
Build To Spec Kit Aisle Containment Solution User's Manual

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**CHATSWORTH
P R O D U C T S**

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INTRODUCTION

This document is the User's Manual for CPI Build To Spec Kit Aisle Containment Solution. It includes basic assembly and installation instructions for the Build To Spec Kit, Aisle Containment Door Assembly; Full Height Cabinet Blanking Panels and Cabinet To Floor Sealing Kits, which are used together to create an Aisle Containment Solution.

Build To Spec Kit Aisle Containment Solution User's Manual

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Legal Information

The information contained in this guide is subject to change without notice.

Chatsworth Products, Inc. (CPI) shall not be liable for technical or editorial errors or omissions contained herein; nor is it liable for any injury, loss, or incidental or consequential damages resulting from the furnishing, performance, or use of this material and equipment.

Warranty

Chatsworth Products, Inc. (CPI) guarantees manufactured products and each part or component thereof against all defects in material and/or workmanship. CPI agrees to remedy any manufacturing defect either through replacement or repair at no charge provided that the defective unit is returned, transportation prepaid, to the CPI factory.

The warranty extends for a period of one year from the date of installation or initial use, provided that this period shall not exceed 18 months from the original date of shipment from the factory.

Any product that has been repaired or replaced shall be similarly warranted on its repair or replacement for the remaining product warranty period or 90 days from the date of repair or replacement, whichever expires last.

This warranty does not extend to products that have been subjected to neglect, accident or improper use, nor to units that have been altered by non-CPI personnel.

No warranties other than those set forth in this section are given or implied with respect to the products furnished. CPI shall, in no event, be liable for consequential damages, for loss, damage or expense directly or indirectly arising from the use of the products, for any inability to use materials or from any other cause.

SAFETY INFORMATION



WARNING: Improper use of this product may lead to serious injury or death. Read and understand all instructions for proper installation and use of this product.



WARNING: Installation of aisle containment products may require the use of ladders, scaffolds, and other climbing tools. Follow all climbing device procedures and observe all safety and warning precautions.



WARNING: The aisle containment products are heavy and large. This requires that at least two personnel be used for assembly and installation. Obtain adequate assistance or hire professional equipment riggers.



WARNING: Depending on the configurations of the deployed system, the static weight of the duct can result in heavy loads. Consult with the local building engineer to verify that floor and/or ceiling loading prior to assembling and installing the structure. Failure to provide adequate support and anchoring for the frame could result in severe injury or death.



WARNING: Failure to properly support structural members during assembly could result in severe injury or death.



WARNING: The aisle containment system is designed to support the weight of the duct, but is not designed for significant additional loading. Do not climb on or support heavy items such as cable runways from the containment structure as doing such could result in severe injury or death.

INTENDED USE

The Build To Spec Kit Aisle Containment Solution should only be used in a restricted service environment, such as a data center. Use indoors only, in environmentally controlled areas; do not use outdoors or in harsh environments. Not for use in plenums. Use this solution for computer server, storage and network equipment. Allow only qualified service personnel to use this solution.

STORAGE OF COMPONENTS

All system components should be stored indoors only in environmentally controlled areas. Do not store outdoors. Do not expose to harsh or humid areas.

TOOLS REQUIRED FOR ASSEMBLY AND INSTALLATION

The following tools are required to assemble the Build To Spec Kit and Aisle Containment Doors. Additional tools may be required depending on site-specific requirements.

Tool	Application
Mitre saw with metal/aluminum cutting blade	For cutting frame components
Jig/reciprocating saw with metal cutting blade	For cutting corner brackets
Utility Knife or Flute Cutter	For cutting poly panels/bulb seal
Straight edge or Guardian Knife Guide*	For cutting poly panels/bulb seal
#2 Phillips screwdriver or bit for drill/driver	Assembly, BTS Kit
#3 Phillips screwdriver or bit for drill/driver	Assembly, Door
8 mm socket and open end wrench	Assembly, Door
10 mm socket and open end wrench	Assembly, Door
13 mm socket and open end wrench	Assembly, Door
Ladders	Installation
Levels	Installation
Drill, bits	Installation

**For best results when cutting corrugated plastic sheet use specialized cutting tools, like the Guardian Knife Guide by Saw Trax Mfg. Inc.*

SITE PREPARATION

Floor

In an access floor installation, ensure that the floor is strong enough to support the fully populated computer cabinets, and the additional weight of the Build To Spec Kit (aisle containment duct) and Aisle Containment Door Systems. If required, add subfloor bracing to provide the proper support for equipment.



Subfloor bracing.

Ceiling

If supporting from threaded rod, ensure that the ceiling is strong enough to support the Build To Spec Kit (aisle containment duct). Threaded rod used to support the duct should only be used to support the duct.

UNPACKING

The containment system components are packaged in separate crates. Inspect the components for damage as they are unpacked. If any damage is observed, contact your distributor or CPI Customer Service.



CAUTION: Aisle containment components are heavy. Use a minimum of two (2) people to unpack and remove components from the pallet.

1. Components are packaged in protective crates. The upper crate will need to be removed to access the components. Carefully remove the mounting screws from the steel plates that tie the upper and lower crate. The upper crate will need to be lifted and set aside.



CAUTION: The upper crate is heavy. Use a minimum of two (2) people to remove.

2. Individual component pieces will be individually wrapped with foam. The foam should be used to provide protection when the components are staged on the floor prior to assembly. Use a utility knife to cut any tape. Be careful not to allow the knife to contact the components as this causes damage.



RECYCLABLE MATERIALS: CPI uses only recyclable materials in all of its containment packaging. Please save packaging for later use or dispose of properly. All wood components of CPI pallets have been properly treated to comply with the pest-free certifications required by foreign countries.

3. After the all of the components have been unpacked, locate the hardware kit and inspect the product for concealed damage. If any damage to the aisle containment solution is observed, contact your distributor or CPI Customer Service.

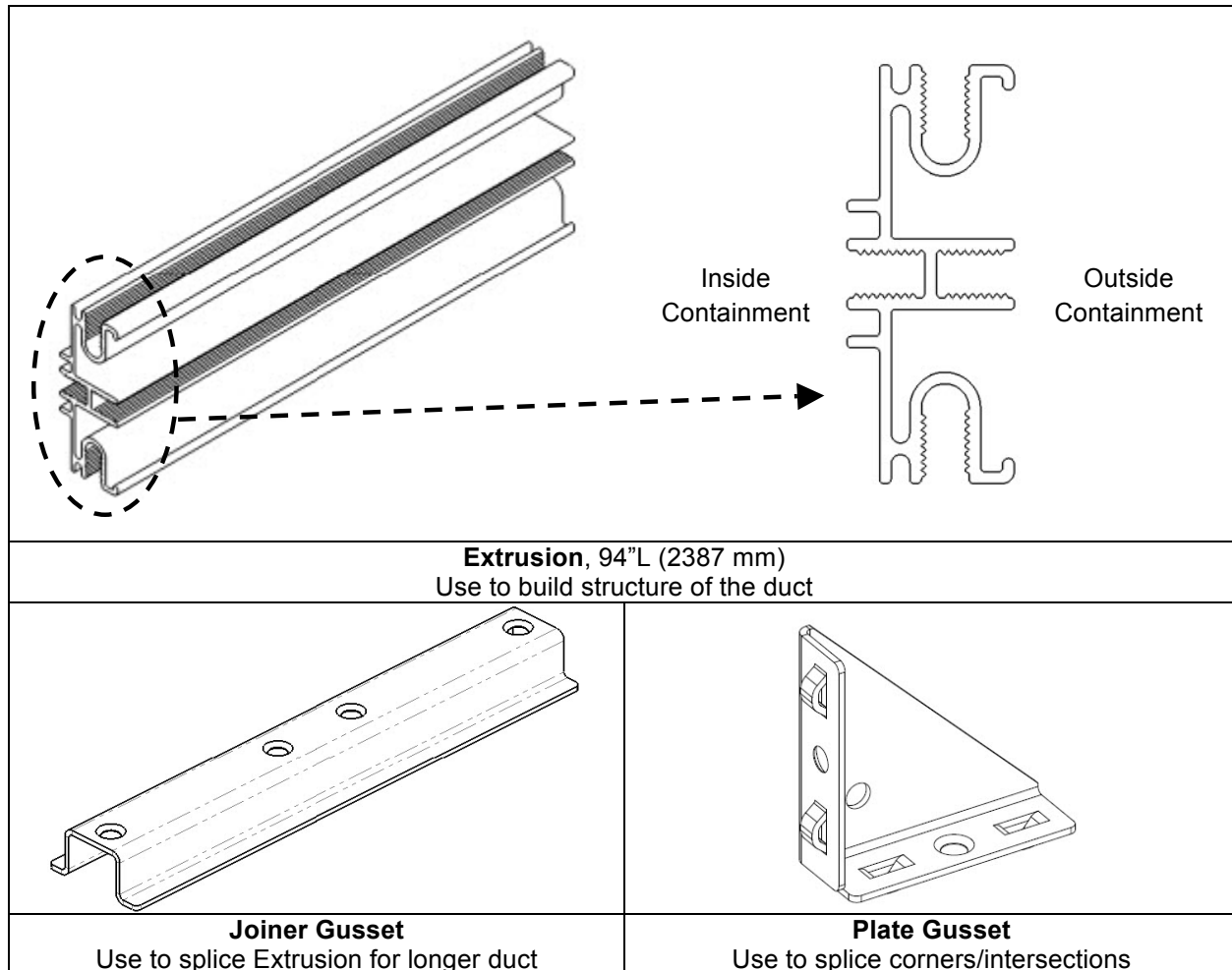
BUILD TO SPEC KIT – THE AISLE CONTAINMENT DUCT

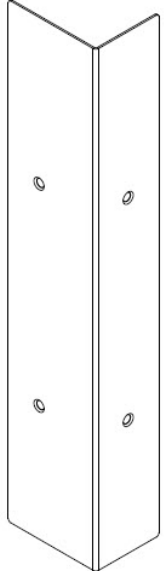
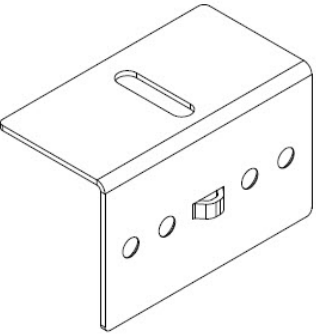
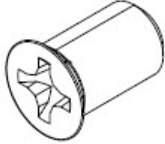
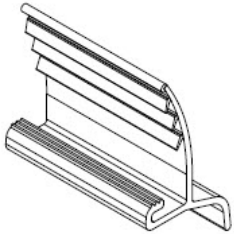
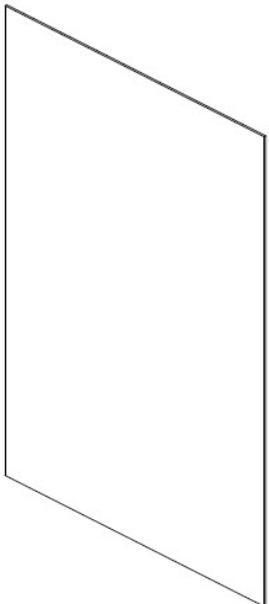
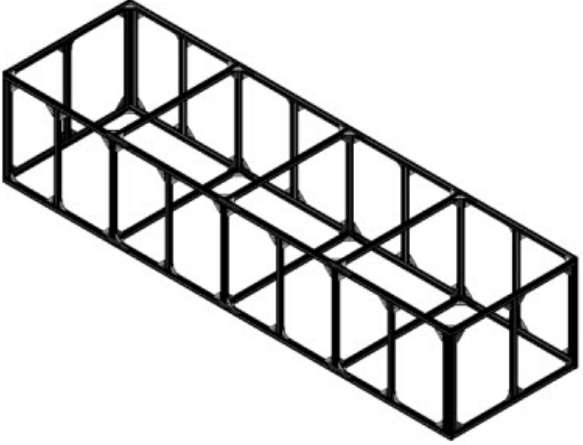
INTRODUCTION

The Build To Spec Kit from Chatsworth Products, Inc. (CPI) includes various components that are field fabricated to create a single duct over the contained aisle. The duct isolates and guides exhaust air from the contained aisle back to the air handlers as part of a closed return system. The duct can be supported from the ceiling or from the tops of cabinets. Clear polycarbonate panels allow light to enter the contained aisle. Use Aisle Containment Door Assemblies (ordered separately) on each end of the contained aisle. Use Full Height Blanking Panels (ordered separately) to fill any gaps from missing cabinets or uneven rows. If cabinets vary in height, use Universal Bulb Seal (ordered separately) on drop panels cut from extra panel material to seal the gaps.

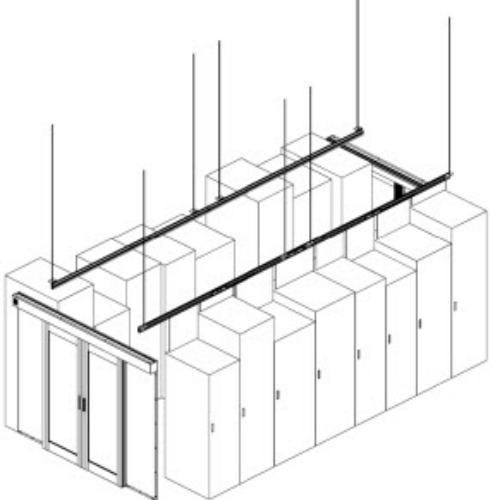
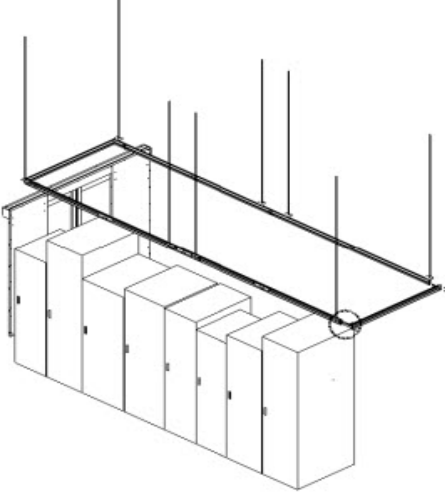
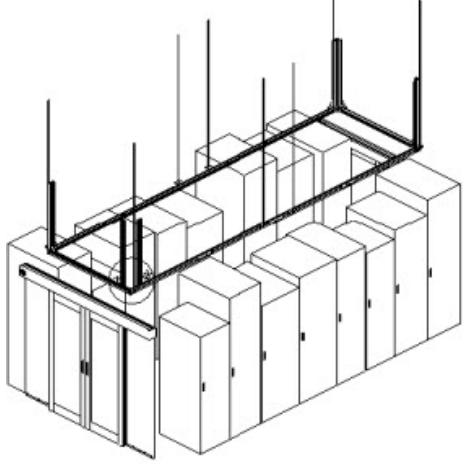
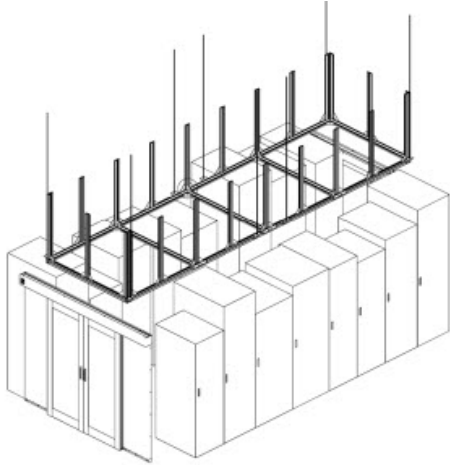
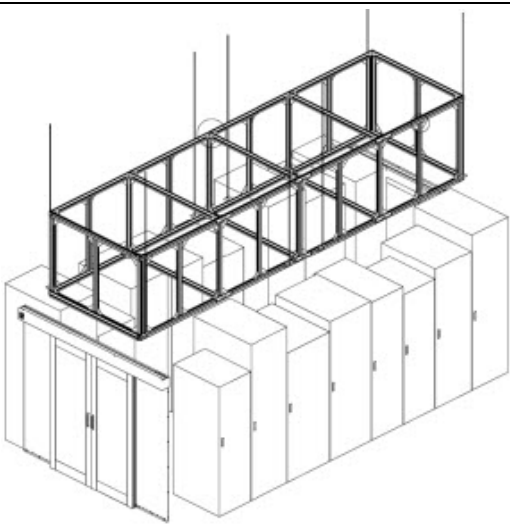
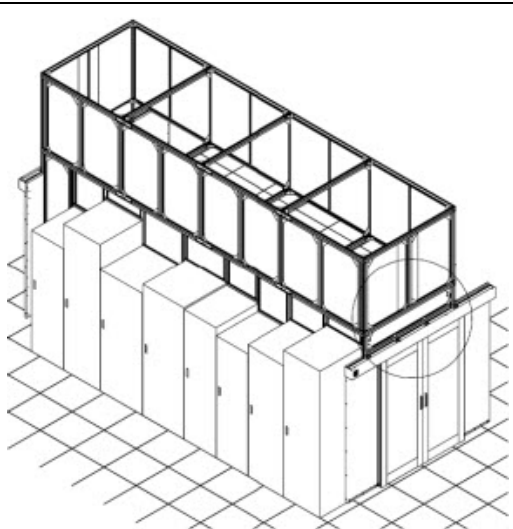
COMPONENTS

The basic components included with each Build To Spec Kit are illustrated below and on the next page.



	
<p align="center">Corner Cover Use to reinforce outside corners</p>	<p align="center">Mounting Bracket Use to attach duct to ceiling or cabinets</p>
	
<p align="center">Screws Use to assemble Gussets and Extrusion</p>	<p align="center">Panel Clamp Use to secure Panels against Extrusion</p>
	
<p align="center">Polycarbonate Panels 48" (1219 mm) W x 96" (2438 mm) L</p>	<p align="center">Build To Spec Kit Assembled Kits are available in several sizes.</p>

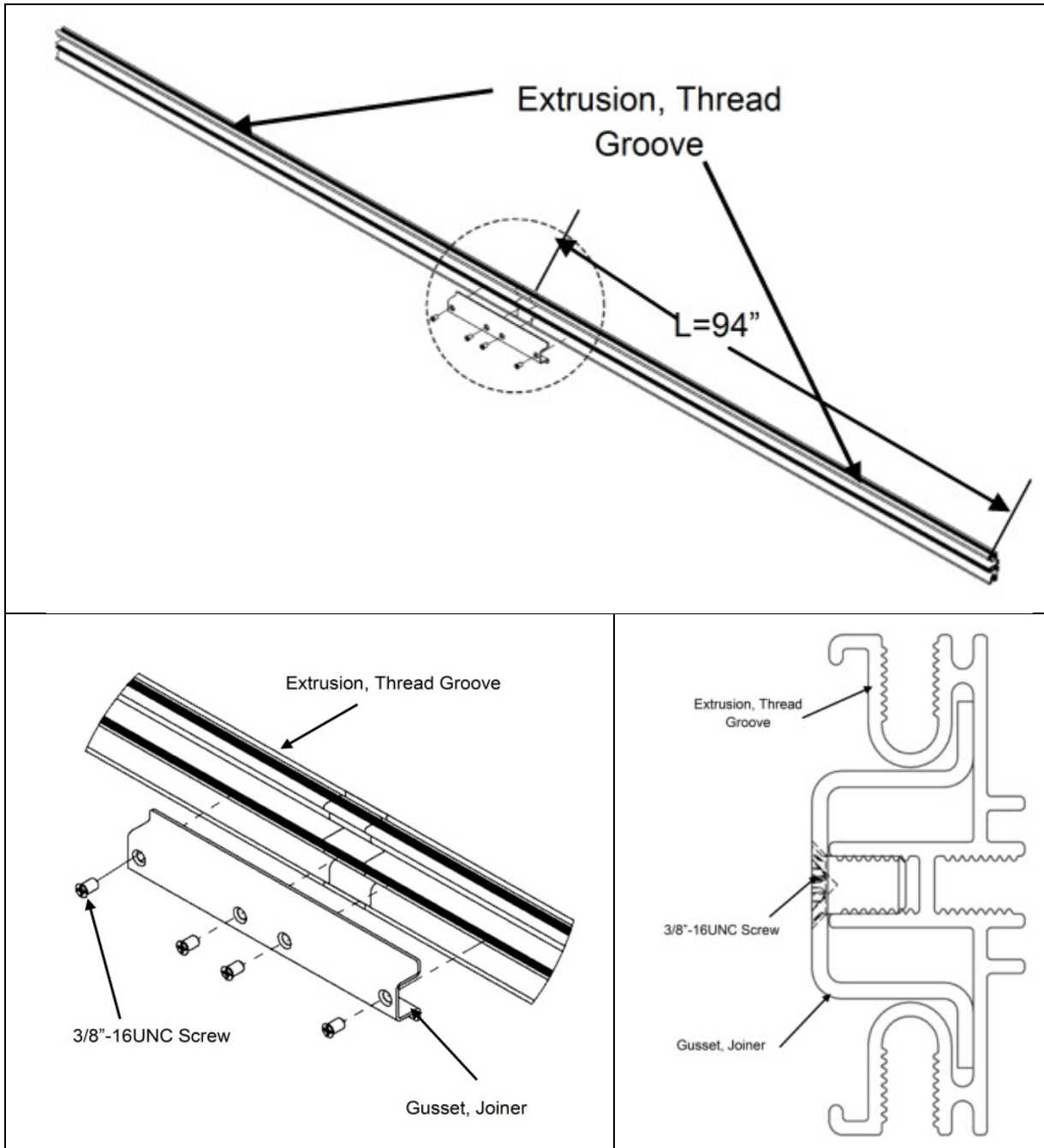
ASSEMBLING THE BUILD TO SPEC KIT - The following sections cover recommended assembly and installation methods. Use alternate methods or order of assembly as required.

	
<p>Step 1: Join Extrusions to form the bottom, sides of the duct and support from ceiling or top of cabinets.</p>	<p>Step 2: Level the sides and connect the ends to form the bottom of the duct.</p>
	
<p>Step 3: Cut and install vertical supports at each corner.</p>	<p>Step 4: Cut and install cross braces and intermediate vertical supports.</p>
	
<p>Step 5: Cut and install the frame and cross braces at the top of the duct.</p>	<p>Step 6: Cut, fit and install the panels. You may also need to add drop panels and end fascias.</p>

CREATE THE DUCT

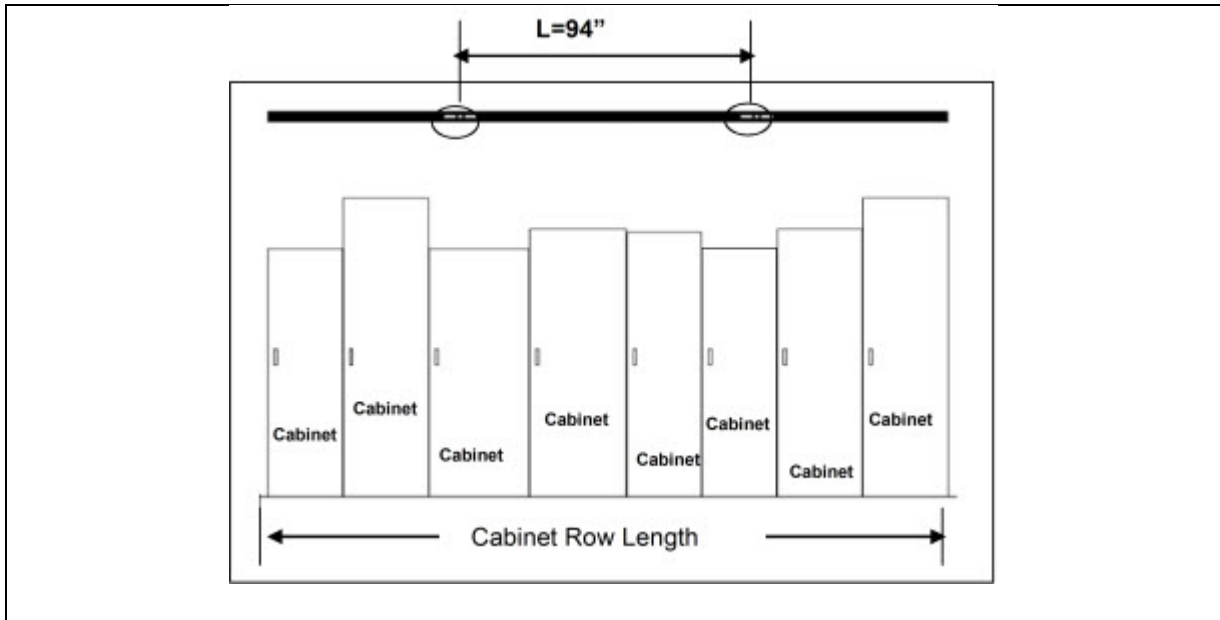
1. Assemble Extrusions to make the two long sections for the bottom of the duct.

If cabinet row length is greater than 94" (2387 mm), join extrusions together using the Joiner Gusset and (4) Screws as shown below.

**Note:**

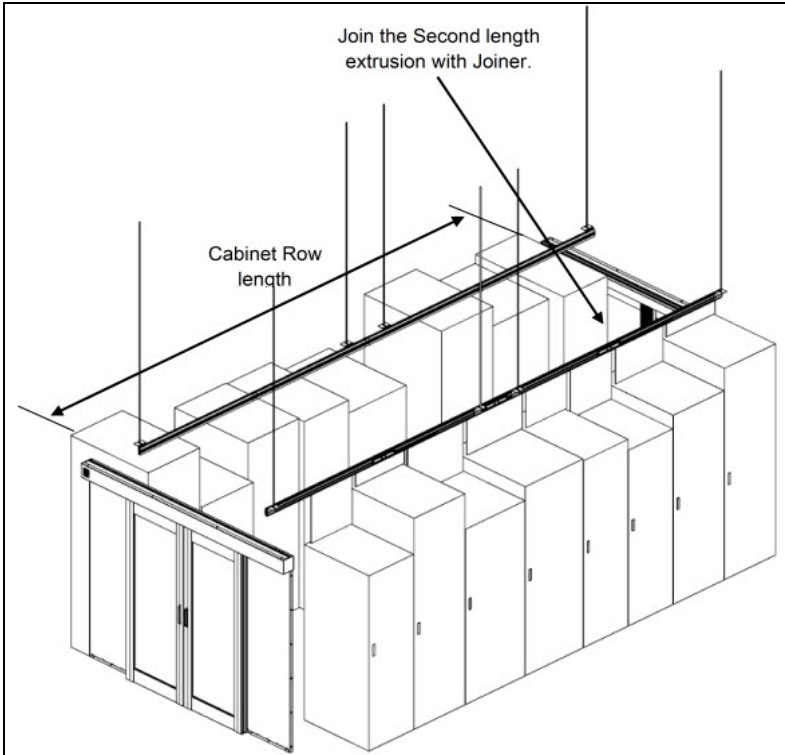
- The flat side of the extrusion faces the inside of the containment/duct (see page 8).
- The Joiner Gusset faces the outside of the containment/duct.

2. Cut the extrusions to match the Cabinet Row Length.

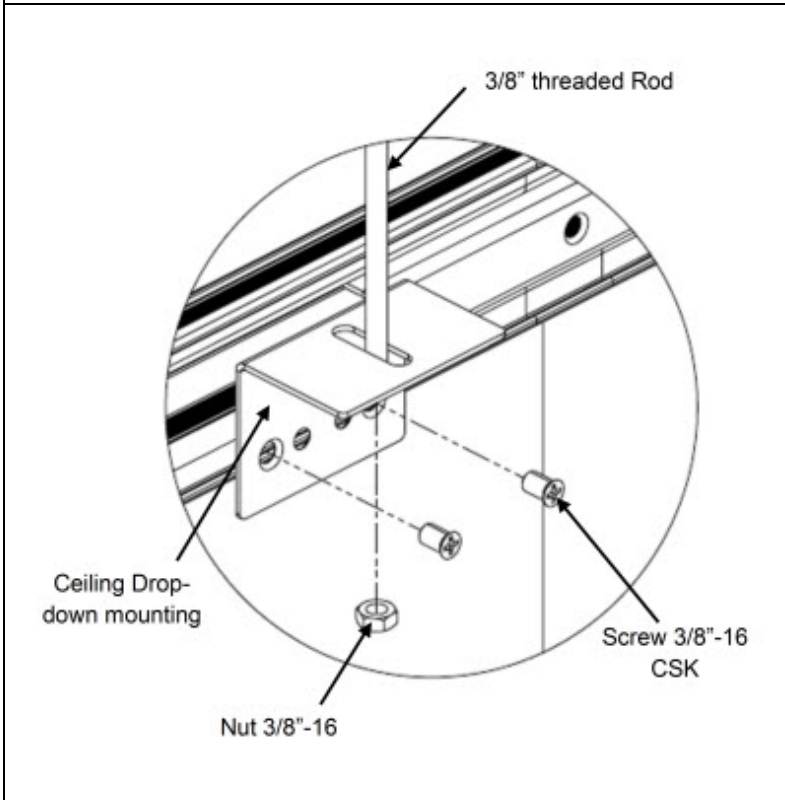


If cabinet row lengths are uneven, cut Extrusions to match the longest row length. Consider the addition of future cabinets also. Open space at the end of the row can be filled with a Full Height Blanking Panel (sold separately, see page 26).

3. Use Mounting Brackets to attach extrusions to the ceiling or to the tops of cabinets.

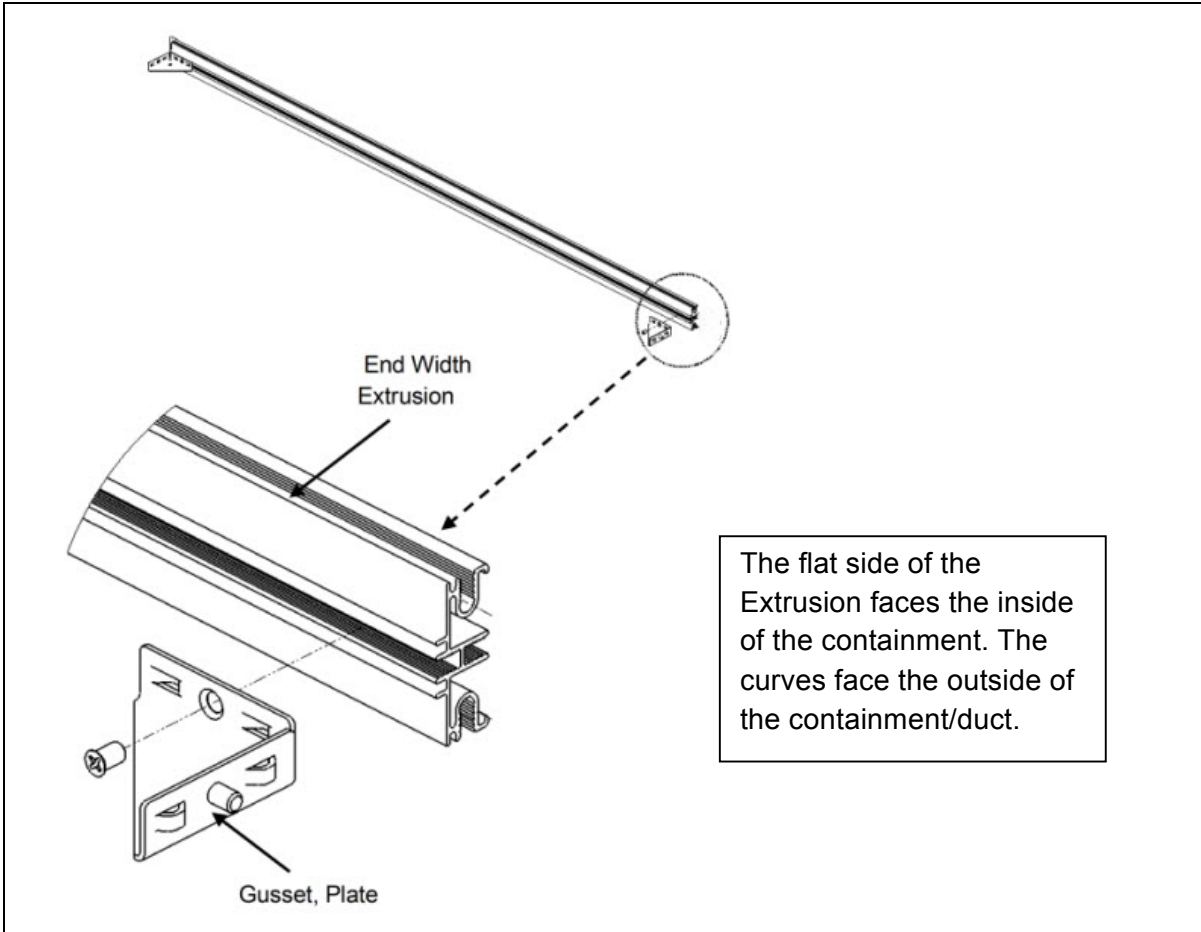


- Position the extrusions so Gusset Joiners face the outside of the containment/duct.
- Mounting brackets attach to the outside of the containment/duct.
- Support extrusions on both sides of Joiner Gussets and close to the ends of the duct.
- Space brackets approximately every 48" (1200 mm) of span.

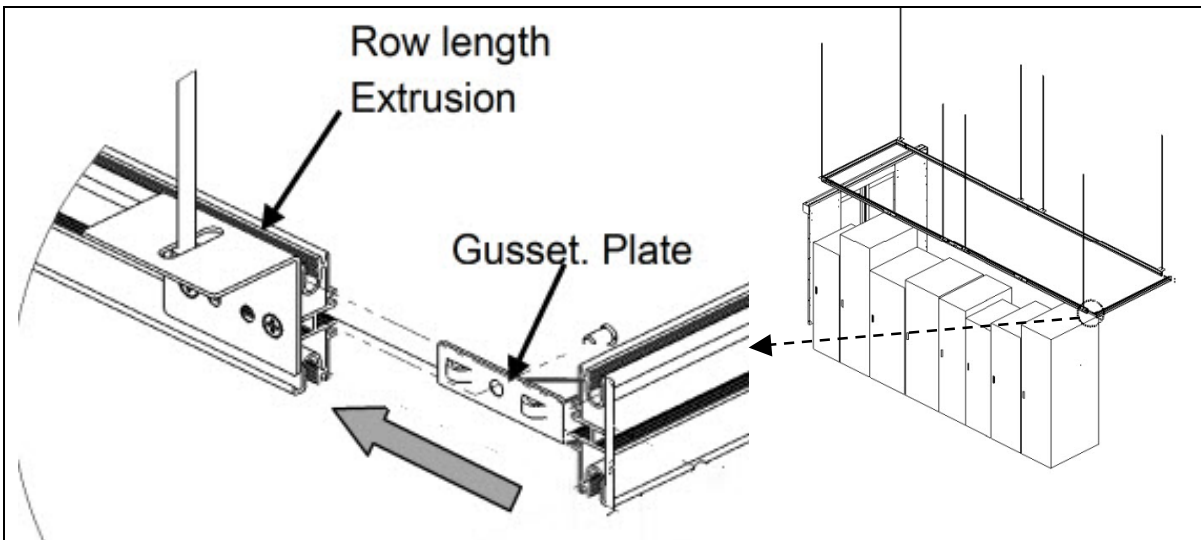


- Use 3/8" threaded rod to support the duct from the ceiling as shown.
- When cabinets are the same height, you can support extrusion(s) directly from the tops of cabinets.
- Flip the Mounting Bracket and use a 3/8" hex bolt to attach the extrusion directly to the tops of cabinets.
- Hardware for ceiling or cabinet attachment is not included.

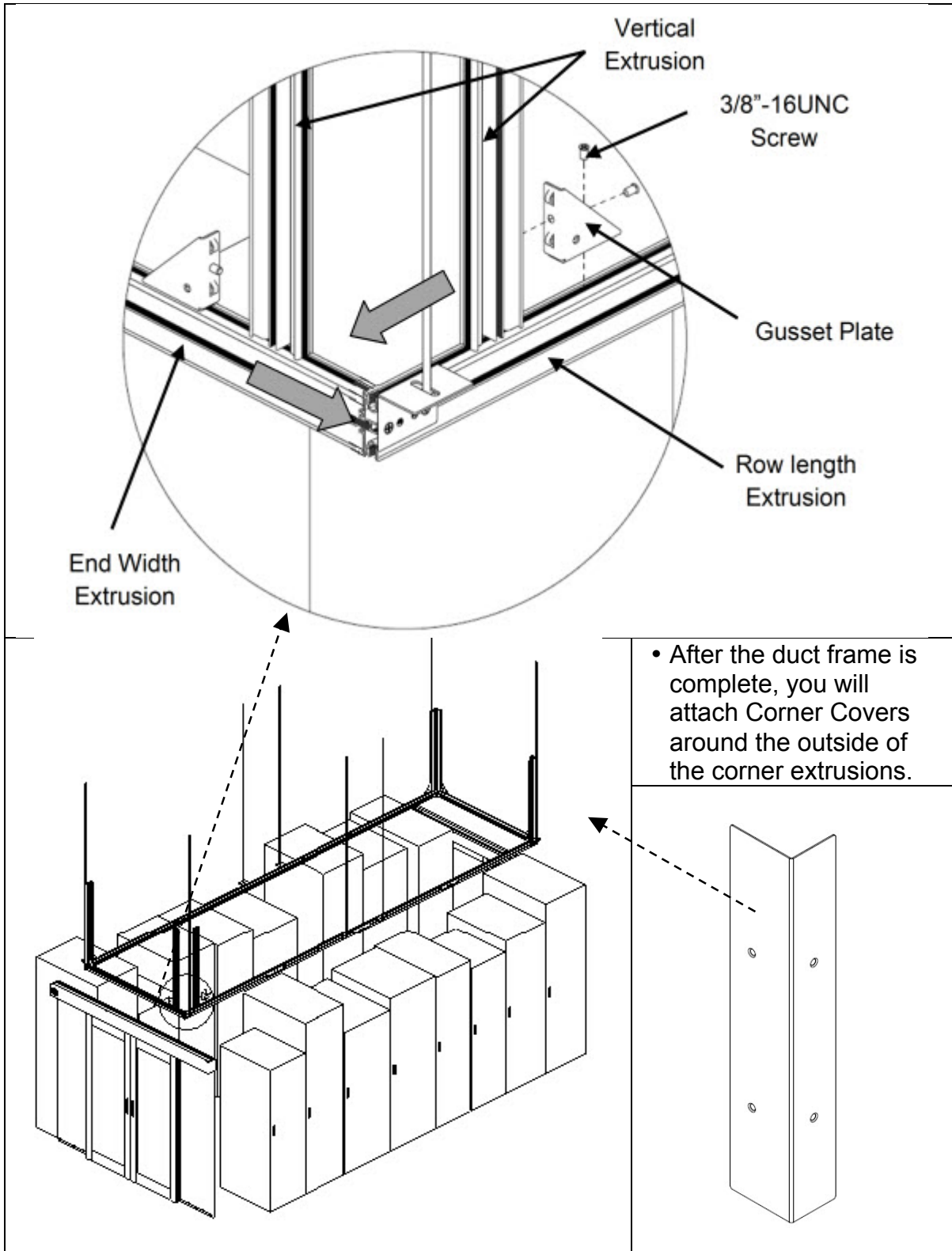
4. Cut extrusions to cap the ends of the duct and attach with Plate Gussets as shown below. Note the orientation of the Extrusion; the Plate Gusset goes inside the duct.



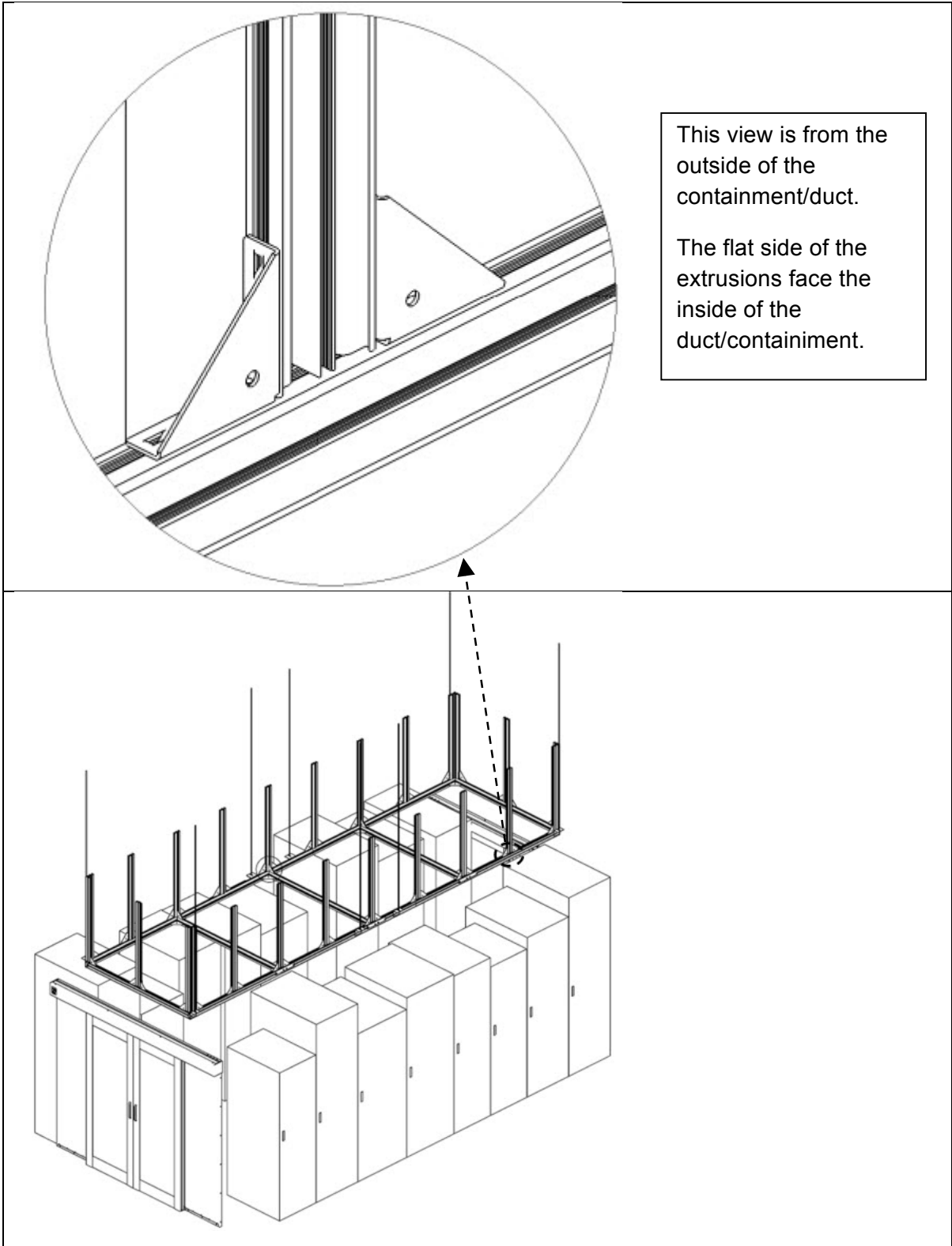
5. Attach the extrusions to the ends of the duct with the Plate Gussets. Note the orientation of the Extrusion; the Plate Gusset goes inside the duct.



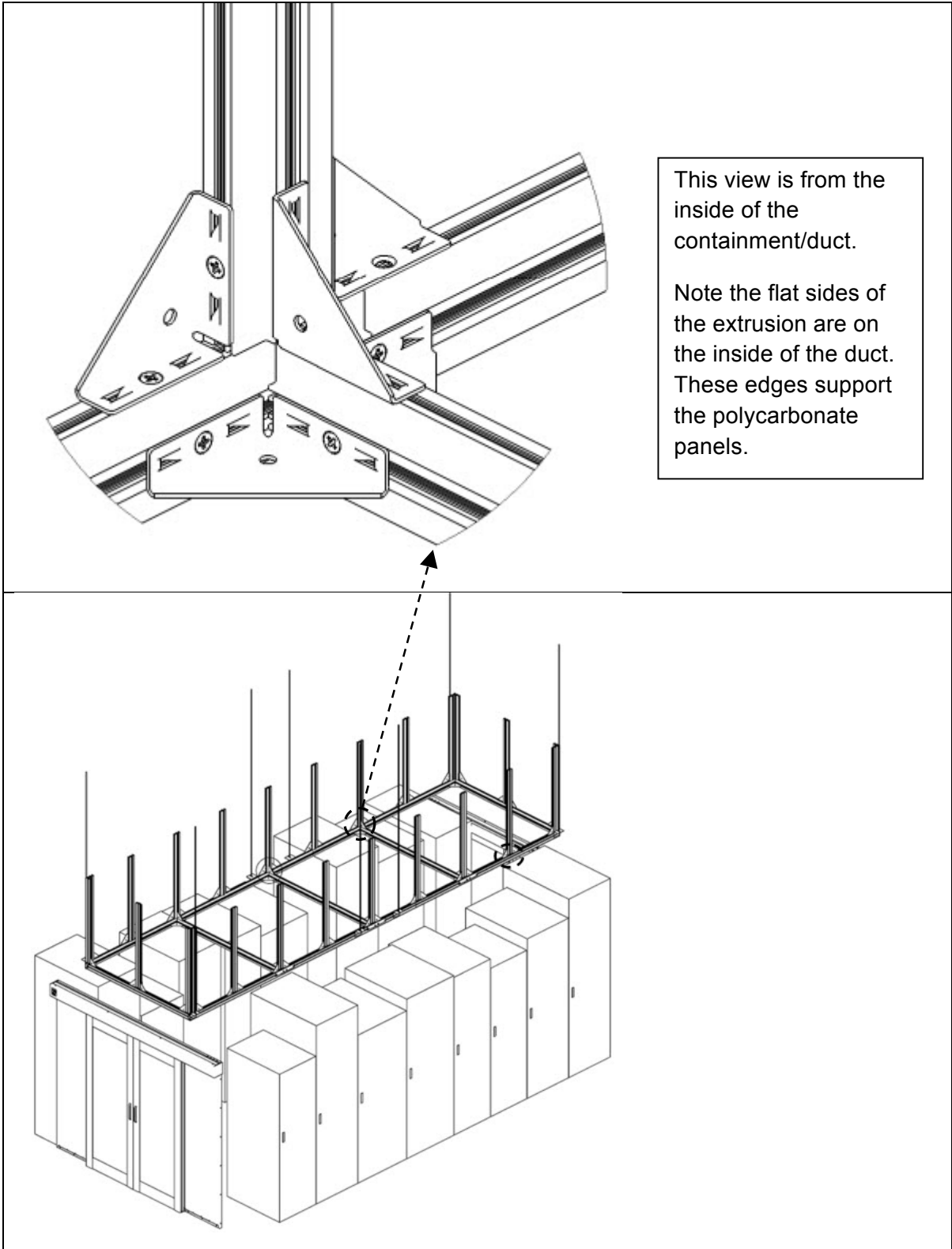
6. Cut two vertical extrusions per corner. Each vertical extrusion should be 3.25" (83 mm) less than the cabinet to ceiling distance to allow space for the top of the duct frame. Attach the extrusions in the corners with Plate Gussets as shown below.



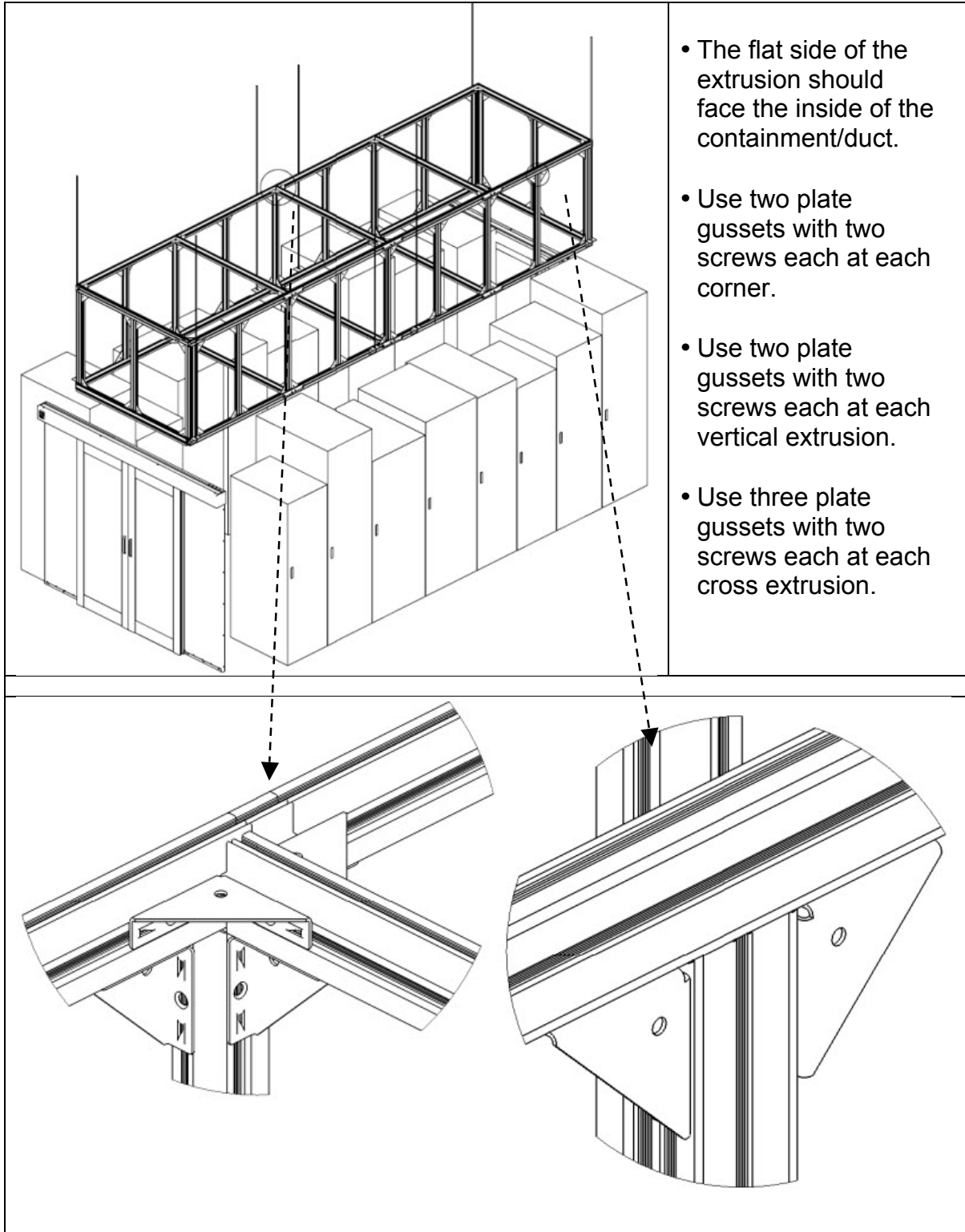
7. Add vertical extrusions every 48" (1200 mm) or at a smaller even interval across the length of the duct. Use two gussets with two screws each to secure each vertical extrusion as shown below. The flat side of the extrusion faces the inside of the duct.



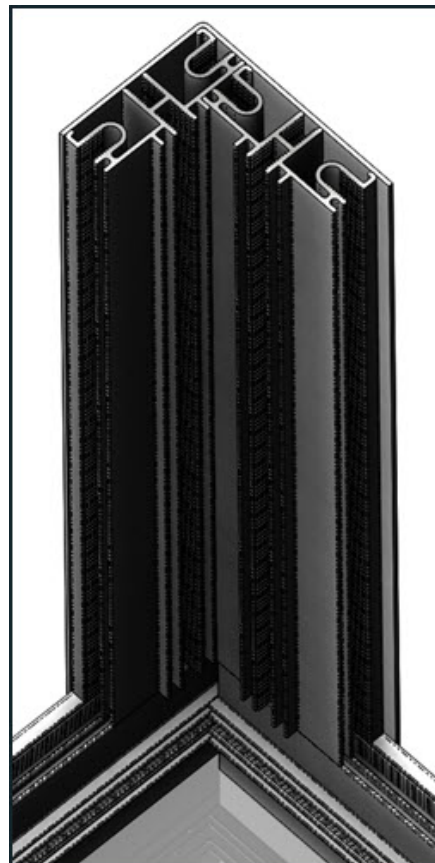
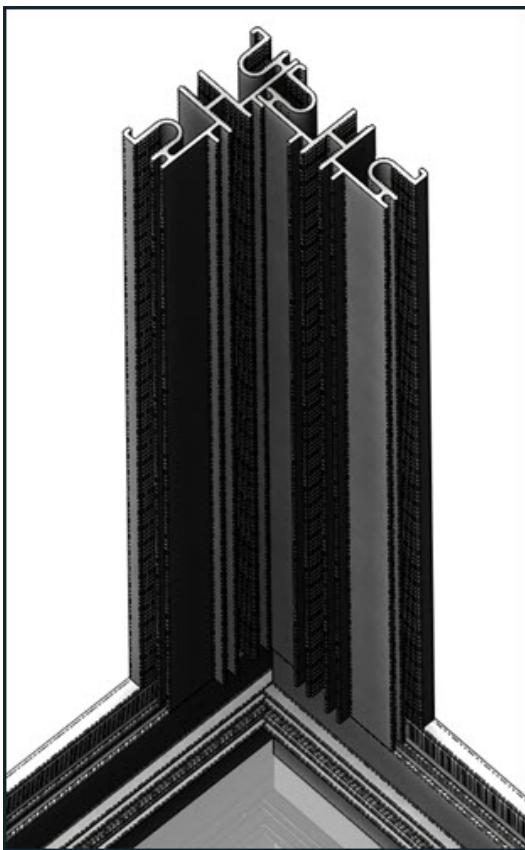
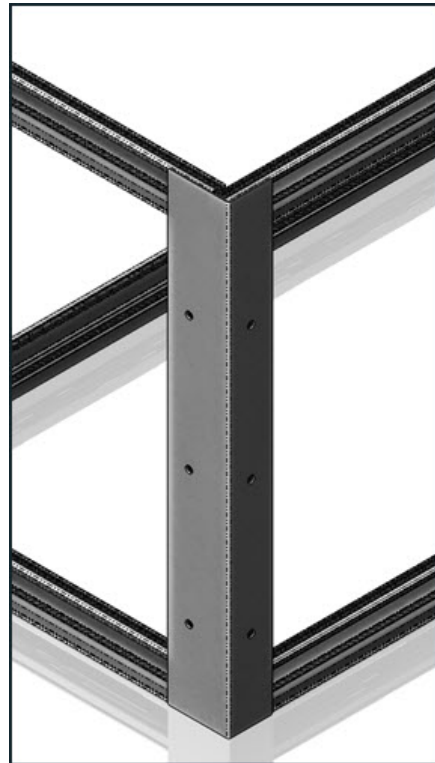
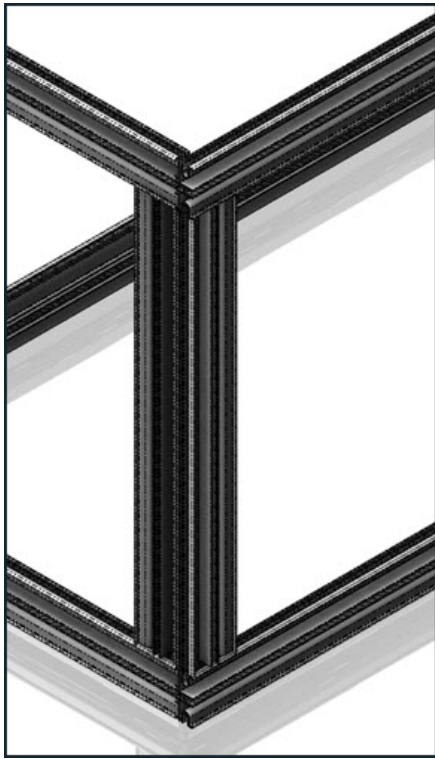
8. Add cross extrusions at every other vertical extrusion. Use three gussets with two screws each to secure each cross extrusion as shown below.



9. Repeat the previous steps to cut and assemble a top frame for the duct. Attach cross extrusions at the top also. The top frame of the duct touches the drop ceiling.



10. Cut and add Corner Covers around the outside of each corner. See step 6, page 15.

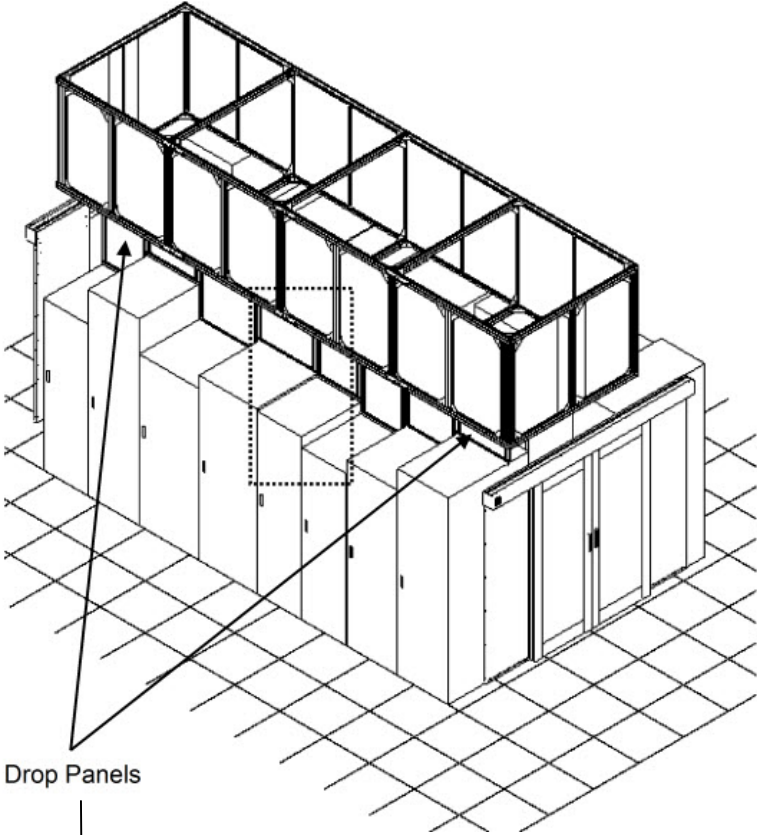


11. Cut Polycarbonate Panels to fit the duct and secure with Panel Clamps.

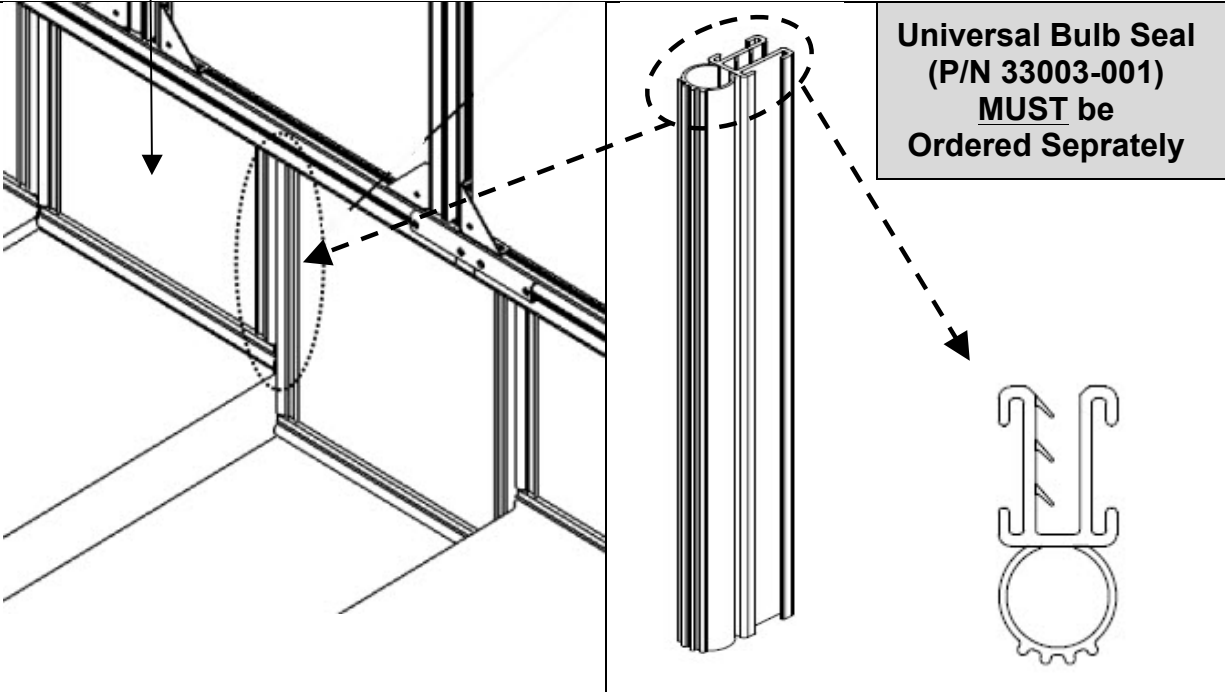
- The inside of the extrusion used to construct the duct has a flat surface with a raised edge that forms a frame for each polycarbonate panel, see the details below.
- Measure and cut the polycarbonate panels using a utility knife and straight edge or Guardian Knife Guide and Coroclave Flute Cutter.
- Insert panels into the frame in the extrusion and secure with panel clamps. The clamps snap into the threaded opening on the extrusion, see below.

CREATE DROP PANELS

Create drop panels to fill any gaps between the tops of cabinets and the duct.

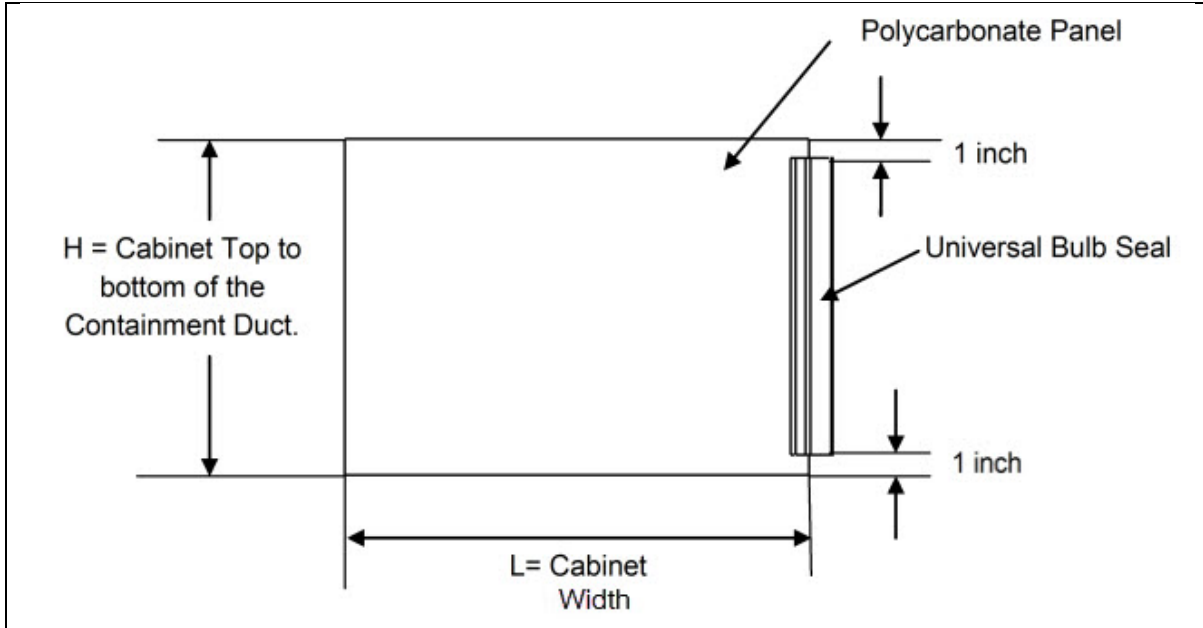


- Drop panels are made with Polycarbonate Panel, Panel Clips and Universal Bulb Seal
- Universal Bulb Seal (P/N 33003-001) must be ordered separately.
- Order additional panel and clips, if required.
- Panels are cut to fit the gap above each cabinet.
- Universal Bulb Seal attaches around the edge of the panels.
- See the next page for details.

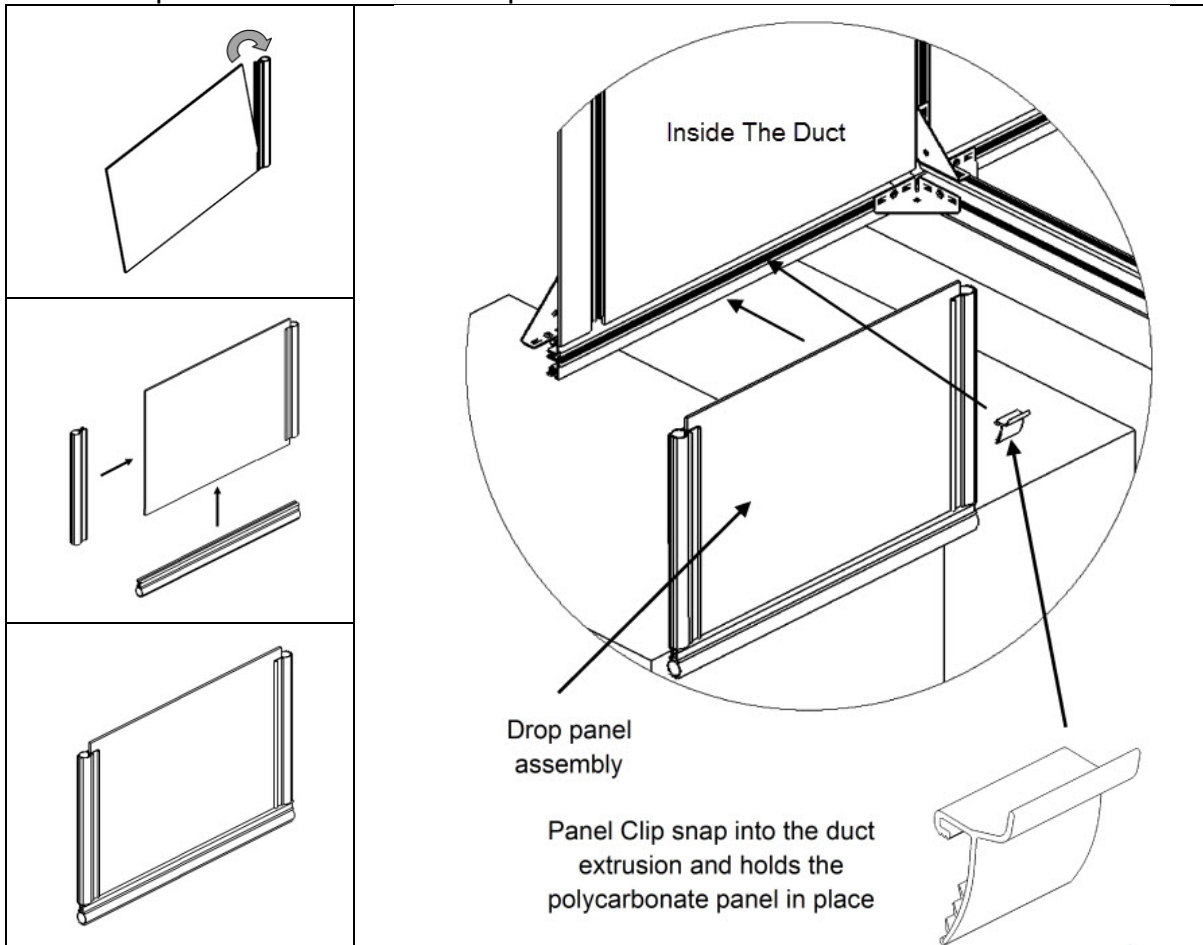


Universal Bulb Seal (P/N 33003-001) MUST be Ordered Separately

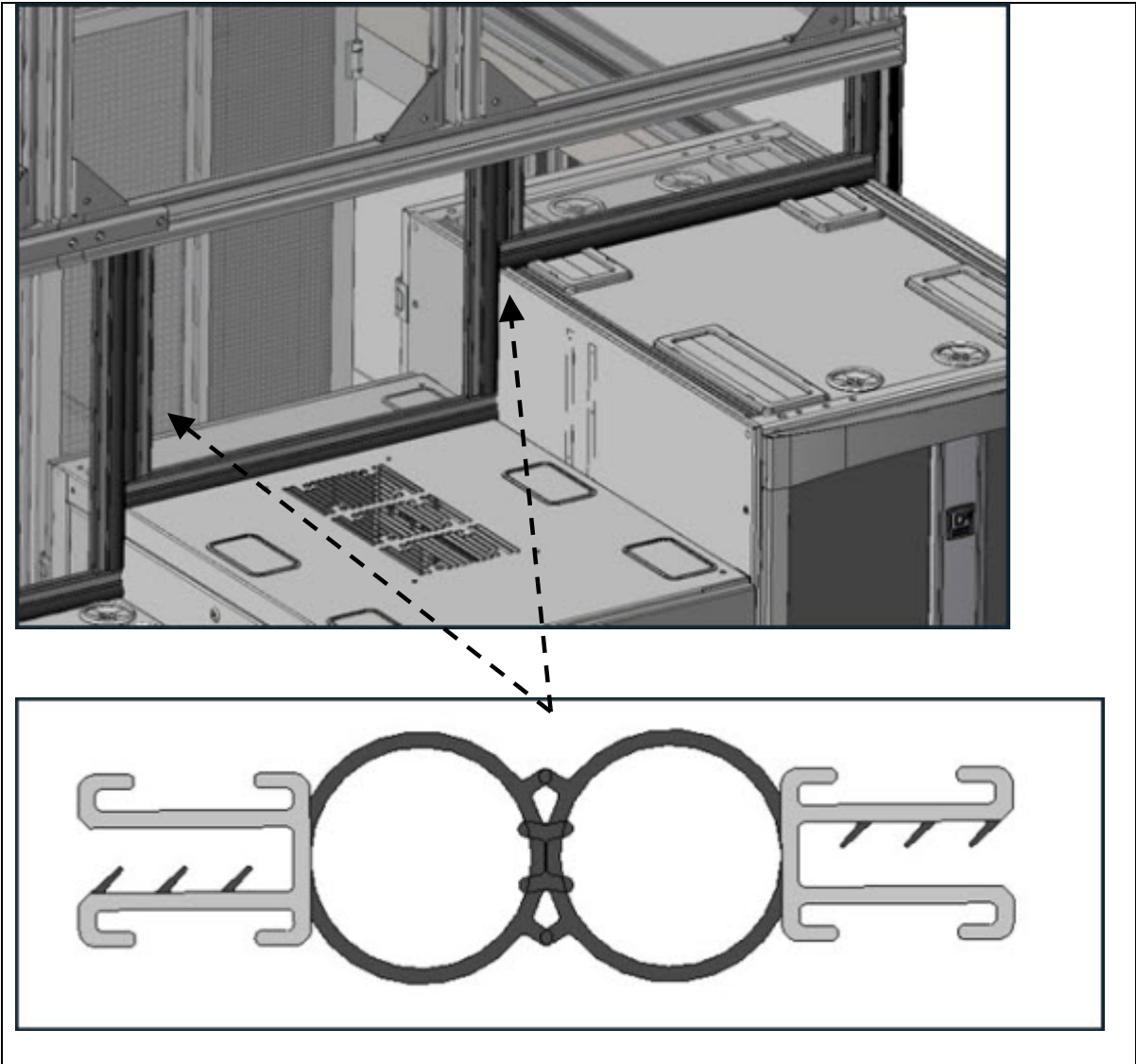
1. Cut panels and bulb seal, as shown below.



2. Assemble panels and install with clips.

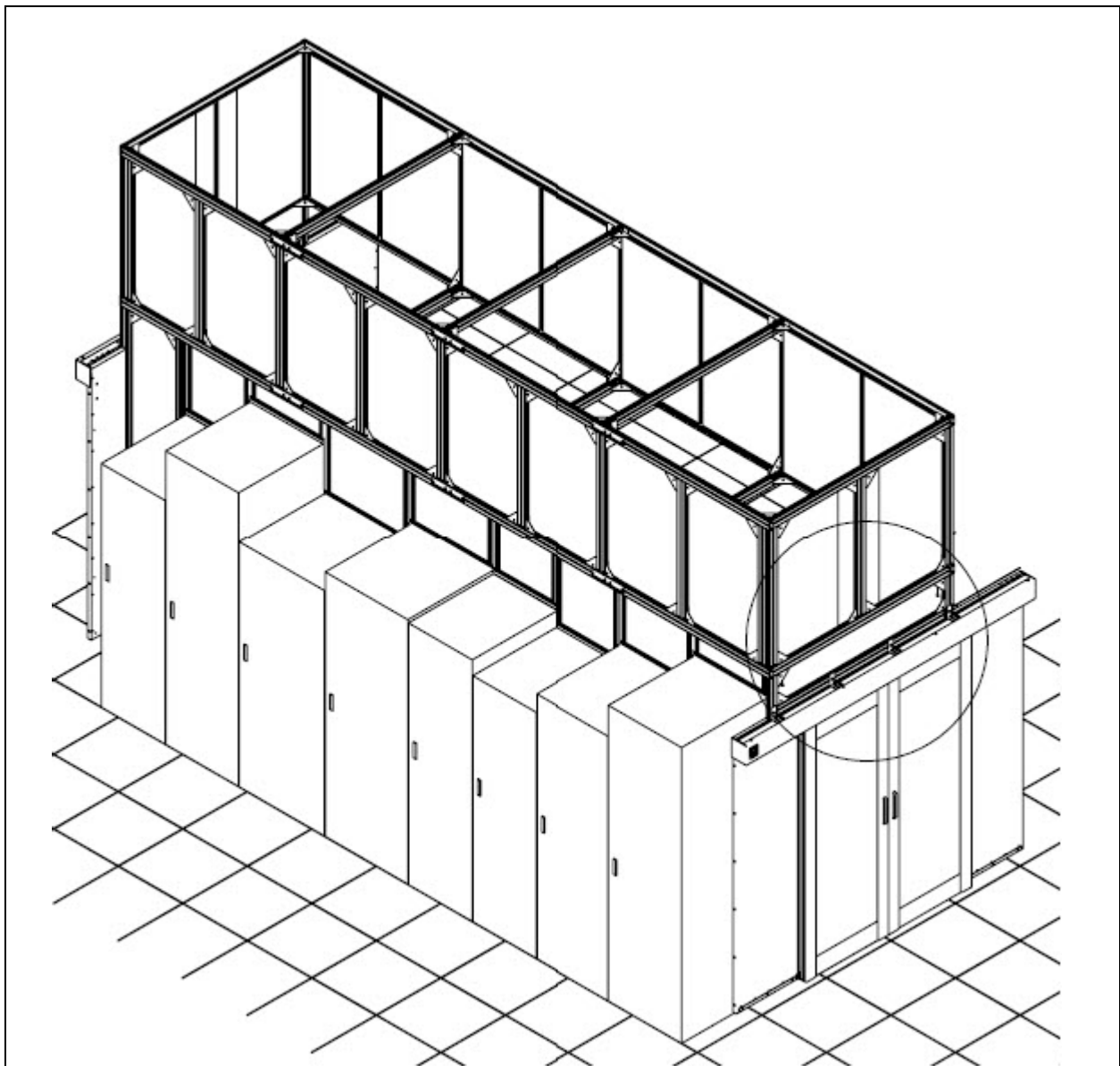


3. When drop panels are adjacent, interlock the edges of the Universal Bulb Seal.



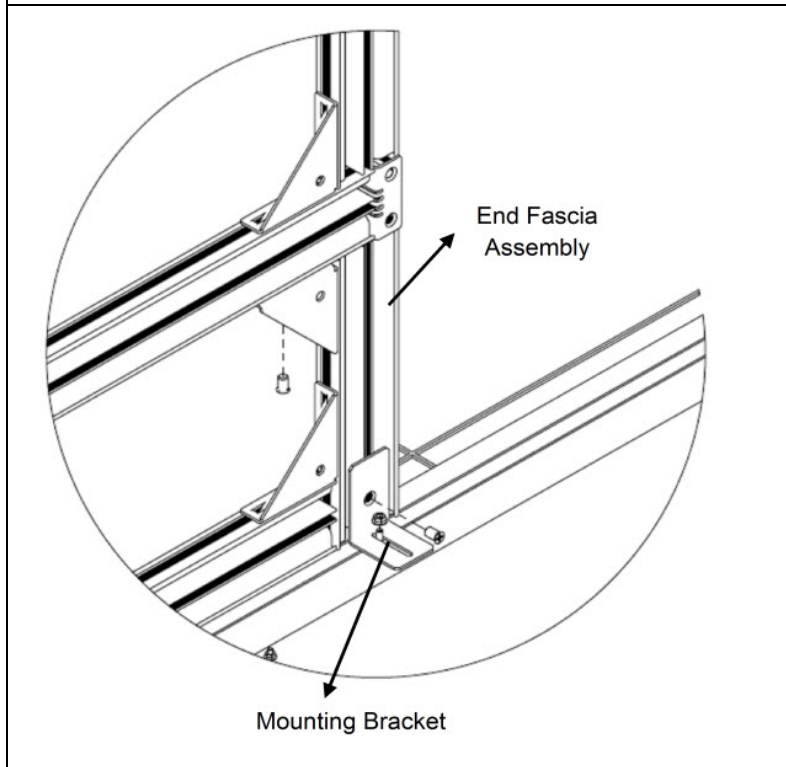
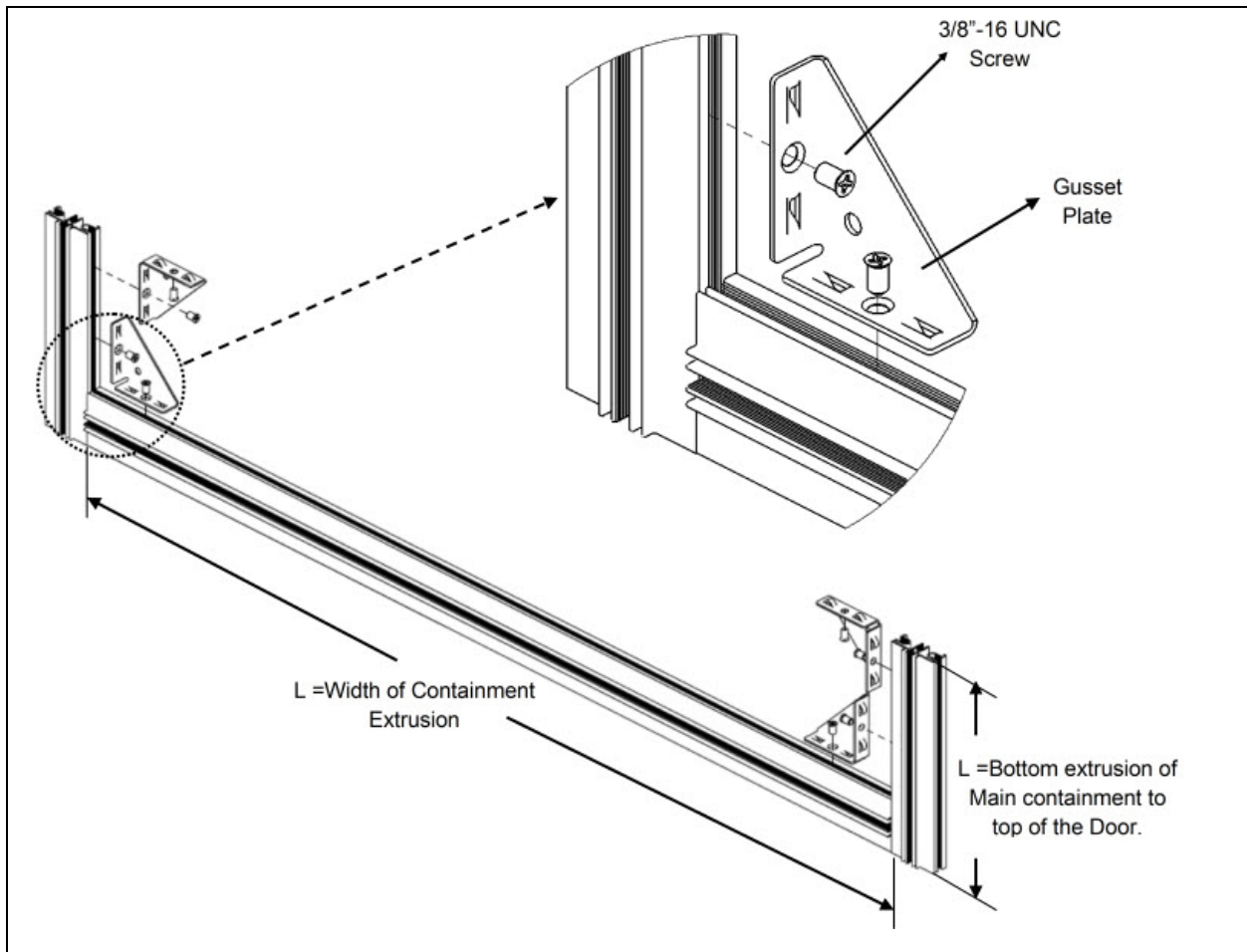
CREATE AN END FACIA OVER THE DOOR

Aisle Containment Doors must be supported at the top and bottom. The bottom of the doors attach to the floor. The top of the doors must either attach to the tops of the cabinets or to the duct, as shown in the image below.



Details for assembling and installing the doors, including details for attaching the doors to the tops of cabinets, are in the next section of this manual.

Details for constructing an end fascia as shown in the image above, which is constructed from excess duct materials, are on the following page.



1. Cut and assemble the extrusion as shown above with flat sides aligned to form an end fascia.
2. Install the fascia as shown to the left so that the flat side faces the inside of the contained aisle.
3. Measure and cut a Polycarbonate Panel to fit the fascia frame and install with Panel Clips.
4. Attach the door to the bottom of the end fascia with several Mounting Brackets.

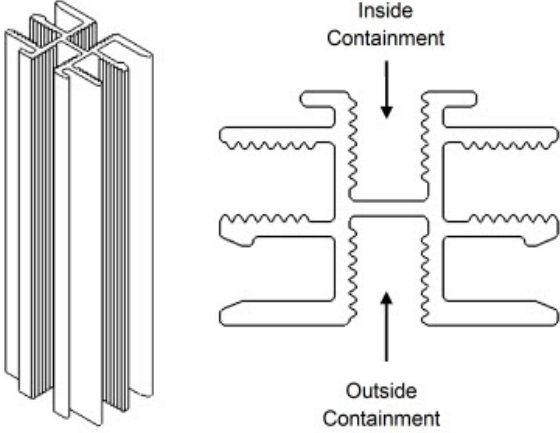
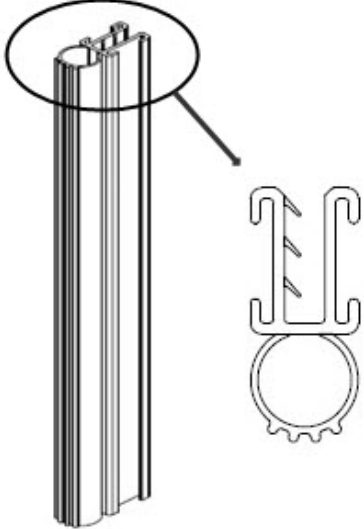
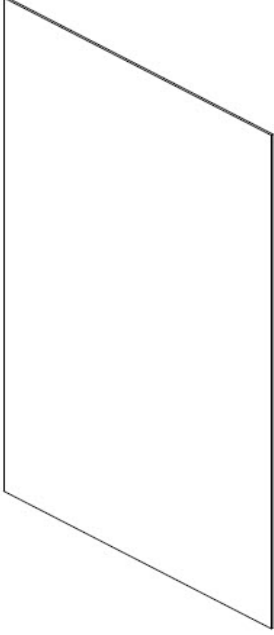
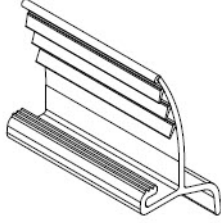
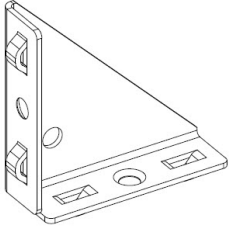
FULL HEIGHT CABINET BLANKING PANELS

INTRODUCTION

The Full Height Cabinet Blanking Panel (P/N 33002-XXX) is an optional accessory that is used with Build To Spec Kit to fill gaps between cabinets when cabinets are omitted.

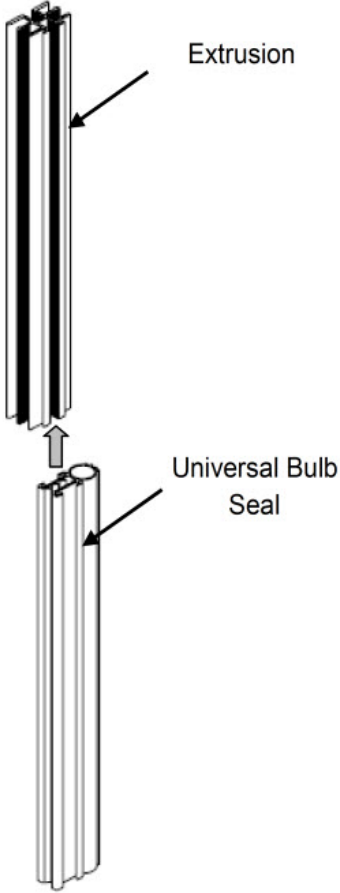
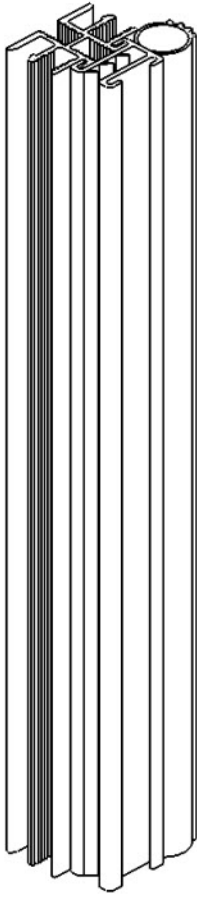
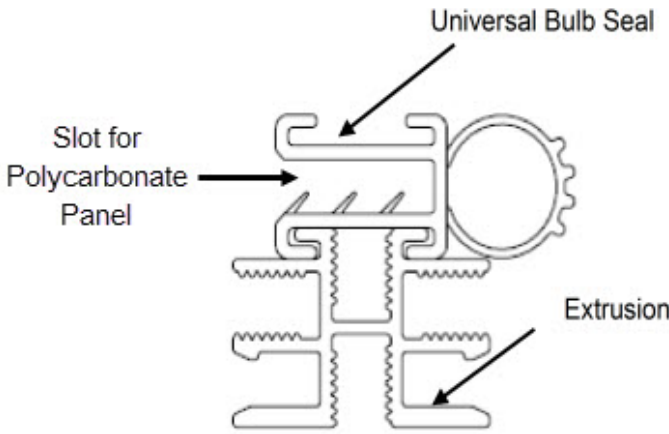
COMPONENTS

The components required for each Full Height Cabinet Blanking Panel are illustrated below. Kits are sold in 2 packs and 10 packs.

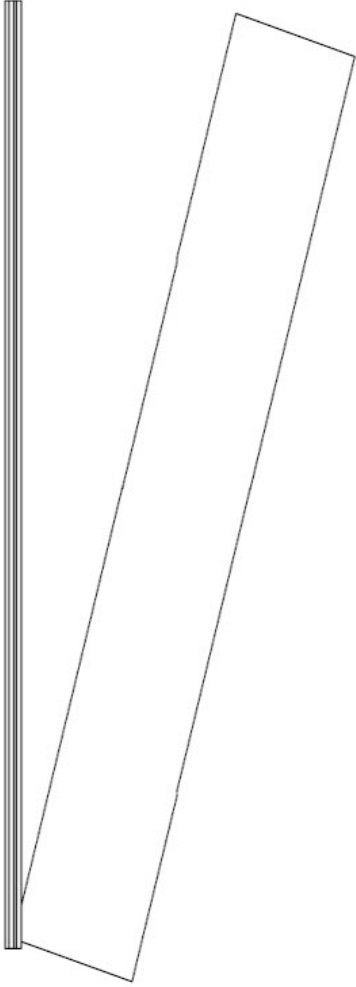
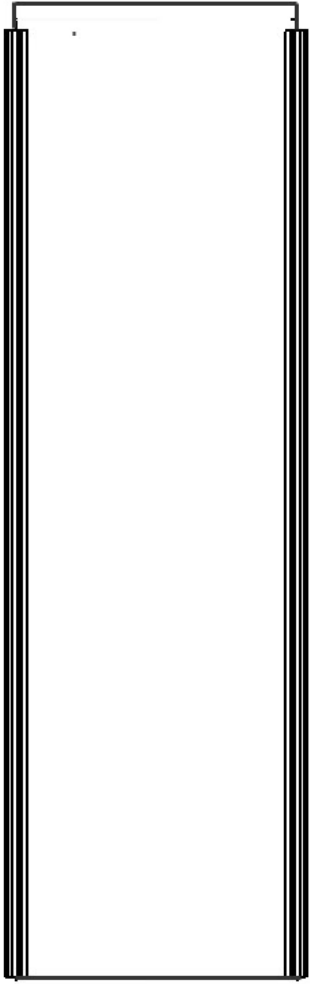
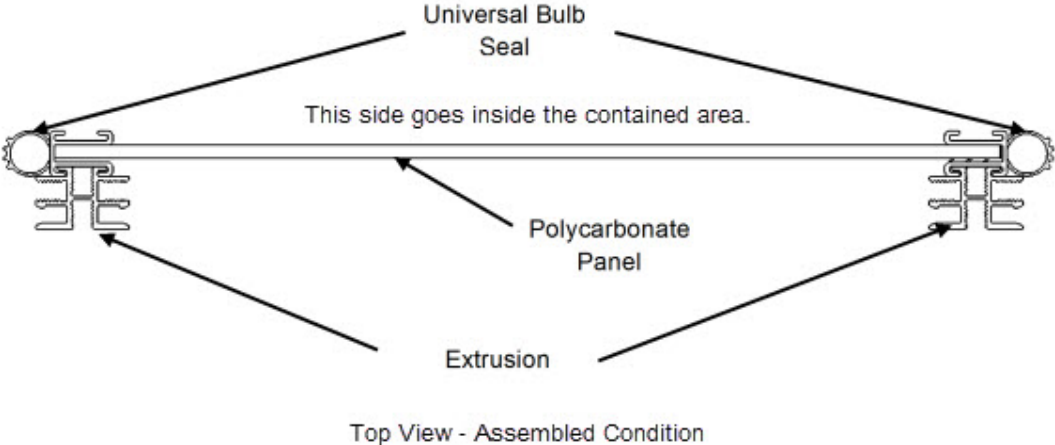
	
<p>Extrusion, 94"L (2387 mm) 2 pieces- use to make the side of the panel</p>	<p>Universal Bulb Seal, 96"L (2438 mm) 2 pieces – use to seal the sides of the panel</p>
	
<p>Polycarbonate Panels 48" (1219 mm) W x 96" (2438 mm) L 1 piece – use to fill gap between cabinets</p>	<p>Panel Clamp 5 pieces - Use to secure panel against duct.</p>  <p>Plate Gusset 2 pieces - Use to attach the extrusion to the duct</p>

INSTALLATION

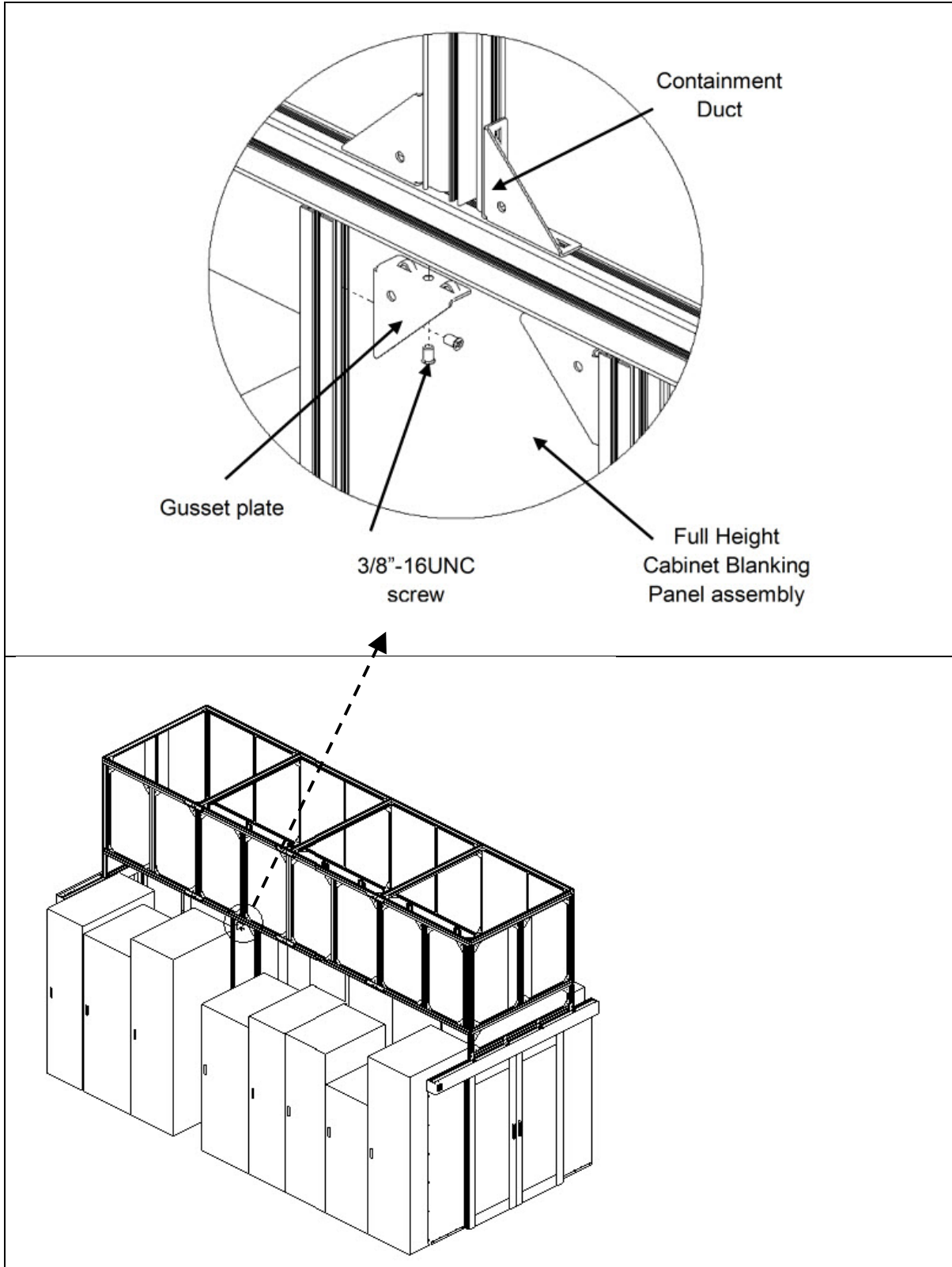
1. Measure, cut and assemble the sides of the Full Height Cabinet Blanking Panel.

 <p>Extrusion</p> <p>Universal Bulb Seal</p>	 <p>Assembled Condition</p>	<ul style="list-style-type: none"> • Measure the height of the opening – the distance from the floor to the bottom of the duct. • Cut the Extrusions and the Universal Bulb Seal to match the height of the opening. • Slide the Universal Bulb Seal onto the Extrusion as shown to the left.
 <p>Universal Bulb Seal</p> <p>Slot for Polycarbonate Panel</p> <p>Extrusion</p>	<ul style="list-style-type: none"> • The Universal Bulb Seal supports the polycarbonate panel and forms a seal against the side of the adjacent cabinets. 	

2. Measure, cut and assemble the Polycarbonate Panel

		<ul style="list-style-type: none"> • Measure the width of the opening – the distance between cabinets. • Cut the Polycarbonate Panel to match the width of the opening. • Then, cut the Polycarbonate panel to be 1" (25 mm) higher than the height of the opening. • Insert the trimmed panel into the Universal Bulb Seal so that the panel extends above the tops of the extrusions. • Be sure to orient the Extrusions so that they face the same side of the panel (see top view below)
 <p style="text-align: center;">Top View - Assembled Condition</p>		

3. Add Full Height Cabinet Blanking Panels to fill gaps between cabinets and at the ends of rows. Note that the panel is placed on the inside of the containment/duct.



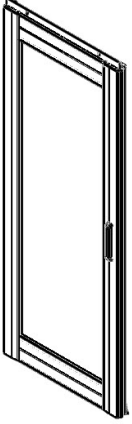
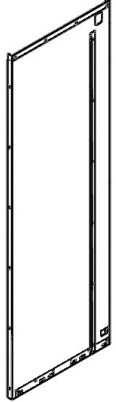
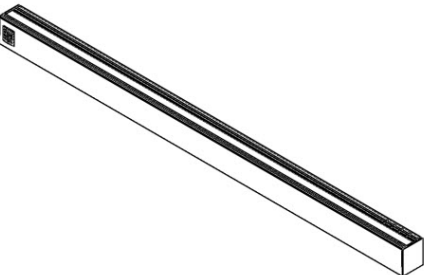
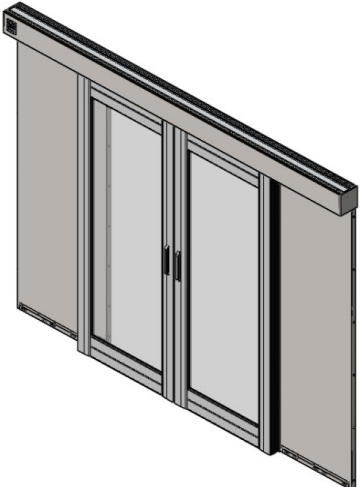
AISLE CONTAINMENT DOOR SYSTEM

INTRODUCTION

The Aisle Containment Door Systems from Chatsworth Products, Inc. (CPI) have been developed to meet a wide range of application needs. The door systems can be installed in aisle widths that are between two and three tiles wide. The door systems are designed to be compatible with F-Series TeraFrame® and GF-Series GlobalFrame® cabinets that are between 42U minimum and 52U maximum height (77.8" – 98.9"). Door systems are available in three sliding options including: double-door, single-door left-hand sliding and single-door right-hand sliding. Four finish options are available including black and glacier white colors with either anodized aluminum door frames or color-matched door frames. The system can be installed onto slab floors or raised access floors. All systems include a stylish anodized aluminum door frame with full-height, clear polycarbonate inserts, an automatic close system with speed control damper, and a detent-open catch.

COMPONENTS

The doors ship unassembled in a single crate with assembly and installation hardware:

	
<p>Door(s) - 1 or 2 pieces</p>	<p>Sides - 2 pieces</p>
	
<p>Rail Assembly - 1 piece</p>	<p>Assembled Double Door</p>

INSTALLATION

The Aisle Containment Door is bolted to the floor and supported to the top of TeraFrame or GlobalFrame cabinets.

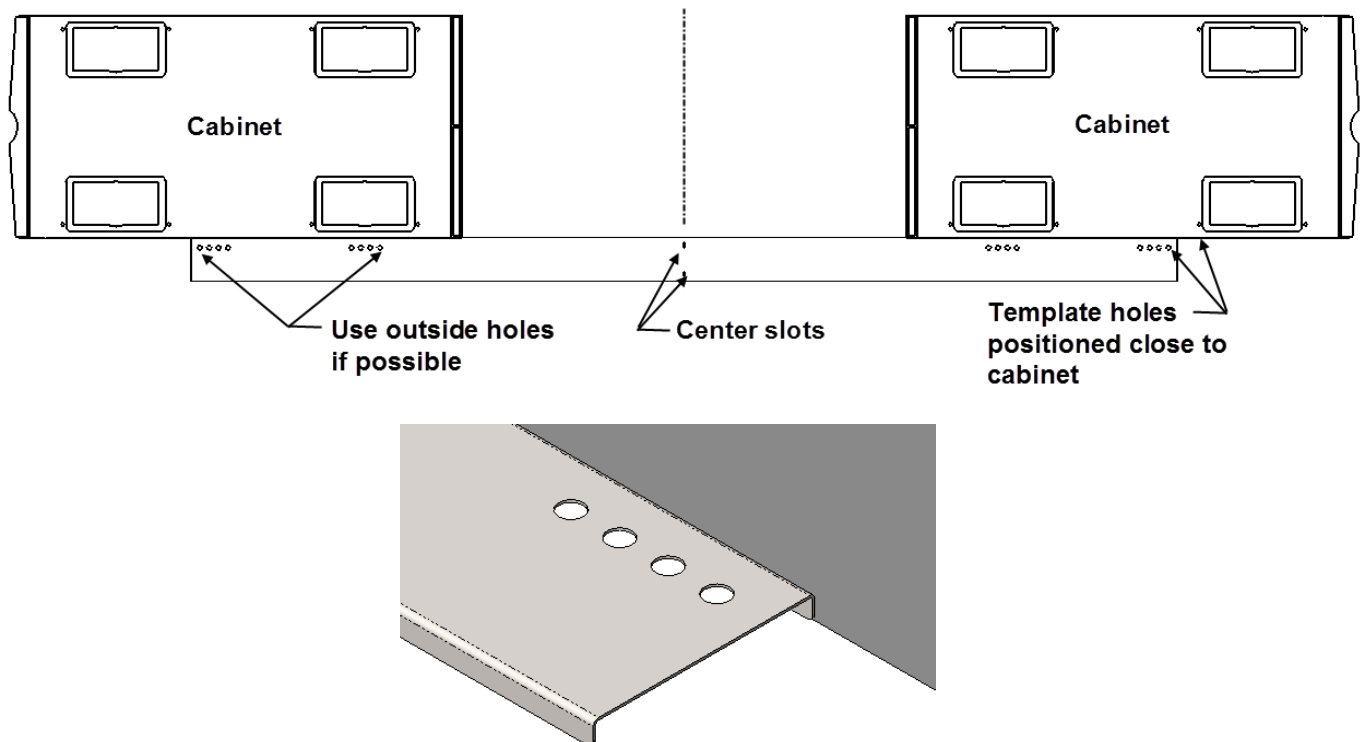
FLOOR PREPARATION

SLAB FLOOR

Install four concrete anchors, two for each side panel, using the floor drilling template to accurately locate the holes. The template is not included with the door; it must be ordered separately, 32875-701 for the double door or 32875-702 for the single door.

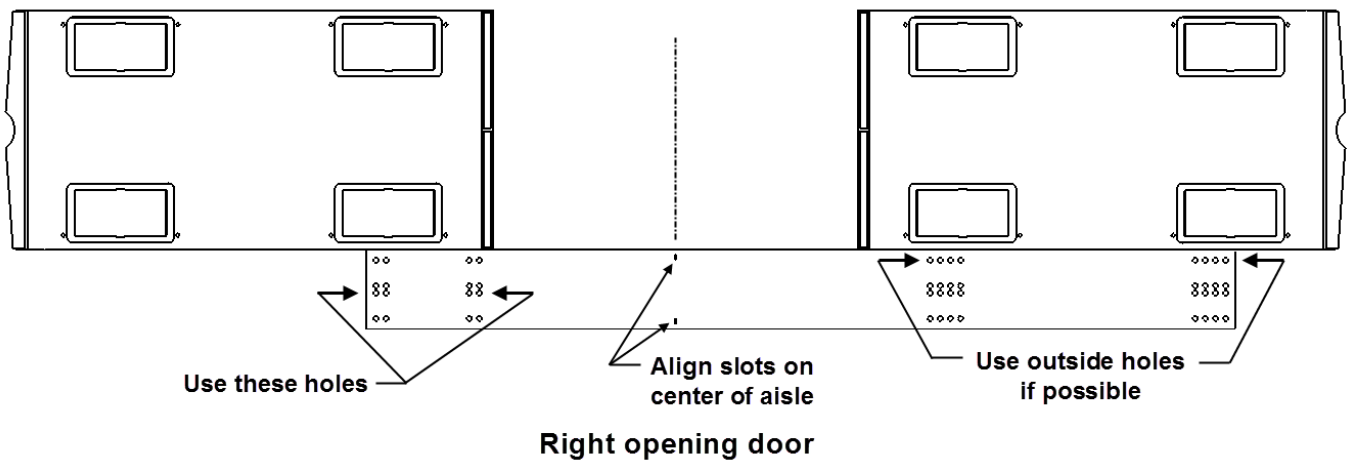
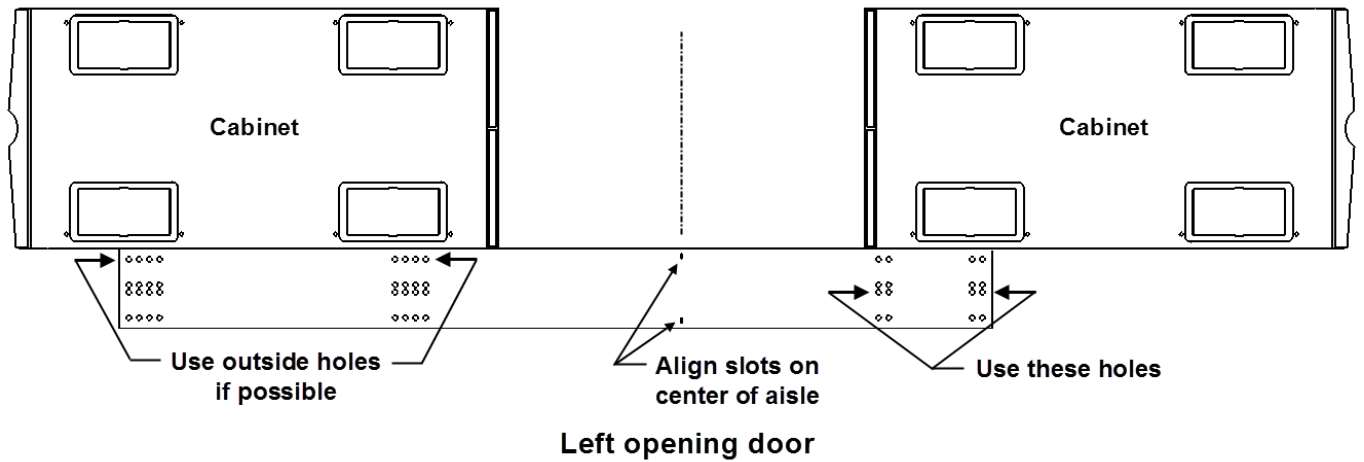
DOUBLE DOOR

For the double door, position the template (PN 32875-701) with the flanges down and the holes close to the cabinet. The side flange should butt against the cabinet side and the template should be centered on the aisle; the slots at the center of the template can be used as a guide. Drill four holes, two at each end, through the template; the template holes are 1/2" diameter which should be the correct size for 3/8" concrete anchors (not included). If possible use the outside set of holes as shown in the picture below; the other holes can be used if there is an obstruction in the concrete.



SINGLE DOOR

For the single door, position the template (PN 32875-702) with the flanges down and oriented for left or right door opening as shown in the pictures shown below; the first picture shows a left opening door and the second shows a right opening door. The side flange should butt against the cabinet side and the template slots should be centered on the aisle. Drill four holes, two at each end, through the template; the template holes are 1/2" diameter which should be the correct size for 3/8" concrete anchors (not included). If possible use the outside set of holes as shown in the picture below; the other holes can be used if there is an obstruction in the concrete.



ACCESS FLOOR

For access floor installations, a door standoff kit (PN 32870-X01 for the double door or PN 32870-X02 for the single right door) is required. The standoff moves the door assembly away from the cabinet by 2.5" so that there is enough clearance for the floor mounting hardware.

In an access floor installation, ensure that the floor is strong enough to support the weight of the door (320 lbs for the double door and 280 lbs for the single door).

Drill four clearance holes (two for each side panel) for 3/8" bolts or threaded rod into the floor tile using the floor drilling template to accurately locate the holes. The template is not included with the door; it must be ordered separately, 32875-X01 for the double door or 32875-X02 for the single door.

Bracing to the subfloor

In an access floor installation, ensure that the floor is strong enough to support the fully populated computer cabinets. Add subfloor bracing to provide the proper support for equipment.



Fig. 2.2.1 Subfloor bracing

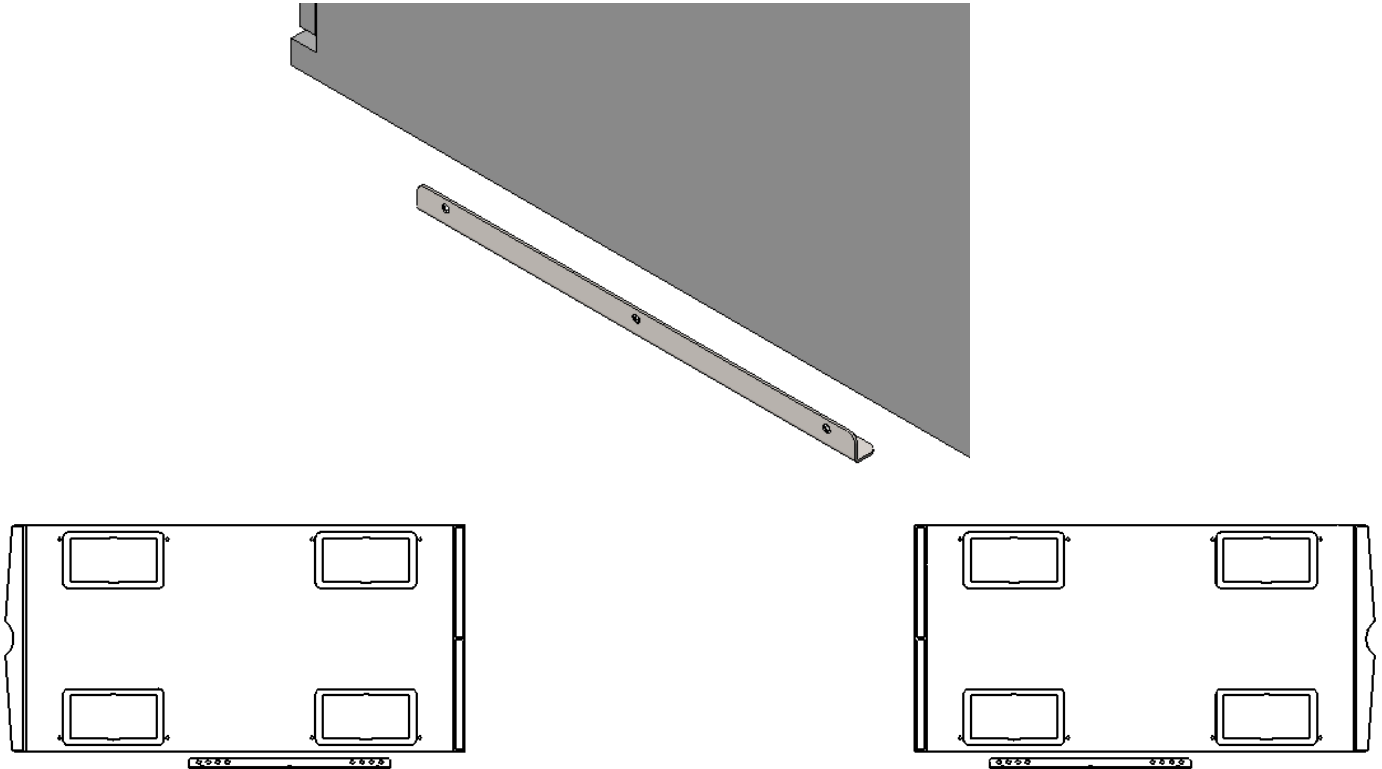
FLOOR MOUNTING ANGLE INSTALLATION

SLAB FLOOR

Install four 3/8" concrete anchors (PN: 40604-001, not included) into the four drilled holes. Bolt the two mounting angles to the floor with 3/8" hex bolts (not included).

ACCESS FLOOR

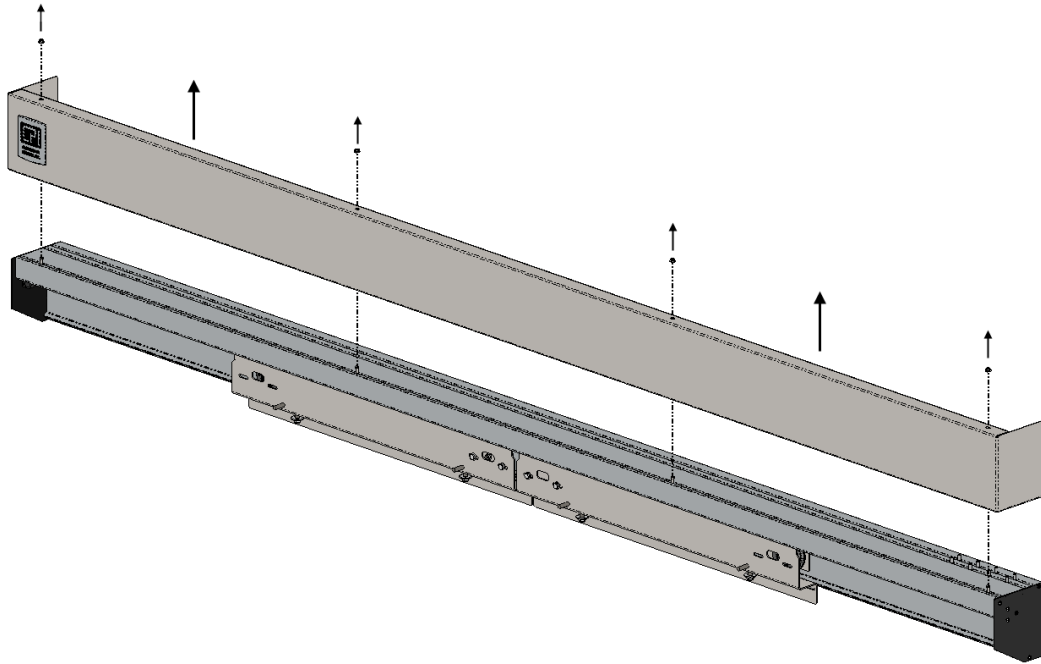
Bolt the two mounting angles to the floor tile with 3/8" hex bolts and fender washers (not included). If subfloor bracing is being used, extend 3/8" threaded rod through the floor tile to the subfloor (not included).



DOOR FRAME ASSEMBLY

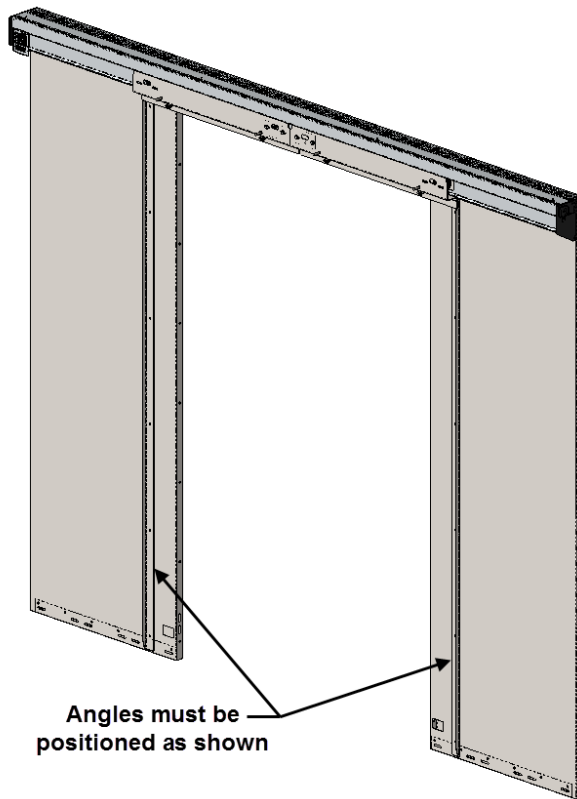
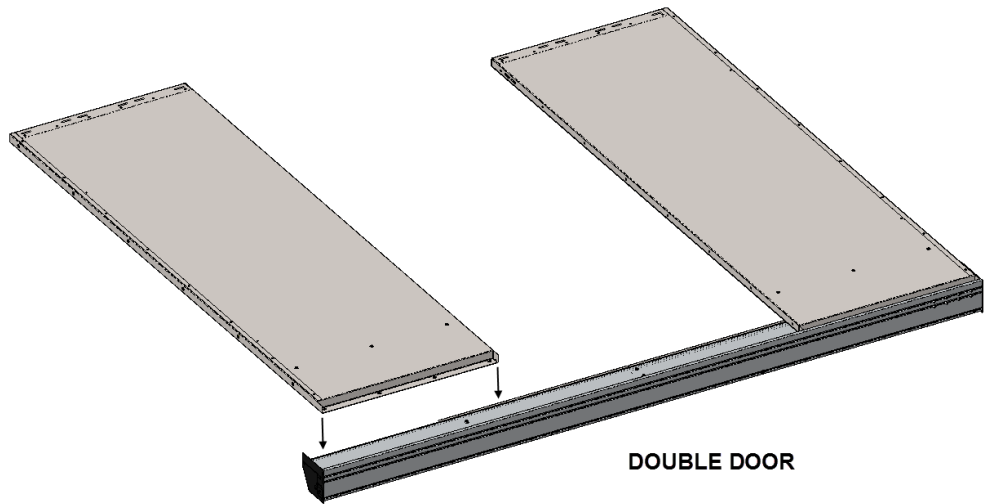
REMOVING THE RAIL COVER

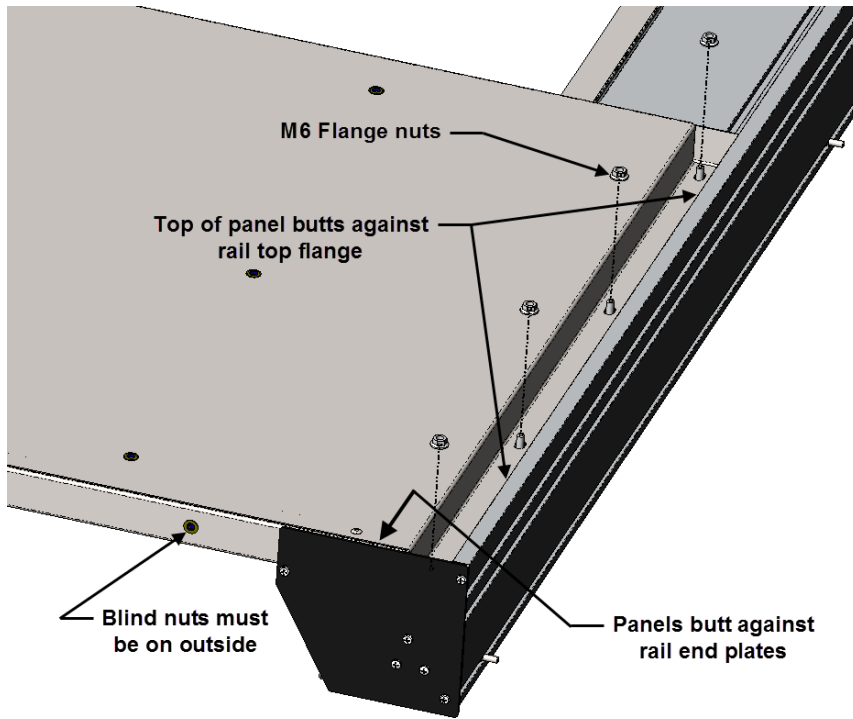
Lay the rail assembly on the floor; use packaging to protect finish. Remove the four nuts that hold the cover on the rail and remove the cover. Set the cover aside.



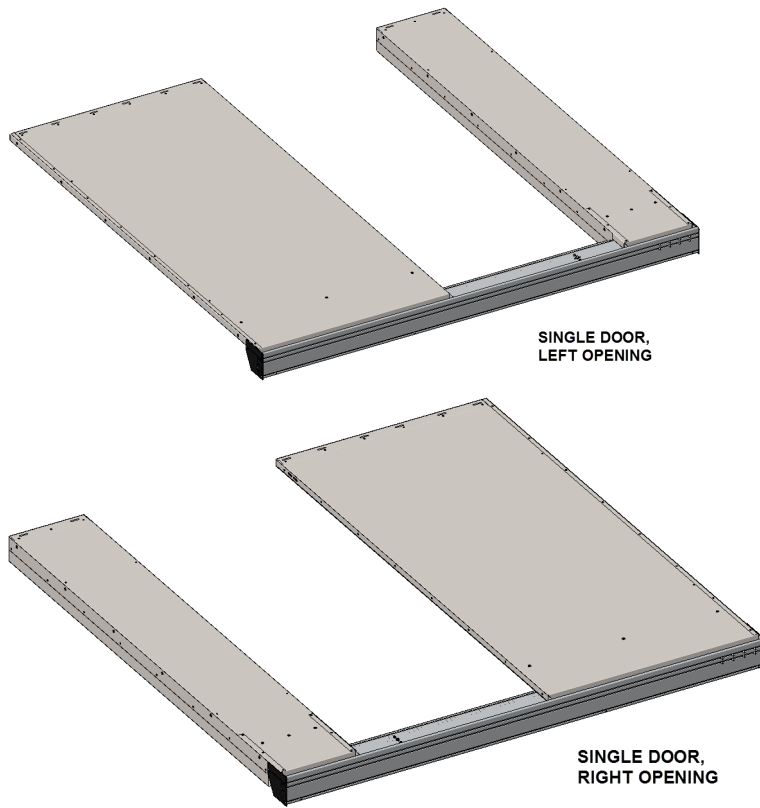
ASSEMBLING THE DOOR FRAME

Position the rail assembly with the front towards the floor. Attach the side panels to the rail assembly using M6 flange nuts (see first picture on following page). The rail has bolts that protrude out of the back of the rail; these bolts go through the holes in the top flange of the panels. Be sure that the angles on the front face of the panels are positioned towards the center of the door opening (see second picture on following page). To ensure that the panels are mounted square to the rail be sure that the top edge of the panels are butted against the rail extrusion and slide the panels so that they butt against the rail end plates (see detail on page 13).



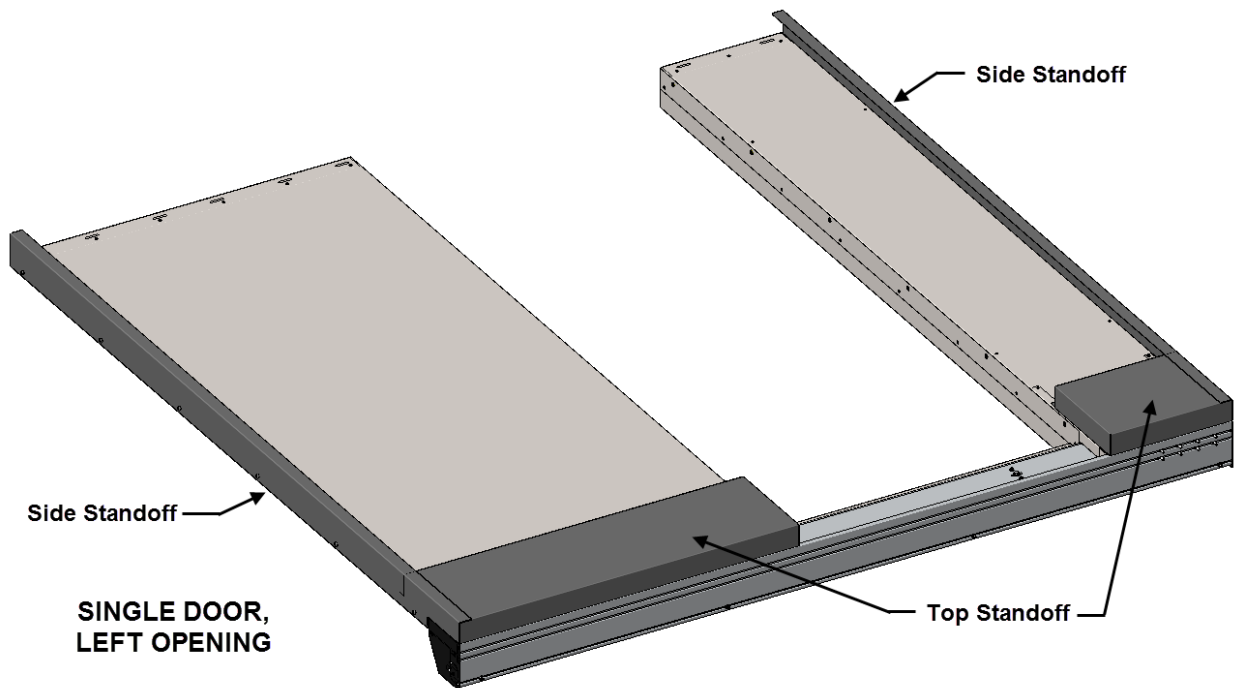
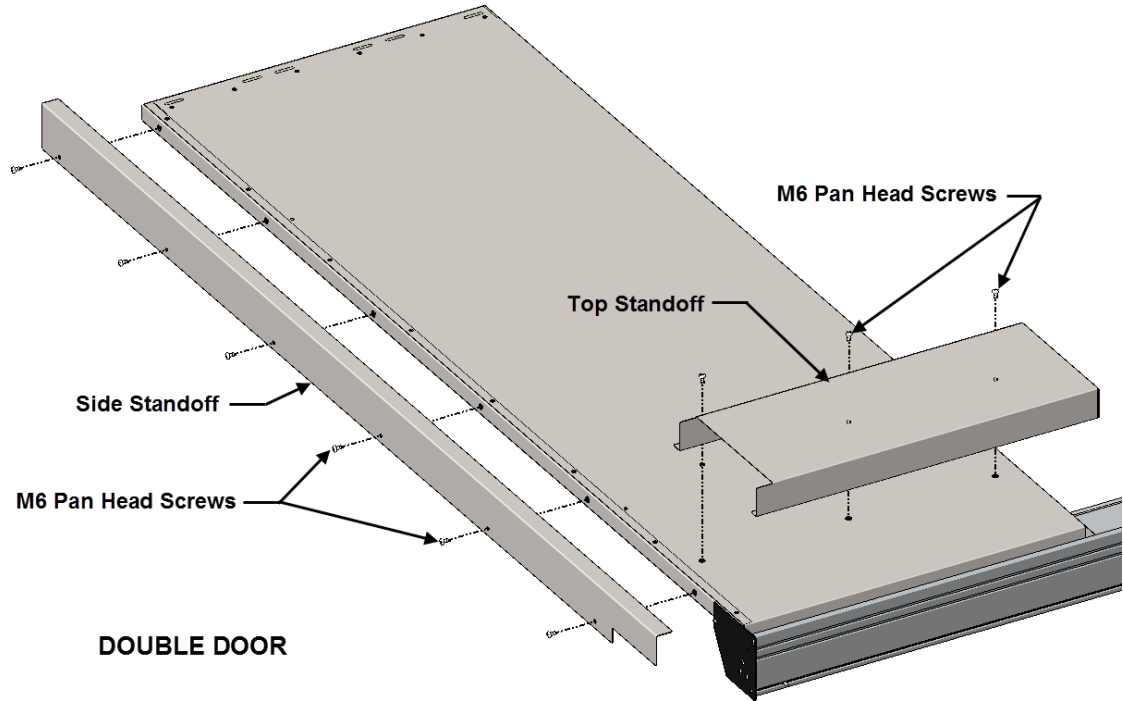


Single Door Assemblies shown below – note position of large and small panels.



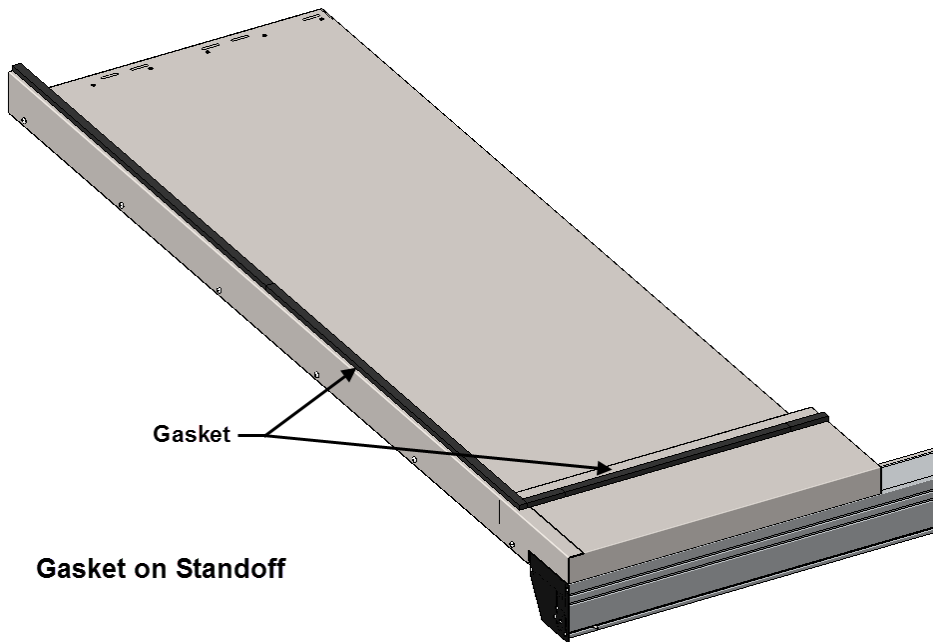
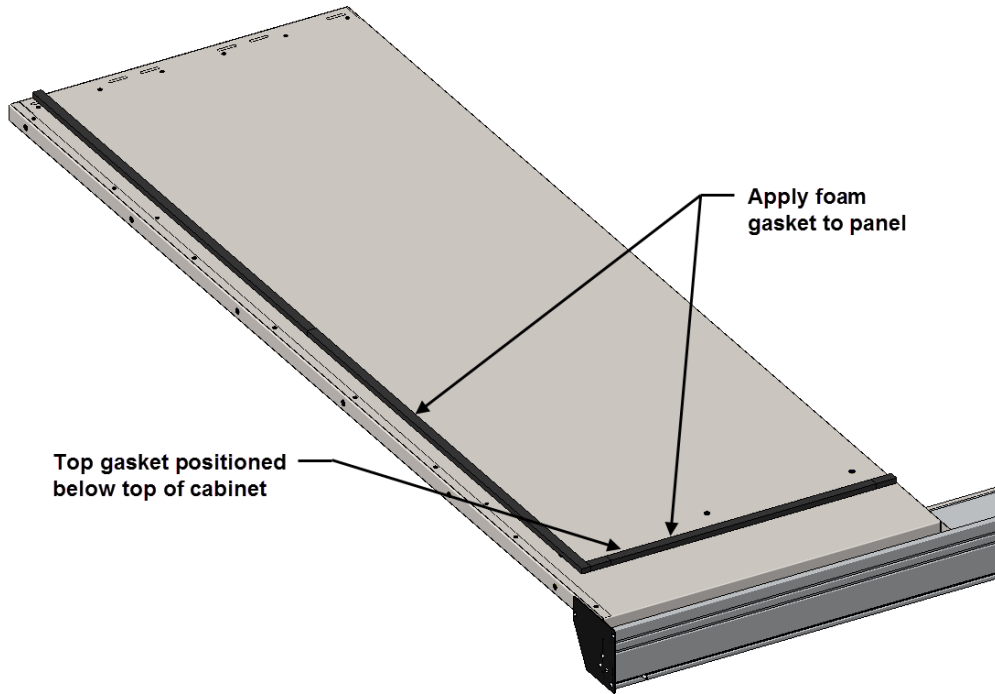
STANDOFF ASSEMBLY

For access floor installations, a door standoff kit (PN 32870-X01 for the double door, PN 32871-X01 for the single left door, or PN 32871-X02 for the single right door) is required. The standoff is mounted to the frame assembly as shown below. Attach the two side standoffs to the side panels using six M6 pan head screws on each standoff. Attach the two top standoffs to the side panels using three M6 pan head screws on each standoff.



APPLYING PANEL GASKET

Apply the adhesive foam gasket to the side panels as shown below. The top gasket should be positioned 2" – 3" (51 – 76 mm) below the top edge of the cabinet. If the cabinet is taller than the door assembly apply the top gasket at the very top of the panels.



DOOR FRAME INSTALLATION

CABINET TOP ATTACHMENT

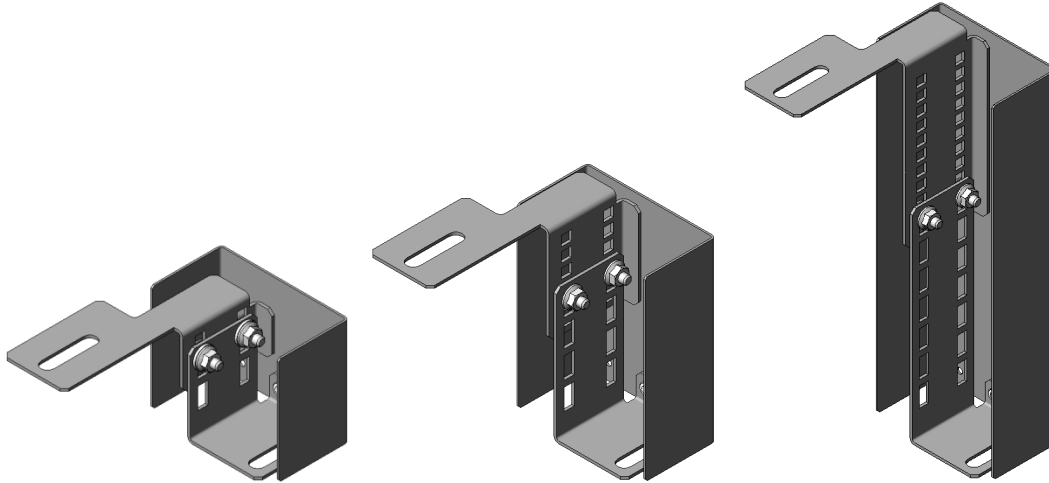
A Cabinet-to-Door Bracket Kit is required to attach the door frame to the top of the cabinets (not included with door). The brackets will work with F-Series TeraFrame and GF-Series GlobalFrame cabinet heights from 42U to 52U. Order one kit per door assembly as follows:

For doors without standoff kit:

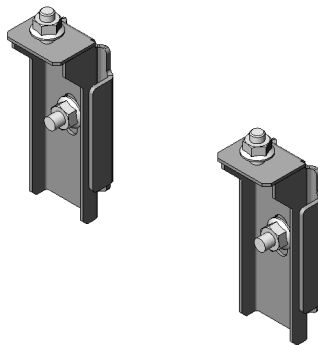
- 32805-X00 For top of cabinet heights from 85.3" up to 91.4"
- 32805-X01 For top of cabinet heights from 82.6" up to 94.2"
- 32805-X02 For top of cabinet heights from 77.8" up to 98.9"

For doors with standoff kit:

- 32805-X03 For top of cabinet heights from 85.3" up to 91.4"
- 32805-X04 For top of cabinet heights from 82.6" up to 94.2"
- 32805-X05 For top of cabinet heights from 77.8" up to 98.9"

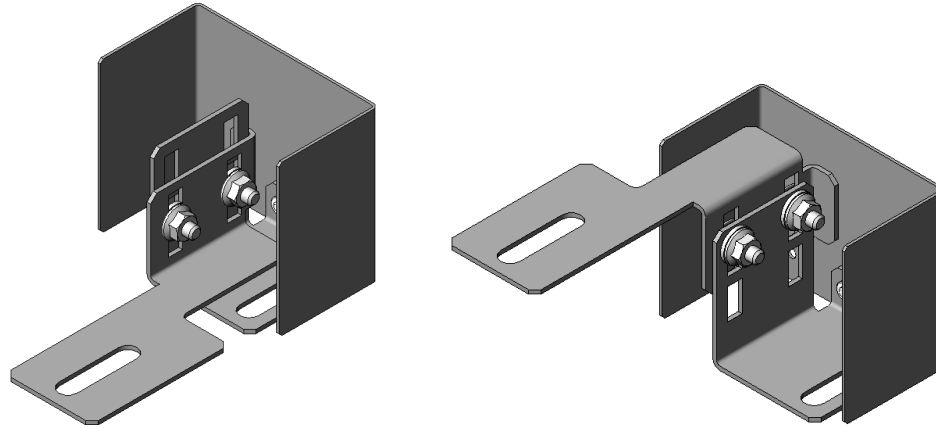


GF-Series GlobalFrame Gen 1 Cabinets will also require a Rail Support Bracket kit, PN 32771-X01. GF-Series GlobalFrame Gen 2 Cabinet do not require a Rail Support Bracket Kit.

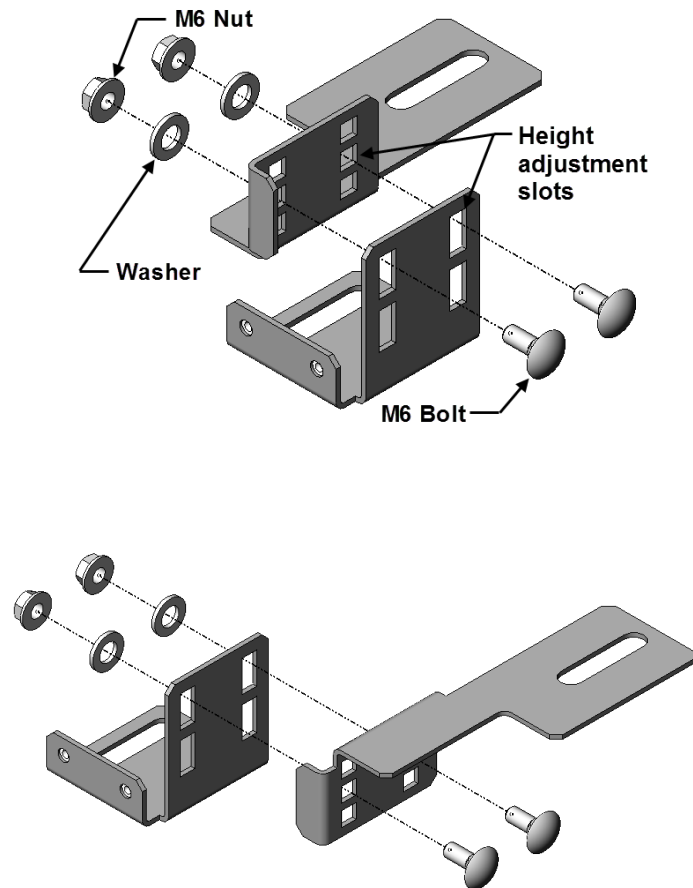


BRACKET ASSEMBLY

The top mounting brackets can be assembled in two different configurations; the first picture below shows the bracket assembled for the minimum height adjustment and the second shows it assembled for the maximum adjustment.

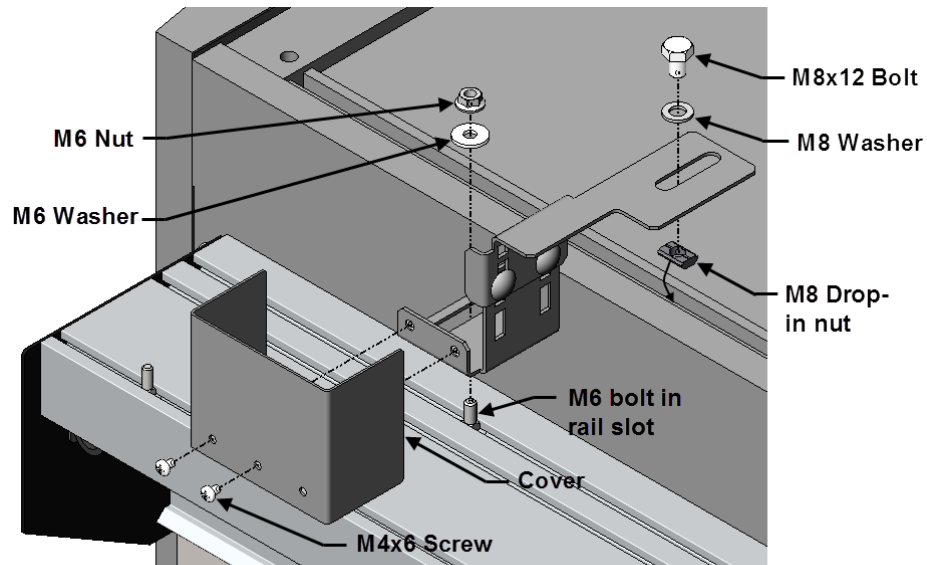


Assemble the two brackets together using two M6 bolts, washers, and nuts for each bracket assembly.

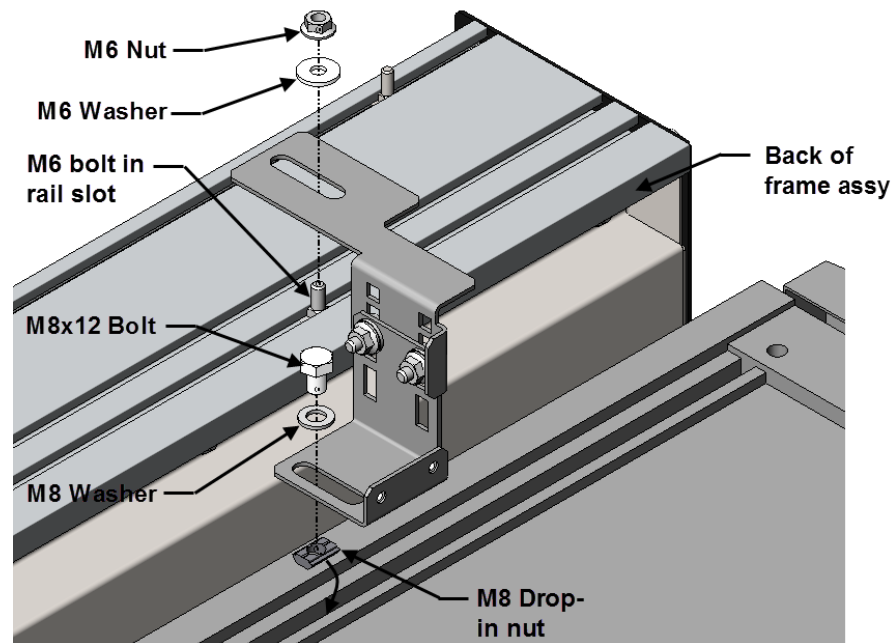


TERAFRAME AND GLOBALFRAME GEN 2 MOUNTING

For F-Series TeraFrame and GF-Series GlobalFrame Gen 2 Cabinets that are taller than the door frame assembly, mount the bracket assembly as shown below. Install the M8 drop-in nut in the cabinet's upper frame slot. Attach the top bracket to the cabinet with the M8x12 bolt and M8 washer into the drop-in nut. The bottom bracket is attached to the door top rail using one of the pre-installed M6 bolts in the rail and a M6 nut and washer. Attach the bracket cover to the bottom bracket with two M4x6 screws.

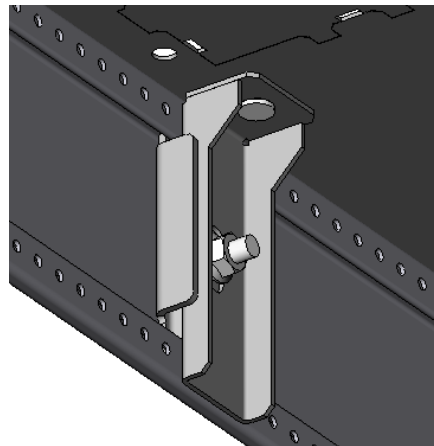
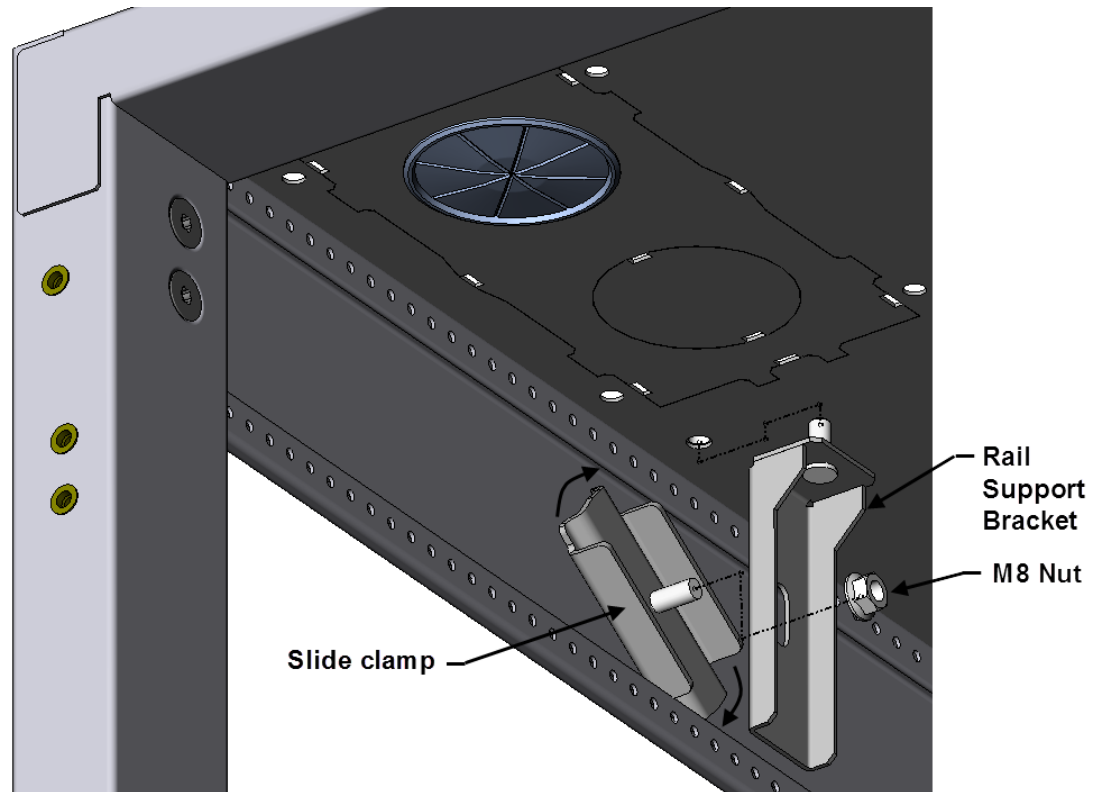
**TeraFrame Mounting**

For F-Series TeraFrame and GF-Series GlobalFrame Gen 2 Cabinets that are shorter than the door frame assembly, mount the bracket assembly as shown below; the picture is shown from the back side of the door. Install the M8 drop-in nut in the cabinet's upper frame slot. Attach the bracket to the cabinet with the M8x12 bolt and M8 washer into the drop-in nut. The bracket is attached to the door top rail using one of the pre-installed M6 bolts in the rail and a M6 nut and washer. The bracket cover is not needed in this type of installation.

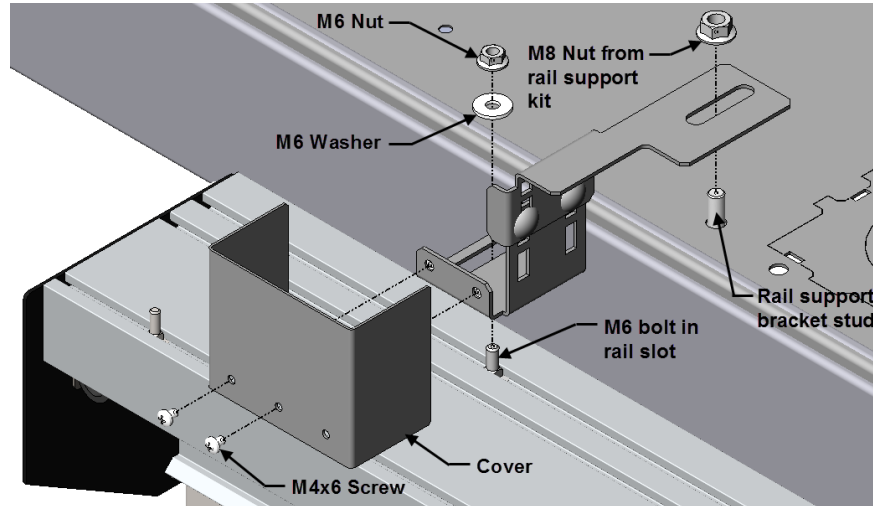


GF-SERIES GLOBALFRAME GEN 1 MOUNTING

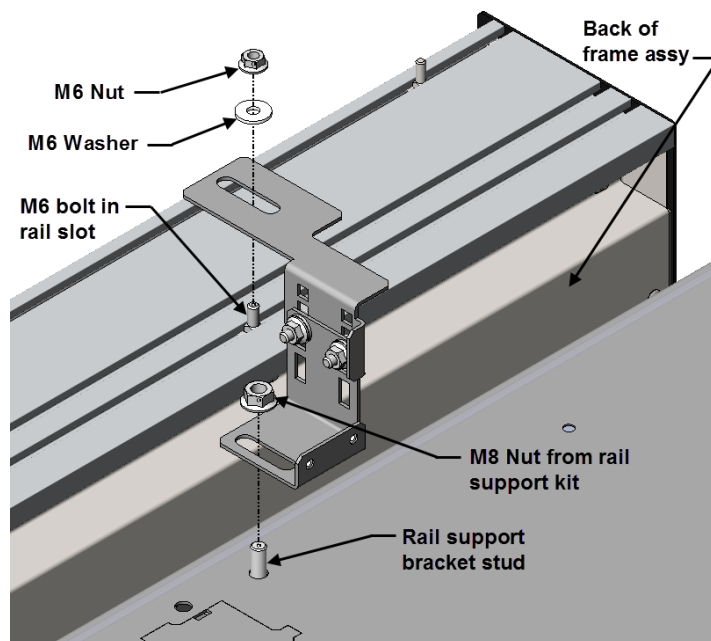
Install the Rail Support Bracket kit, PN 32771-X01, on the inside of the GF-Series GlobalFrame Gen 1 Cabinet as shown below. Insert the slide clamp into the cabinet horizontal slide and rotate it to a vertical position. Remove the plastic hole plug from the top panel adjacent to the cable pass port. Mount the rail support bracket to the slide clamp with a M8 nut; the top stud goes through the top panel hole and protrudes out the top.



For GF-Series GlobalFrame Gen 1 Cabinets that are taller than the door frame assembly, mount the bracket assembly as shown below. Attach the top bracket to the cabinet with the M8 nut, from the Rail Support Bracket kit, onto the stud. The bottom bracket is attached to the door top rail using one of the pre-installed M6 bolts in the rail and a M6 nut and washer. Attach the bracket cover to the bottom bracket with two M4x6 screws.



For GF-Series GlobalFrame Gen 1 Cabinets that are shorter than the door frame assembly, mount the bracket assembly as shown below; the picture is shown from the back side of the door. Attach the top bracket to the cabinet with the M8 nut, from the Rail Support Bracket kit, onto the stud. The bracket is attached to the door top rail using one of the pre-installed M6 bolts in the rail and a M6 nut and washer. The bracket cover is not needed in this type of installation.

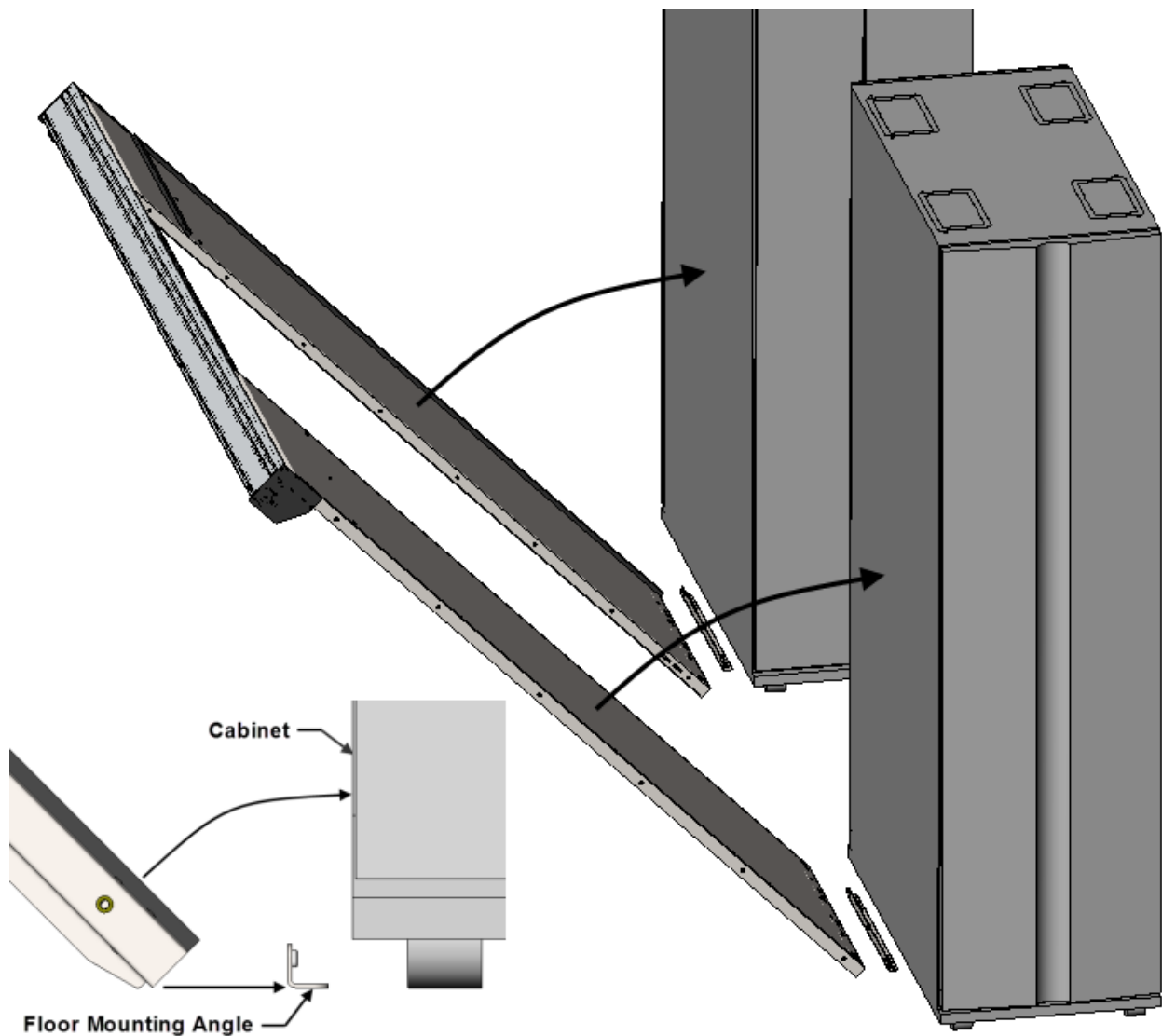


POSITIONING THE DOOR

Position the door frame assembly with the bottom of the side panels aligned with the floor mounting angles. Tip the frame assembly up so that the inside pocket of the side panels fit over the floor mounting angles. Utilize a level to ensure the door assembly is vertically plumb. Check plumbness at the left and right hand side panel assemblies. Tighten the door support bracket hardware.

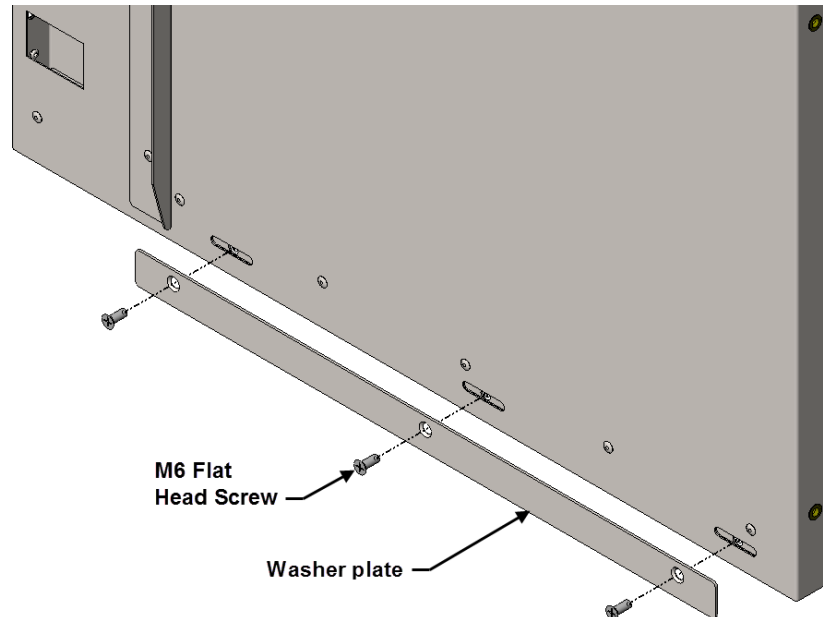


WARNING: Until the frame assembly is attached to the top of the cabinet, the frame must be held up in place by at least one person.



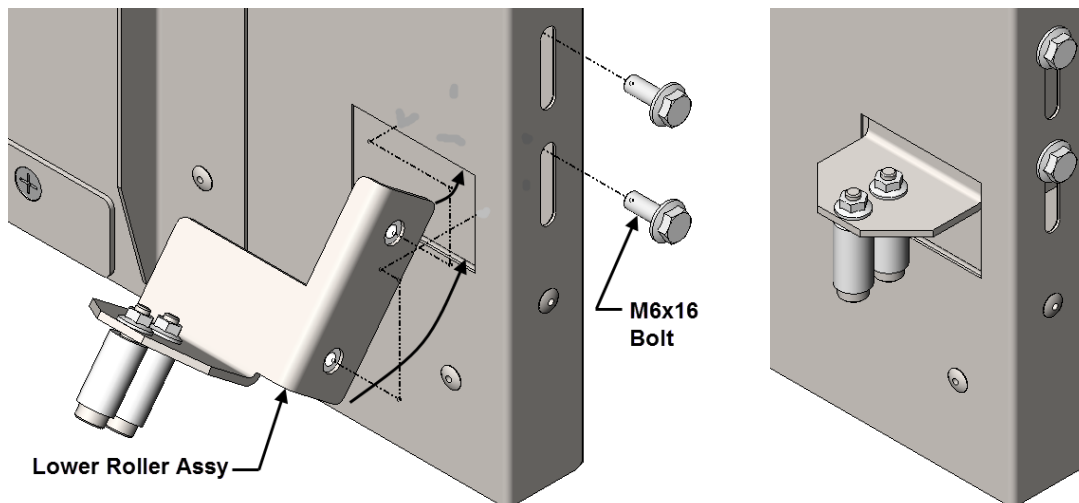
CABINET FLOOR ATTACHMENT

Attach the bottom of each side panel to the floor mounting angle with three M6 flat head screws and a washer plate. ****TIP**** Use a flat screwdriver positioned underneath the side panel to aid with hole alignment.



LOWER ROLLER INSTALLATION

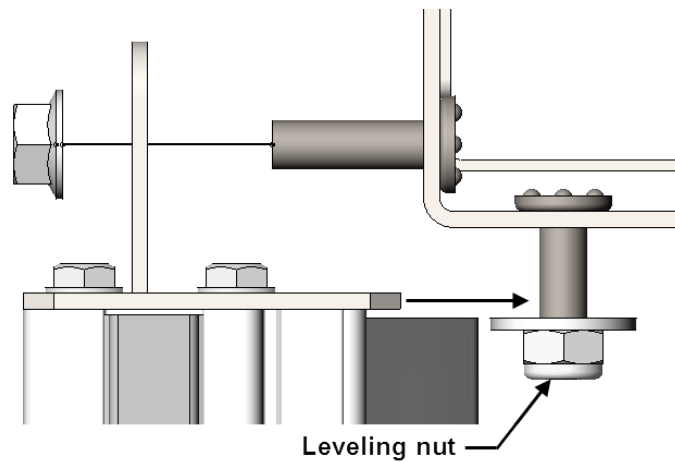
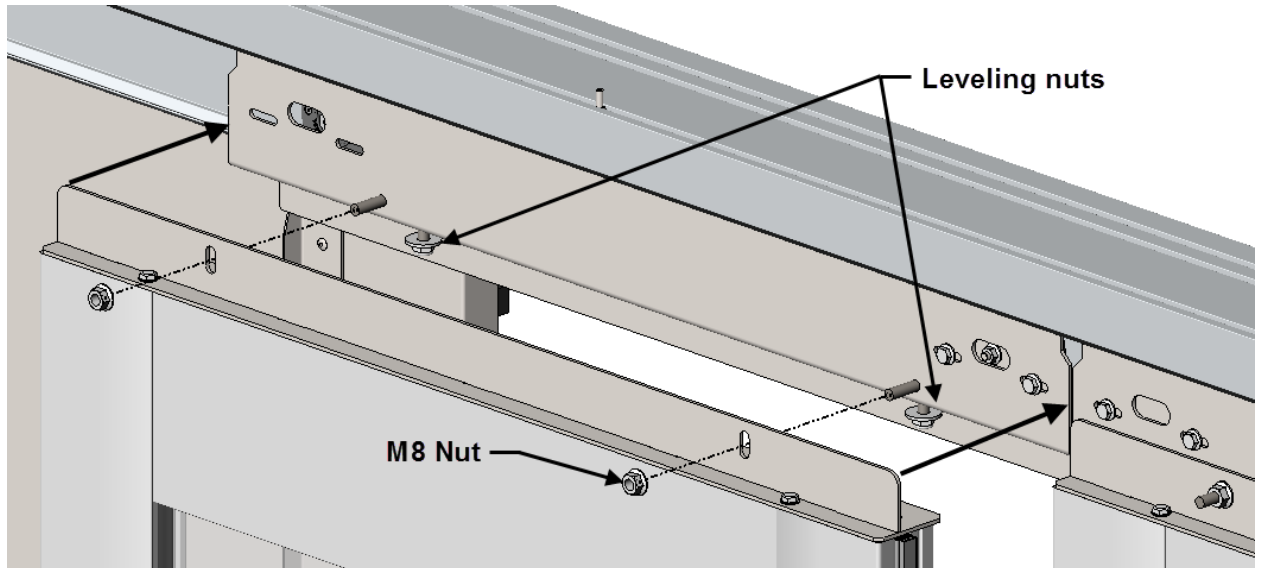
Install the lower roller assemblies (two for the double door and one for the single door) as shown on the following page. Insert the assembly through the rectangular opening on the front of the side panel and rotate it into position. Attach to the side panel with two M6 x 16 bolts. The roller assembly should be positioned at the top of the slots. The bolts should only be finger tight, the roller will be moved later.



DOOR INSTALLATION

MOUNTING THE DOOR

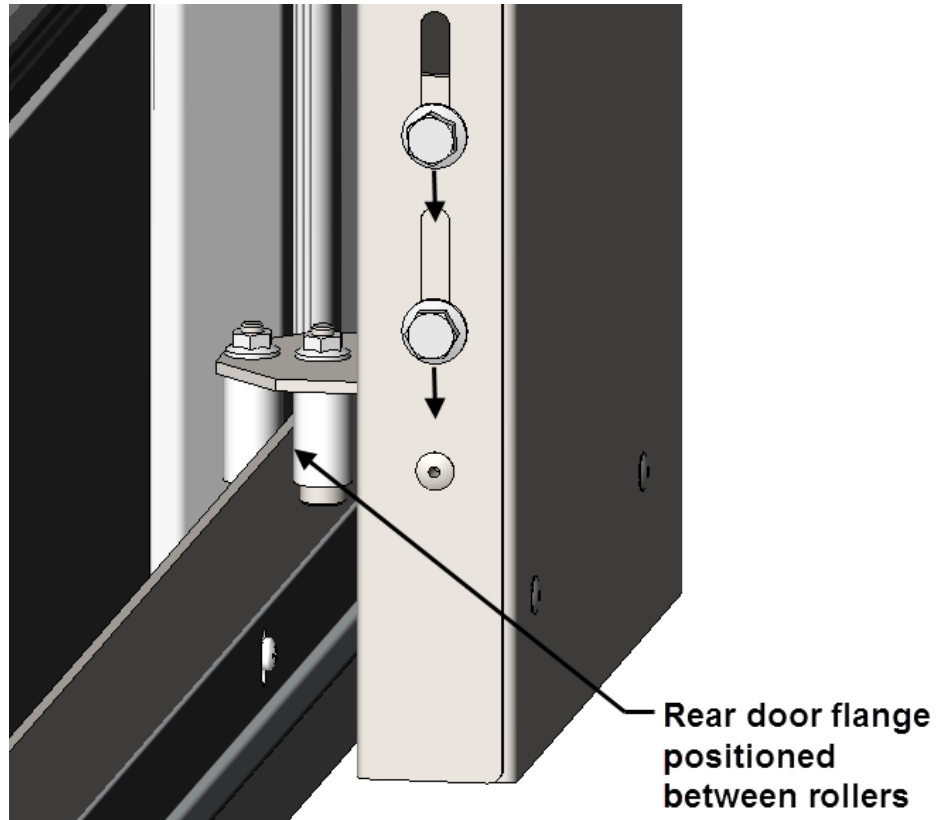
Hang each door panel onto the roller bracket studs and secure with two M8 nuts; the nuts should only be finger tight to allow height and leveling adjustment. Be sure that the rear flange of the door hanger bracket is positioned on top of the leveling nuts, see second picture below.



Adjust leveling nuts as required to level each door assembly. The leveling nuts include nylon inserts to prevent rotation during use. Do not overtighten. Once both door assemblies are leveled, tighten the M8 nuts attaching the door assembly to the bracket finger tight then 1/4 turn with a wrench.

ADJUSTING LOWER ROLLERS

From inside of the door, loosen the lower roller bolts and slide the roller assembly down so that the rear door flange is captured between the two rollers. Adjust the height to maintain at least a 1/4 " gap between the door flange top and the metal bracket for smooth operation. Tighten the bolts.



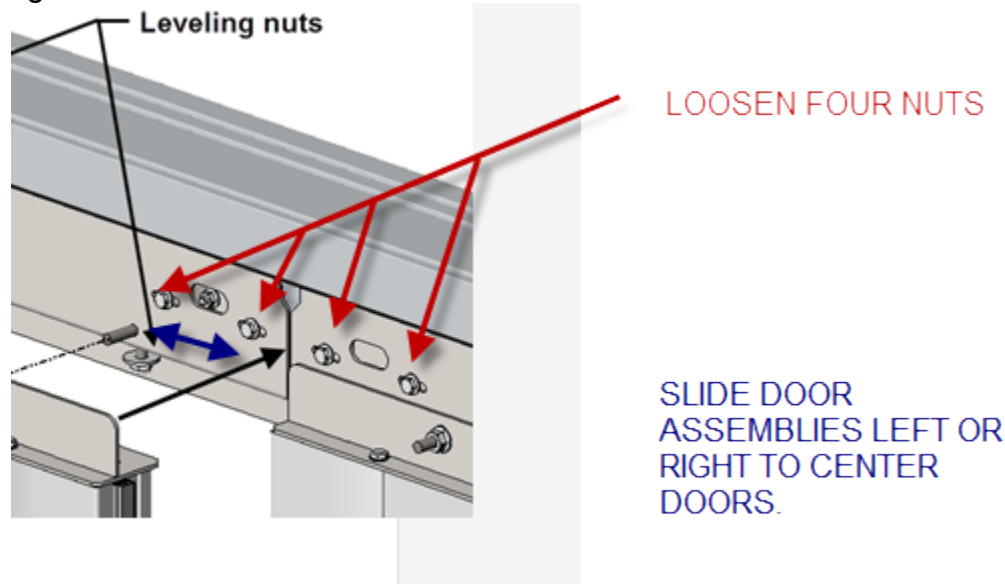
ADJUSTING DOOR ALIGNMENT

Q: What if there is an uneven gap between the two door assemblies?

A: Either one of both of the door assemblies is not level. Adjust the leveling nuts to level the doors and eliminate the gap.

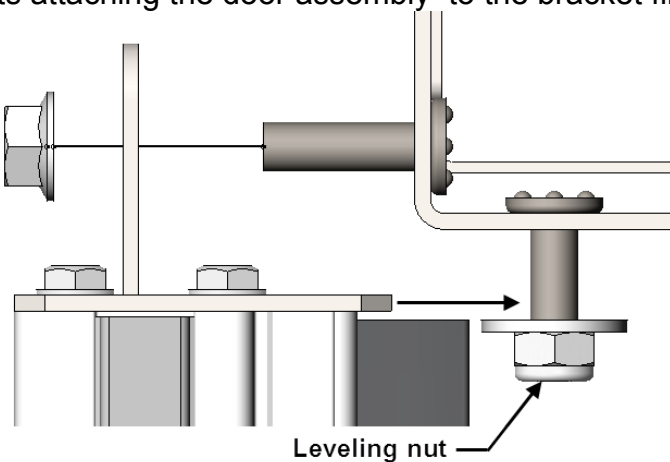
Q: What if the door vertical gasket stops before sealing to the vertical L shaped bracket on the side assemblies?

A: The door(s) are not centered on the track. Loosen hardware securing door support brackets to the trolley system. Slide door assemblies left or right as required. Re-tighten hardware.



Q: What if the door stops before fully closing?

A: Adjust door brush seal height if too low. Door support hardware may be overtightened. Loosen M8 hardware securing door to support brackets. Loosen leveling nuts to lower door assembly. Check operation. If improved, tightened the M8 nuts attaching the door assembly to the bracket finger tight then $\frac{1}{4}$ turn with a wrench.



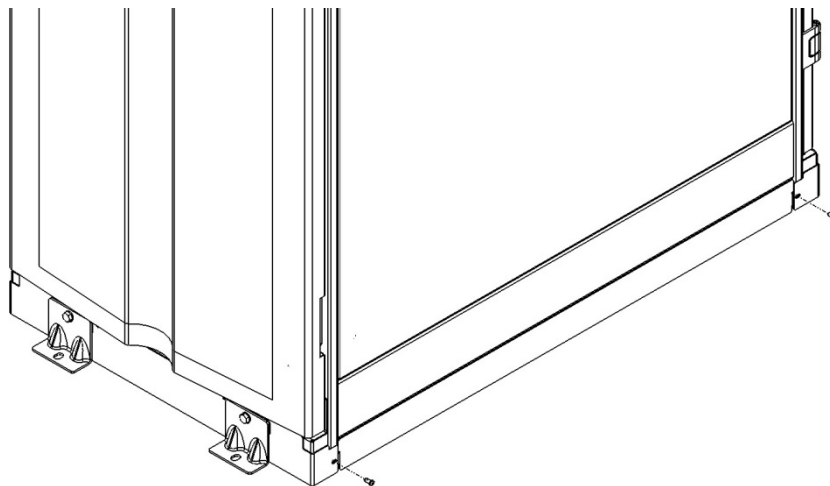
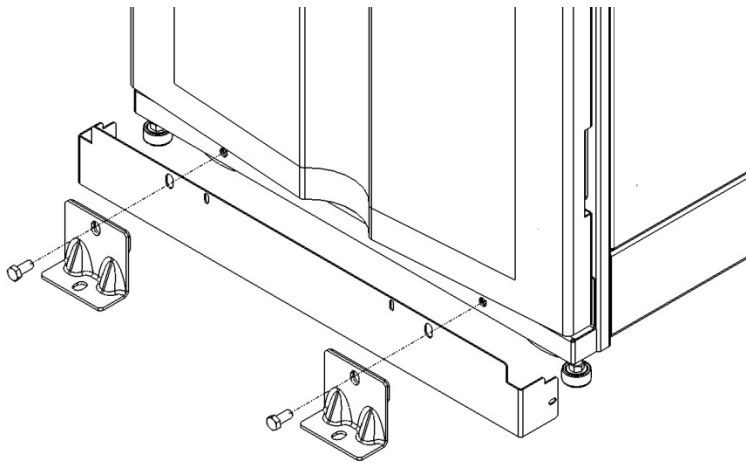
AISLE CONTAINMENT FLOOR SEAL KITS

INTRODUCTION

Aisle Containment Floor Seal Kits are used around the bottoms of the cabinets to seal the gaps between the floor and the bottoms of the cabinets. A cabinet-specific kit is available for CPI F-Series TeraFrame, GF-Series GlobalFrame and N-Series TeraFrame Network Cabinets. For all other cabinets, check with the manufacturer for a cabinet-specific solution or use the AisleLok Under Rack Panel or AisleLok Acrycell Sealing Tape.

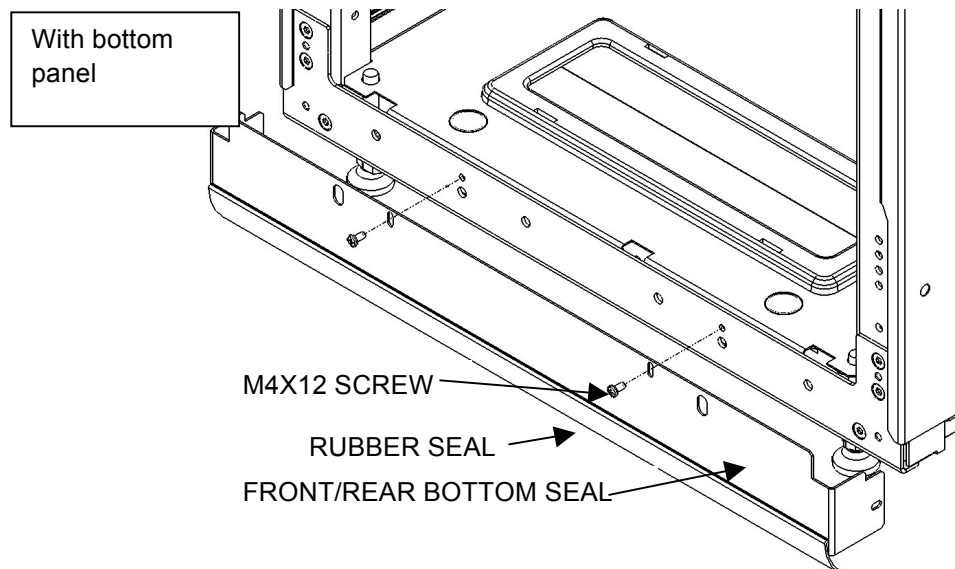
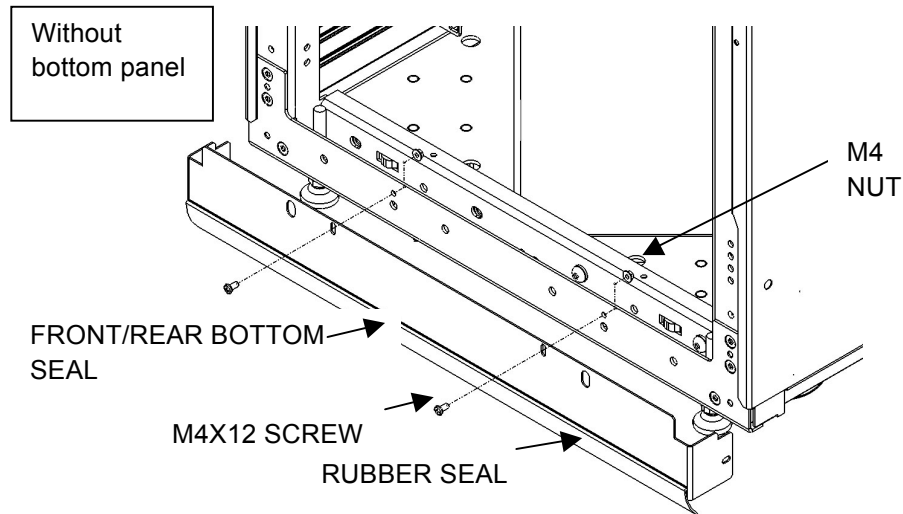
FOR GF-SERIES GLOBALFRAME GEN 1 CABINET AND F-SERIES TERAFRAME GEN 3 CABINET

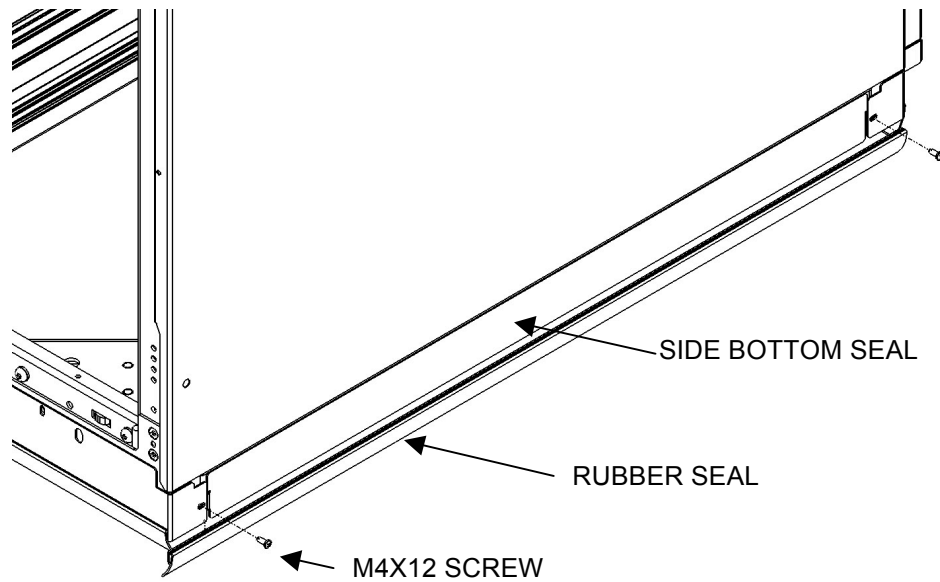
1. Install bottom seals on front and rear of each cabinet as shown.
2. Install side bottom seal on end row cabinets.



FOR F-SERIES TERAFRAME GEN 2 CABINET

1. Install bottom seals on front and rear of each cabinet as shown.
2. Install side bottom seal on end row cabinets.



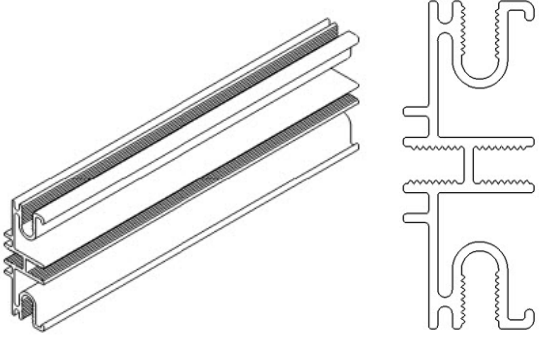
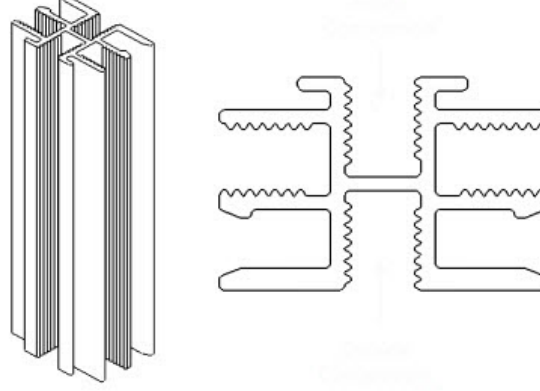
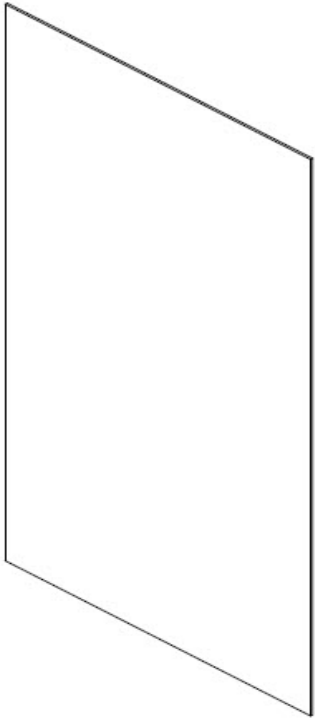


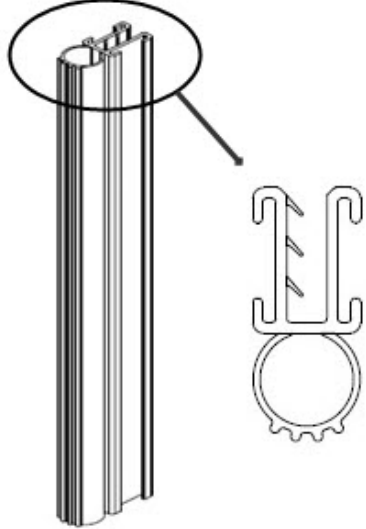
FOR ALL OTHER CABINETS

1. Check with the cabinet's manufacturer for a cabinet-specific kit
2. If not available, use the AisleLok Under Rack Panel (CPI P/N 13877-XXX) or AisleLok Acrycell Sealing Tape (CPI P/N 13876-XXX) to seal the gaps under the cabinets.

ACCESSORIES

For Build To Spec Kit and Full Height Cabinet Blanking Panel.

<p>Frame Extrusion 94"L (2387 mm)</p> <p>2 pieces 33006-X01</p>	
<p>Panel Support Extrusion 94"L (2387 mm)</p> <p>2 pieces 33004-X01 10 pieces 33004-X02</p>	
<p>Polycarbonate Panel 48"W (1219 mm) x 96"L (2387 mm)</p> <p>2 pieces 33005-001 10 pieces 33005-002</p>	
<p>X = Color (C=Black, E=Glacier White)</p>	

<p>Universal Bulb Seal 96"L (2387 mm)</p> <p>2 pieces 33003-001 10 pieces 33003-002</p>	
<p>Panel Retention Clips</p> <p>12 pieces 33007-001</p>	