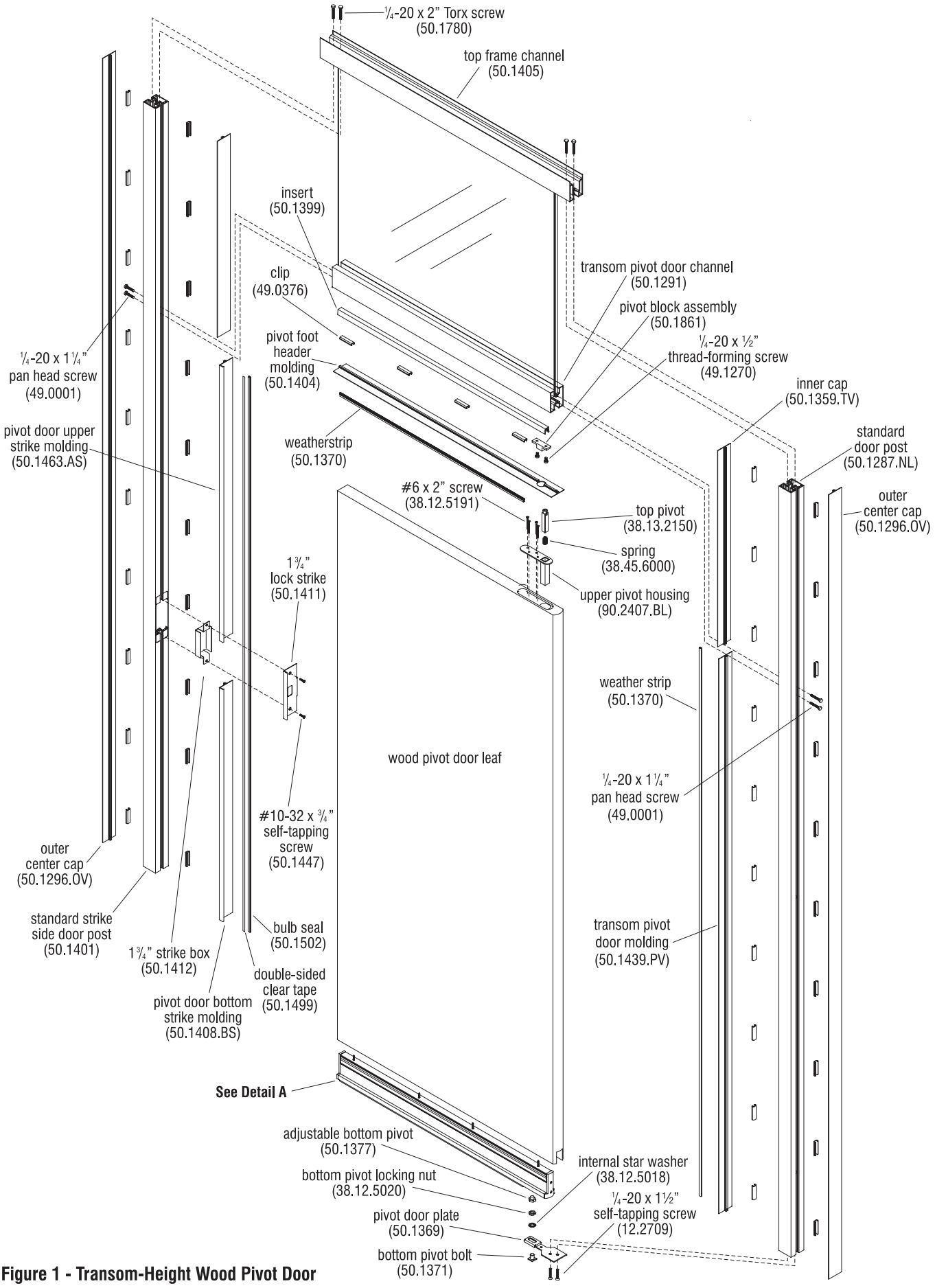


Figure 1 - Transom-Height Wood Pivot Door

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

8. If not already installed, position the pivot block assembly (50.1861) over the pre-drilled holes in the transom pivot channel and secure using two 1/4 -20 x 1/2" thread-forming screws (49.1270) (Figure 1).

9. Stand the door frame assembly up and into the ceiling rail. Make sure the door frame is plumb.

Door Leaf Pivot Installation

10. To prepare the pivot door leaf, begin by installing the upper pivot housing (90.2407.BL). Position the upper pivot housing into the cutout in the top of the door leaf and secure using four #6 x 2" screws (38.12.5191) (Figure 1). Do not install the spring and top pivot at this time.

Adjustable Wood Pivot Channel Installation

11. To get an accurate door height measurement, slide the bottom pivot assembly (50.1415) into the adjustable wood pivot channel (50.1526) and secure using two 1/4" lock washers (12.5052) and 1/4 -20 x 1 1/4" screws (49.0001) (Detail A).

12. Next, place the adjustable wood pivot channel, with installed bottom pivot assembly, onto the adjustable bottom pivot (50.1377) Figure 1).

13. With the assistance of a second person, measure from the bottom of the upper pivot bushing down to the top of the adjustable wood pivot channel. Note the measurement for the door height and for installing the right amount of shims (Detail A).

14. To attach the adjustable wood pivot channel to the door leaf, begin by placing the adjustable wood pivot channel into the bottom of the door leaf (Detail A).

15. Measure the space between the adjustable bottom channel and door leaf for the required amount shims (50.1530.LUP, 50.1531.LUP, 50.1532.LUP) (Detail A).

16. Reposition the stack of shims with the channel into the door leaf. Make sure the adjustable bottom channel and shims sit firmly against the door leaf and secure using four #12 x 2 1/2" screws (Detail A).

17. To get the correct height for the pivot door end caps (50.1528 & 50.1529), measure from the bottom of the adjustable wood pivot channel to the end of the notch in the door leaf (Detail A).

    Note: Another way to get the correct height measurement for the pivot door end cap is to place the cap upside down over the notch and adjustable wood pivot channel. Then mark the cap from the bottom of the channel.

18. Cut the pivot door end caps to that measurement. Cut from the extended top portion of the cap.

19. Position the pivot door end cap over the adjustable wood pivot channel and secure using two #6-32 x 1/2" self-tapping screws (50.1377) (Detail A). Repeat step to install the other cap.

Door Assembly Installation

20. With the assistance of a second person, install the door assembly onto the adjustable bottom pivot (Figure 1).

21. Insert the spring (38.45.6000) and top pivot (38.13.2150) into the upper pivot housing (90.2407.BL). Using the supplied tool, compress the spring-loaded pivot down and move the door into position, then release the spring-loaded pivot into the upper pivot bushing (Figure 1).

22. Check the door for proper height and lock engagement. Adjust the height of the door as needed by turning the adjustable bottom pivot (Figure 1).

23. Follow other instructions in this manual to complete attaching the door handle/lock, the door frame to adjacent panels and trim.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

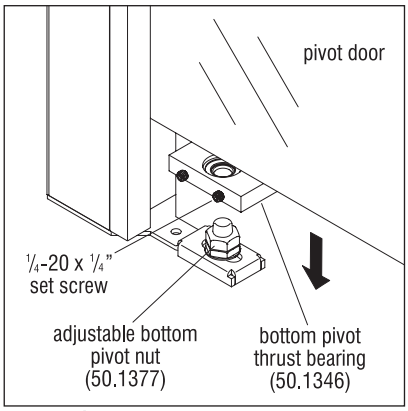


Figure 1 - Install Door to Pivot Nut

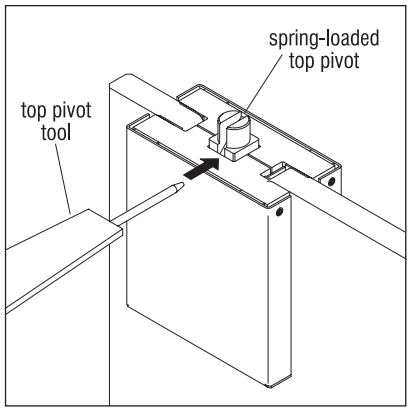


Figure 2 - Depress Spring-loaded Pivot

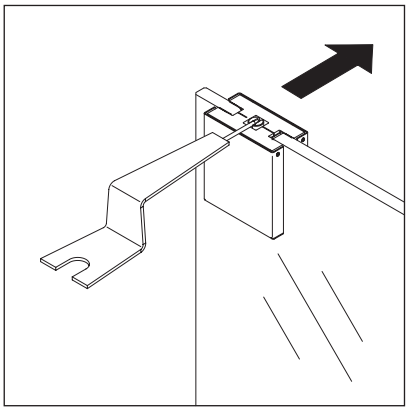


Figure 3 - Move Door into Position

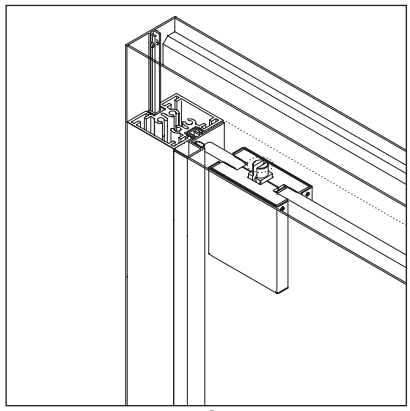


Figure 4 - Release Spring-loaded Pivot

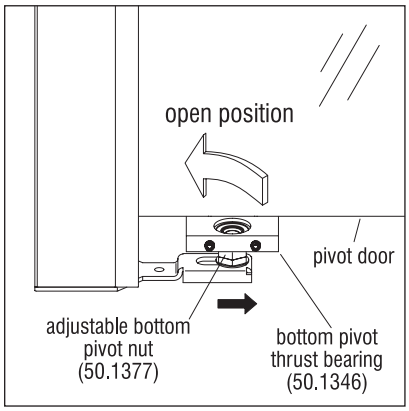


Figure 5 - Open Position

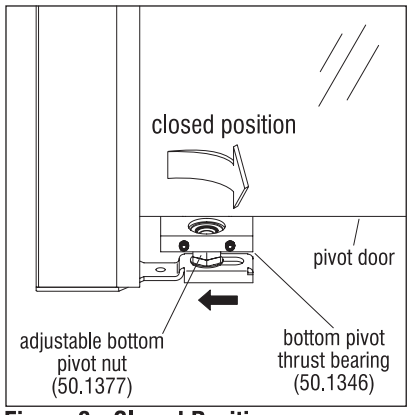


Figure 6 - Closed Position

Door Pivot Adjustment Installation

Note: Generally, most offices have doors set to swing open, and storage rooms are set to swing closed. This can be achieved by following these additional instructions.

Note: Some door parts are not illustrated so that pivot parts can be visible.

1. Install door by first placing the bottom pivot thrust bearing over the adjustable bottom pivot nut (Figure 1).

2. Depress the spring-loaded top pivot using the supplied tool (Figure 2). Next, move door into position (Figure 3), then release the spring-loaded pivot into the top pivot plate (Figure 4).

3. Once door is installed, go back to the bottom pivot thrust bearing and loosen the set screws holding it in position (Figure 1). This will allow the thrust bearing to move with the bottom pivot nut when setting the door opening position.

4. Moving the bottom door thrust bearing and pivot nut approximately ¼" toward the center of the door will make the door swing open under its own weight (Figure 5).

5. Moving the bottom door thrust bearing and pivot nut ¼" toward the edge of the door will make the door swing closed under its own weight (Figure 6).

   Note: If door does not swing properly, plumb is not correct.

6. Once door opening position has been decided upon, tighten the set screws for the door thrust bearing to hold it in place. Then, tighten the lock nut for the bottom pivot nut to hold it in place as well.

   Note: All additional door hardware should be installed per manufacturer instructions. Contact KI if additional information is needed.

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Sliding Door Sound Seal Fin Installation

Note: The sound seal fin is installed after sliding door has been hung.

1. With sliding door closed, line up seal fin (50.1659) on back edge of door. Make sure door is fully closed so wiper contacts side post and that seal fin is above adjustable bottom. Once fin is in position, mark where to cut top of seal fin so it is flush with top of door.

2. Once fin is cut, Install seal fin (50.1659) on backside of door leaf (Figure 1). Peel release backing off of fin then attach to backside edge of door leaf. Make sure fin is above adjustable bottom (Figure 1).

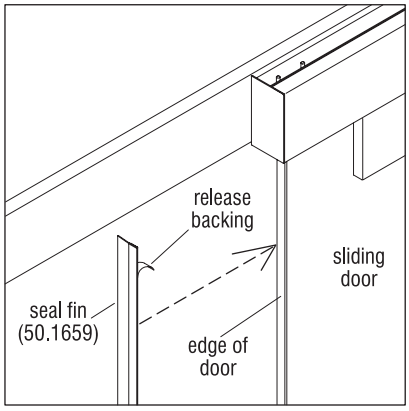


Figure 1

CAUTION

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Pivot Door Reversal Instructions

Door Reverse Parts List

Note: The following parts will need to be ordered and shipped to the site prior to door frame field reversal.

FULL-HEIGHT LUP-G DOOR FRAMES:
Left-Hand Door to a Left-Hand Reverse:

Glass Pivot Door Strike Center Molding
1363/50.1362/RH/CH – 1.07/040.000/FINISH
Quantity: 1

Glass Pivot Door Center Molding
1467/50.1362/CH – 1.07/FINISH
Quantity: 1

Right-Hand Door to a Right-Hand Reverse:

Glass Pivot Door Strike Center Molding
1363/50.1362/LH/CH – 1.07/040.000/FINISH
Quantity: 1

Glass Pivot Door Center Molding
1467/50.1362/CH – 1.07/FINISH
Quantity: 1

TRANSOM-HEIGHT LUPT-G DOOR FRAMES:
Left-Hand Door to a Left-Hand Reverse:

Glass Transom Pivot Door Strike Center Molding
1438/50.1362/RH/SE + .43/040.000/FINISH
Quantity: 1

Glass Transom Pivot Door Pivot Center Molding
1477/50.1362/SE + .43/FINISH
Quantity: 1

Right-Hand Door to a Right-Hand Reverse:

Glass Transom Pivot Door Strike Center Molding
1438/50.1362/LH/SE + .43/040.000/FINISH
Quantity: 1

Glass Transom Pivot Door Pivot Center Molding
1477/50.1362/SE + .43/FINISH
Quantity: 1

Important: The following instructions will field reverse a Lightline plate glass pivot door frame. There are temporary and permanent options for field reverse handing.

Configurations

1. See Figure 1a and 1b for possible combinations of field reverse handing.
2. See Figures 2 and 3 for parts identification.

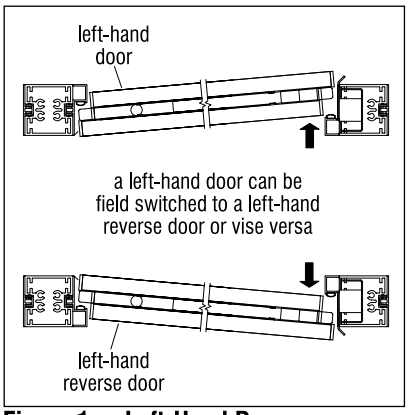

Figure 1a - Left-Hand Doors

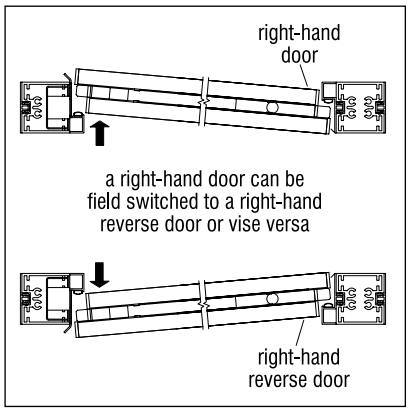

Figure 1b - Right-Hand Doors

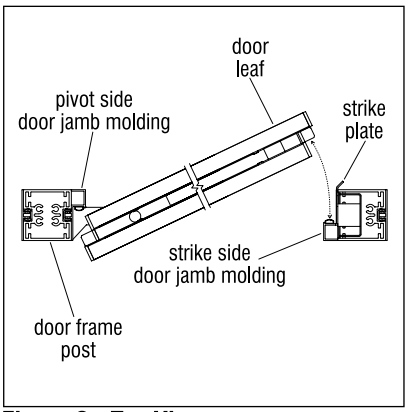

Figure 2 - Top View

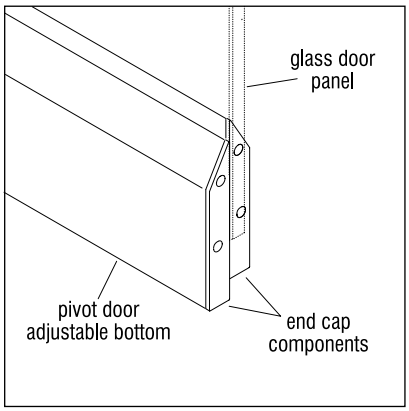

Figure 3 - Door Bottom

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Pivot Door Swing Reversal - Pivot-Side Frame

Note: The illustrations show a right-hand door being changed to a right-hand door reverse swing, but left-hand doors are reversed the same way.

1. Remove door leaf from frame and set aside, then remove pivot side pivot molding (Figure 1). Two thin pry bars can be used working from both sides of the door post, moving from one end of the molding to the opposite end. Once the molding is removed, pry any remaining black plastic clips (49.0376) out of the post.

2. Install replacement pivot side pivot molding opposite of the original molding orientation (Figure 2).

3. Remove the two #10-32 x 3/4" self-tapping screws and strike plate (50.1366) from the strike side of the door frame (Figure 3). Do not discard the strike plate as it will be re-used.

4. Remove strike side molding and any remaining black plastic clips from the door post (Figure 4).

5. Install replacement strike molding opposite of the original molding orientation (Figure 5).

6. Re-install strike plate. Door frame is now ready to receive a reverse hand door leaf (Figure 6).

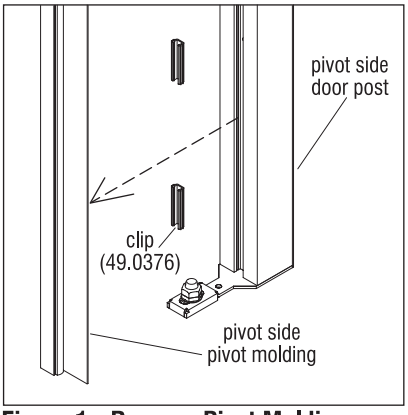

Figure 1 - Remove Pivot Molding

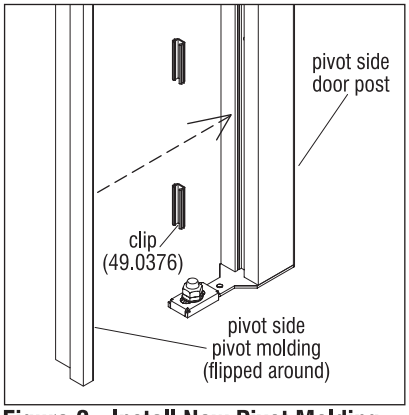

Figure 2 - Install New Pivot Molding

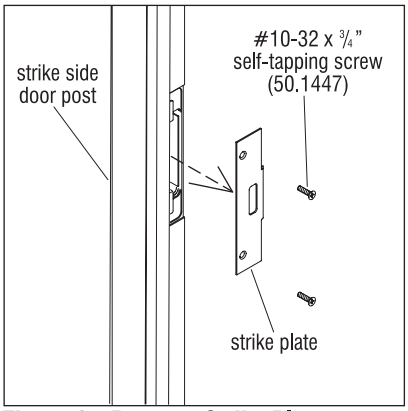

Figure 3 - Remove Strike Plate

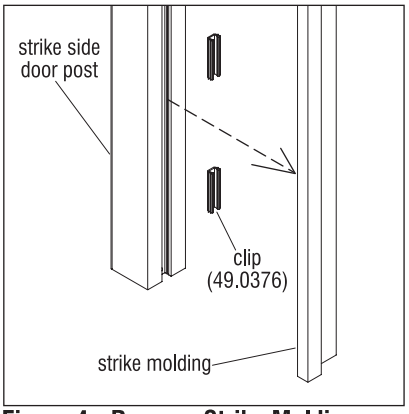

Figure 4 - Remove Strike Molding

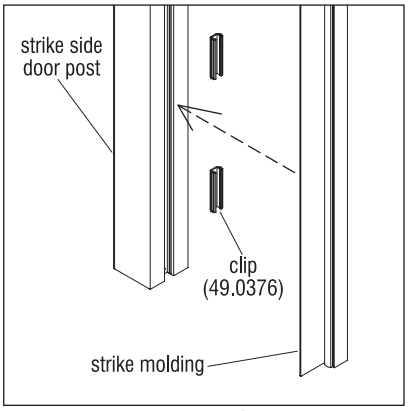

Figure 5 - Install New Strike Molding

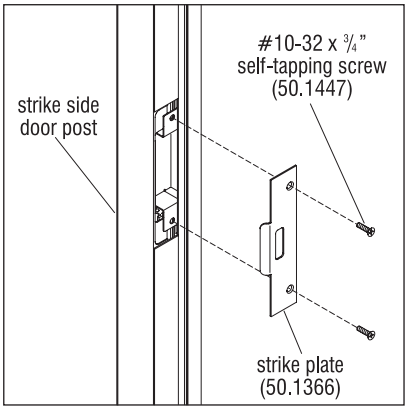

Figure 6 - Install Flipped Strike Plate

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Pivot Door Swing Reversal - Door Leaf

7. Carefully lay door leaf on a flat, protected worksurface. First, remove the two upper #6-32 x 1¼" self-tapping screws, then remove pivot door bottom covers (50.1616) from the bottom of door leaf (Figure 7).

8. Next, remove the two lower #6-32 x 1¼" self-tapping screws and end cover components from door bottom. Then, seperate the block end cover (50.1635) from the end cover assembly (50.1476) by inserting a screwdriver or small pry bar in between both items. Once the parts are seperated, remove excess tape residue from both surfaces with a scraper and glue remover. Do not discard any parts as they will be re-used (Figure 8).

9. Flip all end cover components to reverse the notch in the door bottom for the new door jamb orientation. Apply installer supplied double-sided tape to both sides of the end cover assembly (50.1476) and poke a hole through the tape to expose the screw hole in the center (Figure 9).

10. Peel the double-sided tape release backing off of the end cover assembly (50.1476) that will mate to the block end cover (50.1635), then align the mounting holes and press both parts firmly together to make sure they are fully seated (Figure 9).

11. Next, peel the double-sided tape release backing off of the end cover assembly where it mates against the adjustable bottom channel. Position end cover assembly with the attached block end cover against the adjustable bottom channel and secure using a #6-32 x 1¼" self-tapping screw (50.1491) through the bottom hole only. Do not install a screw in the top hole until the bottom covers (50.1616) are installed in step 13 (Figure 9).

12. Position the glass pivot door end cover (50.1636) onto the adjustable bottom channel at the other side of the door leaf and secure using a #6-32 x 1¼" self-tapping screw (50.1491) through the bottom hole only. Do not install a screw in the top hole until the bottom covers (50.1616) are installed in step 13 (Figure 9).

13. Repeat steps 7 through 12 at the other end of the door leaf to reverse the block end cover, the glass pivot door end cover and end cover assembly. Then, Install the bottom covers (50.1616) onto the bottom channel by snapping them into place and installing the two upper #6-32 x 1¼" self-tapping screws on each side of the door (Figure 10).

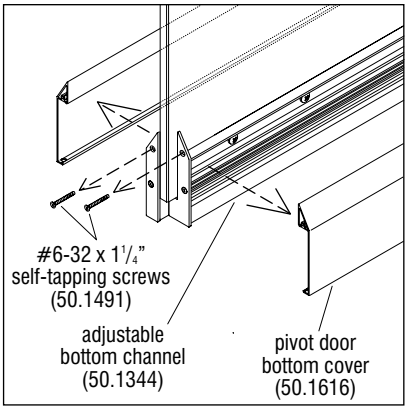

Figure 7 - Remove Bottom Covers

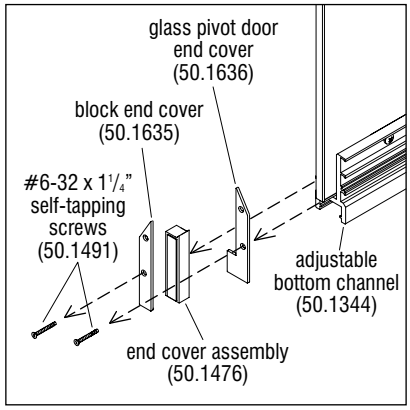

Figure 8 - Remove End Covers

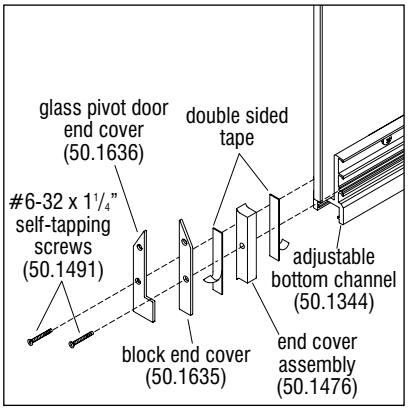

Figure 9 - Flip End Covers & Install

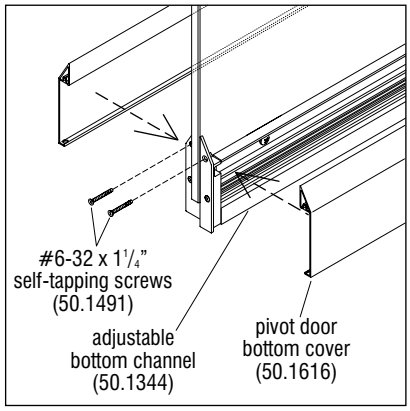

Figure 10 - Install Bottom Covers

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Pivot Door Swing Reversal - Door Handle Reversal

Note: Lightline accepts different door handle options. Figures 11 & 12 show only one type that is offered. Your installation may vary.

14. Remove door hardware/housing from door leaf (Figure 11).
15. Flip door hardware/housing and re-install to door leaf (Figure 12).
16. Re-install door leaf into door frame following standard pivot door installation steps. Door field reversal is now complete.

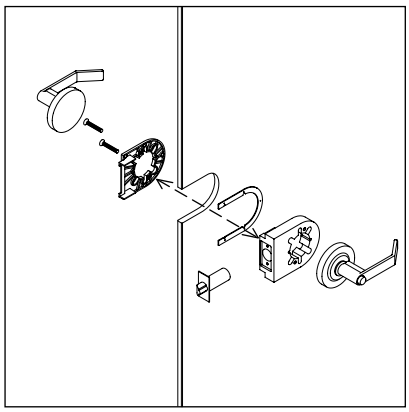

Figure 11 - Remove Door Handle

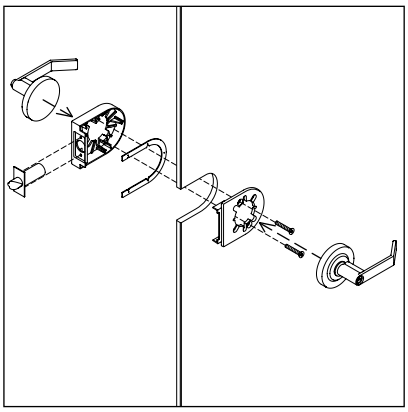

Figure 12 - Reverse Handle & Install

Pivot Door - Temporary Field Reverse Instructions

Note: A Lightline pivot door can be temporarily field reversed without ordering or replacing any components.

1. Measure the strike side molding from the top of the strike notch to the floor and note the dimension (Figure 1).
2. Remove the strike plate, strike side door jamb molding, and any remaining black plastic clips from the door post. Next, measure the strike molding from the bottom of the strike notch to the previously noted dimension above the strike notch, mark and cut (Figure 2). Re-apply all black plastic clips to the cut moldings spacing them about 12" apart.
3. Flip the cut moldings and re-install them opposite of the original orientation. The splice in the cut jamb molding will be near the top of the door frame above the strike plate as illustrated (Figure 3).
4. Now re-install the strike plate and the temporary door frame. Field reversal is complete. Door frame is now ready to receive a reverse hand door leaf.

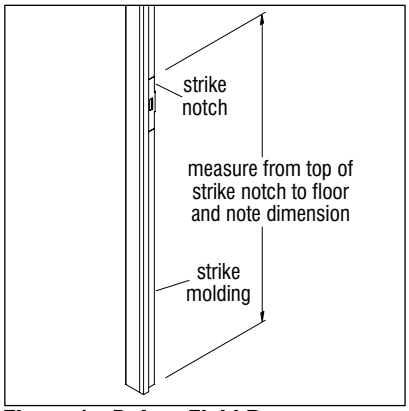

Figure 1 - Before Field Reverse

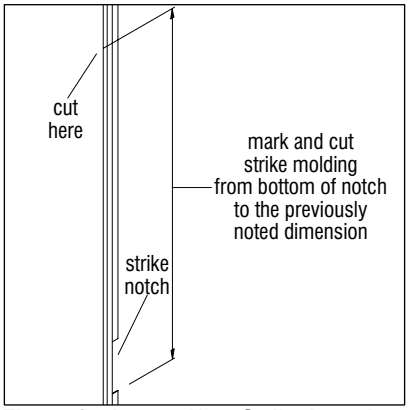

Figure 2 - Locate New Strike Location

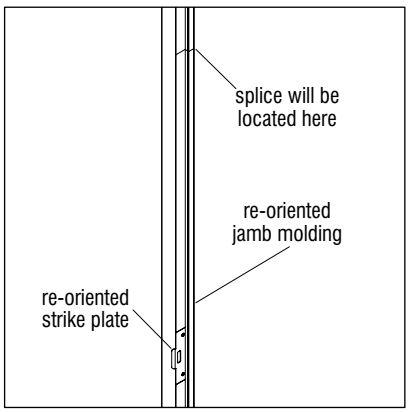

Figure 3 - After Field Reverse

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

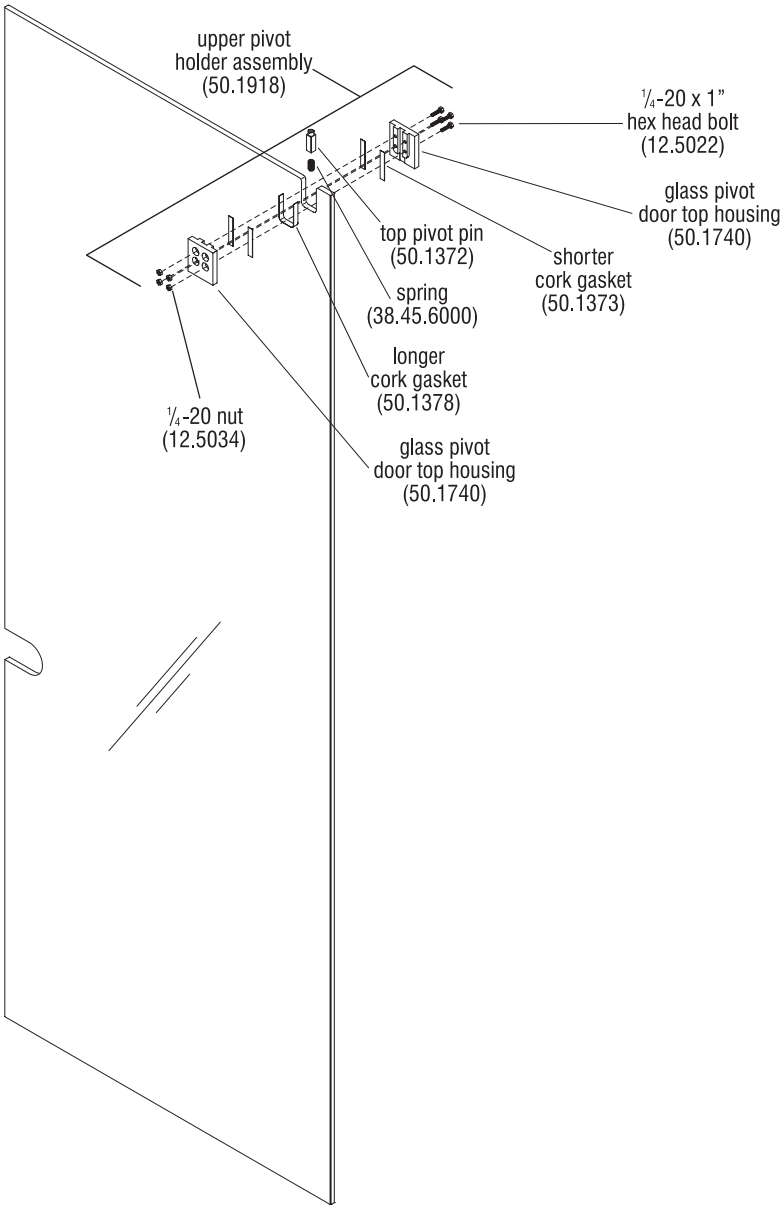

Figure 1

Closer Housing Kit Installation

1. To prepare the pivot door leaf, begin by attaching the upper pivot holder assembly (50.1918). Apply longer cork gasket (50.1378) around the perimeter of the notch in the top of the door leaf (Figure 1).

2. Apply two pieces of shorter cork gasket (50.1373) to the inside of one half of the glass pivot door top housing (50.1740) (Figure 1). Repeat this step for the other half.

3. Place both glass pivot door top housing halves (50.1740) into the notch and secure using four 1/4 -20 x 1" hex head bolts (12.5022) and 1/4 -20 hex nuts (12.5034). Make sure the housing halves assembly is fully seated into the notch and tighten nuts firmly (Figure 1).

4. Check to see if the housing nuts and bolts are properly tightened by temporarily inserting the spring (38.45.6000) and top pivot pin (50.1372). It should not rattle, but still move freely. Remove the top pivot pin and spring once the housing assembly is properly tightened. Do not install the spring and pivot pin at this time (Figure 1).

CAUTION

Assemble units as described herein only. To do otherwise may result in instability. All screws, nuts and bolts must be tightened securely and must be checked periodically after assembly. Failure to assemble properly, or to secure parts may result in assembly failure and personal injury.

Closer Housing Kit Installation (cont.)

5. Position the door closer mounting plate (50.1728) on the upper pivot holder assembly and secure using four $^1/_4$ -20 x $^1/_2$" Torx screws (DZ.12.0007). Repeat step to install the door closer mounting plate (50.1728) at the other side of the door (Figure 2).

6. Once both mounting plates are installed, slide the mounting plate strap (50.1726) over both mounting plates and secure using eight #10-24 x $^3/_8$" machine screws (50.1059) (Figure 2).

7. Clean the outer surfaces of the mounting plate strap with Silane Glass Treatment AP115 (Figure 2).

8. Before installing door closer housing covers (50.1722-L or 50.1725), check for correct fitment of both covers over the mounting plate strap. Make sure left-hand door closer housing cover (50.1722-L) with mounting holes is on the correct side relative to the door handing (Figure 2).

   Note: Door closer mounting holes through left- or right-hand door closer housing covers (50.1722-L or 50.1722-R) are for attaching the door closer using manufacturer instructions (Figure 2).

9. Remove the release backing from the adhesive on door closer housing covers (50.1722-L or 50.1725) and press into position onto the mounting plate strap (Figure 2).

10. Once complete, go back to appropriate pivot door installation steps for final door assembly.

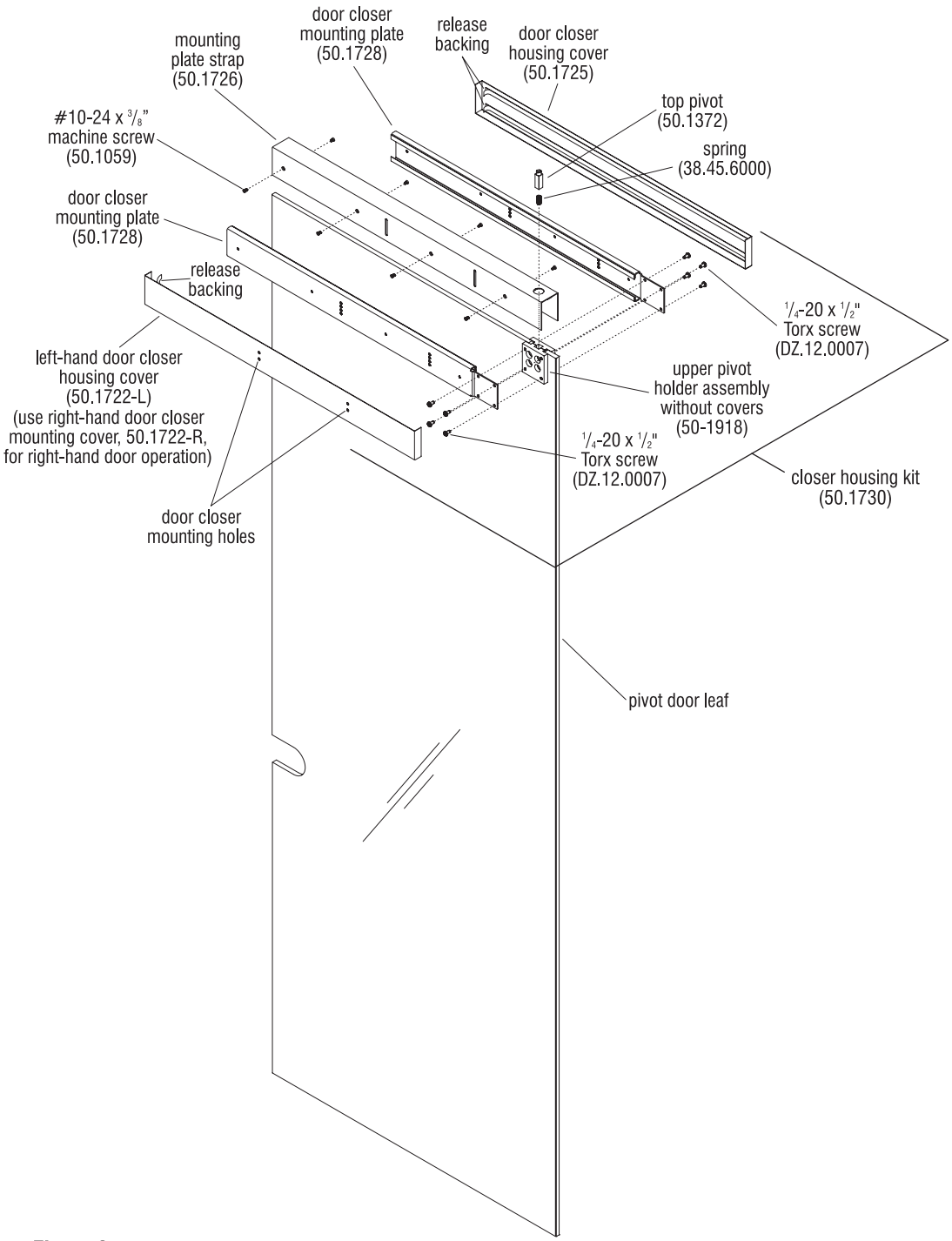

Figure 2

CAUTION

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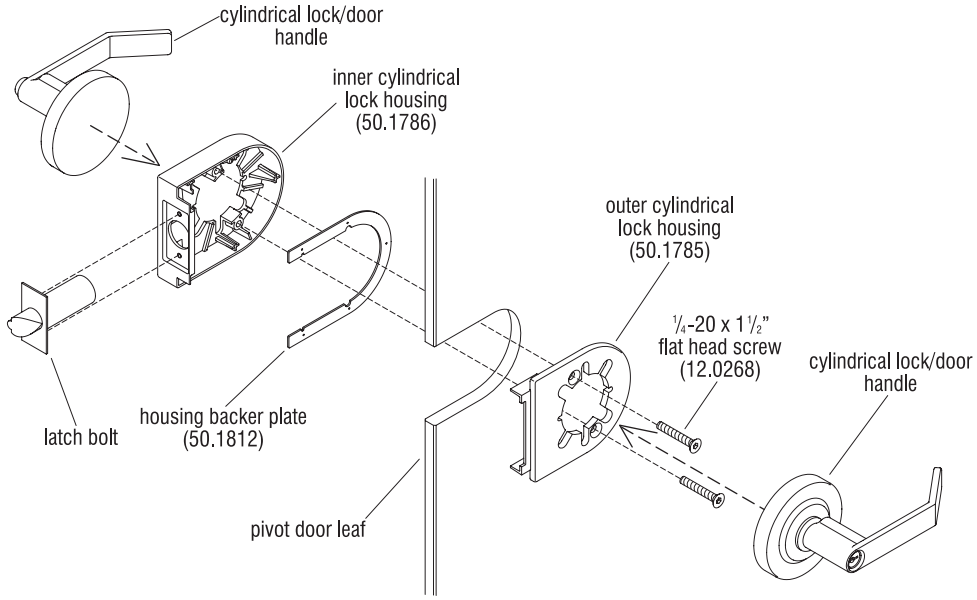

Figure 1

Pivot Door Lock Housing Installation (left-hand shown)
Note: The pivot door must be installed and properly adjusted before the door handle/lock assembly may be installed.

1. Locate the inner cylindrical lock housing (50.1786) and position a housing backer plate (50.1812) into the inner lock housing, making sure that the five round rubber buttons face out, and toward the glass leaf (Figure 1).

2. Place the inner cylindrical lock housing with backer plate into the pivot door leaf opening, against the glass leaf as illustrated for left-hand opening door (right-hand will install opposite). Position the outer cylindrical lock housing (50.1785) over the inner housing and align the mounting holes. Loosely twist in two ¼-20 x 1½" flat head screws (12.0268), check to be sure that the lock housing face is flush with the glass edge of the pivot door glass leaf, then tighten the two screws to secure (Figure 1).

3. Carefully close the door to check the fit of the installed lock housings to the door frame strike. Make any adjustments if required. The latch bolt and the two cylindrical lock/door handles (your style may vary) may be installed following appropriate instructions provided with handle unit.

CAUTION

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Sliding Door Lock Housing Installation (left-hand shown)

1. Locate the outer glass sliding door lock housing (50.1804) (has four counter-sunk holes on the face) and the inner glass sliding door lock housing (50.1805) (has four threaded holes through it). Face the two halves together as illustrated for right-hand opening (left-hand will install opposite). Loosely twist in four ¼-20 1¼" flat head socket cap screws (50.1674) to hold the inner to the outer lock housing, then slide the pair into the door leaf cutout. Center the pair vertically, and align the edge of the pair to be flush with the side edge of the door leaf glass, then tighten the four screws slightly snug. Do not fully tighten the four screws at this time (Figure 1).

2. Slide the two cross dowels (50.1653) into the upper and lower holes of the assembled sliding door lock housing as illustrated. The threaded hole in each dowel must be oriented horizontal to align with the mounting holes of the deadbolt when it installs later. If needed, the cross dowels are slotted on the end, so a small screwdriver can adjust the hole alignment (Figure 2).

3. Next, test fit the deadbolt unit into the open end of the assembled sliding door lock housing as illustrated. Once in, make sure that the large clearance hole for the lock cylinder aligns with the large threaded hole of the deadbolt. Assure that the mounting holes in the cross dowels are aligned horizontal and twist two #12-24 x 1¼" flat screws (38.12.5128) into the top and bottom most holes (which have countersunk openings) in the edge of the deadbolt. Tighten the screws to secure the deadbolt (Figure 3).

4. Assure that the deadbolt is secured tight, that the door lock housings are flush with the edge of the door leaf, then tighten the four ¼-20 1¼" flat head socket cap screws (50.1674) from step 1, to clamp the lock housing to the glass door (Figure 3).

5. Once the housing pair with deadbolt is secured, the sliding door lock covers may be applied following the steps below. Use silane glass treatment with a clean towel, and clean both sides of the door lock housing assembly well for proper adhesion. Locate the left (50.1654.L) and right (50.1654.R) sliding door lock housing covers as shown in figure 3. One cover at a time, peel the release paper from the 2-way tape on the back side of the cover. Align flush to the glass leaf edge while also aligning the cover holes with the door lock housing holes, then adhere each cover to the door lock housing using firm pressure at the tape areas (Figure 3).

6. Complete the install of the sliding door lock housing by installing the lock cylinders and trim collars following the instructions included with the deadbolt. Lastly, orient the deadbolt cover into position as illustrated. The deadbolt cover fits in snug, so may need to be lightly tapped into place with a rubber mallet. Secure the deadbolt cover using the three screws supplied (Figure 4).

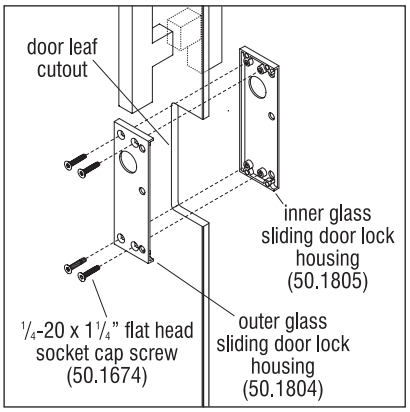

Figure 1

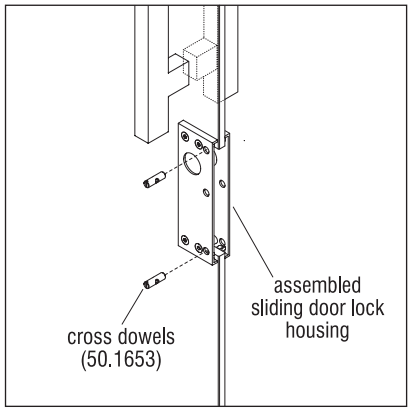

Figure 2

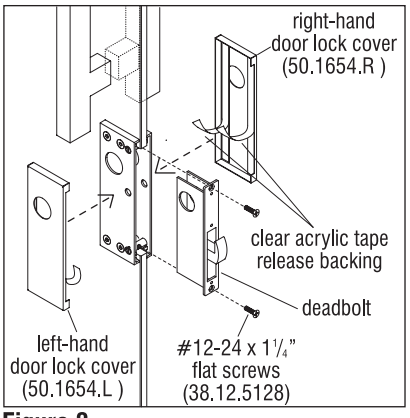

Figure 3

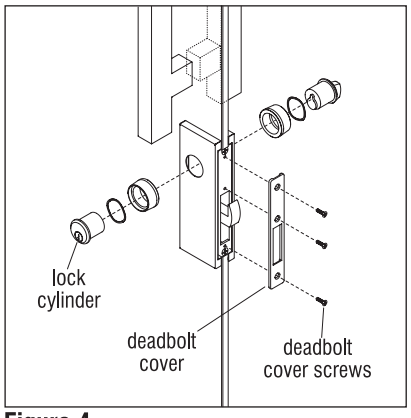

Figure 4

CAUTION

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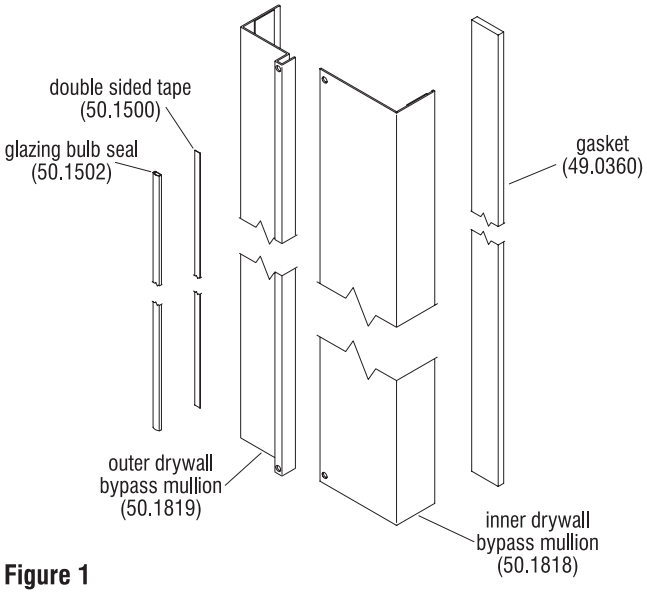

Figure 1

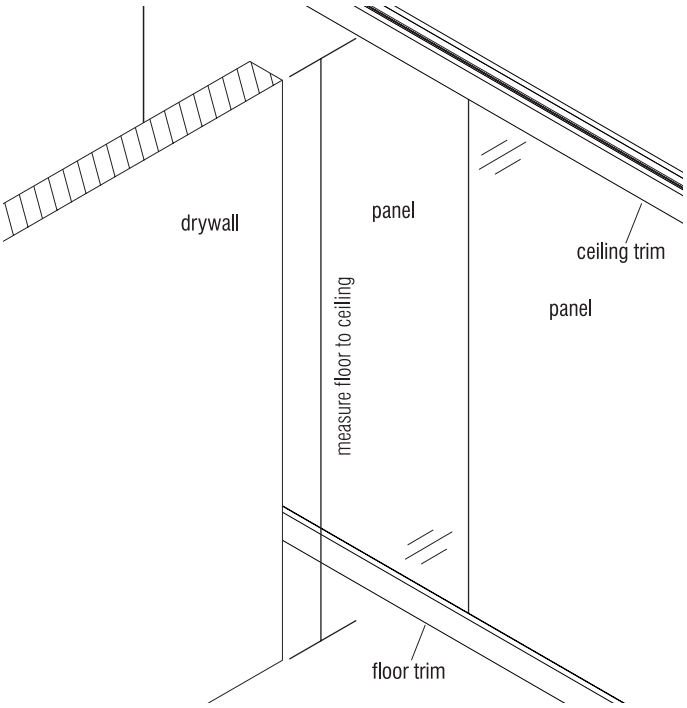

Figure 2

Drywall Bypass Mullion

1. Lightline Drywall Bypass Mullion assembly is used to fill the gap between drywall and panel run when the drywall "T's" into a panel. The mullion ships loose and the parts can be identified in Figure 1.

2. Per space-planning layout, panels must be installed, including the ceiling and floor trim. Please reference pages 8 through 16 of this instructions (Figure 2).

3. Measure from the finished floor level, up to the underside of ceiling tile to determine the overall length of the inner (50.1818) and outer drywall bypass mullion (50.1819) (Figure 2).

4. Once the floor to ceiling measurement is recorded, cut both the inner (50.1818) and outer drywall bypass mullion (50.1819) to size.

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Drywall Bypass Mullion (cont.)

5. Measure from the floor to top of the base trim and record the measurement (Figure 3).

6. Measure from the ceiling to bottom of ceiling trim and record the measurement (Figure 3).

6. Using these two measurements, notch off the top and bottom of the outer drywall bypass mullion nib (50.1819). This will allow clearance for the mullion to fit around the floor & ceiling trim, and snugly to the panel (Figure 4).

7. Once notched, de-burr the cut locations.

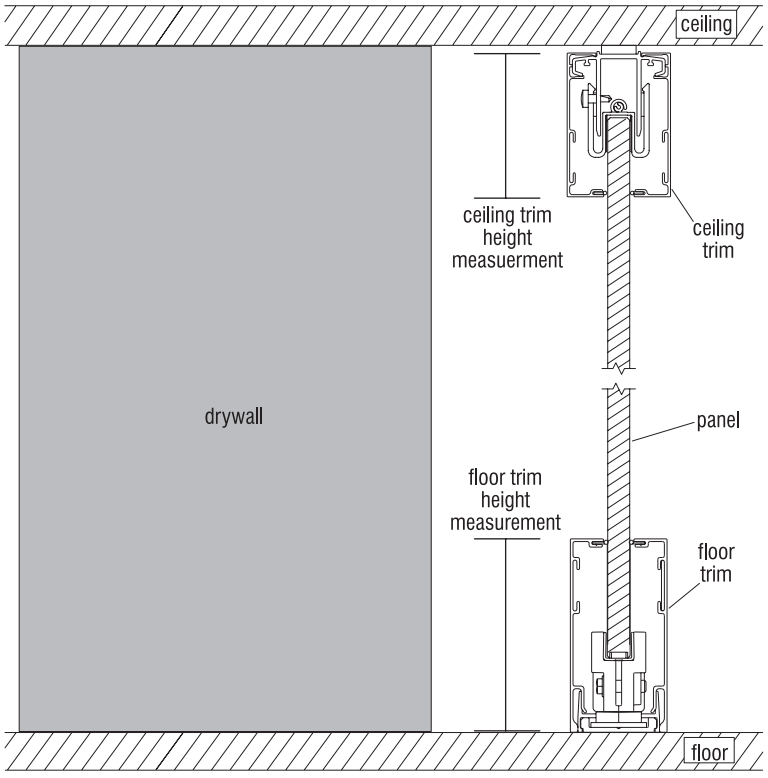

Figure 3

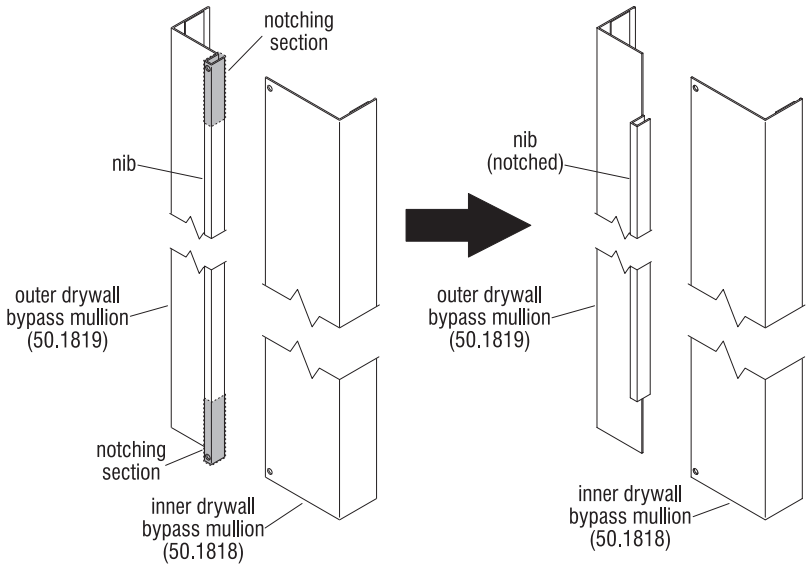

Figure 4

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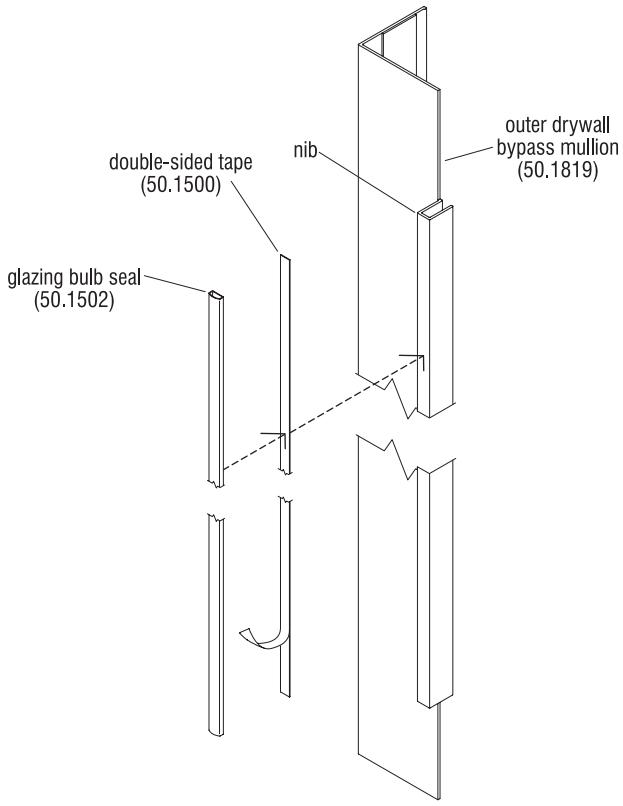

Figure 5

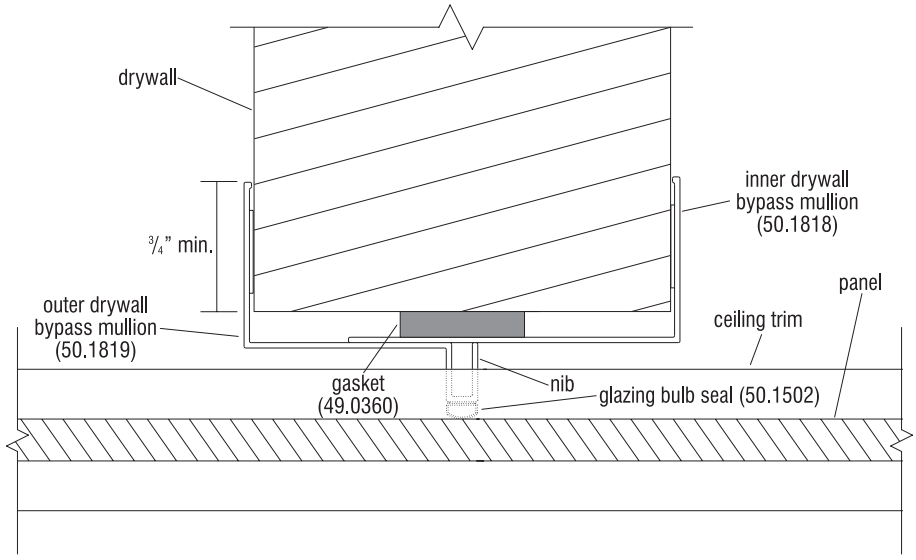

Figure 6 - Top Down View

Drywall Bypass Mullion (cont.)

8. Use the supplied Silane Glass Treatment AP115 to clean the surface of the nib, of the notched outer drywall bypass mullion (50.1819). This must be done prior to applying double-sided tape in the next step (Figure 5).

9. Locate the roll of double-sided tape (50.1500). Beginning at the top of the outer drywall bypass mullion, carefully adhere the double-sided tape to the cleaned face of the nib, working down and pressing firmly. Cut the tape at the bottom of the nib (Figure 5).

10. With tape applied, dry fit the glazing bulb seal (50.1502) and cut to length. Clean the flat side of the glazing bulb seal with Silane Glass Treatment AP115, then remove exposed release backing from installed tape and attach the glazing bulb seal to nib face (Figure 5).

11. Test fit inner (50.1818) and outer drywall mullion (50.1819) to drywall. Determine distance between face of drywall and backside of assembled mullion pieces (Figure 6).

12. Using that measurement, determine the amount of supplied gasket (49.0360) required to shim assembled inner/outer mullion away from drywall so that the glazing bulb seal contacts the glass of LightLine panel. Inner/outer drywall mullions must contact drywall a minimum of 3/4" (Figure 6).

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Drywall Bypass Mullion (cont.)

13. Once distance is determined, apply gasket to backside of inner drywall bypass mullion (50.1818). Gasket can be stacked in thickness to achieve proper shim distance. (gasket is not required to run full length. Cut 4-6" lengths and apply/ stack evenly spaced as necessary for consistent contact).

14. Next, clean surface of drywall where inner drywall bypass mullion (50.1818) will install. Remove release backer from tape on inner drywall bypass mullion and install to drywall. Apply pressure to make sure of good adhesion.

15. Clean other side of drywall where the outer drywall bypass mullion (50.1819) will attach. Once clean, remove release backer from tape and apply to drywall, sliding over inner drywall bypass mullion (50.1818). Refer to Figure 6 top down view for fitment. Apply pressure to make sure of good adhesion.

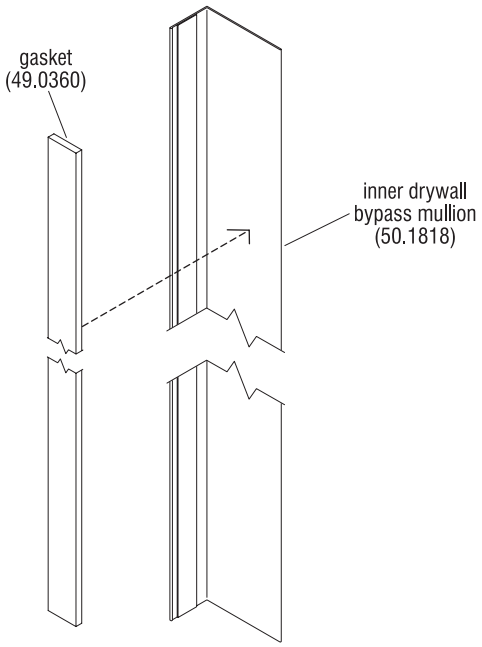

Figure 7

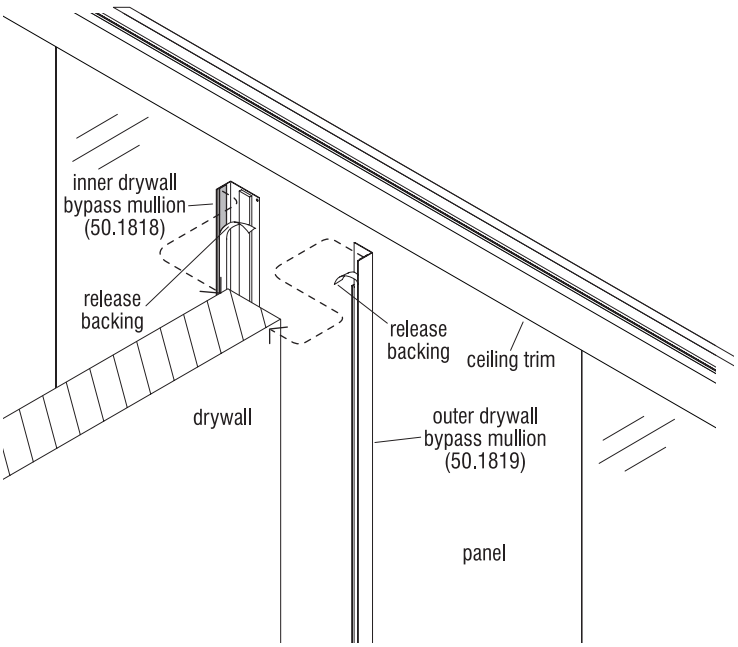

Figure 8

CAUTION

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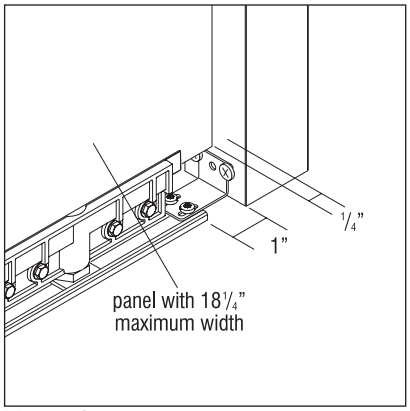

Figure 1

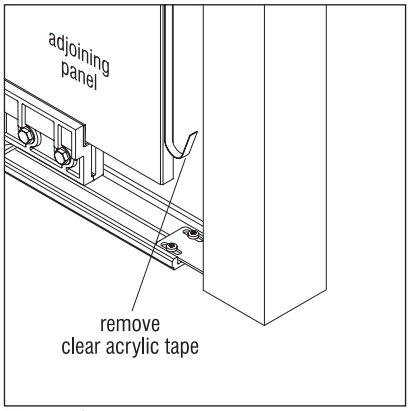

Figure 2

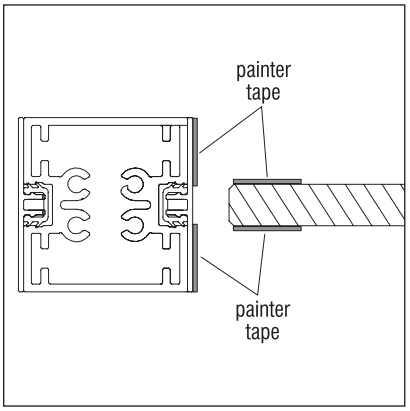

Figure 3

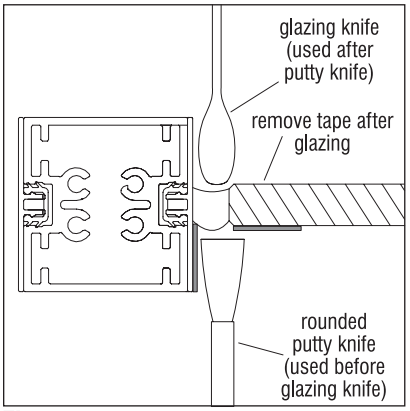

Figure 5

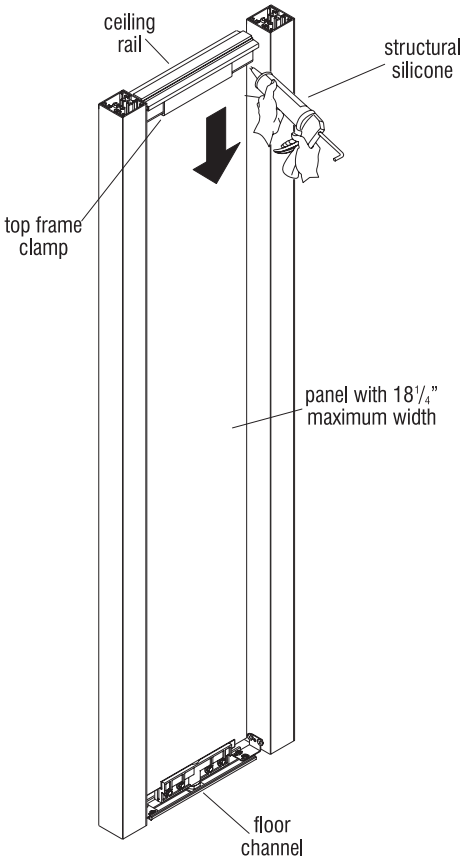

Figure 4

Structural Silicone Application

Note: For laminate glass panels, under 18 1/4" wide module (one panel clamp top and bottom), having neither panel edge supported, requires 1/4" x 1/2" structural silicone edge support. Review final KI installation drawings layout for structural silicone specifications.

Note: Refer to KI space-planning layout drawing for specific conditions and detail.

1. Install panel to be level and plumb at the final location as specified on the space-planning layout. See "Initial Panel Installation" steps on page 17 for information (Figure 1).

3. Remove release backer on edge that will receive structural silicone (Figure 2).

4. Apply continuous length of painters tape to door post surfaces and glass face (Figure 3).

5. Begin to fill gap between panel edge and post with structural silicone. Silicone should be continuous from top to bottom of glass across the 1/2" width of glass, and free of any air voids.

6. Using a rounded putty knife, flat tool the silicone by scraping excess silicone from the joint. Clean excess silicone from putty knife as needed. Perform this task on both sides of the glass.

7. After flat tooling silicone, use glazing knife to tool silicone on both sides of joint for final finish. Glazing knife/sealant tool is available from most hardware stores.

   Note: Steps 6 and 7 can be performed directly after applying silicone.

8. After tooling silicone, remove tape immediately, pulling tape sharply away from silicone. Once silicone has cured, clean glass.

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Freeform Panel Layout Installation

1. Using masking tape and a marker, lay out the X and Y coordinates onto the floor, per the space-planning layout (Figure 1).

2. Cut a section of ceiling rail 2" less than panel width for each of the panels that will be installed in the curved section of wall assembly (Figure 2).

   Note: Panel width is defined as the panel width plus the thickness of both double-sided tape plus the thickness of the rigid seal.

3. Install the sections of ceiling rail with the freeform ceiling rail splices (50.1859). To do this, insert one leg of the splice into the ceiling rail all the way until both splice stops are against the edge of the rail. Then attach the splice to the rail using two #10-16 x ½" self-drilling screws (31.12.9081). Repeat this step until all ceiling rails are connected (Figure 3).

4. When all of the ceiling rails have been connected, it will form a spine that can be used as a template to more accurately lay out the contour of the curve. Flip over and lay the ceiling rail assembly onto the floor and align the rivets in the center of the splices with the marks on the masking tape as closely as possible (Figure 3).

5. Using a spot style plumb-bob laser, adjust the curvature of ceiling rail assembly more accurately. To do this, position the laser so that the laser beam is centered to the center of the rivet of the splice. One at a time, make any corrections required to the mark on the floor by marking the exact spot where the laser hits (Figure 4).

6. Once corrections are done to the floor, make corresponding marks on the ceiling using a marker and masking tape (Figure 4).

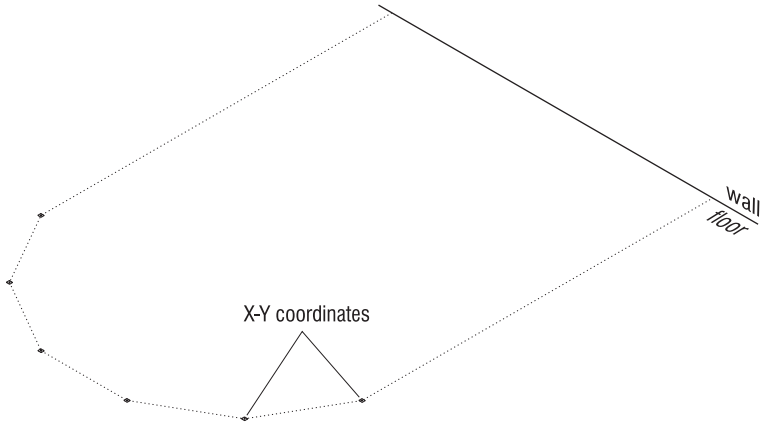

Figure 1 - Floor Markings With X-Y Coordinates

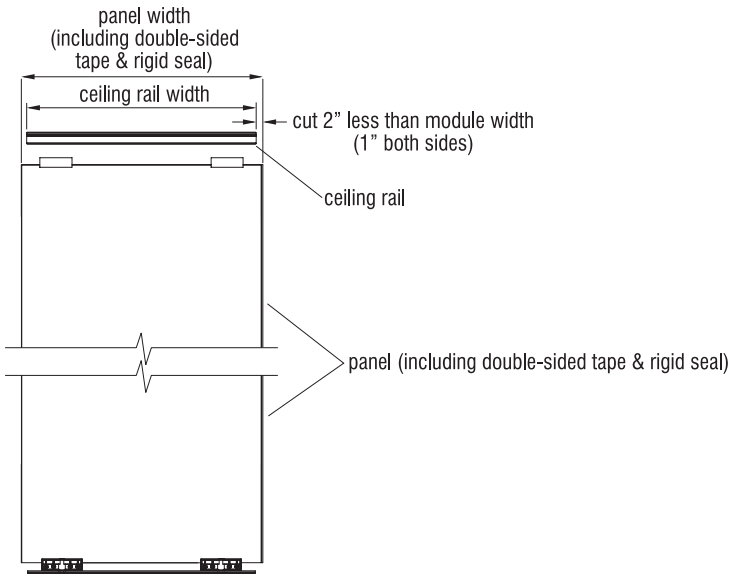

Figure 2 - Ceiling Rail Modification

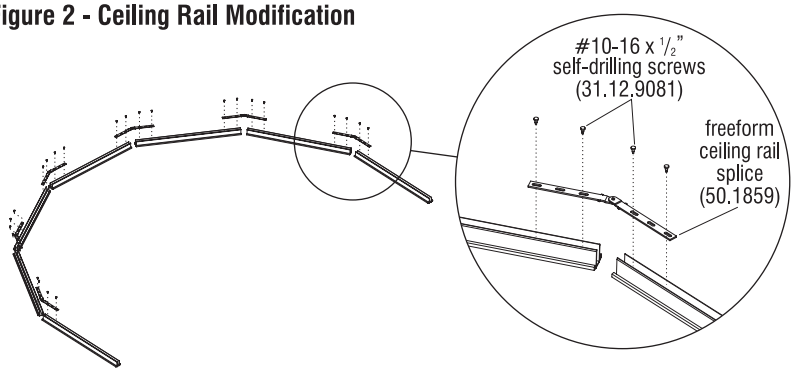

Figure 3 - Freeform Ceiling Rail Spine

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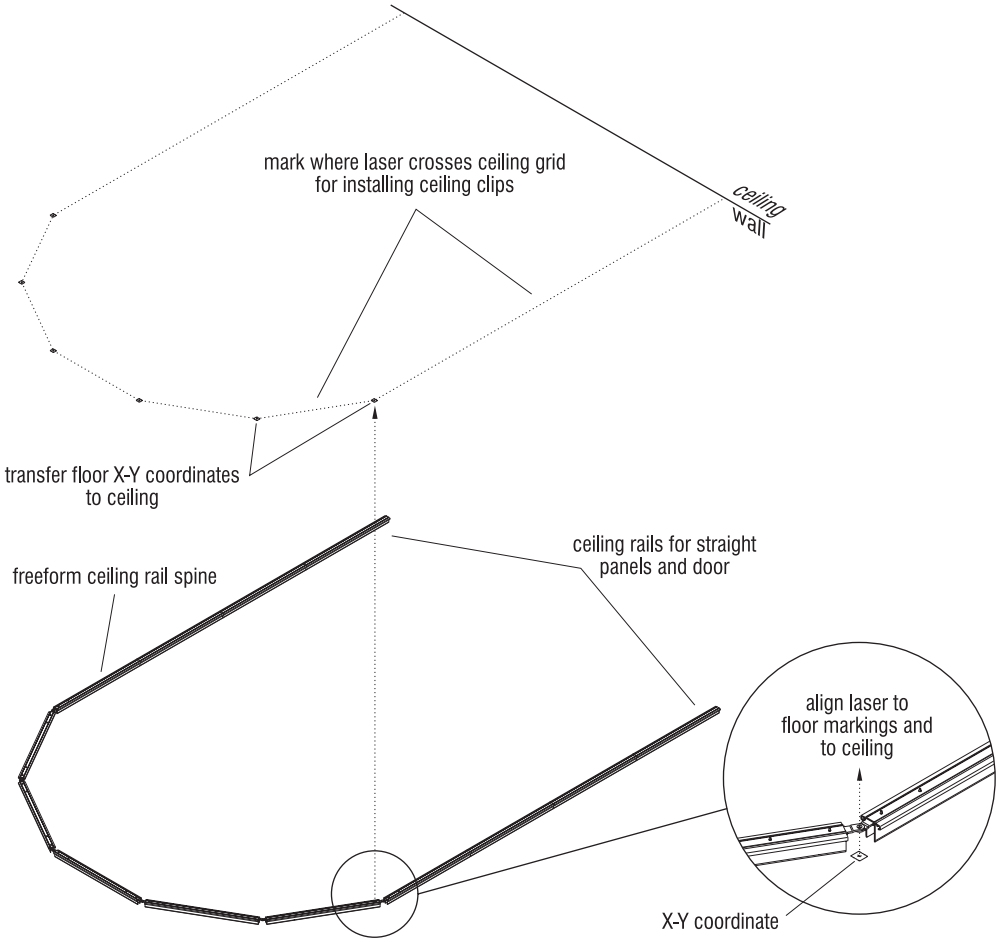

Figure 4 - Ceiling Rail Alignment Check and Marks for Ceiling Clips

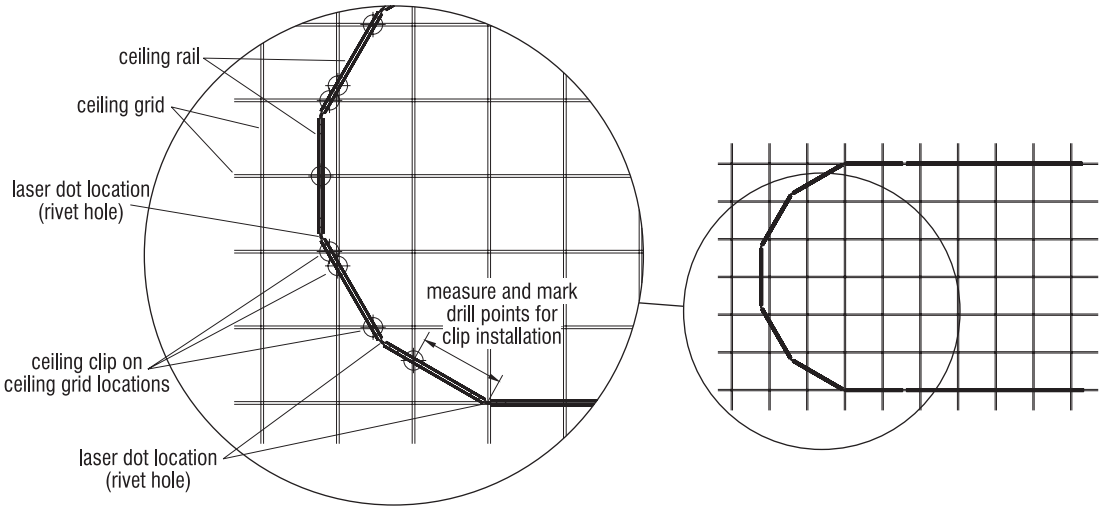

Figure 5 - Ceiling Grid/Rail Clip Locations

Freeform Panel Layout Installation (cont.)

7. Using a line laser or straight edge, connect the marks on the ceiling and mark where the line crosses the center of the ceiling grid (Figure 5).

8. Install a ceiling clip on the marks made where the laser line crosses the center of the ceiling grid (see "Ceiling Rail Installation" on page 8).

9. Holes must be drilled into the ceiling rail so the rail may be installed onto the ceiling clips. To do this, first measure from where the laser dot on the ceiling was to the center of the ceiling clip (Figure 5).

10. Transfer this dimension to the ceiling rail assembly by measuring from the center of the rivet to where a hole will need to be drilled for the ceiling clip (Figure 5).

11. After all the holes have been drilled install the ceiling rail (spine) assembly to the ceiling over the ceiling clips and fasten with hex nuts (see "Ceiling Rail Installation" on page 8). Use additional personnel as required to help support the ceiling rail during installation.

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Freeform Panel Layout Installation (cont.)

Note: Ceiling rails must be installed prior to the floor channel installation. Refer to ceiling rail instructions before proceeding.

12. Using a laser alignment tool, align the lasers with the installed ceiling rail as done in previous steps for ceiling rail installation. Transfer X-Y coordinates to the floor to aid in aligning floor track with ceiling rail (Figures 6).

    Note: If it helps to keep the floor channel from moving, use two square pieces of hook & loop (with an adhesive back) and attach them to the underside of the floor channel centered on both ends.

13. Align the floor channel with the laser alignment mark (Figure 7).

14. Pre-drill attachment screw holes by determined distance on space-planning layout. Use supplied screws that are specified per space-planning layout and attach floor channel to the surface (Figure 7).

    Note: Be certain of no overlaps, and that leveler clamp pad is resting on floor track in all locations

15. Repeat steps one and two for installing additional floor channels, directly below ceiling rails (Figure 7). Standard floor channel installation steps can be found on page 16, if additional information is needed.

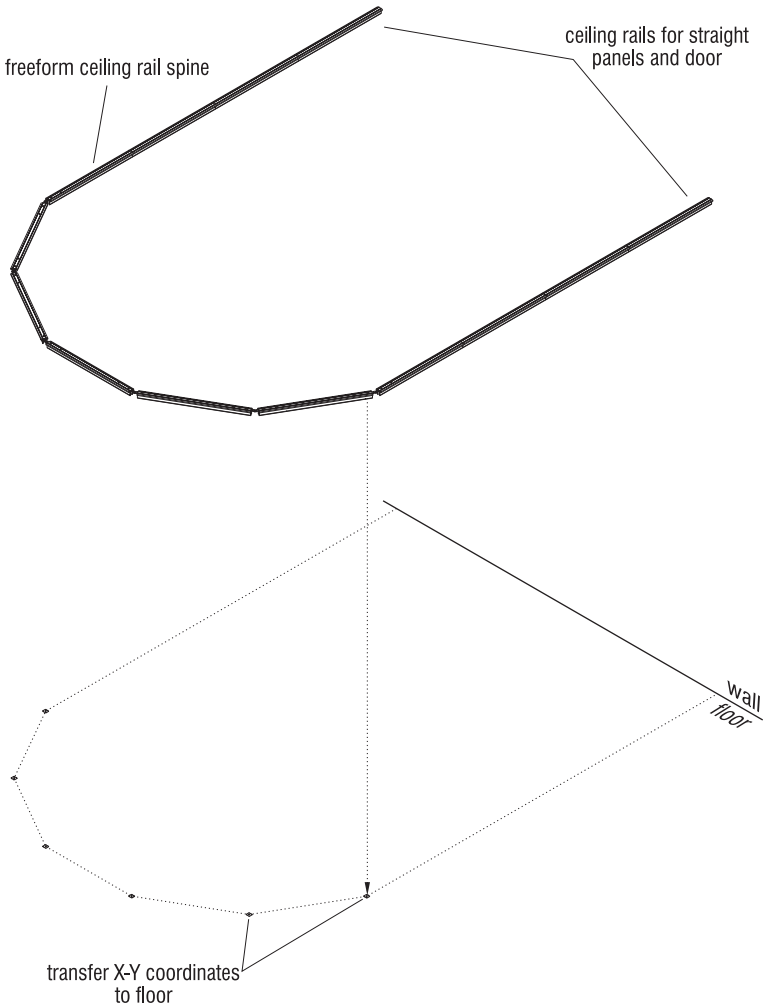

Figure 6 - Floor Channel Alignment Check and Marks for Installation

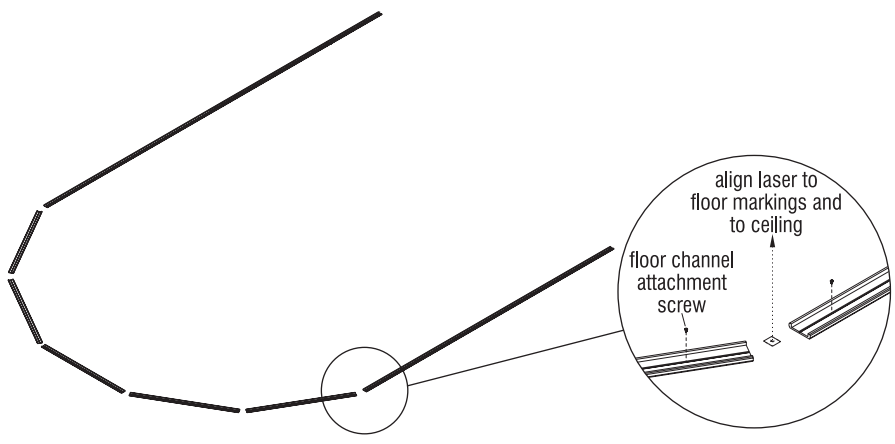

Figure 7 - Floor Channel Positioning

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Freeform Panel Layout Installation (cont.)

Important: Ceiling rails and floor channels must be installed prior to panel installation. Refer to ceiling rail and floor channel instructions before proceeding.

Note: To save time and space, stage all panels into sequence. If possible, do this as the panels are unloaded from the truck, eliminating double handling and potential damage.

16. Before setting panel into position make sure the leveling glide bolt is loose on each end before standing the panel into position.

17. With assistance of a second person, using rubber suction disks, position the panel into the ceiling rail first and hold the panel up & plumb to align the top with the installed ceiling rail (Figure 8).

18. With a second person holding the panel upright and secure, adjust the panel height up enough to nest up into the ceiling rail. **Follow "Panel Height Adjustment" instructions on page 21 to properly level panels and secure to top frame channel** (Figure 8).

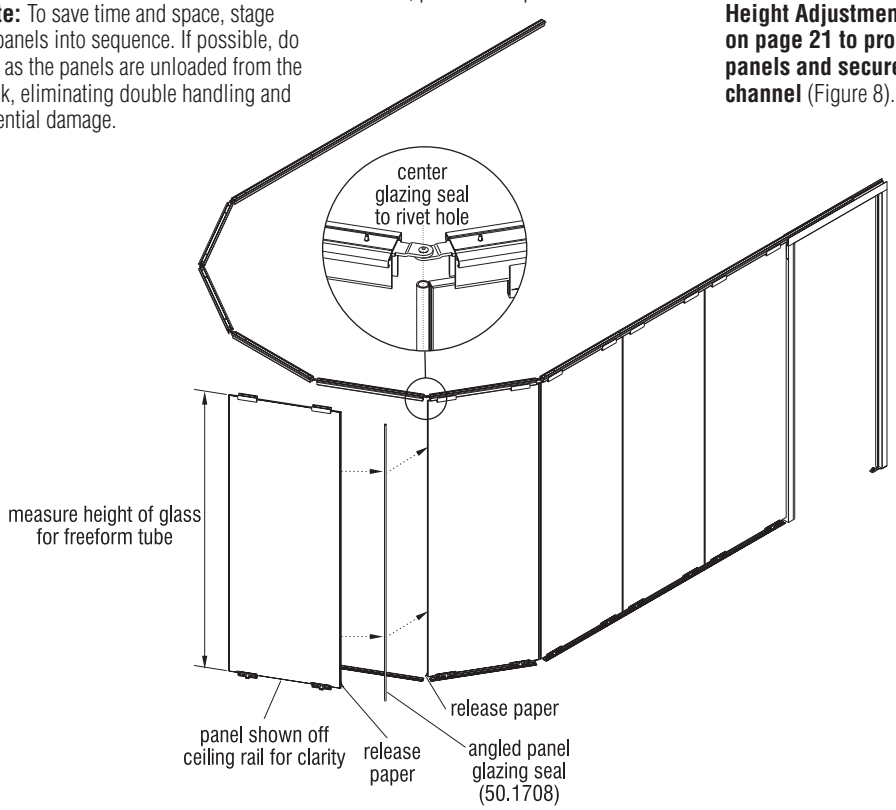

Figure 8 - Panels and Freeform Tube Install

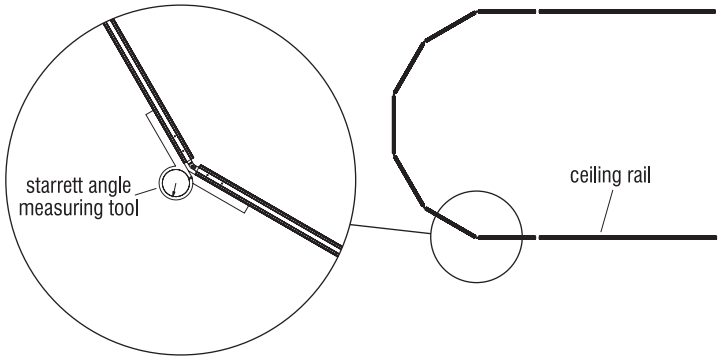

Figure 9 - Starrett Angle Measuring Tool

19. Starting from one end of the curve remove the release paper from the VHB tape on the edge of the Lightline panel (Figure 8).

20. Measure the height of the glass and cut the angled panel glazing seal extrusion (50.1708) to length (Figure 8).

21. Clean the extrusion with Silane Glass Treatment AP115.

22. Bond the angled panel glazing seal extrusion to the edge of the glass using the rigid seal alignment block. Place the top of the seal extrusion centered on the top edge of the glass and use the block to guide the glazing seal onto the edge of the glass by sliding the block down the edge of the glass (Figure 8).

23. Move this panel so that the center of the glazing seal extrusion is aligned with the rivet in the splice (Figure 8).

24. Dry fit the next panel to the first one by leveling both panels so that the second panel butts into the tube evenly from top to bottom.

25. Pull the second glass panel back about $^1/_4$" and remove the release paper from the VHB tape on the edge of the glass panel (Figure 8).

26. Push the second panel into the glazing seal extrusion making a bond. Continue this process for the length of the curve.

27. Using a starrett angle measuring tool, measure the angle between each pane of glass. This device will produce the angle at which to set the power miter box and aid the installation of trim (Figure 9).

CAUTION

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Freeform Panel Layout Installation (cont.)

Note: When cutting trim, make sure inner features are filed back so they are not sticking out of cut.

28. Cut one end of either the ceiling or base trim at the angle determined by the starrett angle measuring tool. Hold the mitered end of trim over the center of the extrusion and mark where the trim crosses the next extrusion. Cut the trim on the miter box at this location. Continue with all the pieces of trim and dry fit them onto the panels.

29. Remove the pieces of trim and splice them all together using the freeform splice plate (50.1734). This splice is bent by hand to the angle required. The splice fits into the end of the trim with an interference fit. Push and tap the splices into trim so that the middle of the splice lines up with the miter line. Continue attaching one piece of trim to the next until the entire curve is complete (Figure 10).

30. Finally, install this complete trim assembly onto the panels as one complete piece (Figure 10).

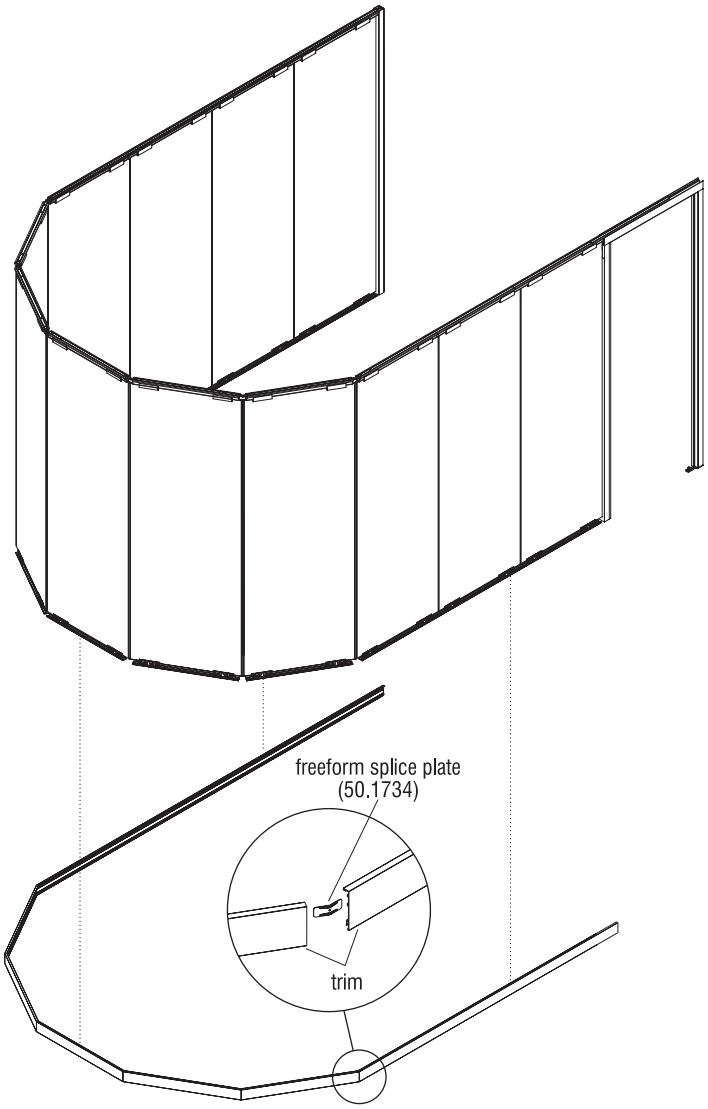

Figure 10 - Trim Installation (Floor Trim Shown Only)

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