



3form Top Support hardware is designed for minimal hardware appearance to accentuate the beauty of 3form Varia Ecoresin®, Chroma® or Glass panels. Panels are easily removed for applications where changing panels or access to back-lighting is required.

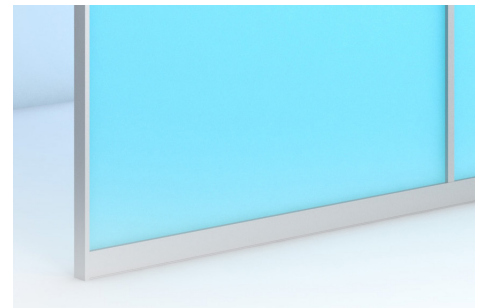


Table of Contents

3 Overview

- 4 General Conditions and Dimensions
- 7 Material Compatibility Chart

8 Top Hung - Resin Panels

- 9 Parts Overview
- 10 Hardware Overview
- 11 Diagram for Specifying Resin Panel Height
- 12 Installation Instructions

18 Top Hung with Bracing - Resin Panels

- 19 Parts Overview
- 20 Hardware Overview
- 21 Diagram for Specifying Resin Panel Height
- 22 Installation Instructions

28 Bottom Supported - Glass Panels

- 29 Parts Overview
- 30 Laminated Glass Flatness Tolerance Chart
- 31 Hardware Overview
- 32 Diagram for Specifying Laminated Glass or Monolithic Glass
- 33 Installation Instructions

38 General Specifications

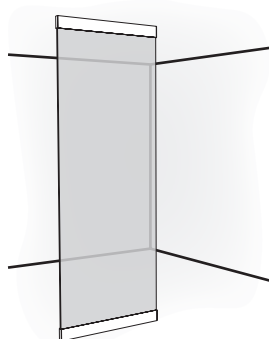
Overview

The Top Support system is designed to be used with a variety of 3form products and to feature their beauty with minimal visible hardware. Varia®, Chroma® and Koda® are supported and hung from the top. Laminated and Monolithic Glass work with the Top Support system by resting on blocks in the bottom channel on the floor. See “Top Support Material Compatibilities” on page 7 for specific recommendations and gauge compatibility. The Top Support system can be installed in the following situations.

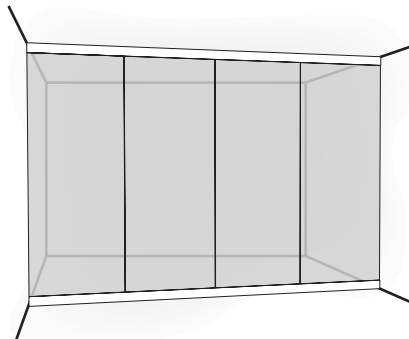
The top and bottom channels can be recessed where conditions allow, but it requires an additional ½" reveal on one side to allow access to the fasteners and to snap on the cover.

Panel Surface Compatibility

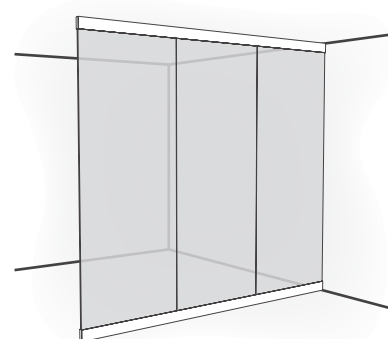
Top Support works well with smooth surface or slight surface texture panels, embossed panels are not compatible with this system due to the nature of this hardware and the installation process.



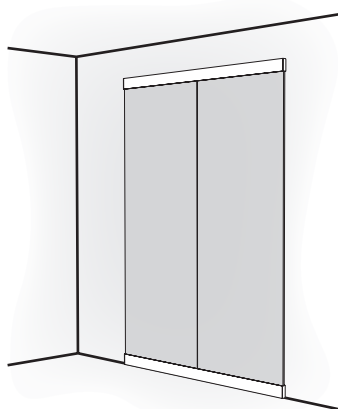
Exposed Edges



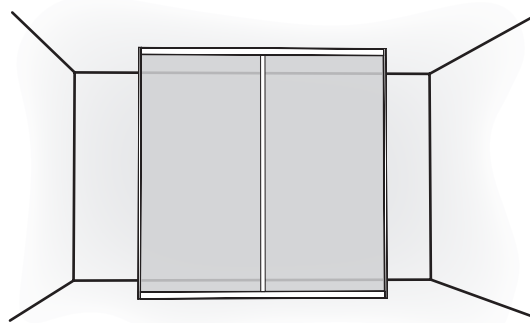
Wall to Wall



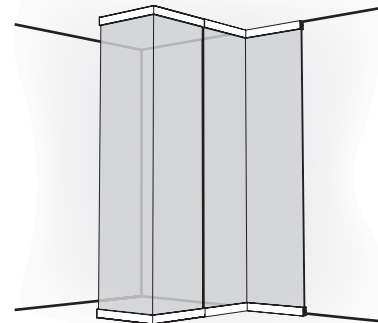
Wall to Exposed Edge



Wall Mounted



Top Support with Bracing

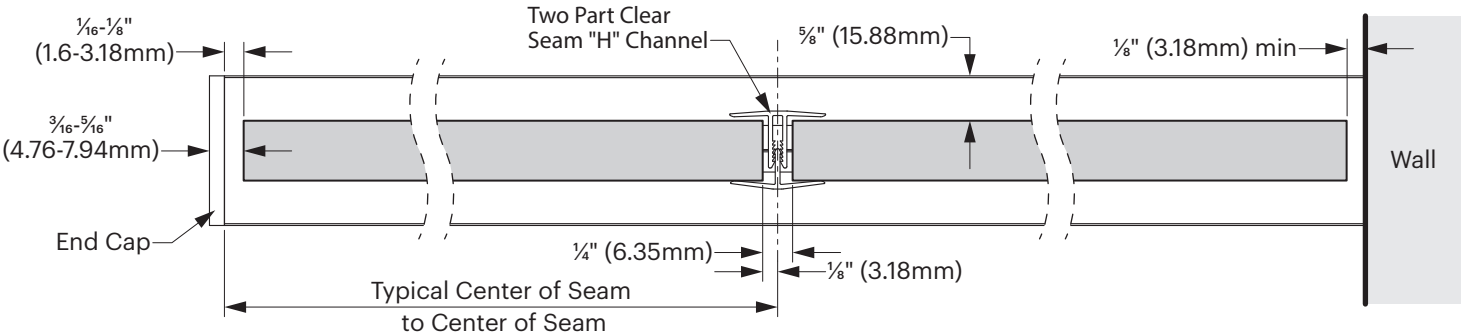


90 Degree Corners

Overview - General Conditions And Dimensions

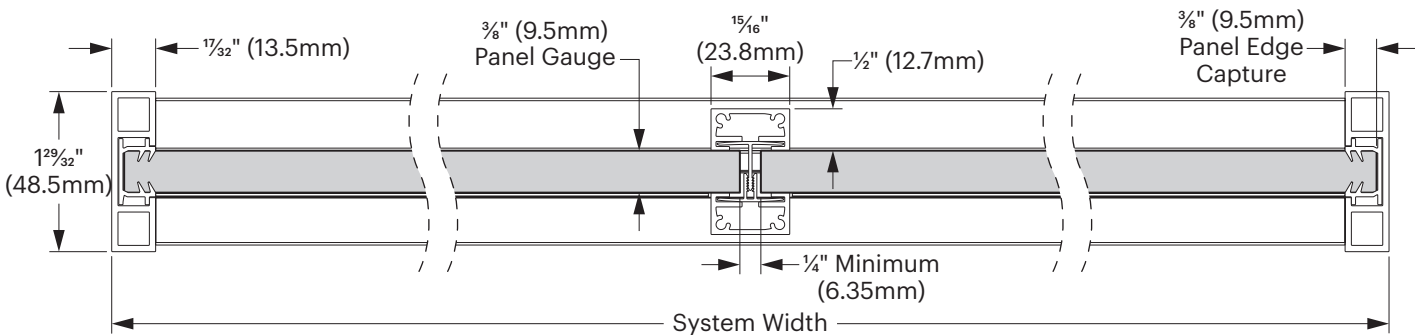
Please use the following for use in planning your installation

Wall and End Cap Condition



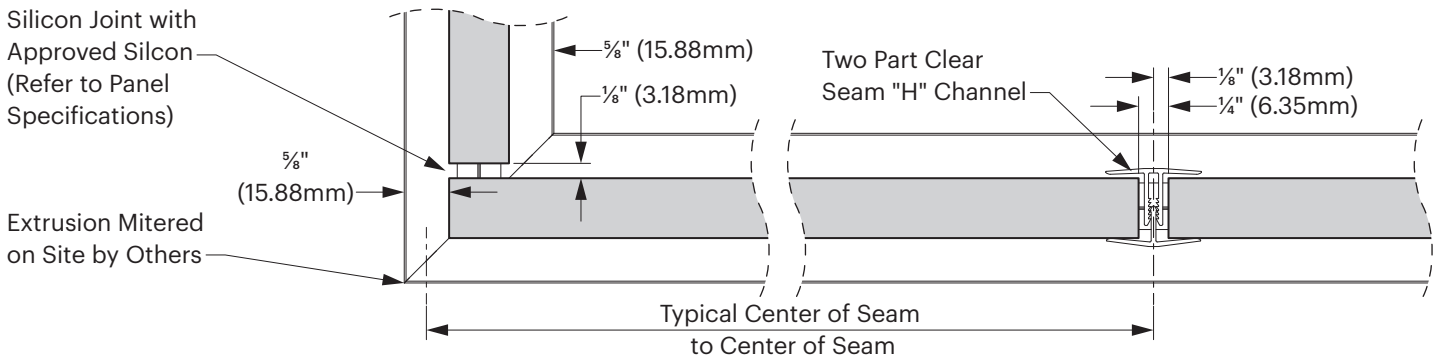
* $\frac{1}{2}$ " gauge nominal panel shown. Fabrication charges apply as requested.

Top Support with Bracing Condition



* $\frac{3}{8}$ " gauge nominal panel shown. Fabrication charges apply as requested. Can be used with $\frac{3}{8}$ " or $\frac{1}{2}$ ".

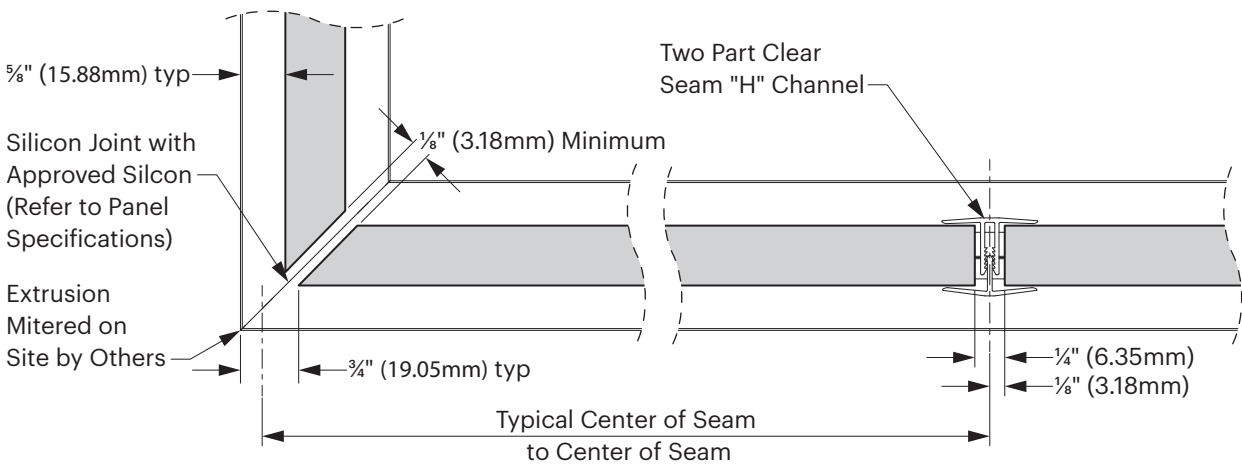
Panel Butt Corner Condition



* $\frac{1}{2}$ " gauge nominal panel shown. Fabrication charges apply as requested.

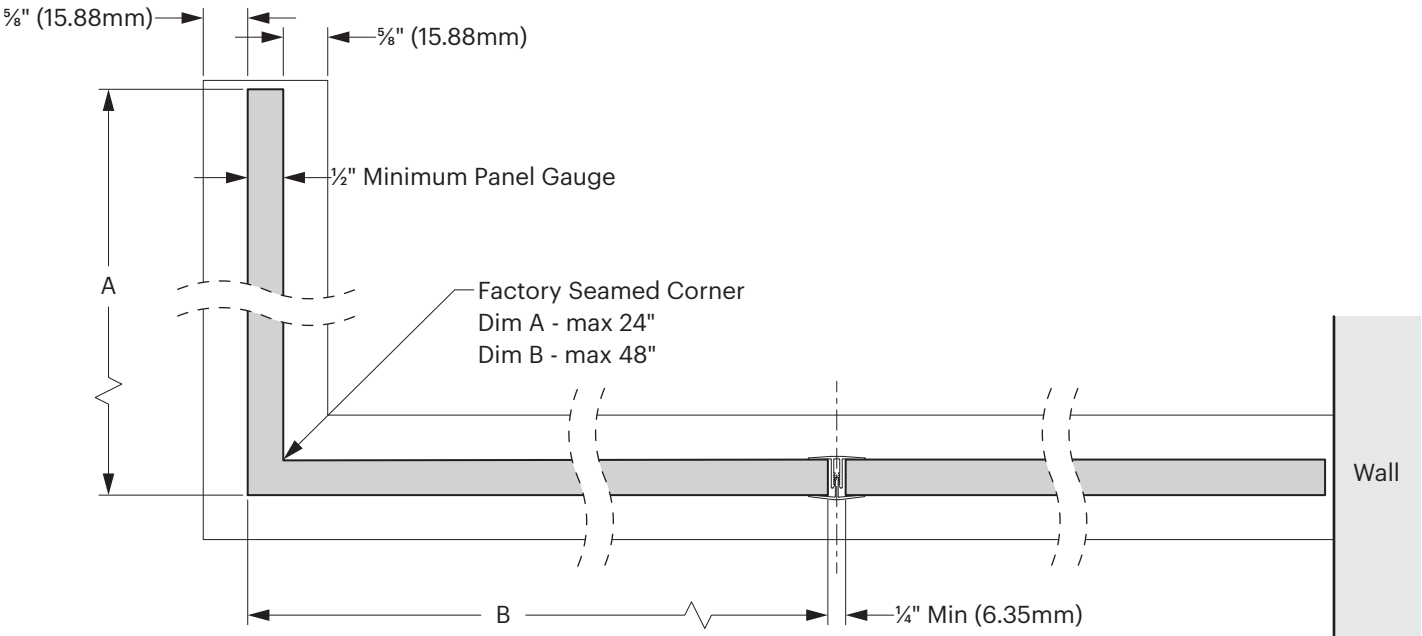
Overview - General Conditions And Dimensions

Mitered Corner Condition (*Varia, Koda and Chroma Only*)



* 1/2" gauge nominal panel shown. Fabrication charges apply as requested.

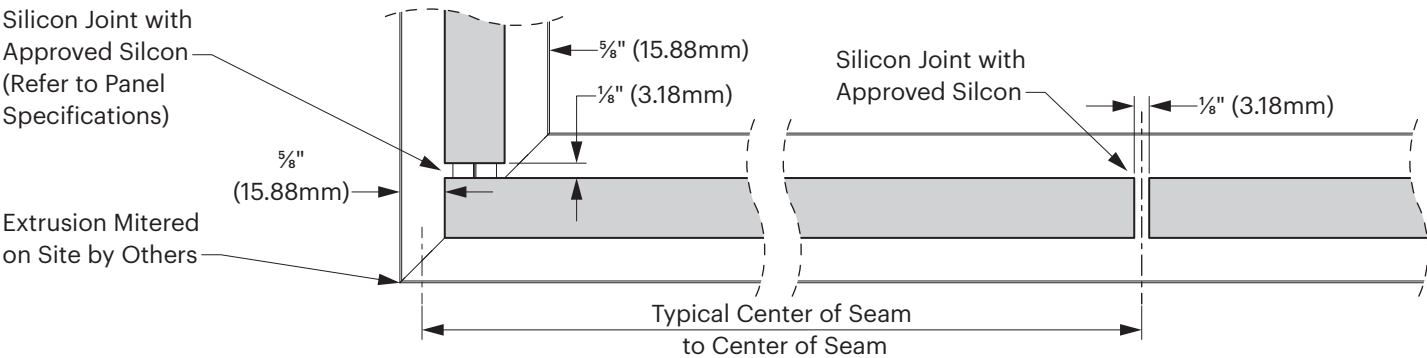
Factory Seamed Corner Condition (*Varia and Chroma Only*)



* 1/2" gauge nominal panel shown. Fabrication charges apply as requested.

Overview - General Conditions And Dimensions

Glass with Abutted Seam and no Hardware Condition



** 1/2" gauge nominal panel shown. Fabrication charges apply as requested.*

Overview

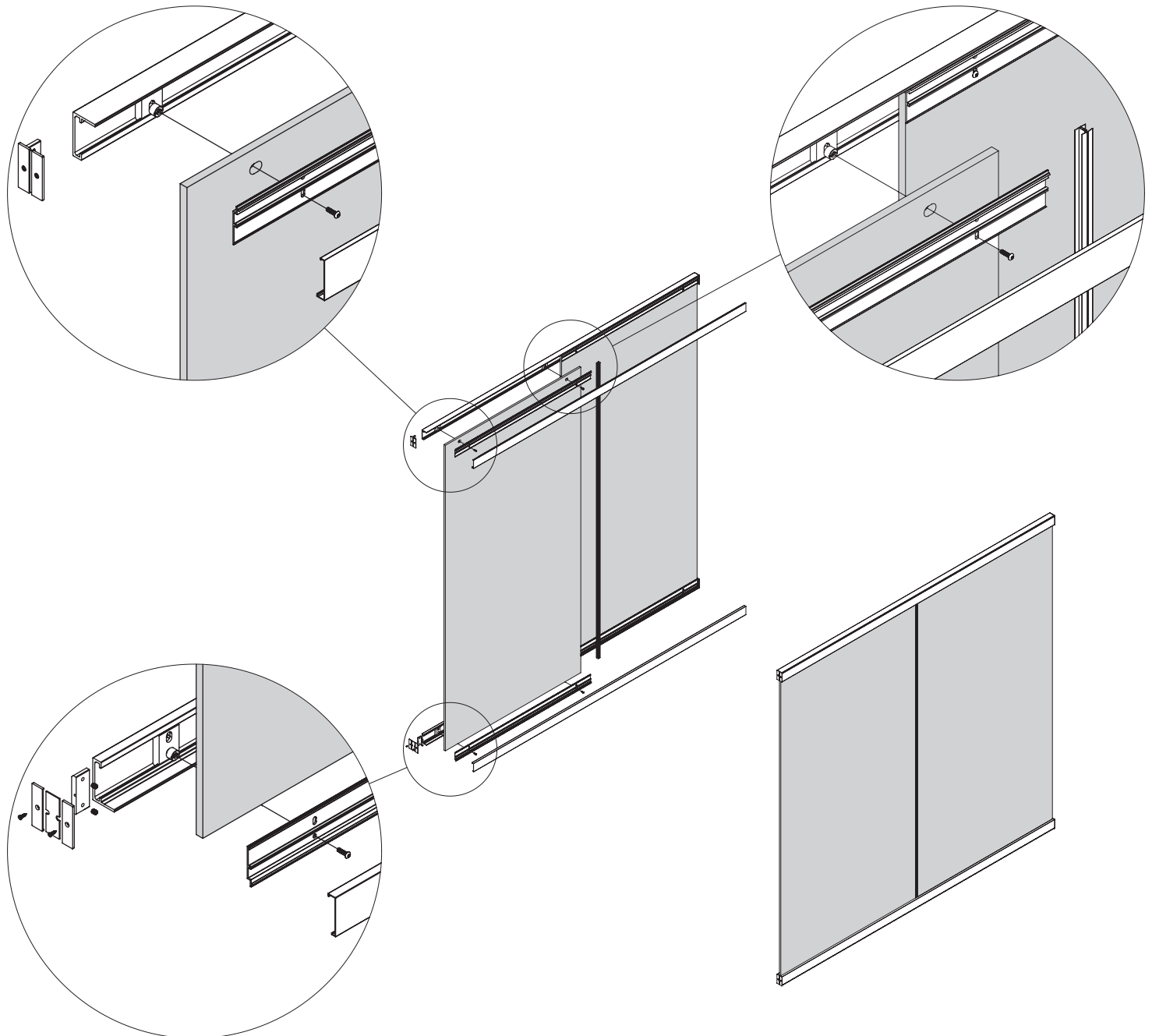
Top Support Material Compatibilities

Refer to the material spec sheet for each of the following materials for more information on bowing and deflection tolerances. In a frameless system, various degrees of deflection and bowing should be anticipated. Top Support is compatible with the following materials, please refer to sections as described below for each material type:

Varia Ecoresin®	$\frac{1}{2}$ " Varia (4' × 10' max) $\frac{3}{4}$ " Varia (4' × 10' max) Due to properties of Varia, significant deflection at center of panel is to be anticipated. If this is problematic in its designated application, specify the 3form Frame System with Varia, Top Support with 3form Laminated Glass or Top Support with Bracing.	Top Hung see page 8
Varia Ecoresin® <i>*Vertical Bracing</i>	$\frac{3}{8}$ " Varia (4' × 8' max) $\frac{1}{2}$ " Varia (4' × 10' max)	Top Hung with Bracing see page 18
Koda®	$\frac{3}{8}$ " Koda (4' × 8' max, 6' max height is recommended) $\frac{1}{2}$ " Koda (4' × 10' max) Due to properties of Koda, significant deflection at center of panel is to be anticipated. If this is problematic in its designated application, either specify the 3form Frame System with Koda or specify Top Support with 3form Laminated Glass.	Top Hung see page 8
Chroma®	$\frac{1}{2}$ " Chroma (4' × 8' max) $\frac{5}{8}$ " Chroma Reflect (4' × 10' max) Due to properties of Chroma, some deflection at center of panel is to be anticipated. If this is problematic in its designated application, either specify the 3form Frame System with Chroma or specify Top Support with 3form Laminated Glass.	Top Hung see page 8
Laminated Glass®	$\frac{1}{2}$ " and $\frac{5}{8}$ " Pressed or Laminated Glass gauges (see Flatness Tolerance on page 30 for more information on how much bow can be expected from glass).	Bottom Supported see page 28
Monolithic Glass®	$\frac{1}{2}$ " tempered Monolithic Glass only (see Flatness Tolerance on page 30 for more information on how much bow can be expected from glass).	Bottom Supported see page 28

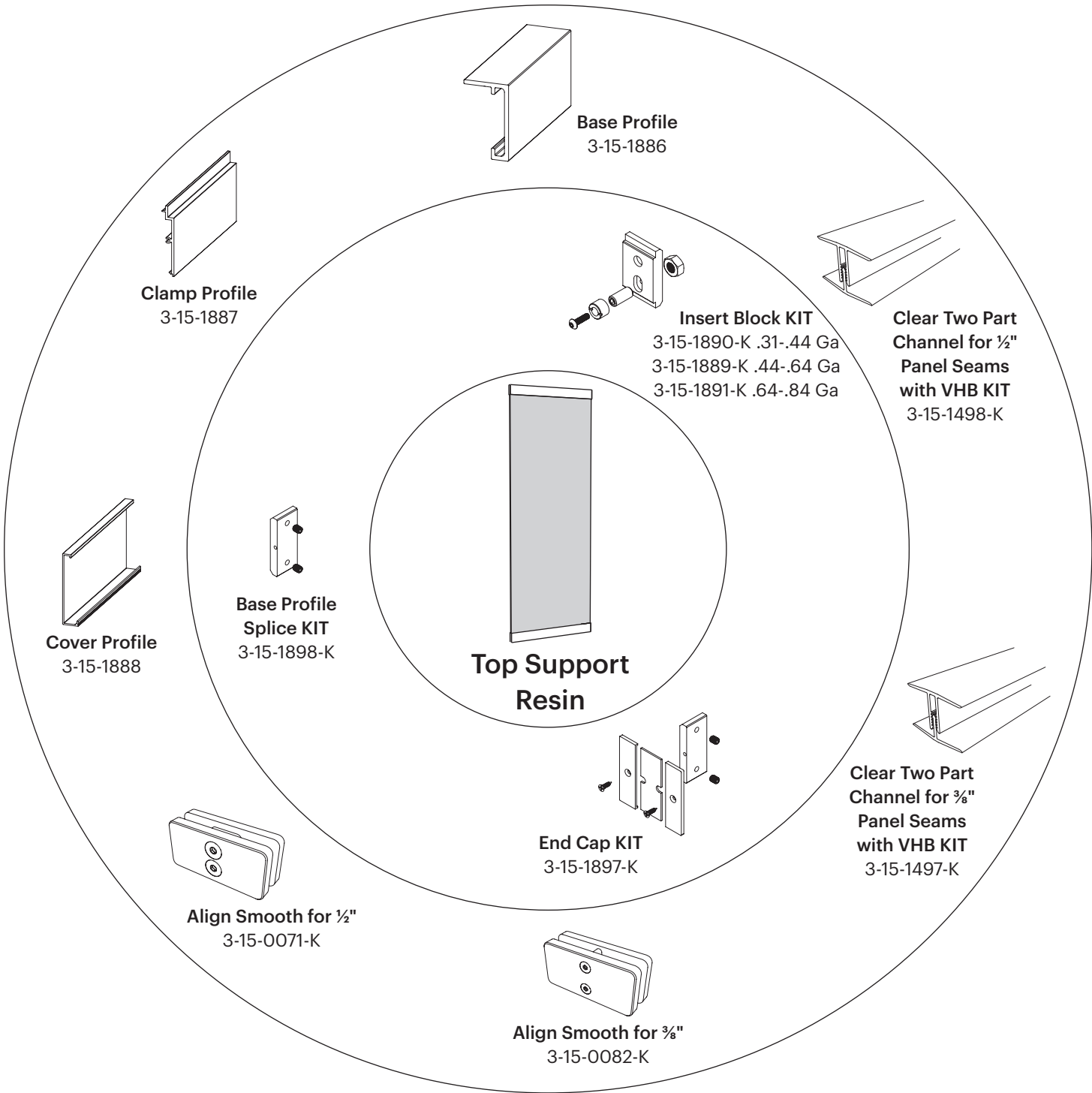
Top Hung - Resin Panels

The Top Support system is designed with minimal hardware to simplify installation and minimize cost. The diagram below shows an exploded view of the assembly and its components. Insert blocks with adjustable bushings are inserted into the top channel and the panel is simply hung on the bushings through pre-fabricated slots in the panel. The insert blocks are also in the bottom channel but the bushings are below the panel so no panel fabrication is necessary at the bottom. The bushings are adjusted to match the panel thickness and clamp profiles secure the panel. Covers are then snapped on the clamp profiles to complete the finished channel. For exposed edge configurations, end caps close off the ends of the channels for a clean look. Each consecutive panel is connected using a clear H-channel or Align hardware.



Top Hung - Resin Panels

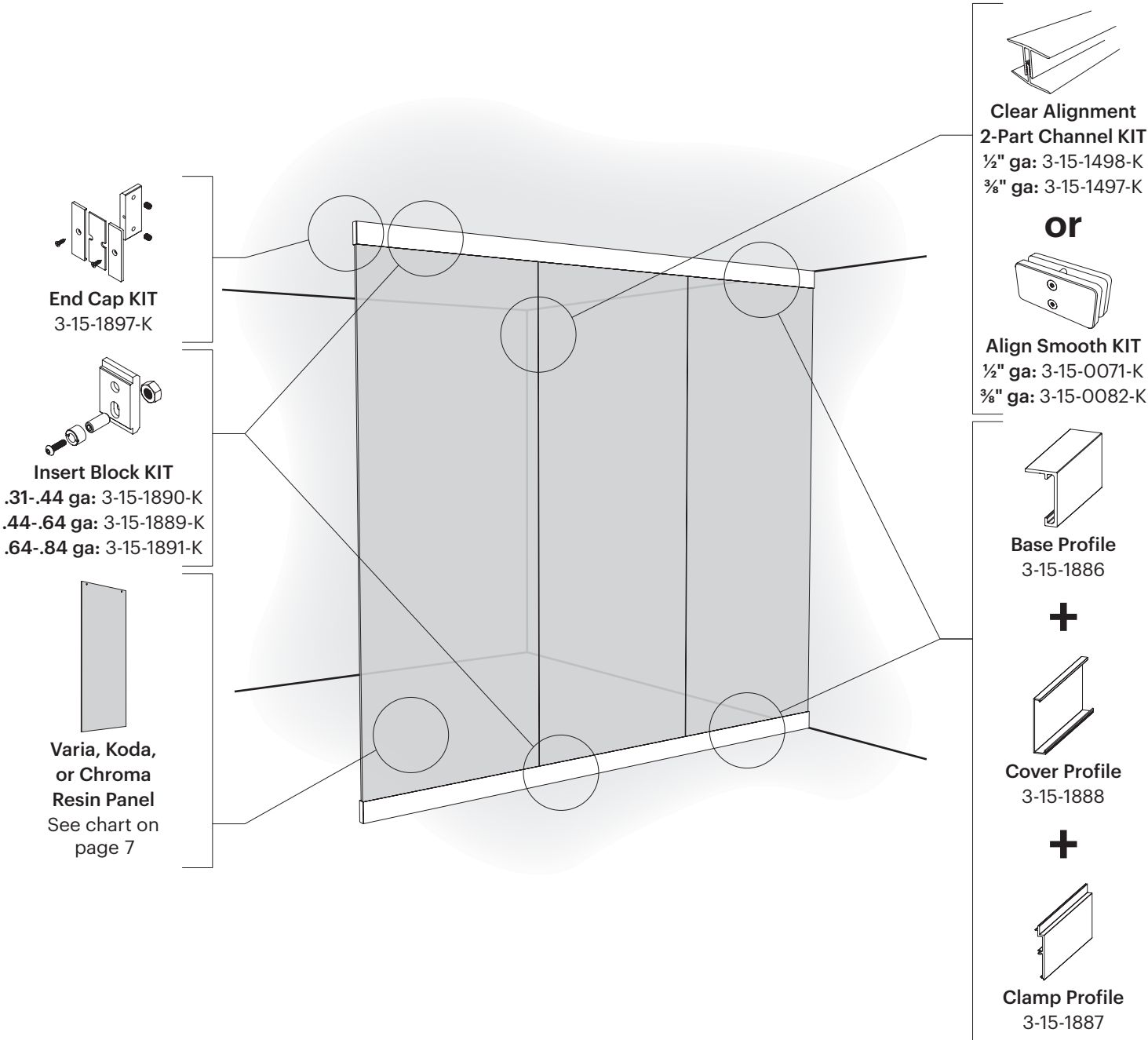
Parts Overview



Top Hung - Resin Panels

SimpleSpec 200.25 - Hardware Overview

The most common application for Top Support is a ceiling to floor installation. The Base Profiles are screwed directly into structural components in the ceiling as well as the floor. This can also be mounted directly to the wall; the Base Profiles are screwed directly into structural components in the wall. The profiles can also be recessed into the ceiling and floor such that only the panels are visible. For installations where the ends of the profiles will be exposed, end caps should be used.

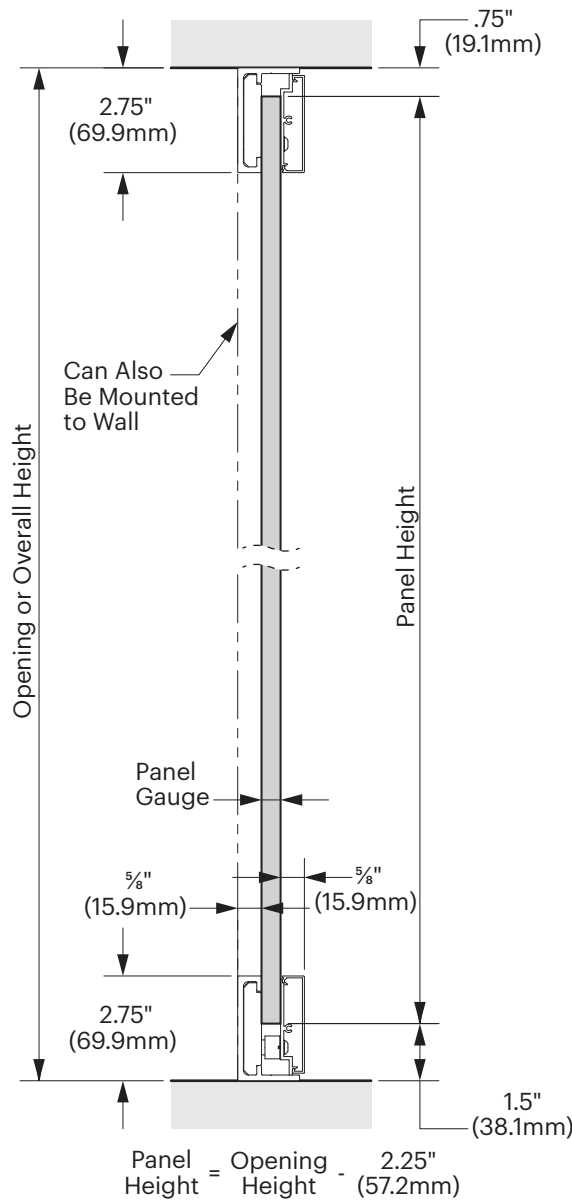


Top Hung - Resin Panels

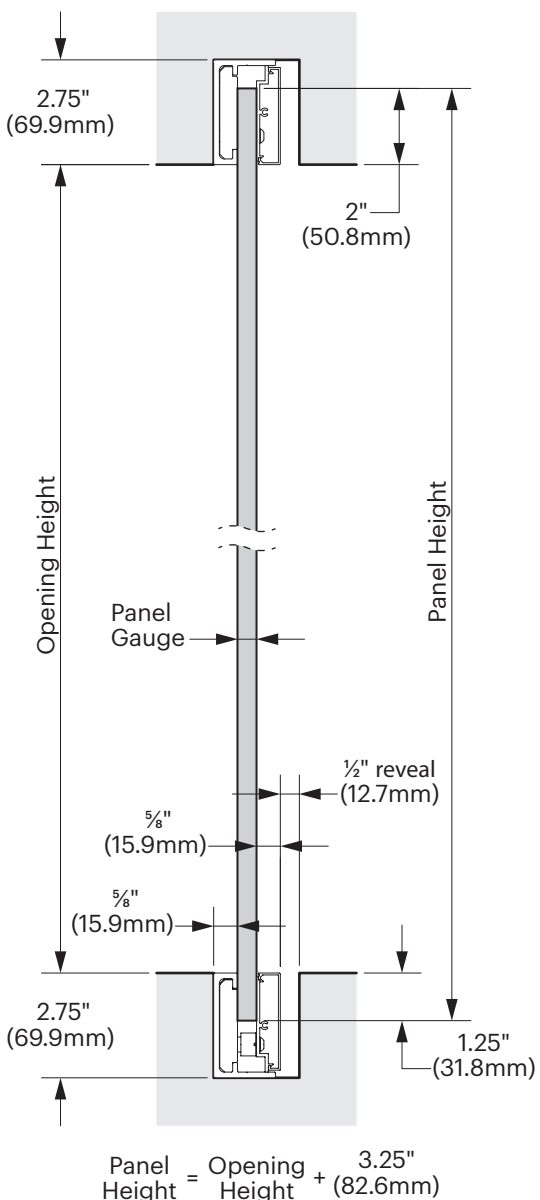
Diagram for Specifying Resin Panel Height

When ordering panels, please use the following panel deductions for the appropriate installation to calculate the panel height based on the opening height.

Surface Mount Installation



Recessed Installation



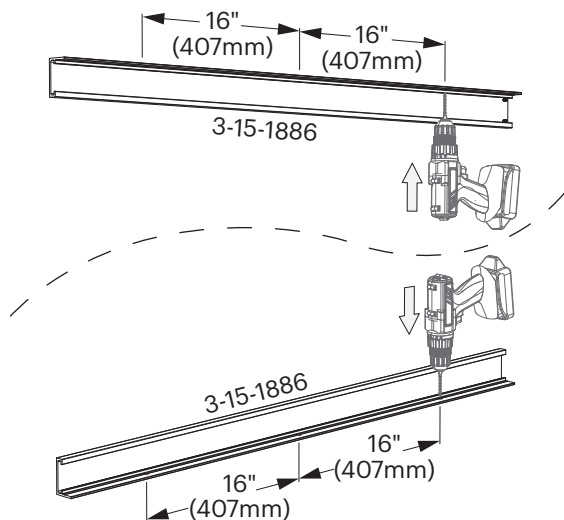
*Allowable Variation in opening height is +/- .3 in. Any variation greater than this tolerance needs to be shimmed.

Top Hung Installation- Resin Panels

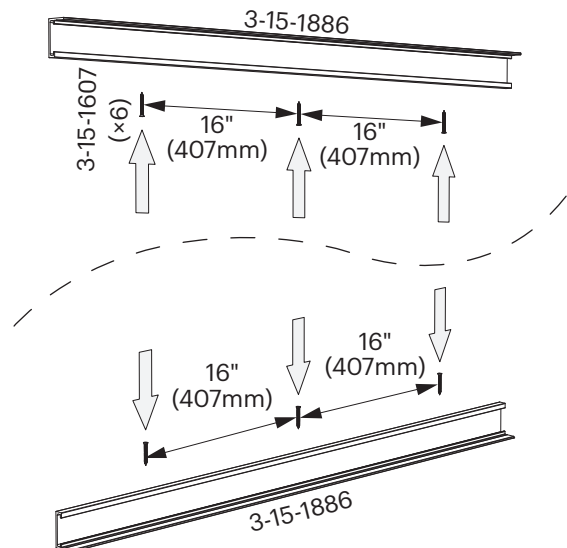
1 Install Base Profiles into Floor and Ceiling or Walls

- a** Refer to pages 4 – 6 to confirm dimensions for the specific condition. For a single panel cut the profiles to approximately $\frac{1}{4}$ " more than the panel width ($\frac{1}{8}$ " on each end). For multiple panels account for an additional $\frac{1}{4}$ " between panels, when using the two part clear seam "H" channel option. ***3-15-1887 comes cut to size.**

- b** ** For wall mounting or floor and ceiling wall-to-wall installation, insert blocks will need to be inserted prior to anchoring tracks (see Steps 2-3).*

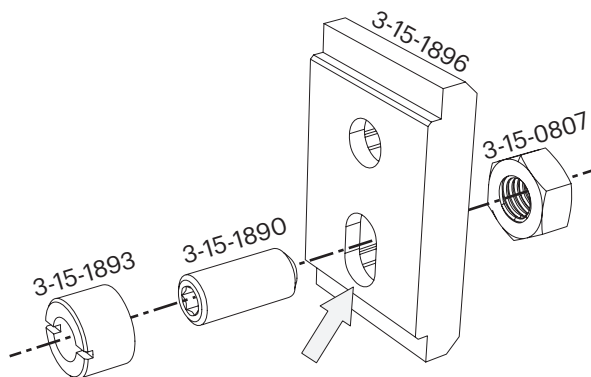


c

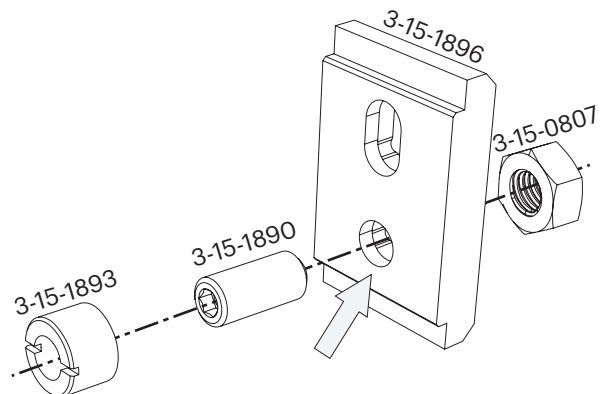


2 Loosely Assemble Insert Blocks

- a** Top Insert Block

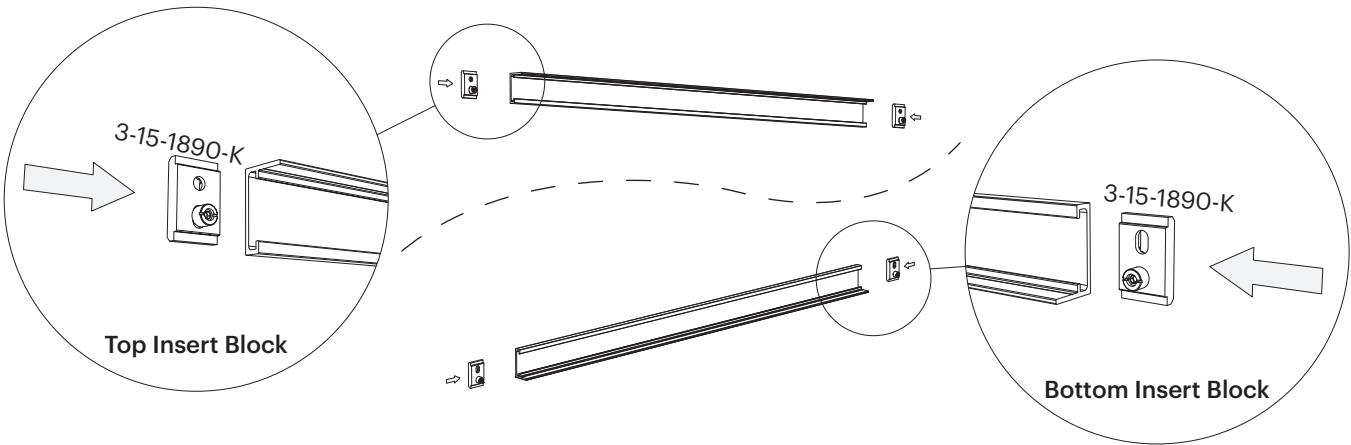


- b** Bottom Insert Block



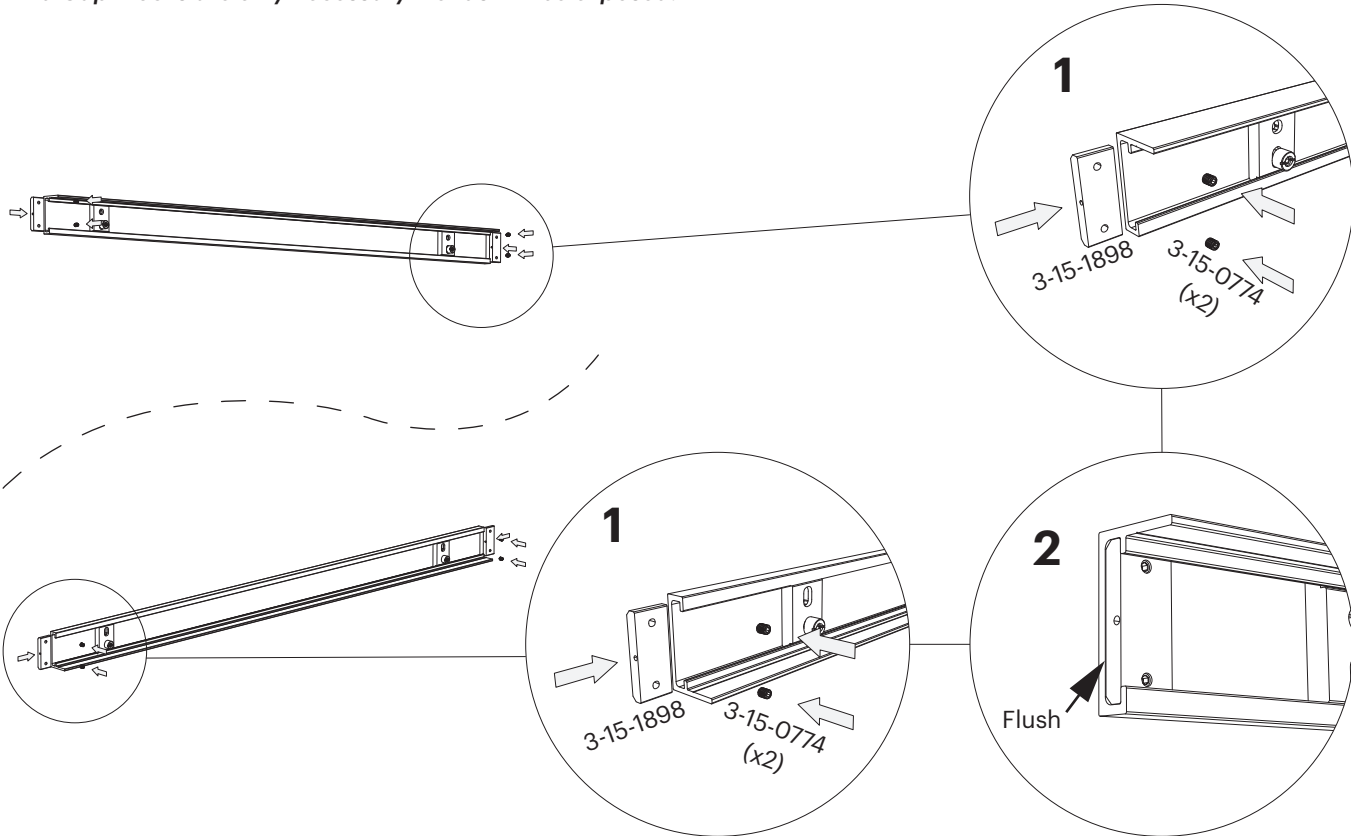
Top Hung Installation- Resin Panels

3 Slide Insert Blocks into Base Profiles



4 Install End Cap Blocks

**End Cap Blocks are only necessary if ends will be exposed.*



Top Hung Installation- Resin Panels

5 Hang Panel

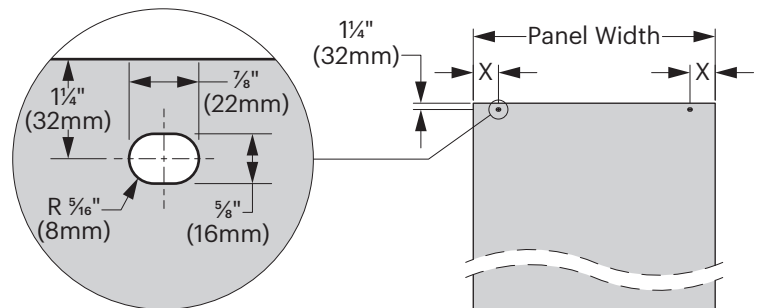
a Prepare panel for installation:

Resin panels will come from the factory with slots at the top for installation.

If the slots are not pre-fabricated, you can fabricate the slots with a router to the dimensions shown.

Alternately:

If you are unable to route the slots, you can drill $\frac{1}{8}$ " (17.5mm) holes.

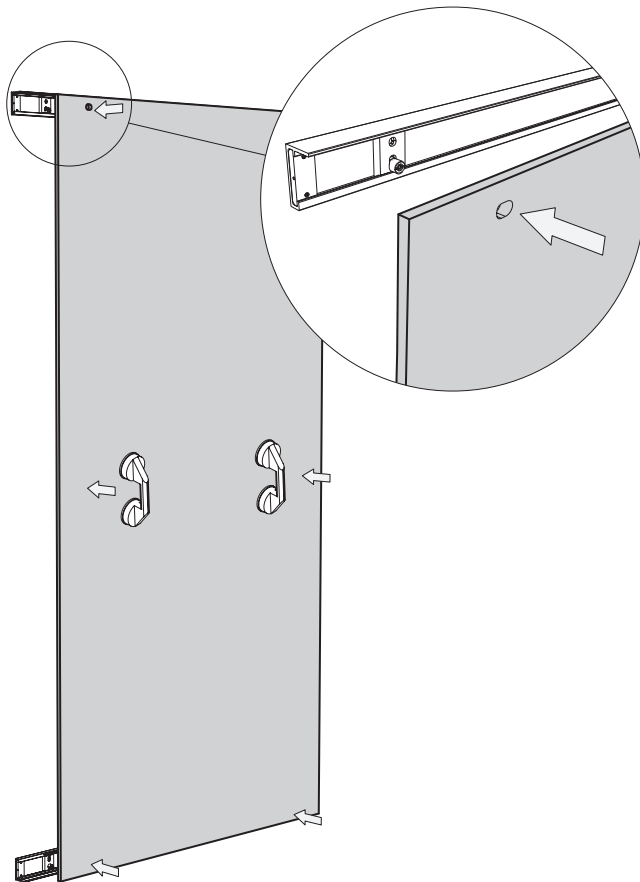


X = 2" (51mm) for panel widths up to 18" (457mm)

X = 5" (127mm) for panel widths greater than 18" (457mm)

X = $\frac{1}{2}$ " panel width (one slot at center) for widths less than 6" (152mm)

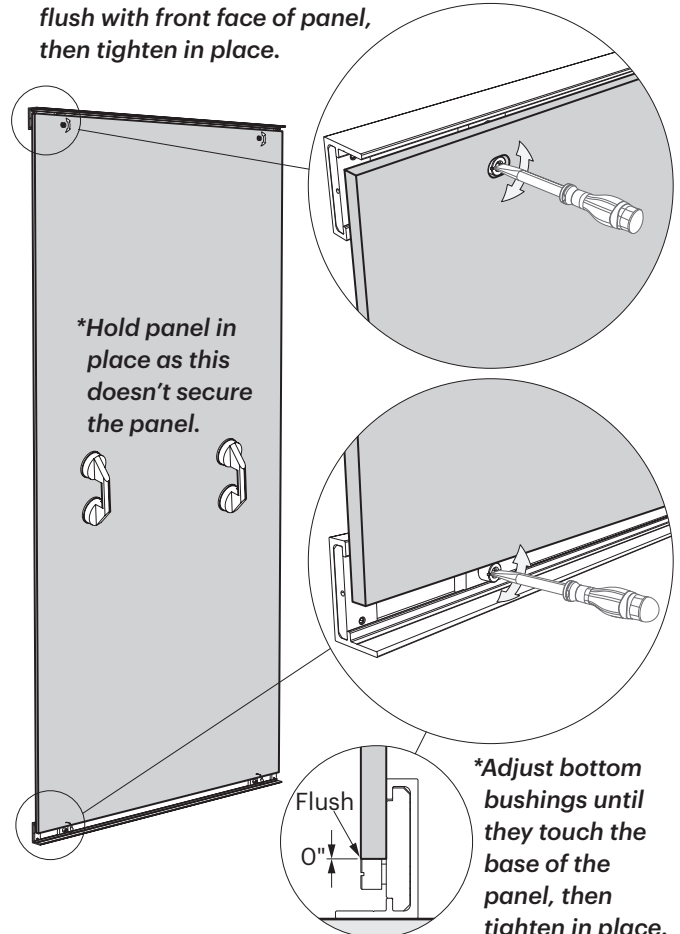
b



*Glazing suction cups will help lift and hold the panel.

c

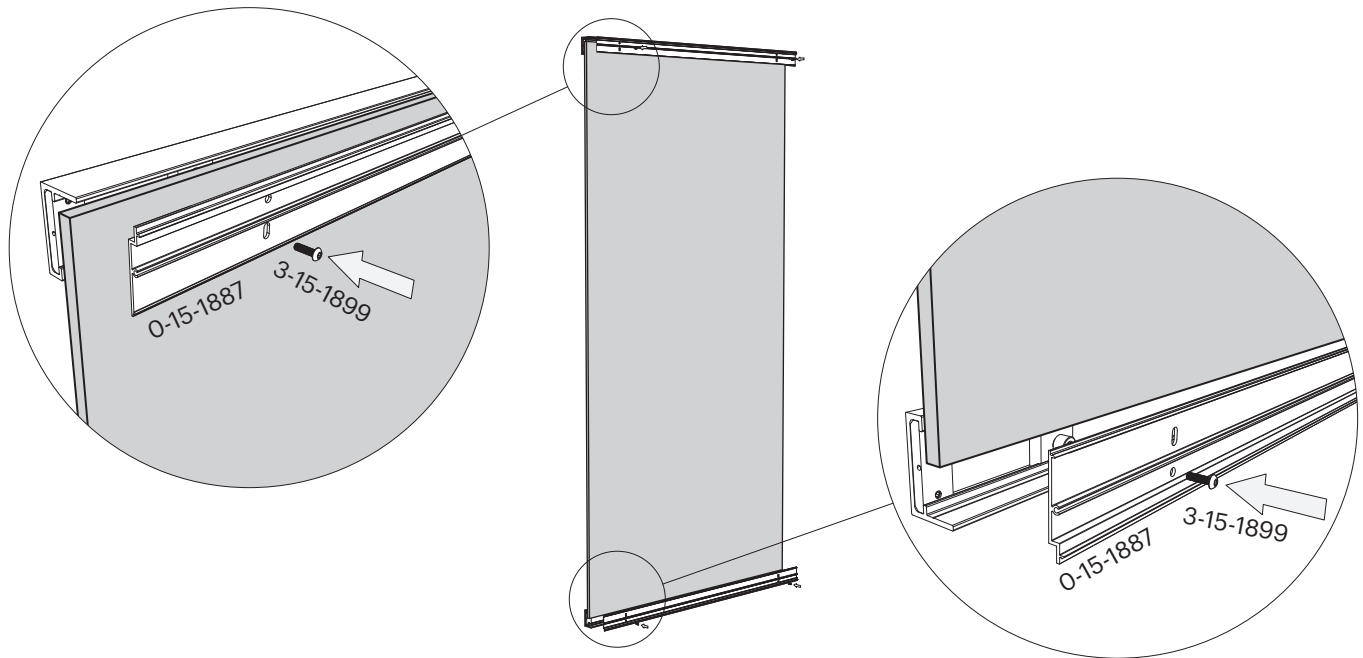
*Adjust top bushings to be flush with front face of panel, then tighten in place.



*Adjust bottom bushings until they touch the base of the panel, then tighten in place.

Top Hung Installation- Resin Panels

6 Attach Clamp Profiles

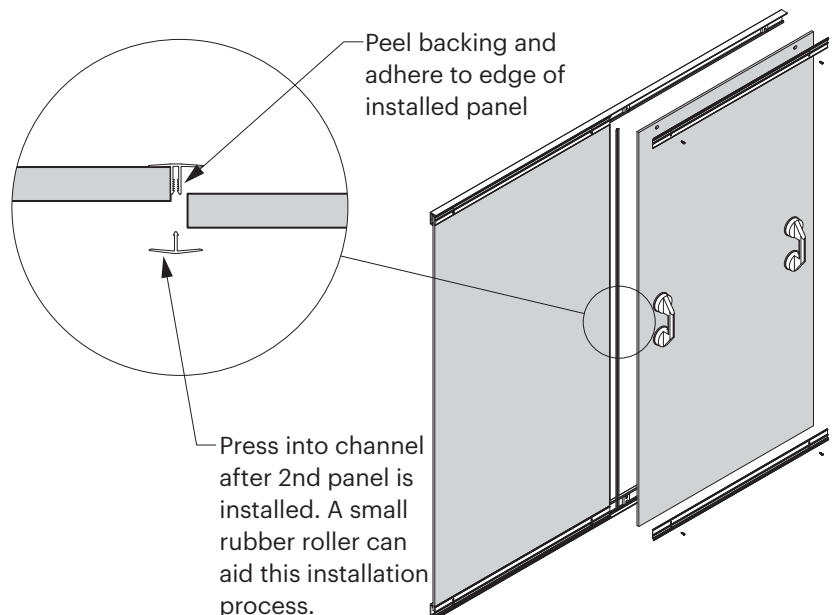


7 Install Adjacent Panels (Optional)

a Install adjacent panels (if exist) as in Steps 5 and 6.

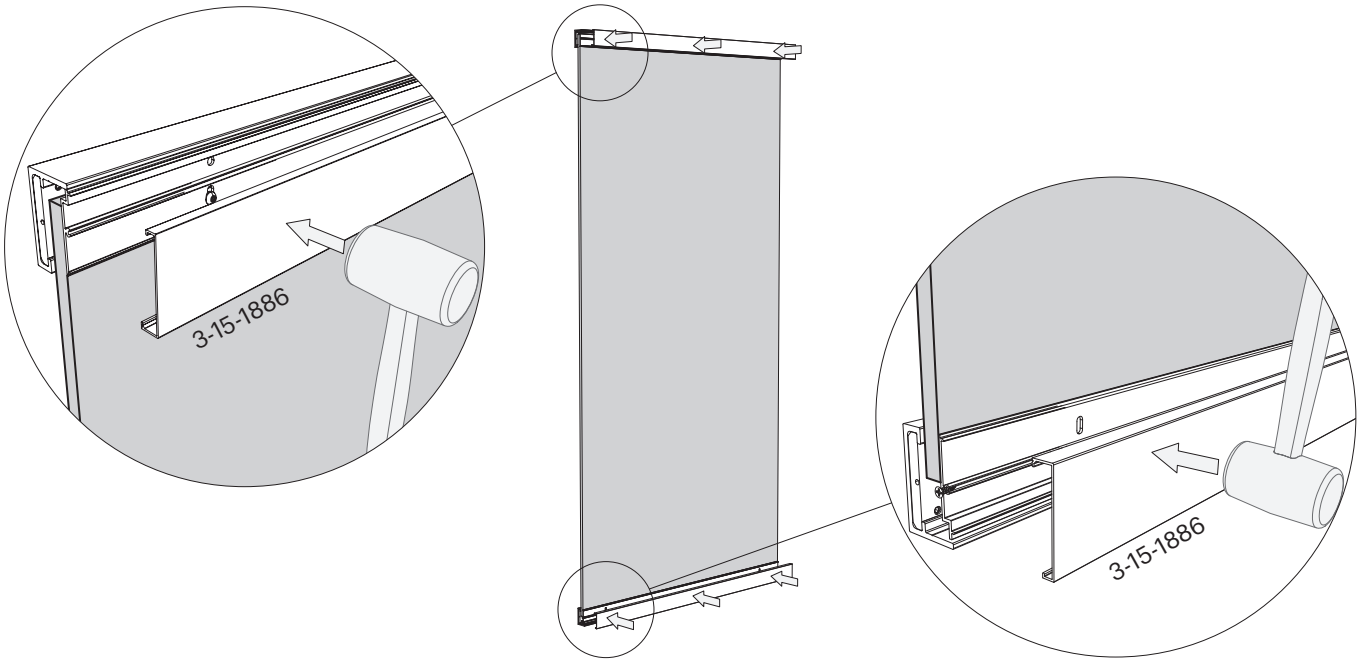
b If using clear alignment H-channel, peel backer off adhesive tape on receiver side of H-channel and adhere the channel on the side of the previously installed channel. See diagram to the right.

c *Alternately:*
Align or Offset Align elements may be used to keep panel joints flush. See Align Solution Document.

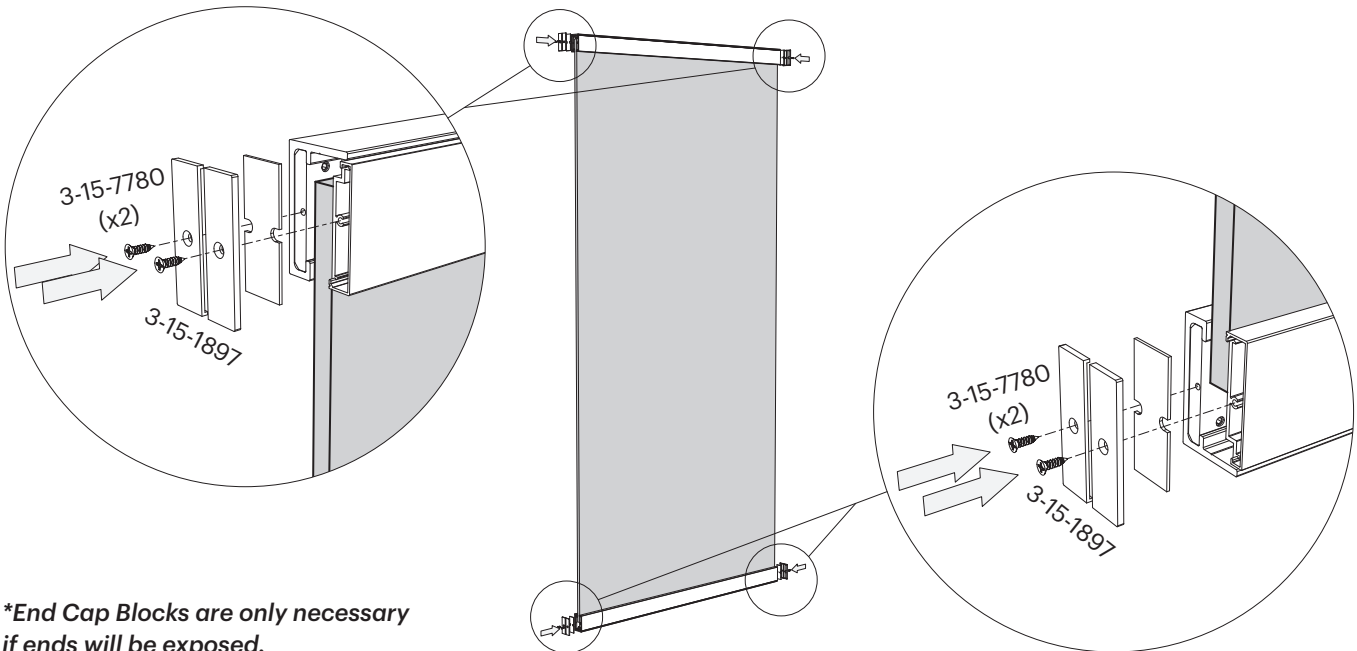


Top Hung Installation- Resin Panels

8 Attach Cover Profiles



9 Attach End Caps (Optional)

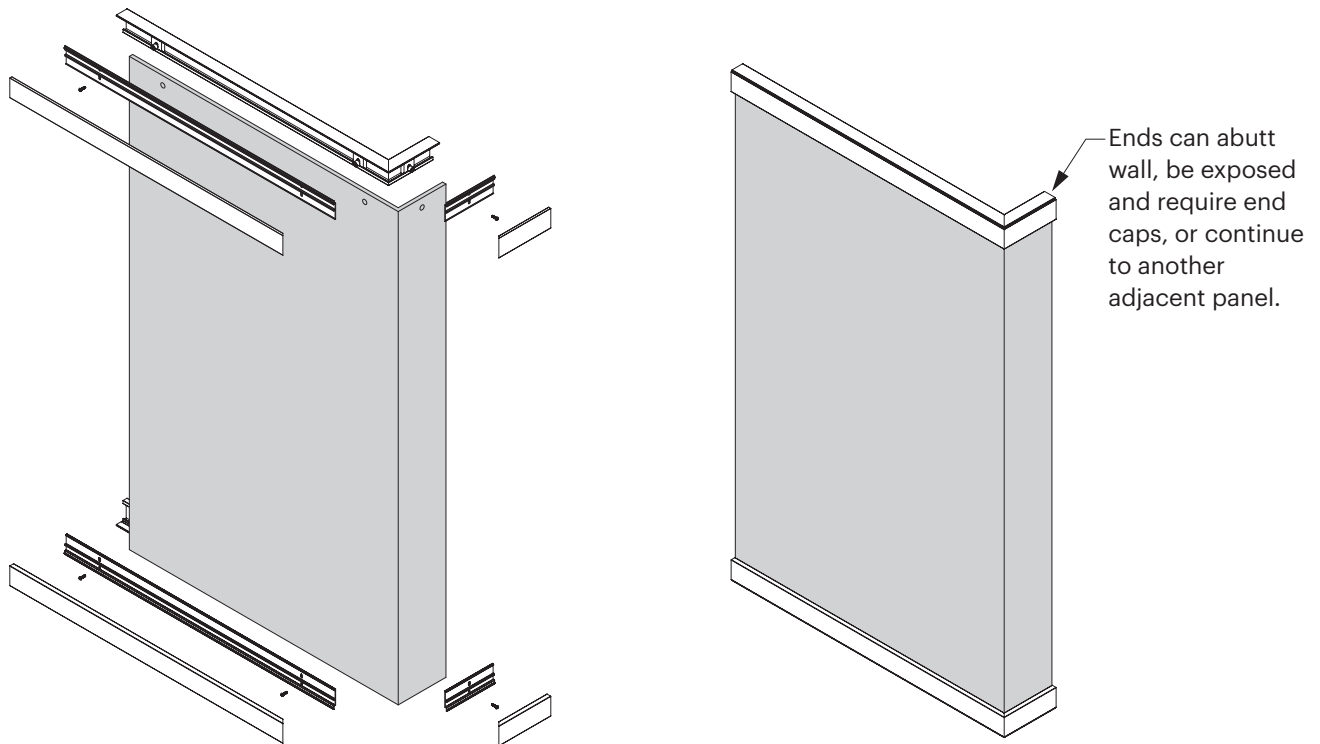


Top Hung Installation- Resin Panels

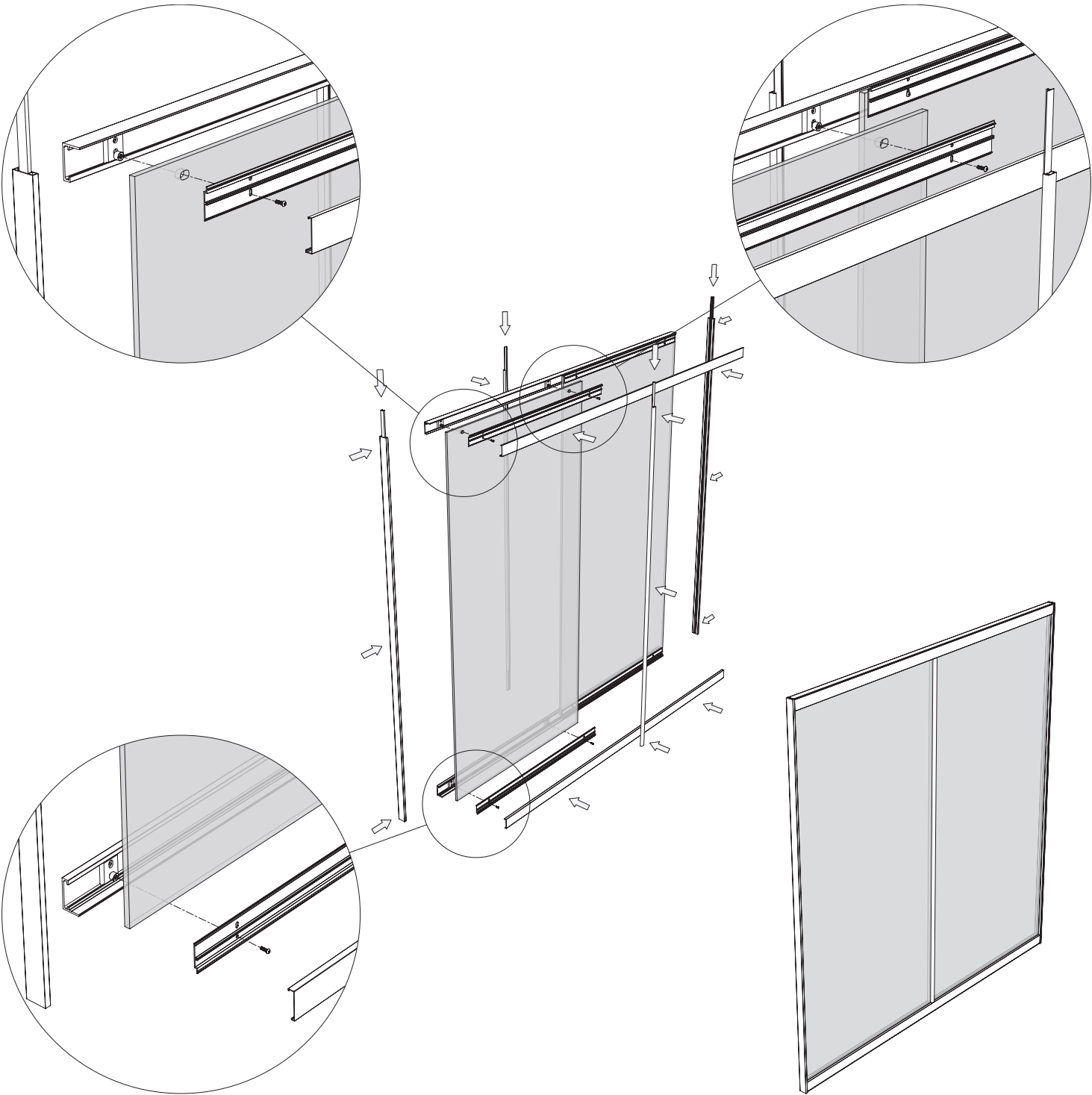
10 Seamed or Miter Corner: Inside and Outside Corners (Optional)

Mitered profiles can be supplied from the factory for 90 degree corners. The straight end will need to be cut on site to match field conditions. The clamp profiles will be fabricated in the factory to match the panels.

Installation is the same as straight panels with the added step of securing around the corner.

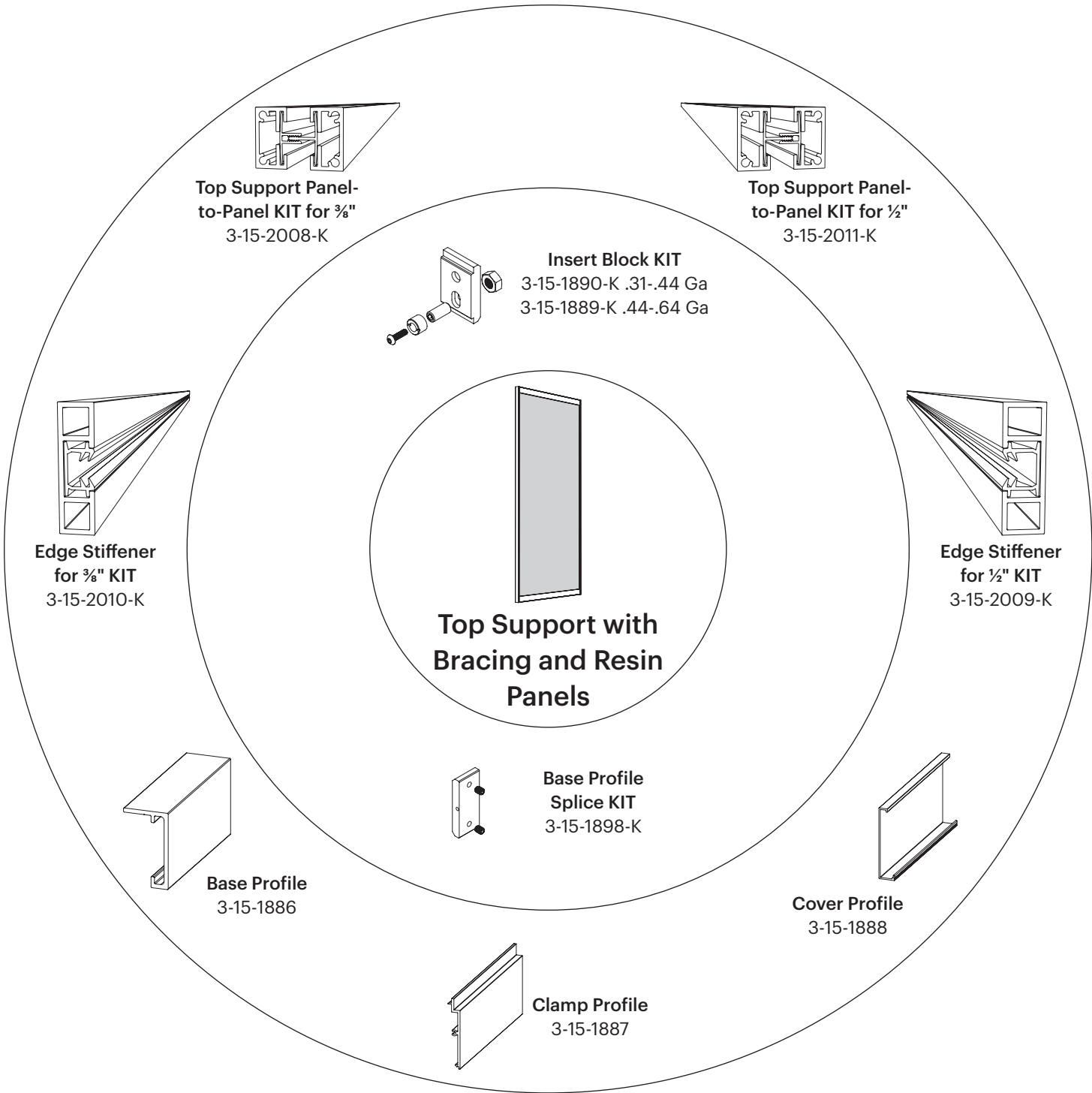


Top Hung with Bracing- Resin Panels



Top Hung with Bracing- Resin Panels

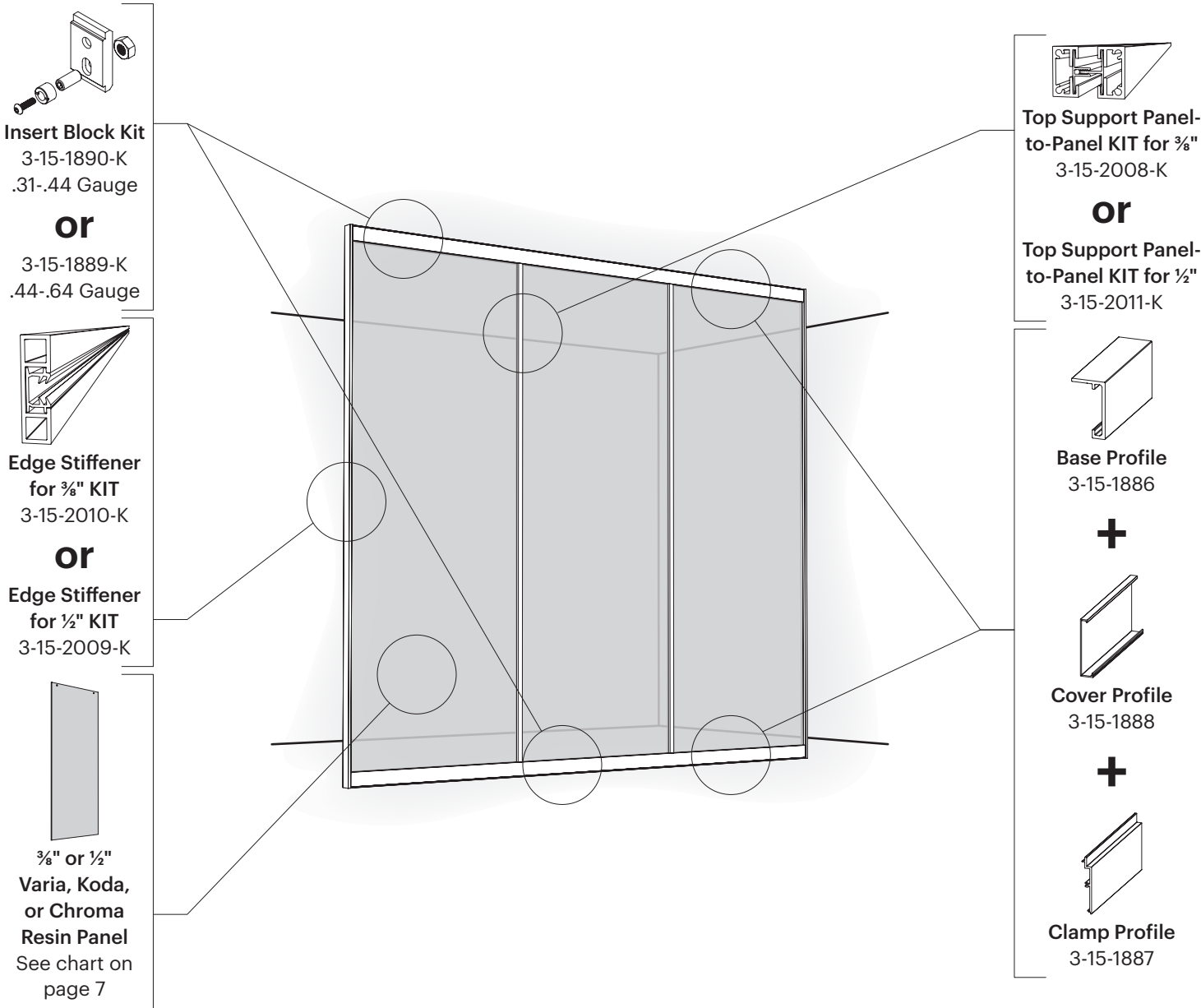
Parts Overview



Top Hung with Bracing- Resin Panels

SimpleSpec 200.53 - Hardware Overview

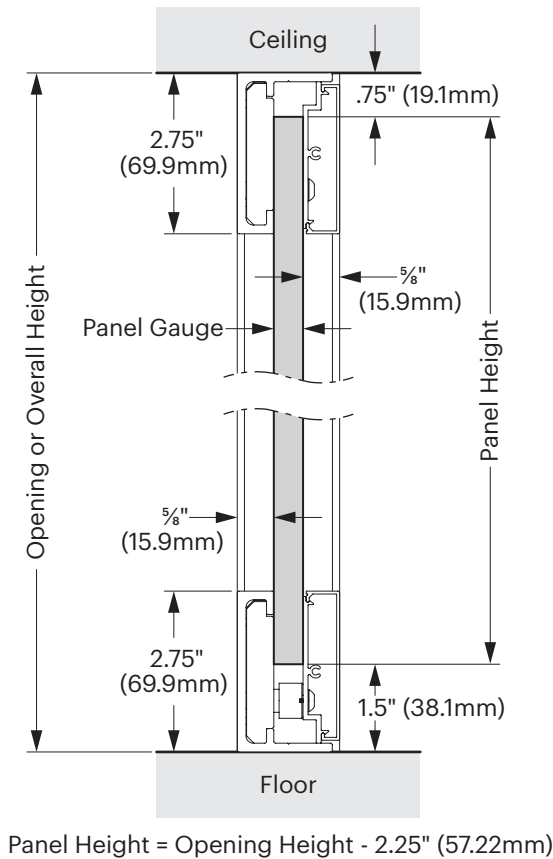
The Top Support with Bracing is used in a ceiling-to-floor installation. The base profiles are screwed directly into structural components in the ceiling as well as the floor. The edge stiffeners on the ends and at panel-to-panel connections add considerable rigidity to the system while maintaining a low profile.



Top Hung with Bracing- Resin Panels

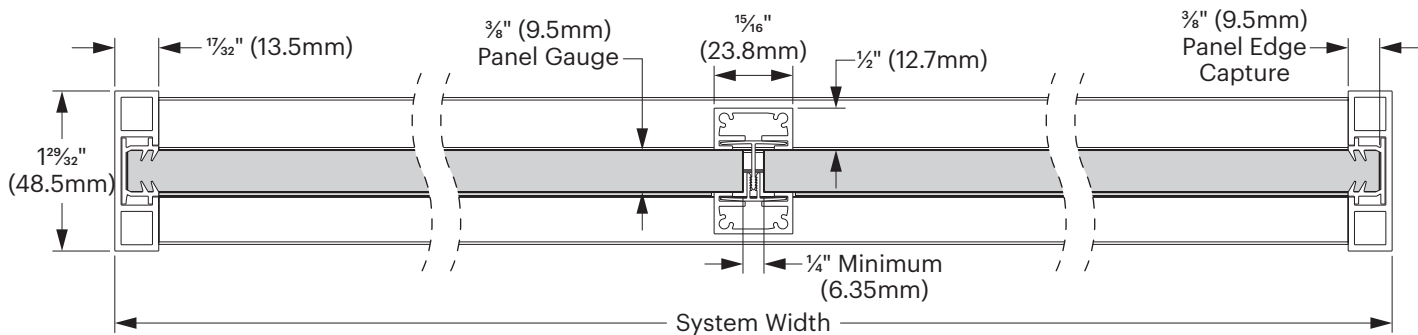
Diagram for Specifying Resin Panel Height

When ordering panels, please use the following panel deductions for the appropriate installation to calculate the panel height based on the opening height.



*Allowable Variation in opening height is +/- .3 in. Any variation greater than this tolerance needs to be shimmed.

Top View of Installation

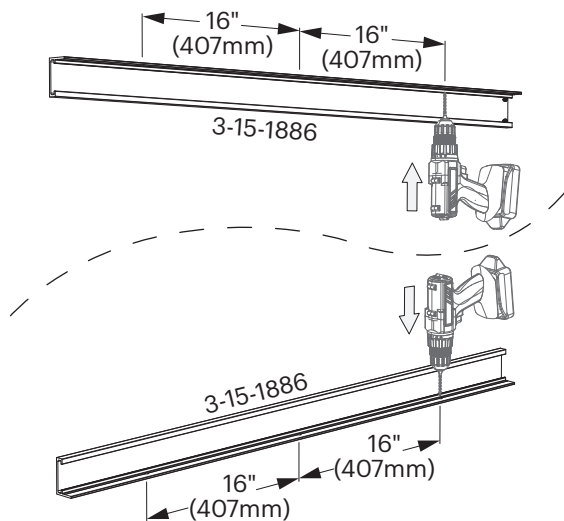


Top Hung with Bracing Installation- Resin Panels

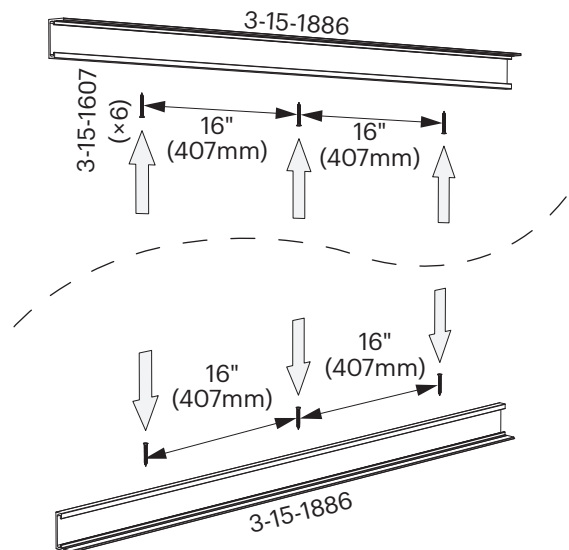
1 Install Base Profiles into Floor and Ceiling or Walls

a Refer to pages 4 – 6 to confirm dimensions for the specific condition. For a single panel cut the profiles to approximately $\frac{1}{4}$ " more than the panel width ($\frac{1}{8}$ " on each end). For multiple panels account for an additional $\frac{1}{4}$ " between panels, when using the two part clear seam "H" channel option. ***3-15-1887 comes cut to size.**

b ** For wall mounting or floor and ceiling wall-to-wall installation insert blocks will need to be inserted prior to anchoring tracks (see Steps 2-3).*

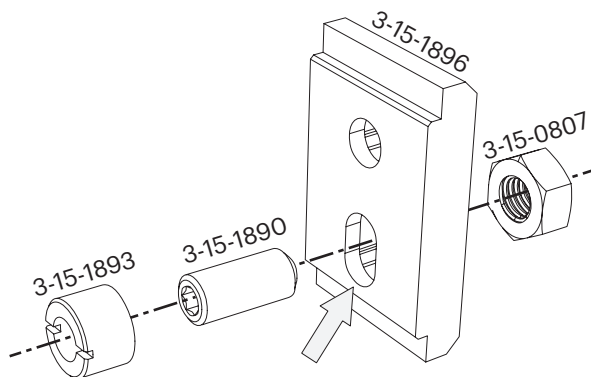


c

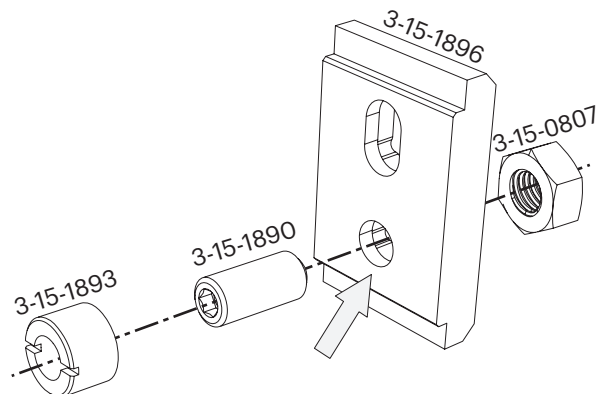


2 Loosely Assemble Insert Blocks

a Top Insert Block

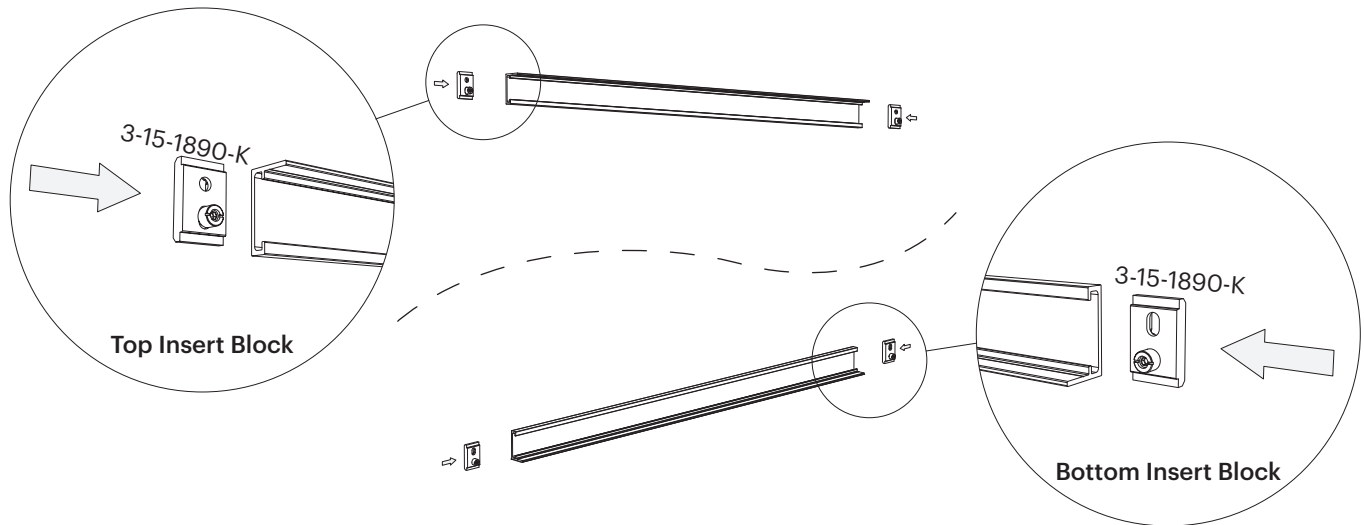


b Bottom Insert Block



Top Hung with Bracing Installation- Resin Panels

3 Slide Insert Blocks into Base Profiles



4 Hang Panel

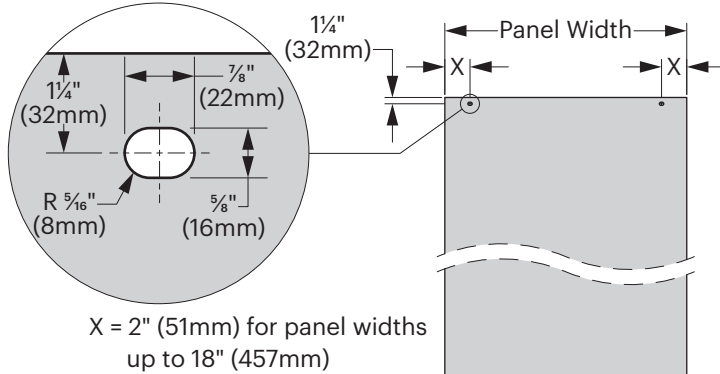
a Prepare panel for installation:

Resin panels will come from the factory with slots at the top for installation.

If the slots are not pre-fabricated, you can fabricate the slots with a router to the dimensions shown.

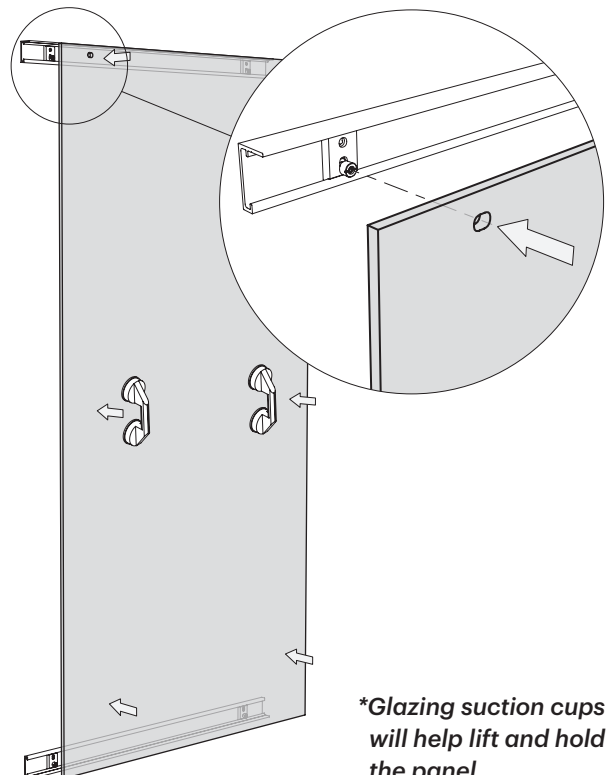
Alternately:

If you are unable to route the slots, you can drill $\frac{1}{16}$ " (17.5mm) holes.



- X = 2" (51mm) for panel widths up to 18" (457mm)
- X = 5" (127mm) for panel widths greater than 18" (457mm)
- X = $\frac{1}{2}$ " panel width (one slot at center) for widths less than 6" (152mm)

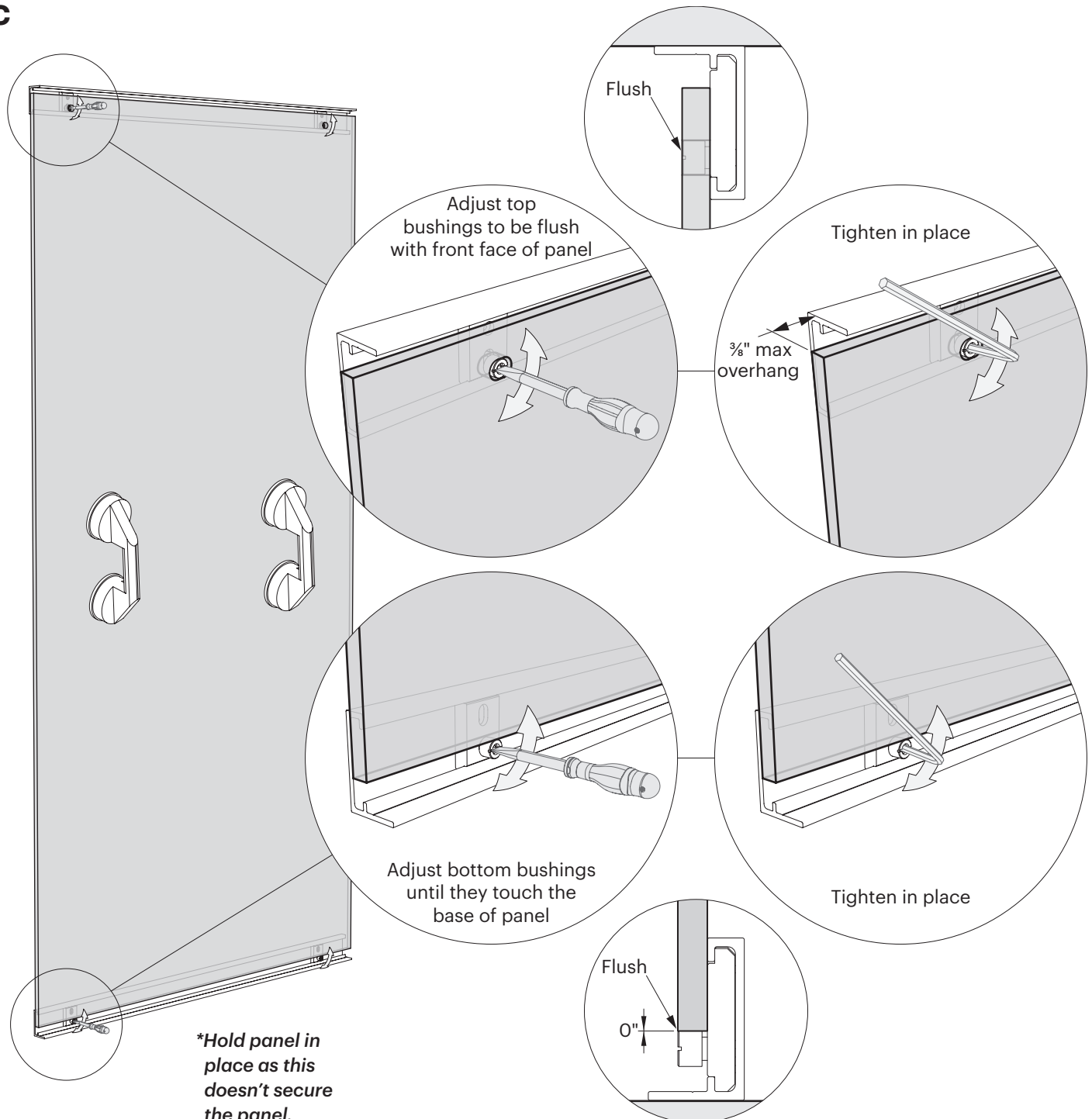
b



Top Hung with Bracing Installation- Resin Panels

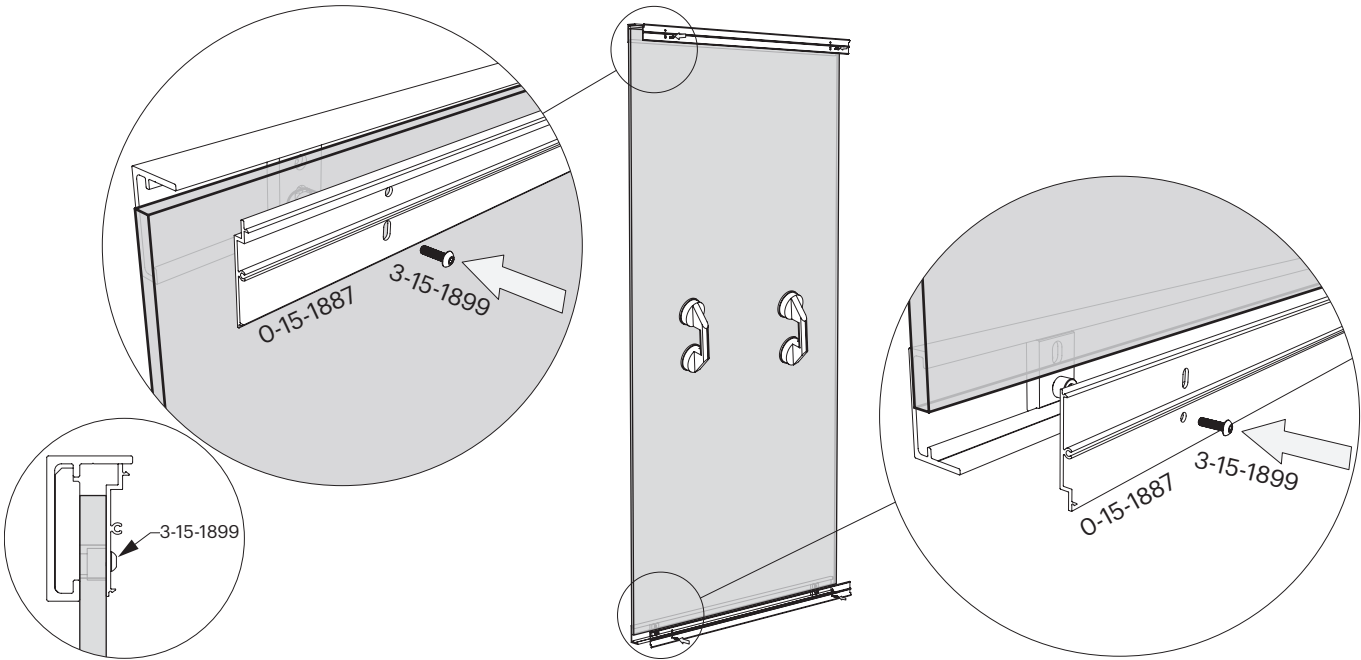
4 Hang Panel cont...

c

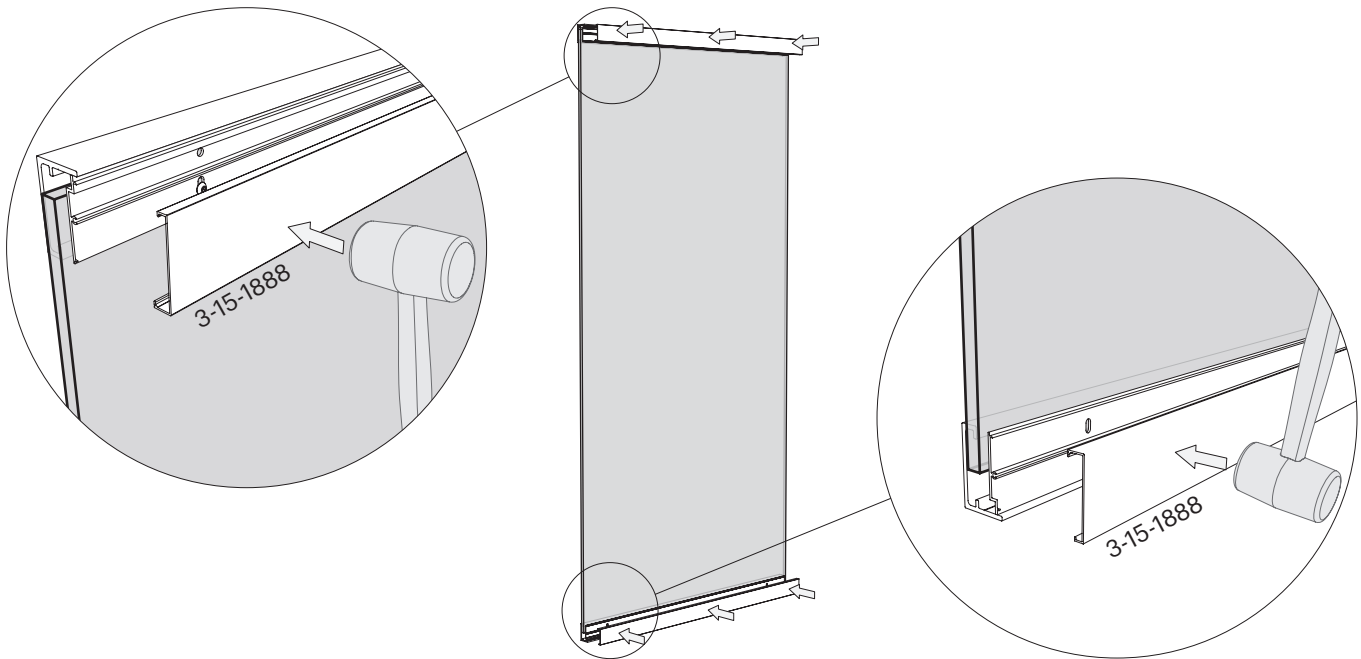


Top Hung with Bracing Installation- Resin Panels

5 Attach Clamp Profiles



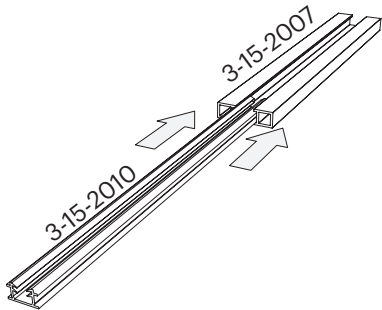
6 Attach Cover Profiles



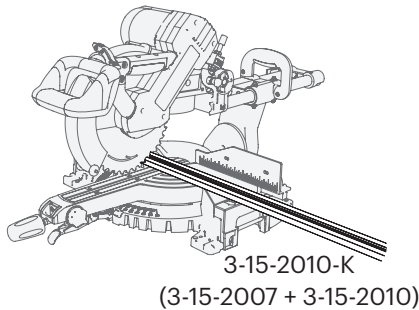
Top Hung with Bracing Installation- Resin Panels

7 Attach Vertical Edge Stiffeners

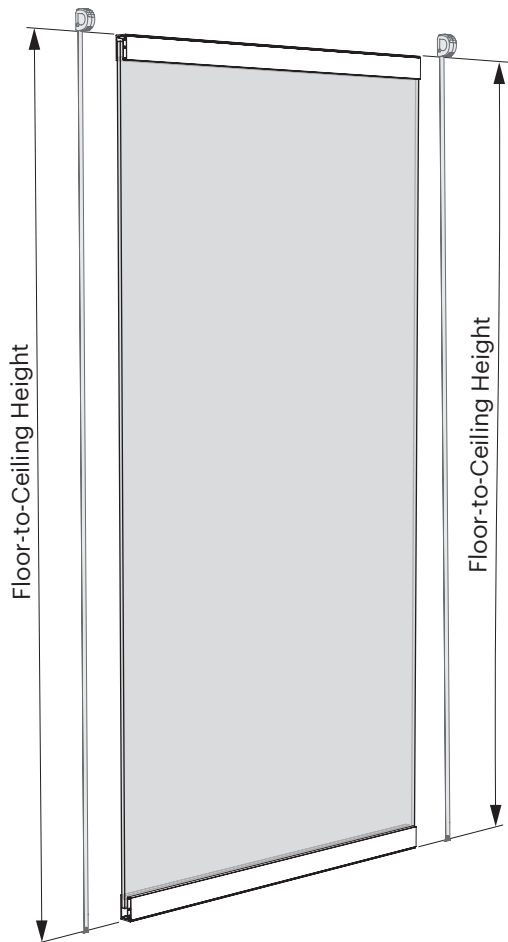
a Insert gasket.



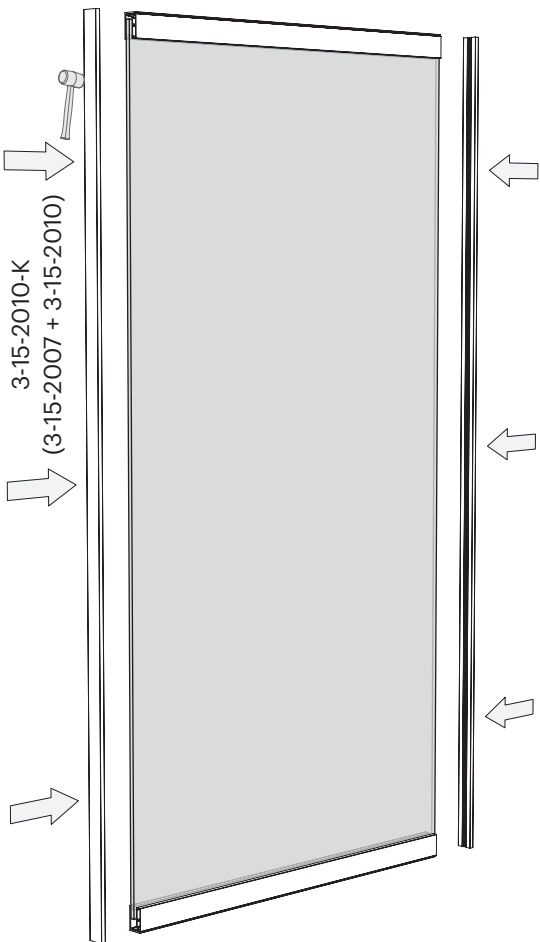
c Cut vertical gasket/extrusion assembly to system height.



b Measure height.



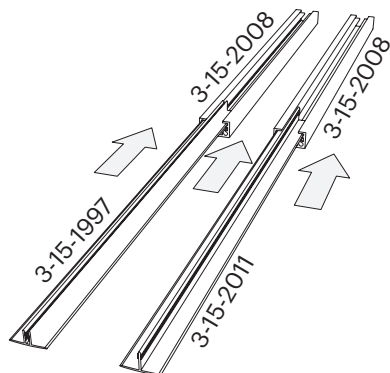
d



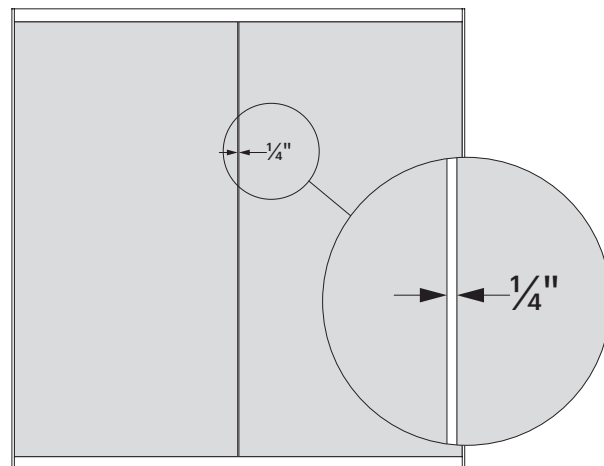
Top Hung with Bracing Installation- Resin Panels

8 Attach Panel-to-Panel Extrusions to System (*Add a Panel Only*)

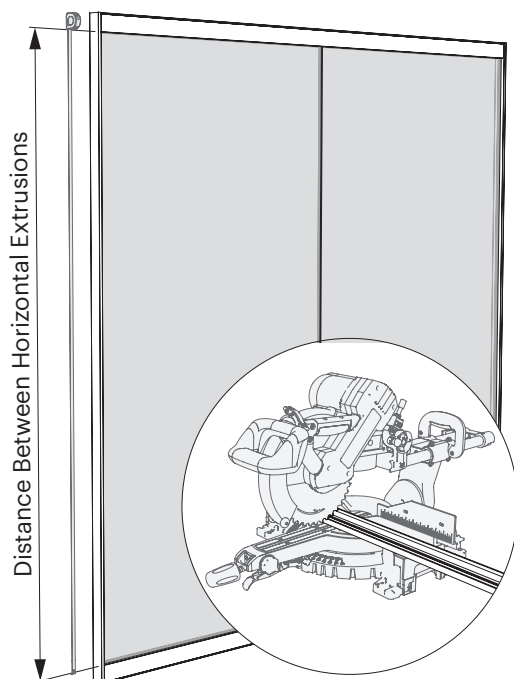
- a** Insert base and cover plastic extrusions.



- b** Ensure a 1/4" panel-to-panel distance.

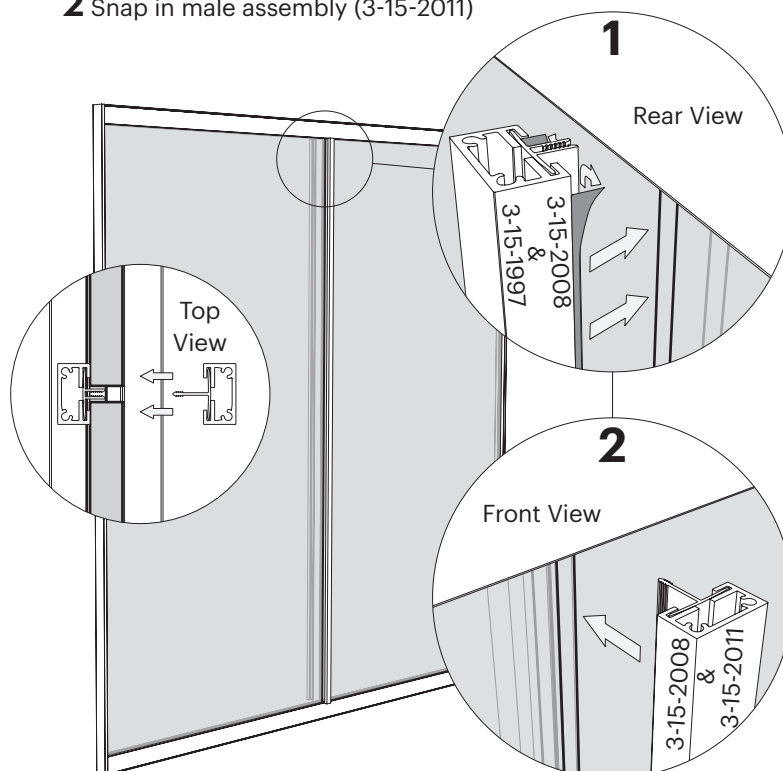


- c** Measure distance between horizontal extrusions and cut panel-to-panel extrusion to that length - 1/16".



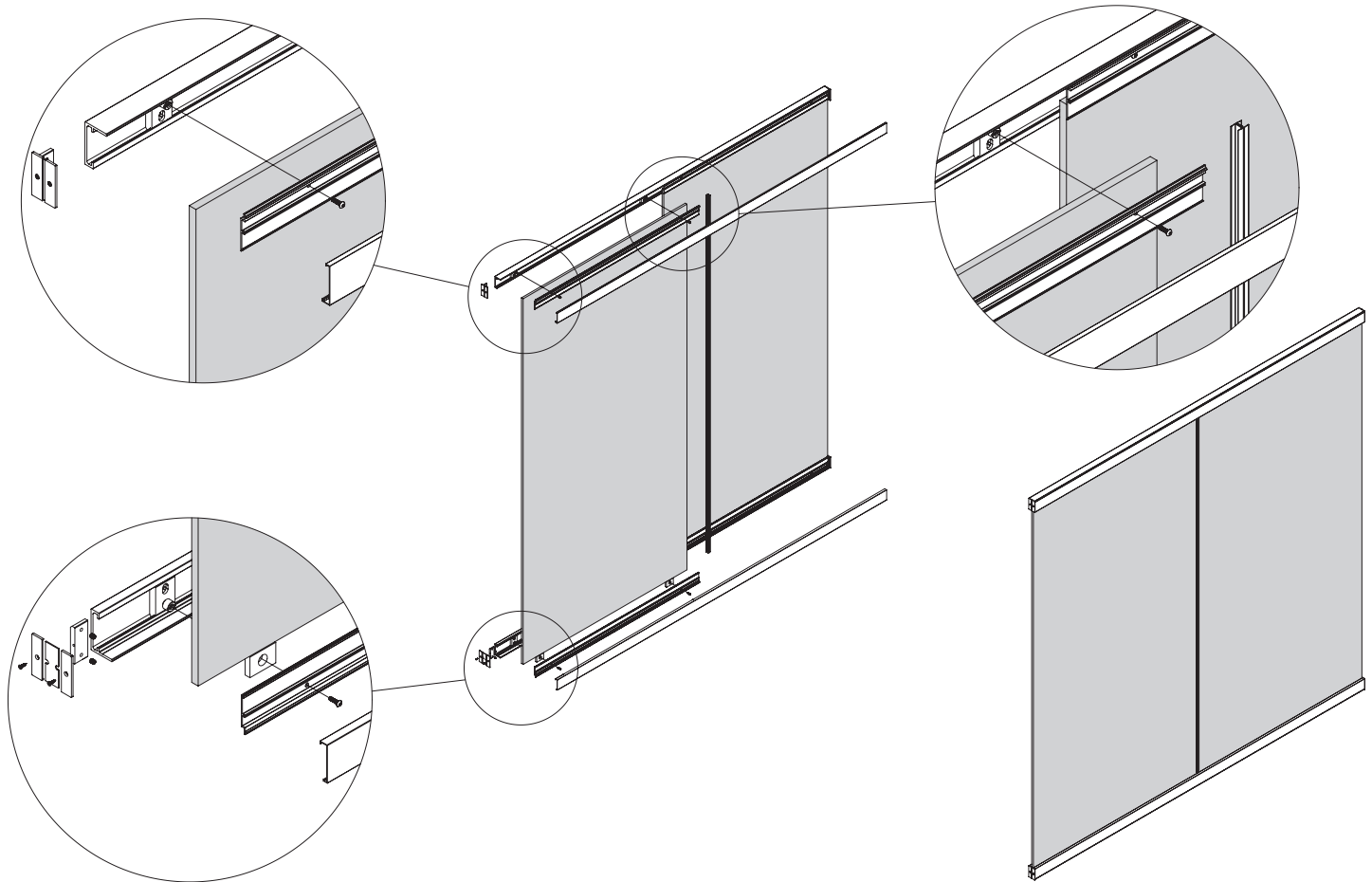
- d** 1 Remove VHB tape cover from female end (3-15-1997) and insert between panels, adhering at edge.

- 2 Snap in male assembly (3-15-2011)



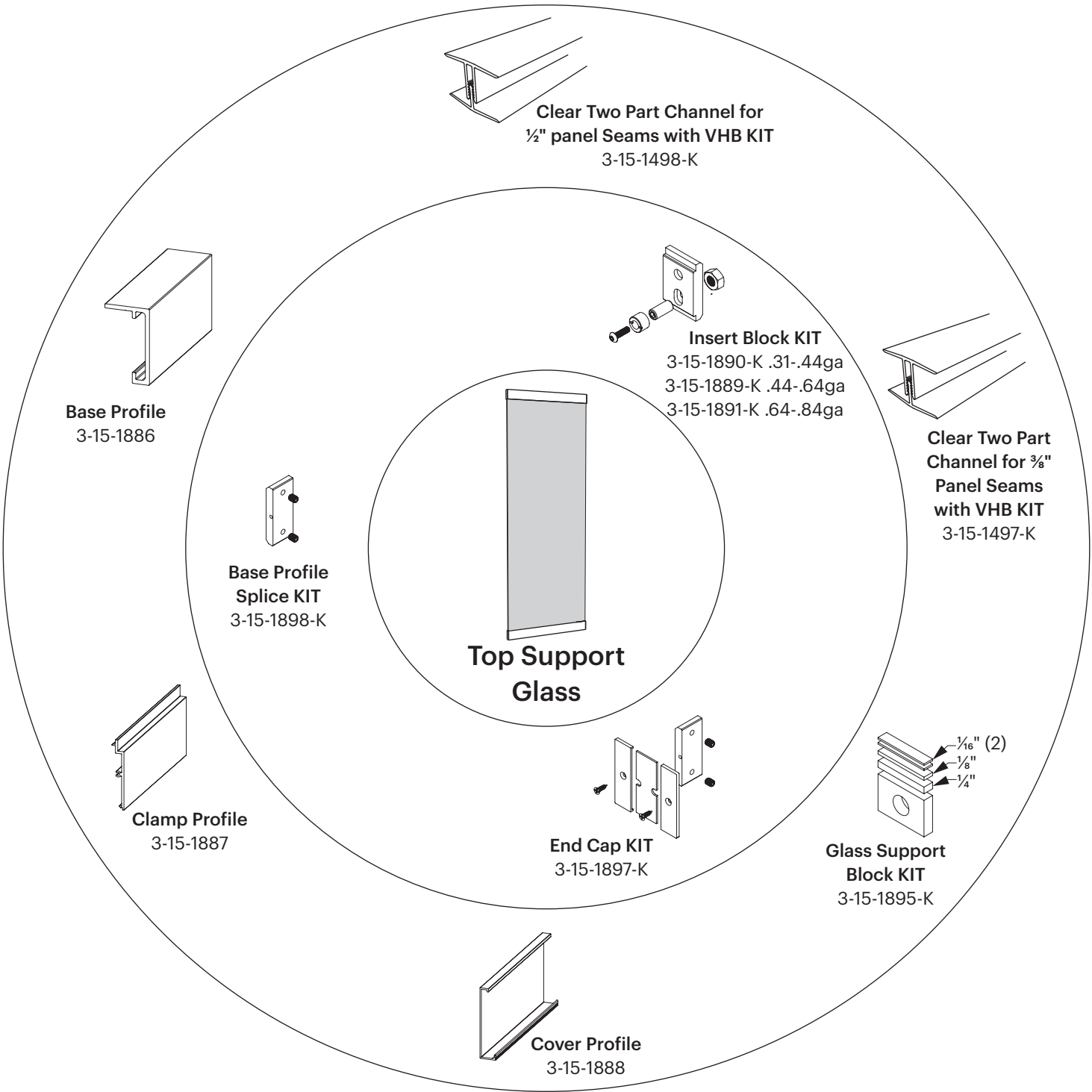
Bottom Supported - Glass Panels

The Top Support system is designed with minimal hardware to simplify installation and minimize cost. The diagram below shows an exploded view of the assembly and its components. Unlike 3form Resin panels; Laminated Glass and Monolithic Glass are supported at the floor channel. For exposed edge configurations, end caps close off the ends of the channels for a clean look. Each consecutive panel is connected using a clear H-channel or Align hardware if necessary (Align is not compatible with Laminated Glass).



Bottom Supported - Glass Panels

Parts Overview



Bottom Supported - Glass Panels

Laminated Glass Flatness Tolerance

For laminated annealed glass the overall bow will not exceed $\frac{1}{16}$ " (1.5 mm) per foot (300mm) of length per ASTM C1172-03. Reference the chart below for the maximum allowable overall bow for laminated tempered glass.

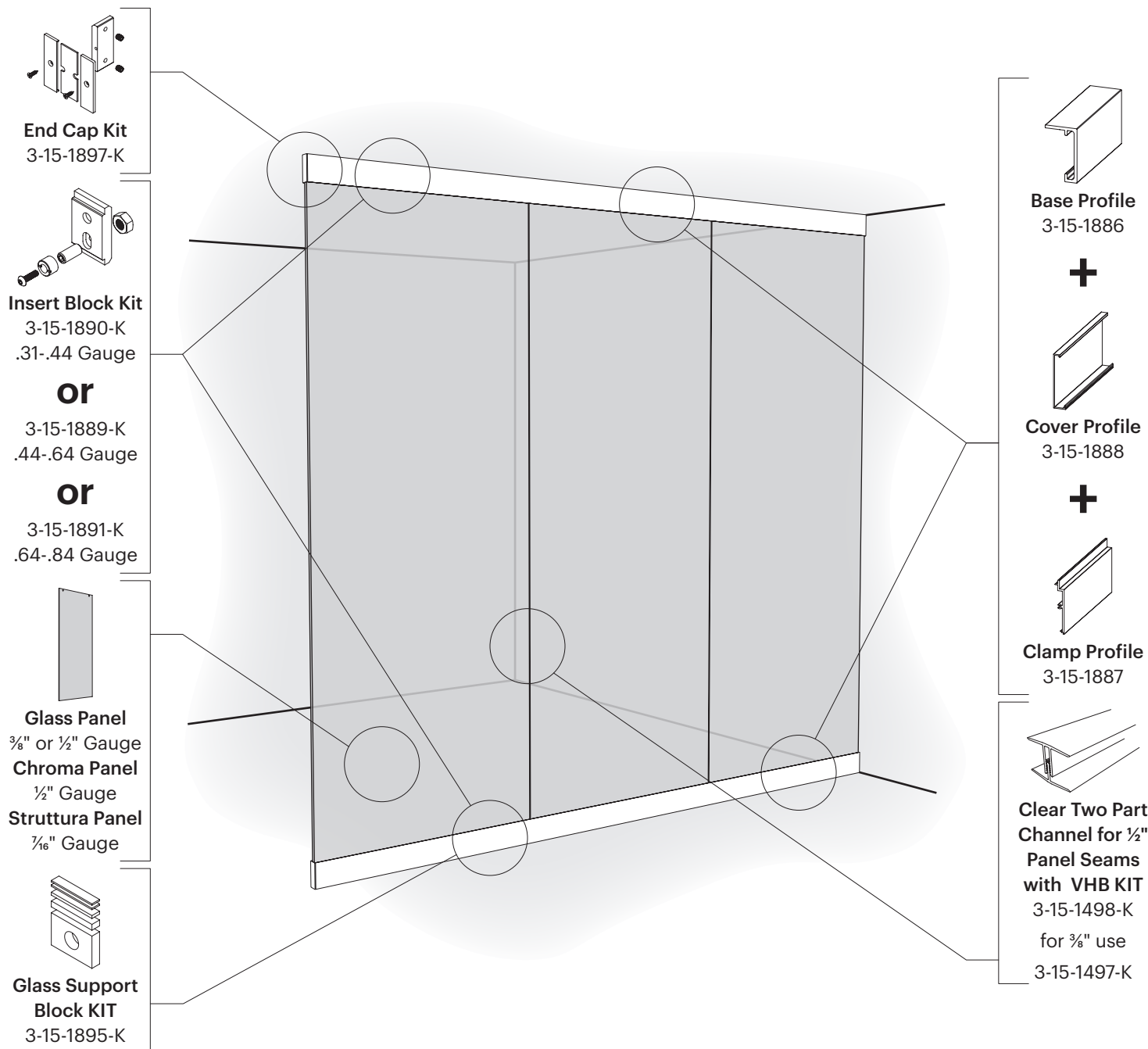
Edge Dimensions	$\frac{1}{2}$ " Laminated Glass	$\frac{1}{2}$ " Monolithic Glass
0" to 18" (0mm to 460mm)	$\frac{1}{16}$ " (1.5mm)	0.04" (1mm)
18" to 36" (460mm to 910mm)	$\frac{1}{8}$ " (3.1 mm)	0.08" (2 mm)
36" to 48" (910mm to 1220mm)	$\frac{3}{16}$ " (4.7mm)	0.08" (2mm)
48" to 60" (1220mm to 1520mm)	$\frac{9}{32}$ " (7.1mm)	0.08" (2mm)
60" to 72" (1520mm to 1830mm)	$\frac{3}{8}$ " (9.5mm)	0.16" (4mm)
72" to 84" (1830mm to 2130mm)	$\frac{1}{2}$ " (12.7mm)	0.20" (5mm)
84" to 96" (2130mm to 2440mm)	$\frac{5}{8}$ " (15.9mm)	0.20" (5mm)
96" to 108" (2440mm to 2740mm)	$\frac{3}{4}$ " (19.0mm)	0.28" (7mm)

Overall bow and warp is to be measured with the panel oriented vertically with the long edge resting on blocks placed at the quarter points. Use a string or other straightedge across the concave surface and measure the maximum deviation.

Bottom Supported - Glass Panels

Hardware Overview

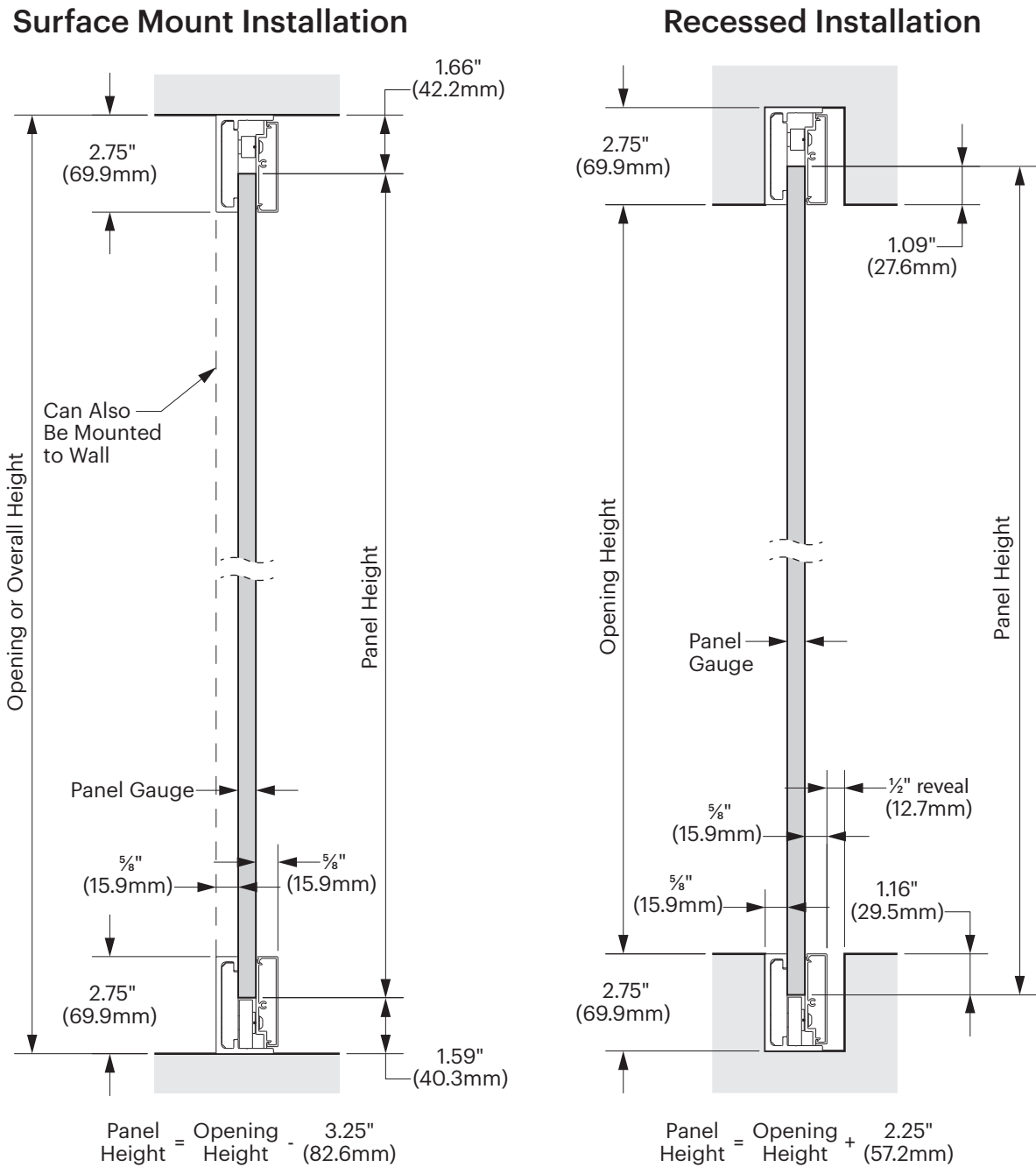
The most common application for Top Support is a ceiling to floor installation. The Base Profiles are screwed directly into structural components in the ceiling as well as the floor. This can also be mounted directly to the wall. The Base Profiles are screwed directly into structural components in the wall. The profiles can also be recessed into the ceiling and floor such that only the panels are visible. For installations where the ends of the channels will be exposed, end caps should be used.



Bottom Supported - Glass Panels

Diagram for Specifying Laminated Glass or Monolithic Glass

When ordering panels, please use the following panel deductions for the appropriate installation to calculate the panel height based on the opening height.



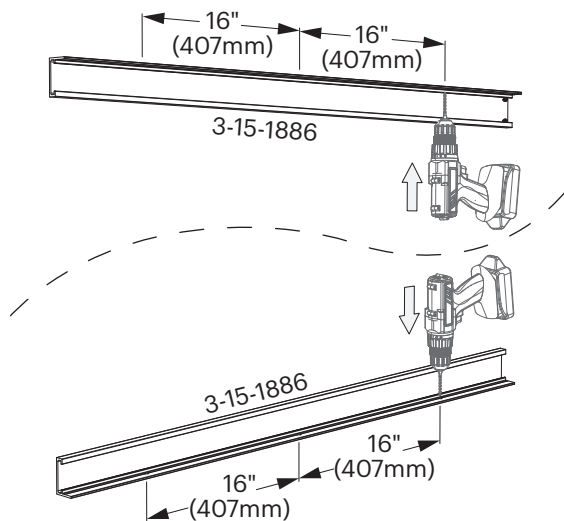
*Allowable Variation in opening height is +/- .3 in. Any variation greater than this tolerance needs to be shimmed.

Bottom Supported Installation- Glass Panels

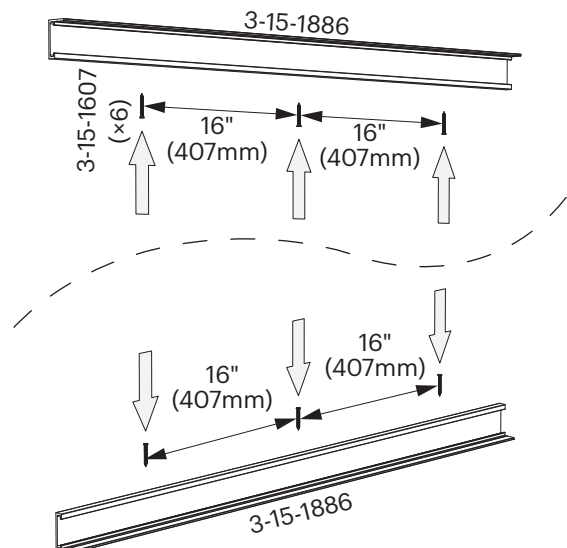
1 Install Base Profiles into Floor and Ceiling or Walls

- a** Refer to pages 4 – 6 to confirm dimensions for the specific condition. For a single panel cut the profiles to approximately $\frac{1}{4}$ " more than the panel width ($\frac{1}{8}$ " on each end). For multiple panels account for an additional $\frac{1}{4}$ " between panels, when using the two part clear seam "H" channel option. ***3-15-1887 comes cut to size.**

- b** ** For wall mounting or floor and ceiling wall-to-wall installation insert blocks will need to be inserted prior to anchoring tracks (see Steps 2-3).*

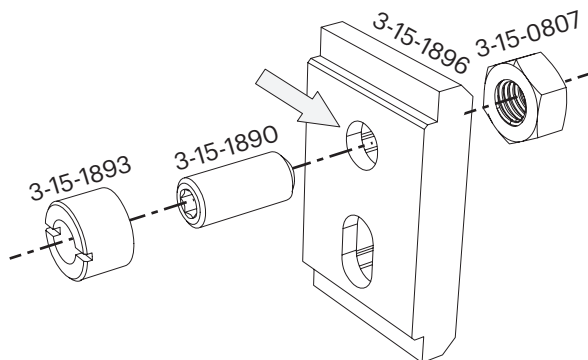


c

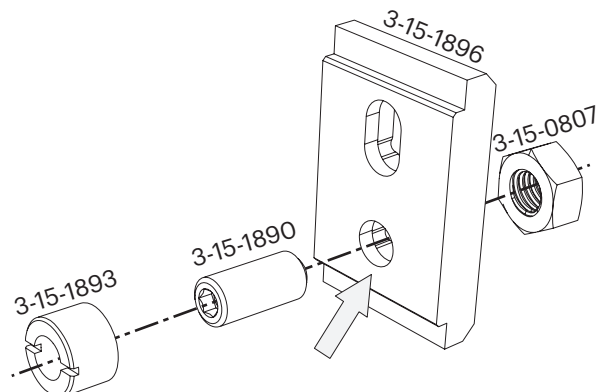


2 Loosely Assemble Insert Blocks

- a** Top Insert Block

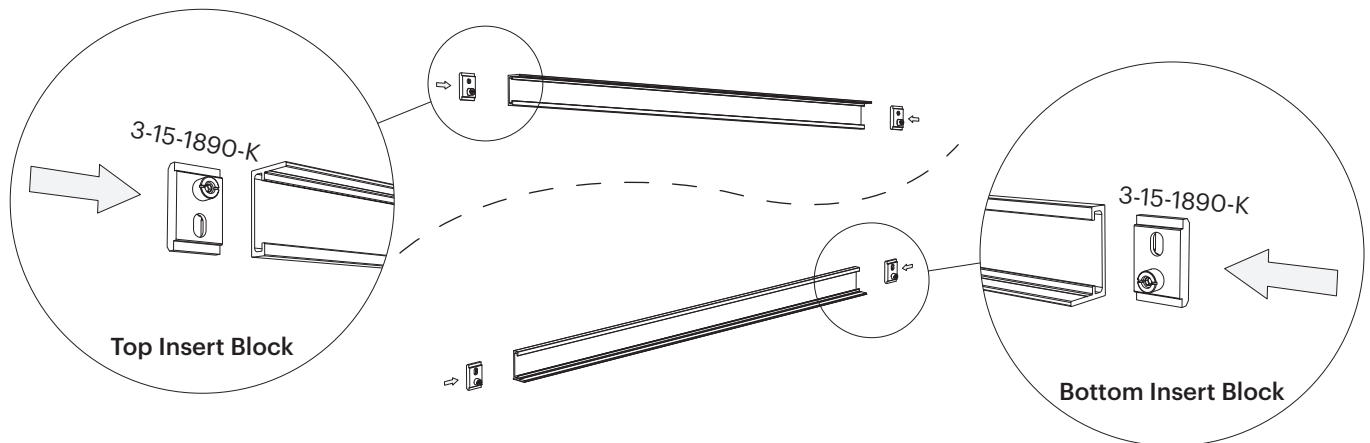


- b** Bottom Insert Block



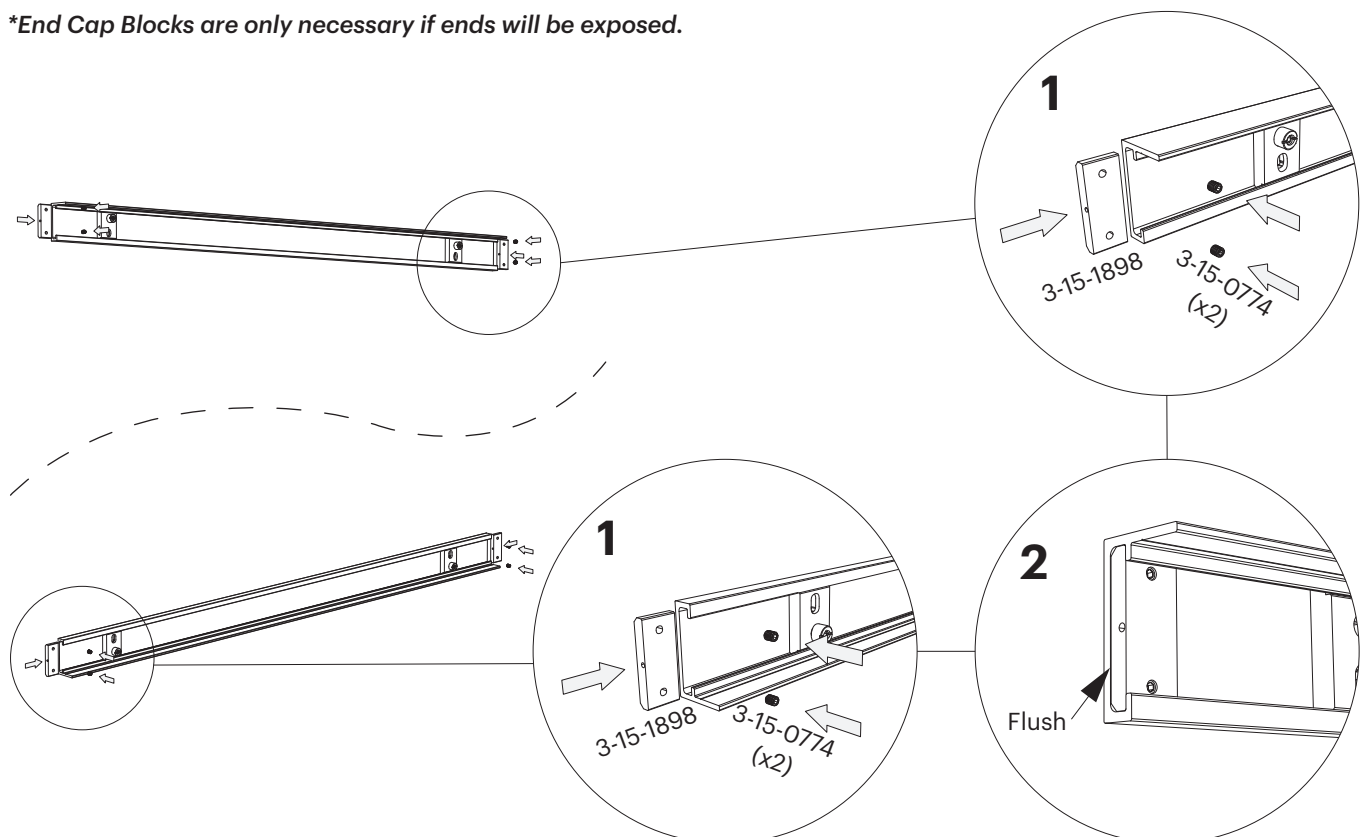
Bottom Supported Installation- Glass Panels

3 Slide Insert Blocks into Base Profiles



4 Install End Cap Blocks

**End Cap Blocks are only necessary if ends will be exposed.*

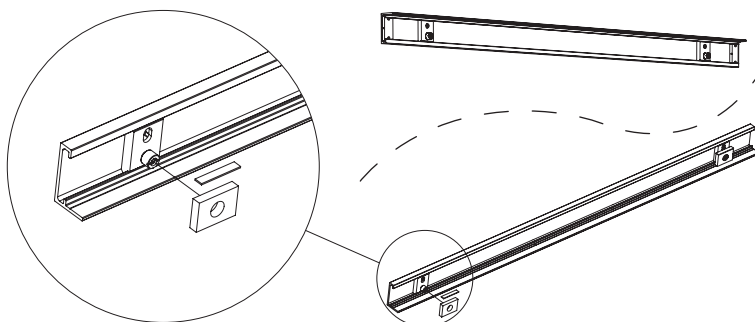


Bottom Supported Installation- Glass Panels

5 Place Glass Support Blocks and Shims

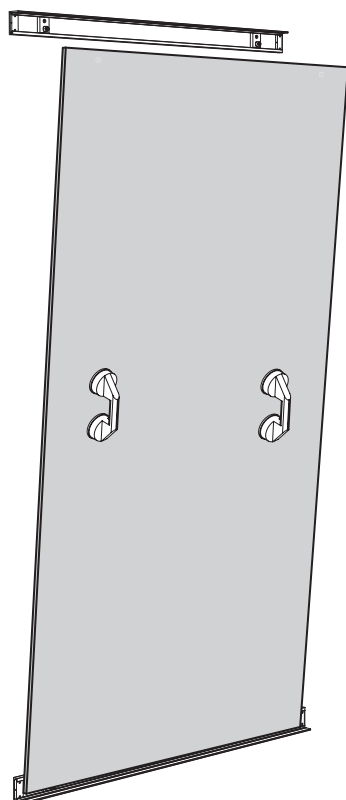
Place glass support blocks on bottom at each insert block location. Align hole in glass support with bushing on insert block.

Place $\frac{1}{8}$ " thick rubber shims on top of glass support blocks. Additional $\frac{1}{8}$ ", $\frac{1}{16}$ " and $\frac{1}{4}$ " shims are included and can be used to level glass panels.



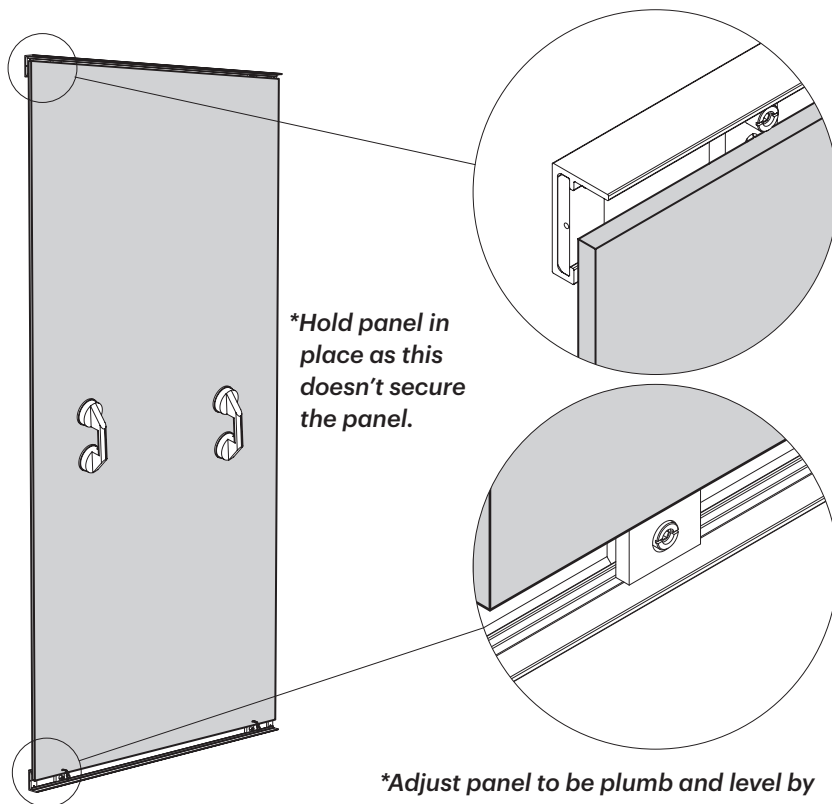
6 Hang Glass Panel

- a** Place glass panel on top of support blocks at bottom.



**Glazing suction cups will help lift and hold the panel.*

b

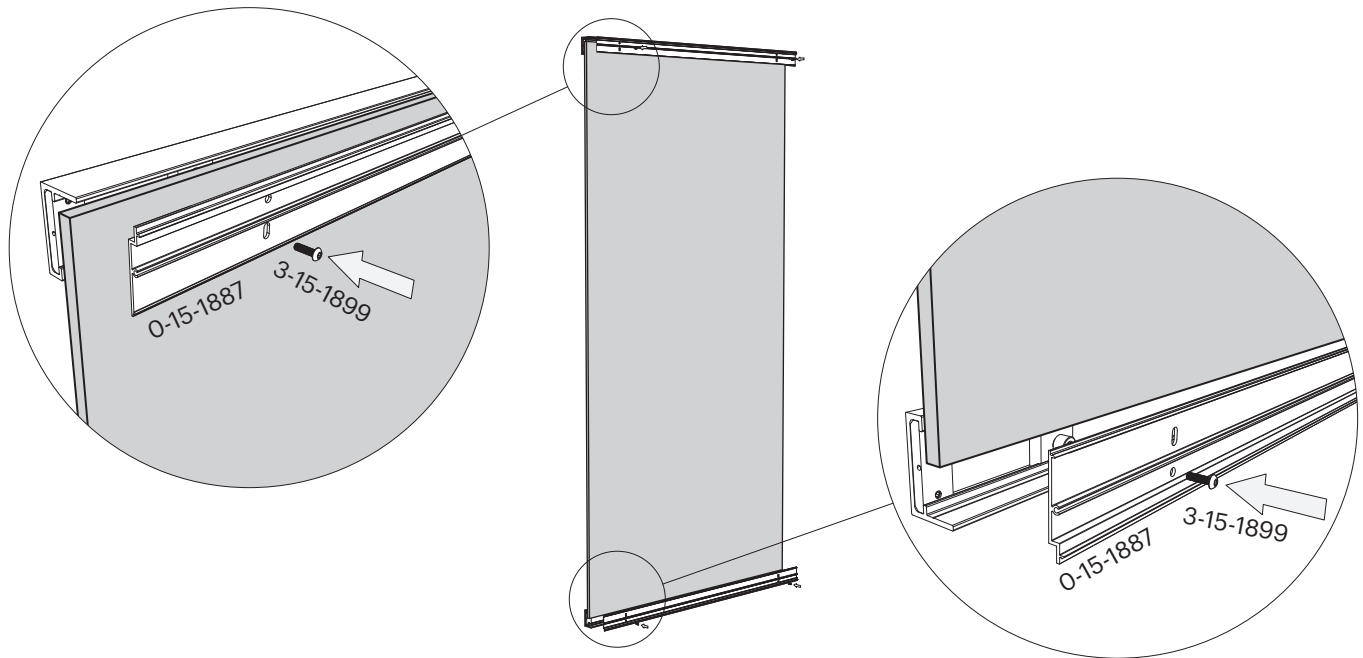


**Hold panel in place as this doesn't secure the panel.*

**Adjust panel to be plumb and level by using additional rubber shims between bottom of glass and blocks as required.*

Bottom Supported Installation- Glass Panels

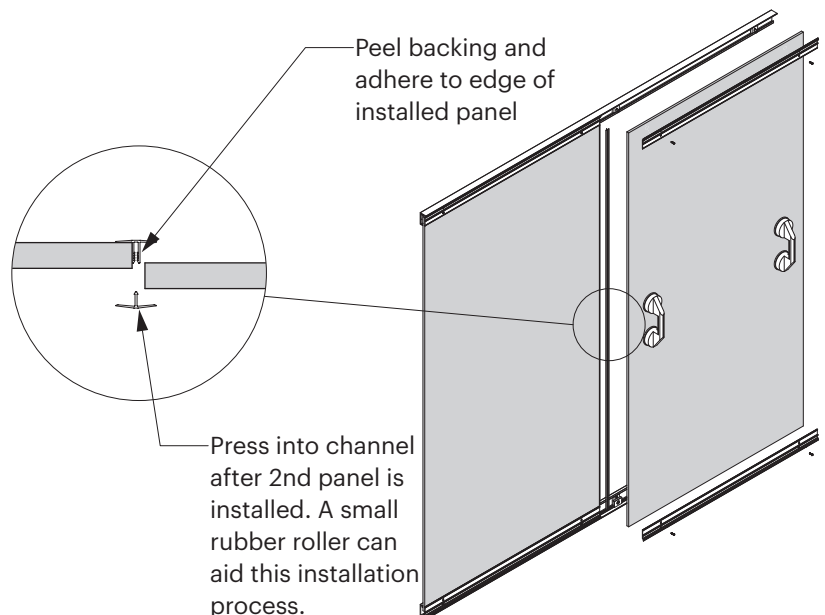
7 Attach Clamp Profiles



8 Install Adjacent Panels (Optional)

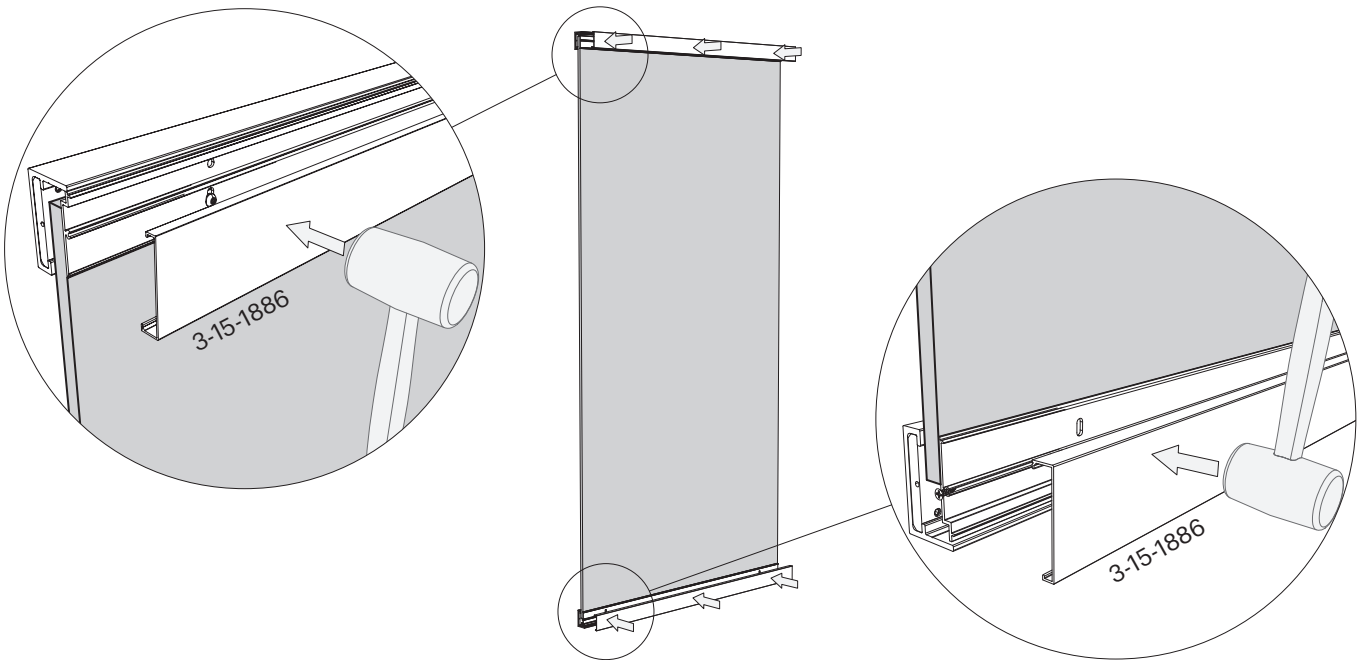
a Install adjacent panels (if exist) as in Steps 6 and 7.

b If using clear alignment H-channel, peel backer off adhesive tape on receiver side of H-channel and adhere the channel on the side of the previously installed channel. See diagram to the right.

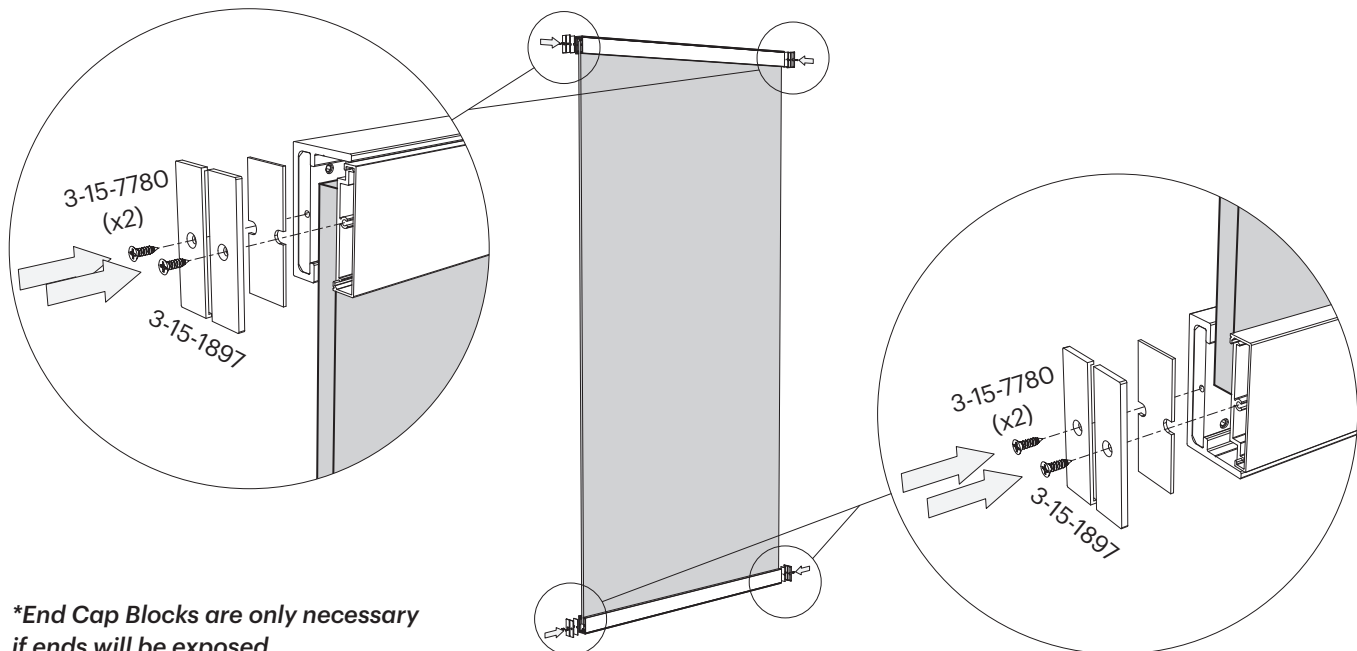


Bottom Supported Installation- Glass Panels

9 Attach Cover Profiles



10 Attach End Caps (Optional)



**End Cap Blocks are only necessary if ends will be exposed.*

General Specifications

	Part Numbers	Material	Finish	Recommended Use	MSDS Information
Aluminum Extrusions*	3-15-1886 3-15-1887 3-15-1888	6063 T6	Clear (Satin) Anodize Architectural Type II Class I Powdercoating Available	Interior Only	Recycled content typically between 25% - 35% Post Industrial 5% Post consumer
Die Cast Aluminum	3-15-1889-K 3-15-1890-K 3-15-1891-K	Die Cast Alloy Aluminum	Factory	Interior Only	Recycled content typically between 25% - 35% Post Industrial 5% Post Consumer
Milled Aluminum	3-15-1007-K 3-15-1897-K 3-15-1898-K	6061	Clear (Satin) Anodize Architectural Type II Class I Powdercoating Available, (may not be feasible for all parts)	Interior Only	Recycled content typically between 25% - 35% Post Industrial 5% Post consumer
Injection Molded	3-15-1889-K 3-15-1890-K 3-15-1891-K 3-15-1895-K	PolyCarbon	Factory	Interior Only	NA
Extruded Clear Plastic	3-15-1498-K 3-15-1497-K	-	Plain Finish	Interior Only	Clear Polycarbonate with UV Inhibitors
Fasteners & Miscellaneous	-	Unless otherwise specified all fasteners are 18-8 or 304/305 Stainless Steel	Plain Finish	Interior Only	Recycled content typically approx. 60% 35% Post Industrial 25% Post Consumer

*Aluminum Extrusions are available in 96.5" lengths