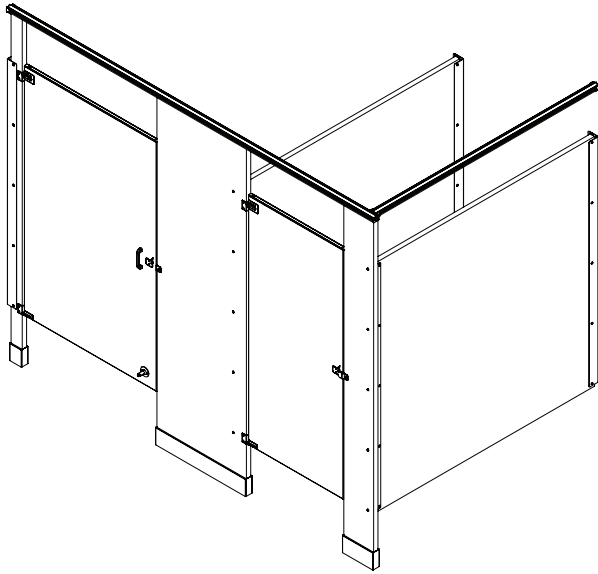


# Installation



## Fusion Granite Restroom Partitions, Floor-Mounted with Overhead Brace — Series 400

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## **⚠ WARNING**

Before beginning installation, make sure that the wall and floor backing are adequate to support the secure mounting of the toilet compartment units.

Partitions are extremely heavy and may require more than one person to position and install.

Failure to comply with these instructions may result in personal injury and/or property damage and will void the partition warranty.

## **⚠ CAUTION**

Personal protective equipment (PPE) is required during the installation and maintenance of this product.

## **NOTICE**

Use an engine hoist and granite lifter to ensure safe and damage-free installation of granite components. To prevent warping, always lay the material flat. Do not lean material against the wall or stack unevenly. Leave the protective masking on until installation is complete.

Make sure all floors and walls are clean and smooth. Remove loose impediments, such as protruding nails and other debris which could affect installation.

To prevent "dimpling," extra caution should be taken when instructed to drill through one side of face only.

Carefully remove components from skid, do not drag.

## **IMPORTANT**

Review your partition layout drawings and verify the number of stalls and components before beginning installation.

Read this installation manual completely to ensure proper installation, then file it with the owner or maintenance department. This installation manual provides instruction for the assembly of normal partition configurations and standard components. Non-standard configurations or components including but not limited to curved or angled walls, partial walls, oversized panels, or modified hardware are not covered in this manual. Compliance and conformity to local codes and ordinances is the responsibility of the installer.

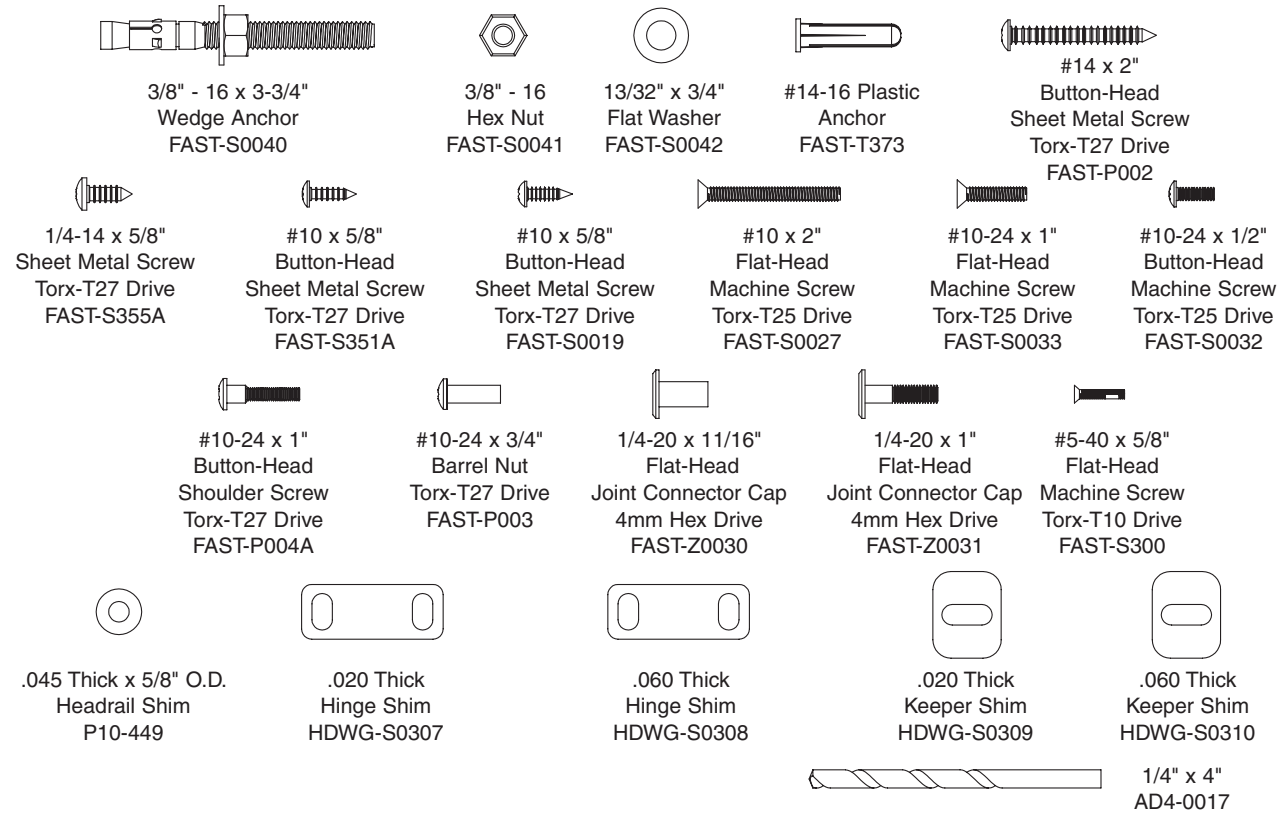
Separate parts from packaging and make sure all parts are accounted for before discarding packaging material. If any parts are missing, do not begin installation until you obtain the missing parts.

Product warranties and parts information may be found under "Products" on Bradley's website at [bradleycorp.com](http://bradleycorp.com).

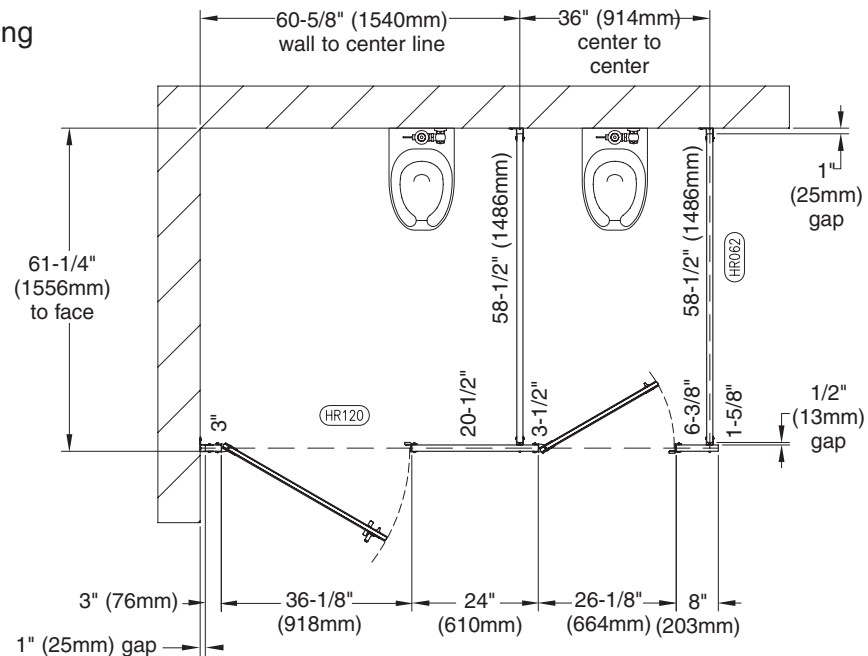
**Supplies Required:**

- Chalk line and pencil
- Tape measure and 4' level
- Jigsaw (or hacksaw) and circular saw
- Two spring clamps
- 9/64", 5/32", 3/16", 7/32" and 1/4" drill bits
- Power drill or screw gun with drill bit extension
- 5/16" and 3/8" ceramic tile and masonry drill bit
- Hammer drill
- Silicone caulk
- Two spacers, 12" high and strong enough to support weight of panel

**Hardware Provided**



**Example of Submittal Drawing**



## 1 Layout Dimensions - Continuous Brackets

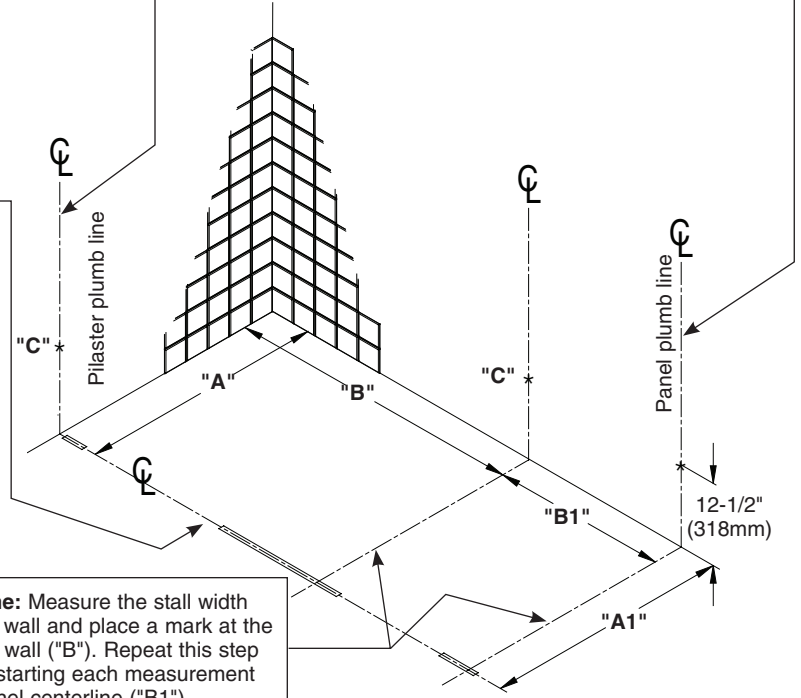
When installing the partition components, consult the applicable Mills Partition submittal drawing for compartment layout dimensions.

**A** **Pilaster Centerline:** Measure from the back wall forward to the face of the compartment, subtract 5/8" (16mm) and mark this location on the floor ("A"). Mark the same measurement on the opposite end of your layout ("A1") and draw a straight line connecting both marks.

**For Freestanding (FS) Partitions:** Refer to submittal drawings and determine the approximate location of the outside panels. Establish dimensions "A" and "A1" as explained above.

**C** Draw a plumb line on all walls from each pilaster and panel centerline. From the highest point in the room, measure 12-1/2" (318mm) from the floor and place a mark on the pilaster/panel plumb line. Use a level to transfer that mark to all other plumb lines ("C").

**B** **Panel Centerline:** Measure the stall width across the back wall and place a mark at the base of the rear wall ("B"). Repeat this step for each panel, starting each measurement from the last panel centerline ("B1").



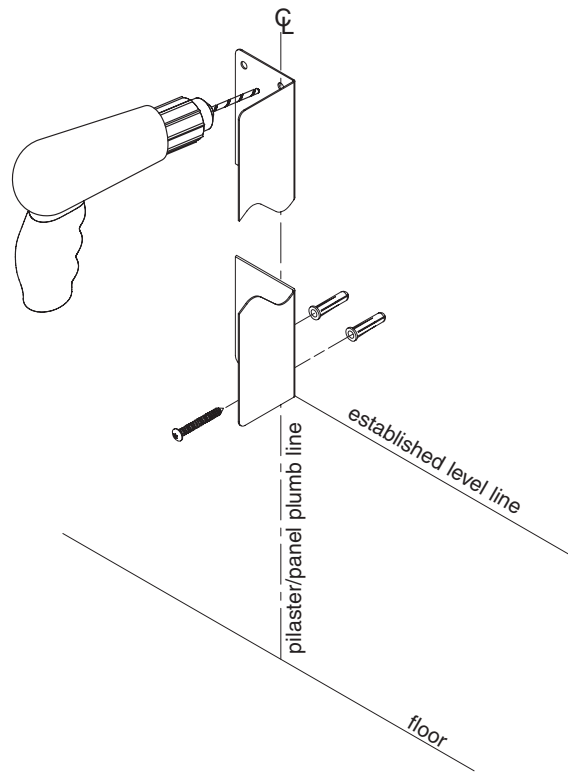
## 2 Continuous Stainless Steel Brackets to Wall

- On end panel applications, position the bracket with the ear facing toward the inside of the stall.
- Brackets are used as templates, but since the hole patterns may be different, the brackets may not be interchangeable.

**A** Place the bottom of the continuous 2-1/2" x 2-5/8" "L" bracket at the established level line. Align the inside holes on the pilaster/panel plumb line.

**B** Using the bracket as a template, mark the hole locations on the wall. Remove the bracket and drill a Ø5/16" hole (min. 2" [51mm] deep) at each hole location.

**C** Insert the plastic anchors in all holes and only secure the inside holes of the bracket to the wall with the #14 x 2" screws provided.



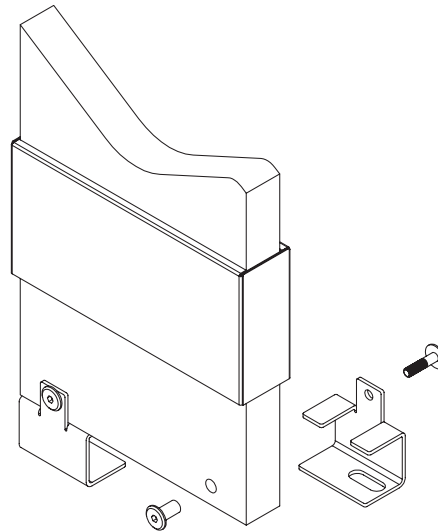
### 3 Leveling Brackets to Pilaster

Pilasters are pre-drilled for leveling brackets.

**A** Slide the shoe onto the bottom of the pilaster and use a piece of tape to keep the shoe positioned about 5" (127mm) from the end. Make sure the shoe "lip" is towards the top.

**B** Orientate the leveling brackets as shown (slot goes on the outside edge of the pilaster). Align the hole of the leveling bracket with a hole on the bottom of the pilaster so that there is one bracket on each side.

**C** Secure the leveling bracket to the pilaster using the 1/4-20 x 1" flat head joint connector bolt and 1/4-20 x 11/16" flat head joint connector cap.



### 4 Continuous and Alcove Stainless Steel Brackets to Pilaster

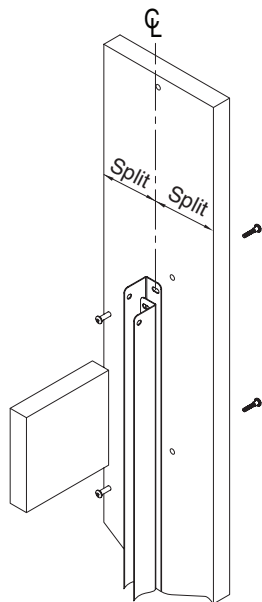
Pilasters are pre-drilled for mounting brackets and headrail. The top hole on the pilaster should be located on the inside of the stall.

Refer to submittal drawings to locate the split dimension and layout location of each marked pilaster.

#### Continuous Brackets

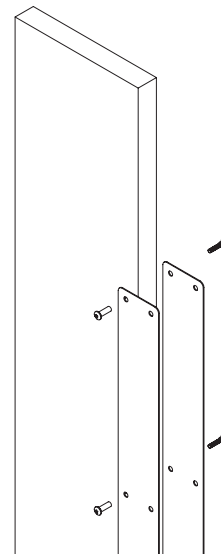
**A** Loosely attach the (2) 1-1/8" x 1-5/8" "L" brackets with the #10-24 x 3/4" barrel nuts and #10-24 x 1" shoulder screws provided.

**B** Place the granite spacers within the brackets and squeeze them together. Securely tighten the bracket mounting hardware and remove the spacers.



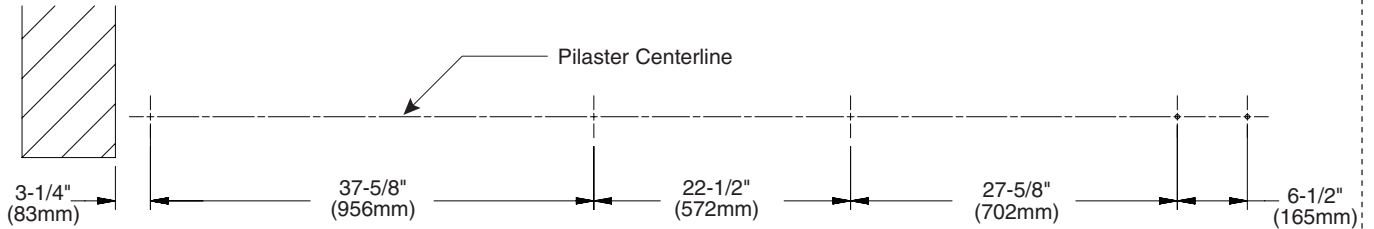
#### Alcove Brackets

**A** Secure brackets to pilaster using the #10-24 x 3/4" barrel nuts and #10-24 x 1" shoulder screws provided.



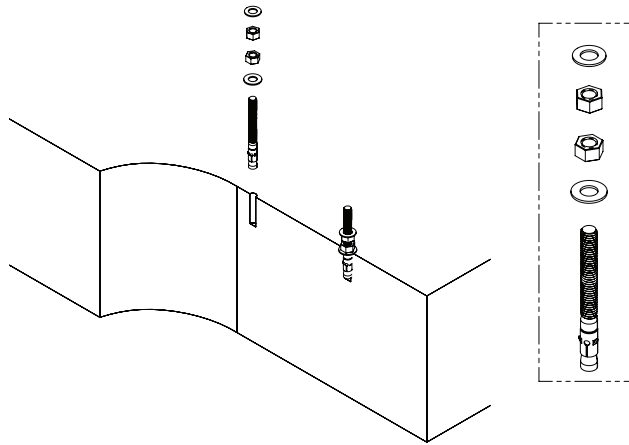
## 5 Pilaster Mounting Hardware

**A** This view is an example only. Refer to your submittal drawings to determine placement of the anchors on the pilaster centerline for your application.

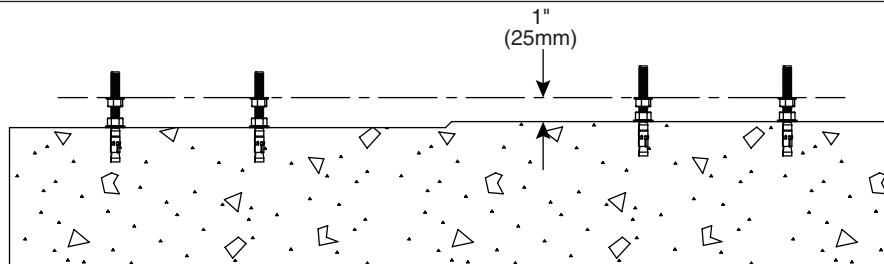


**B** Drill  $\text{Ø}3/8$ " holes (min 1-5/8" [41mm] deep) into the floor and make sure the holes are free of dirt and debris.

**C** Place a wedge anchor into each hole and secure to the floor with a  $13/32$ " x  $3/4$ " washer and  $3/8$ " hex nut. Attach an additional hex nut and flat washer to all wedge anchors.



**D** From the highest point in the room, adjust the support nut and washer to approximately 1" (25mm) above the finished floor. Level and adjust the remaining support nuts and washers to this height.

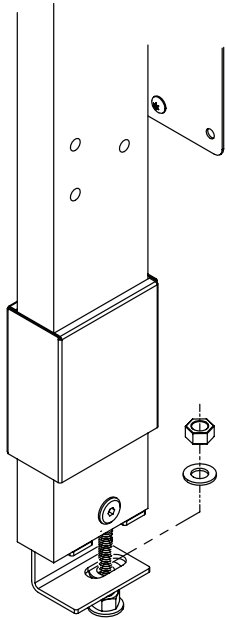


## 6 Pilasters with Stainless Steel Continuous Brackets

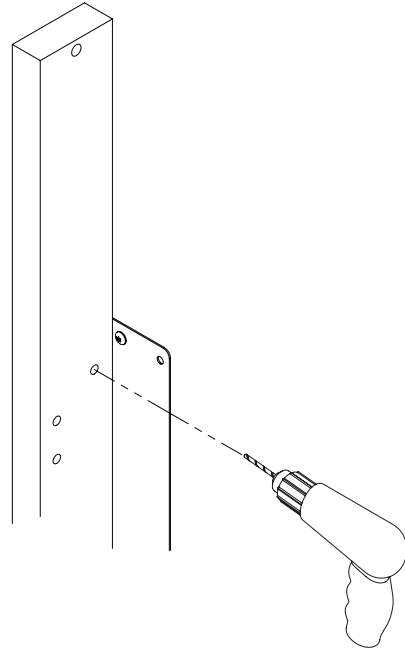
Pilasters located at walls should be mounted first. Gaps range from 1/2" to 1-1/4" (13mm to 32mm). Refer to your submittal drawing for your gap sizes.

Check to make sure the pilasters are plumb and level to each other. The pilaster height can be adjusted by moving the support nuts on the wedge anchor up or down (see page 5).

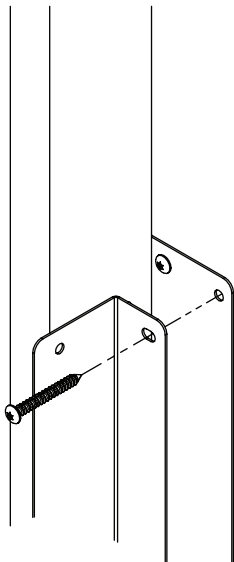
**A** Set the pilaster onto the mounting hardware while at the same time resting or clamping the pilaster against the wall bracket. Secure the pilaster to the mounting hardware using the 13/32 x 3/4" washer(s) and 3/8" hex nut(s) provided.



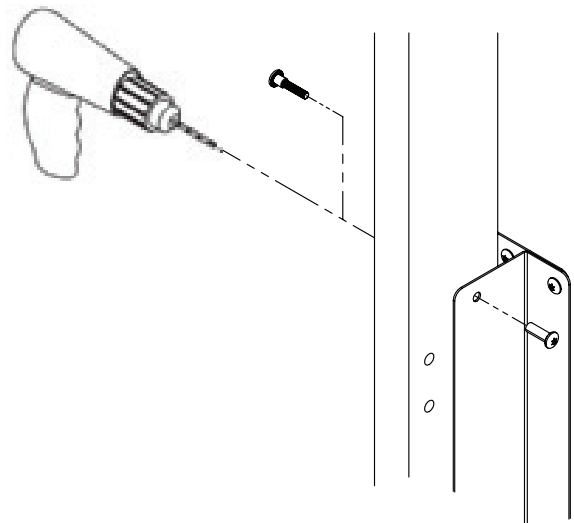
**B** Using the pilaster as a template, drill Ø1/4" holes through the bracket at each pilaster bracket hole.



**C** Position the 2-29/64" x 1-1/2" "L" bracket so that it is flush with the pilaster and the slotted holes are aligned with the holes of the 2-1/2" x 2-5/8" bracket (previously attached during Step 2). Secure both brackets to the wall using the #14 x 2" screws provided.



**D** Using the holes drilled in Step B as a template, drill Ø1/4" holes through the 2-29/64" x 1-1/2" "L" bracket at each bracket hole. Secure the pilaster to the "L" brackets using the #10-24 x 3/4" barrel nuts and #10-24 x 1" shoulder screws provided.



**6a Pilasters and Panels with Stainless Steel Continuous Brackets**

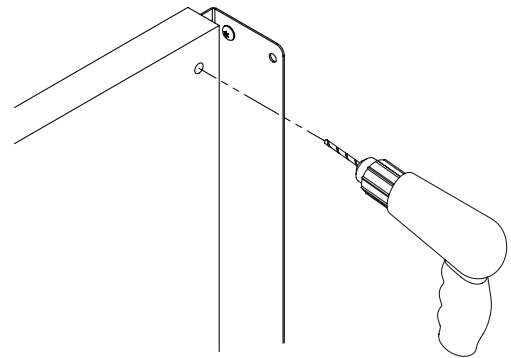
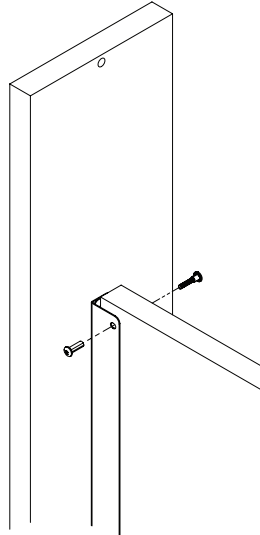
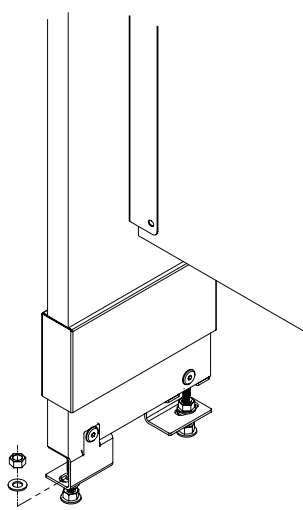
- ✓ *Pilasters located at walls should be mounted first. Start at one end and install a panel, then a pilaster. Continue alternating until installation is complete. An engine hoist and granite lifter (clamp) will aid in the installation process. When installing in an alcove or in-corner, use an alcove bracket to secure the pilaster to the panel.*
- ✓ *Refer to your submittal drawing and leave the appropriate gaps. Standard gap is 1" (25mm) between the panel and wall and 1/2" (13mm) between the panel and pilaster.*
- ✓ *Check to make sure the pilasters are plumb and level to each other. The pilaster height can be adjusted by moving the support nuts on the wedge anchor up or down (see page 5).*

**A** Place the panel on a 12" (305mm) spacer and rest or clamp the panel against the wall bracket.

**B** Set the pilaster onto the mounting hardware while at the same time placing the bracket around the panel. Secure the pilaster to the mounting hardware using the 13/32 x 3/4" washer(s) and 3/8" hex nut(s) provided.

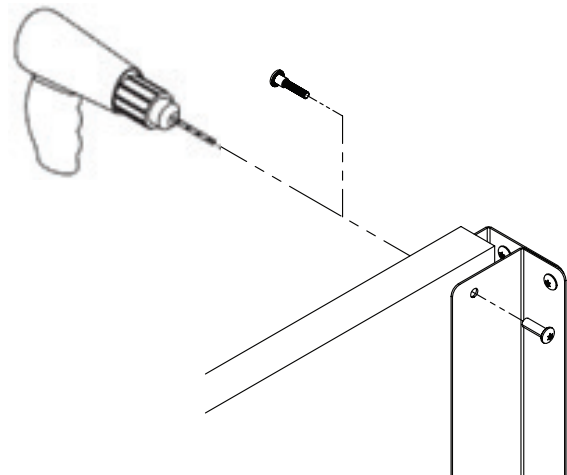
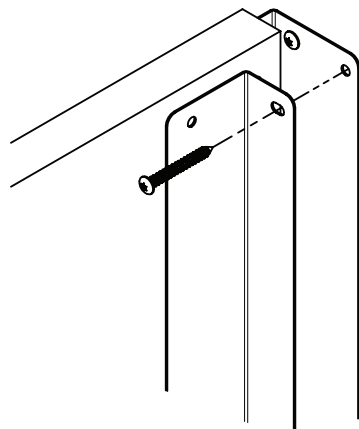
**C** Align the holes on the front end of the panel with the holes on the (2) 1-1/8" x 1-5/8" "L" brackets. Secure the panel to the "L" brackets using the #10-24 x 3/4" barrel nuts and #10-24 x 1" shoulder screws provided.

**D** Using the panel as a template, drill Ø1/4" holes through the bracket at each rear panel bracket hole.



**E** Position the 2-29/64" x 1-1/2" "L" bracket so that it is flush with the panel and the slotted holes are aligned with the holes of the 2-1/2" x 2-5/8" bracket (previously attached during Step 2). Secure both brackets to the wall using the #14 x 2" screws provided.

**F** Using the holes drilled in Step D as a template, drill Ø1/4" holes through the 2-29/64" x 1-1/2" "L" bracket at each bracket hole. Secure the panel to the "L" brackets using the #10-24 x 3/4" barrel nuts and #10-24 x 1" shoulder screws provided.

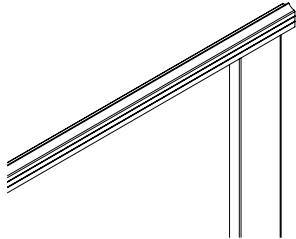




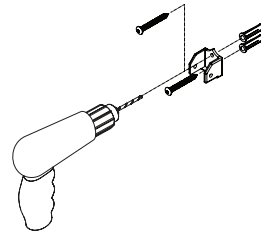
## 7 Headrail

- ✓ Make sure the pilasters are plumb and that the pilaster has been secured to the mounting hardware. Leave the appropriate door opening between the pilasters as shown on your submittal drawing.
- ✓ The illustrations on this page show mounting hardware and fasteners for a generic application. Refer to your submittals to determine your actual headrail configurations.
- ✓ Some headrail sections may need to be cut to an appropriate size. Refer to your submittals for general headrail placement.
- ✓ Headrail configurations that come to an intersection should meet over a pilaster (see completed headrail assembly view below).

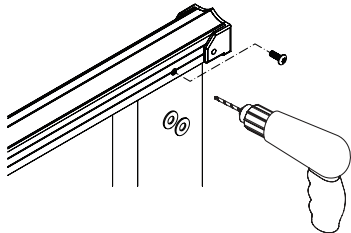
**A** Place headrail over the top of each pilaster located at the wall and slide it tight against the outside face of the pilaster and the side wall. Mark the outline of the headrail on the wall and remove the headrail.



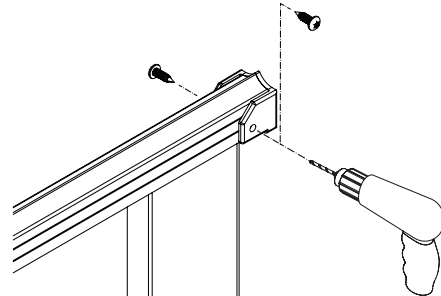
**B** Place the headrail bracket on the outline marked on the wall and mark the locations of the mounting holes. Remove bracket and drill (2) Ø5/16" holes a minimum of 2" (51mm) deep. Prior to securing to the wall, enlarge the (2) back mounting holes of the bracket to Ø1/4". Secure the bracket to the wall with the #14 x 2" screws and plastic anchors provided.



**C** Place headrail over the top of the pilasters and slide it tight into the mounting bracket. Make sure the pilaster is plumb and that the spacing between the pilasters for the doors is the correct dimension. Each pilaster is supplied with an insert for mounting the headrail. Locate the insert and transfer its location to the headrail. Drill a Ø7/32" hole through the back side face of the headrail only. Secure the headrail to the pilaster with the #10-24 x 1/2" machine screws provided. Use 5/8" headrail shims as required.

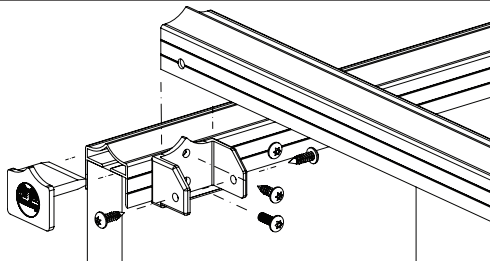


**D** Use the mounting bracket as a template and drill a Ø7/32" hole through the headrail. Secure the headrail to the mounting bracket with the #10 x 5/8" screws provided.

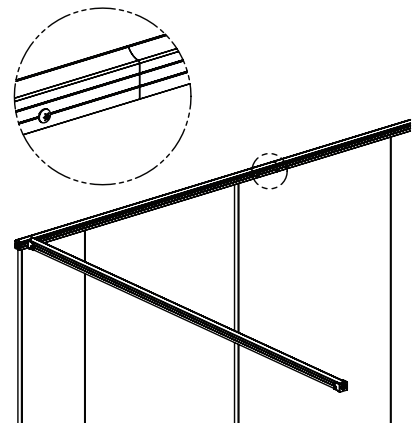


**E** For open end applications, cut the headrail to the appropriate length (if required). Attach the bracket to the wall at the correct height (see step B). Each open end pilaster is supplied with an additional insert for mounting the headrail. Locate the additional insert and transfer its location to the headrail by drilling a Ø7/32" hole through the back side face of the headrail only.

Attach another bracket to the pilaster with (1) #10 x 5/8" screw and (1) #10-24 x 1/2" machine screw at the correct height (see view below). Use 5/8" headrail shims as required. The headrail should be level with any adjacent headrail and should be located directly over the panel. Position each headrail onto the brackets and secure with required fasteners (see step C). Using a rubber mallet, install the headrail end cap.

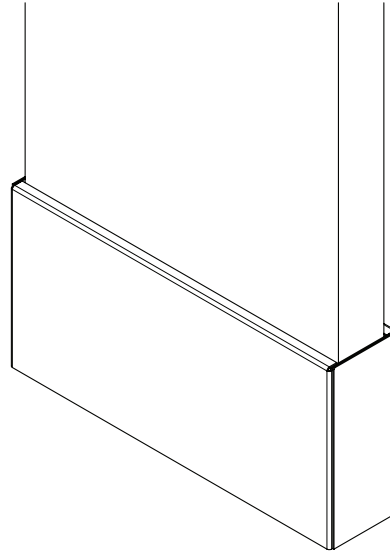
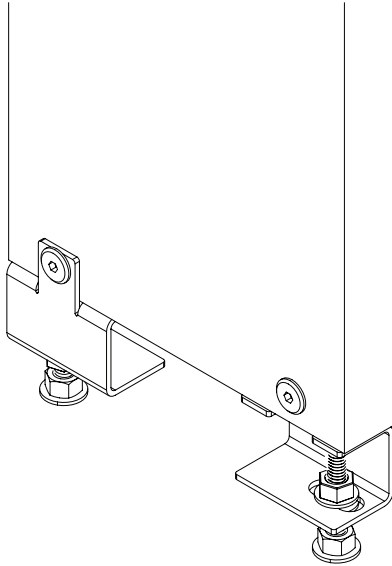


### Completed Headrail Assembly



**8 Pilaster Shoes**

**A** Verify the pilaster has been securely tightened to the mounting hardware. Carefully slide the shoe down the pilaster so that it rests flush with the floor.



**B** Secure shoe to pilaster with clear silicone caulk (by others).

## 9 Wraparound Gravity Hinges

- ✓ *Pilasters are pre-drilled for hinges. Before installing, make sure the door openings are the appropriate size, the pilasters are plumb, and the headrail is installed.*
- ✓ *Before installing the hinges, determine the door swing by facing the compartment from the outside. The Mills submittal drawings will detail the specific door swing.*
- ✓ *The door hinge assembly consists of separate door and pilaster hardware.*
- ✓ *Door cam surfaces can become worn under normal use. The application of lithium grease can help prolong door cam life and reduce friction between surfaces.*

**A** Secure the top and bottom pilaster hinge to the pilaster with the #10-24 x 3/4" barrel nuts and #10-24 x 1" shoulder screws provided. If necessary, insert shims between the hinge and the pilaster on the inside of the stall.

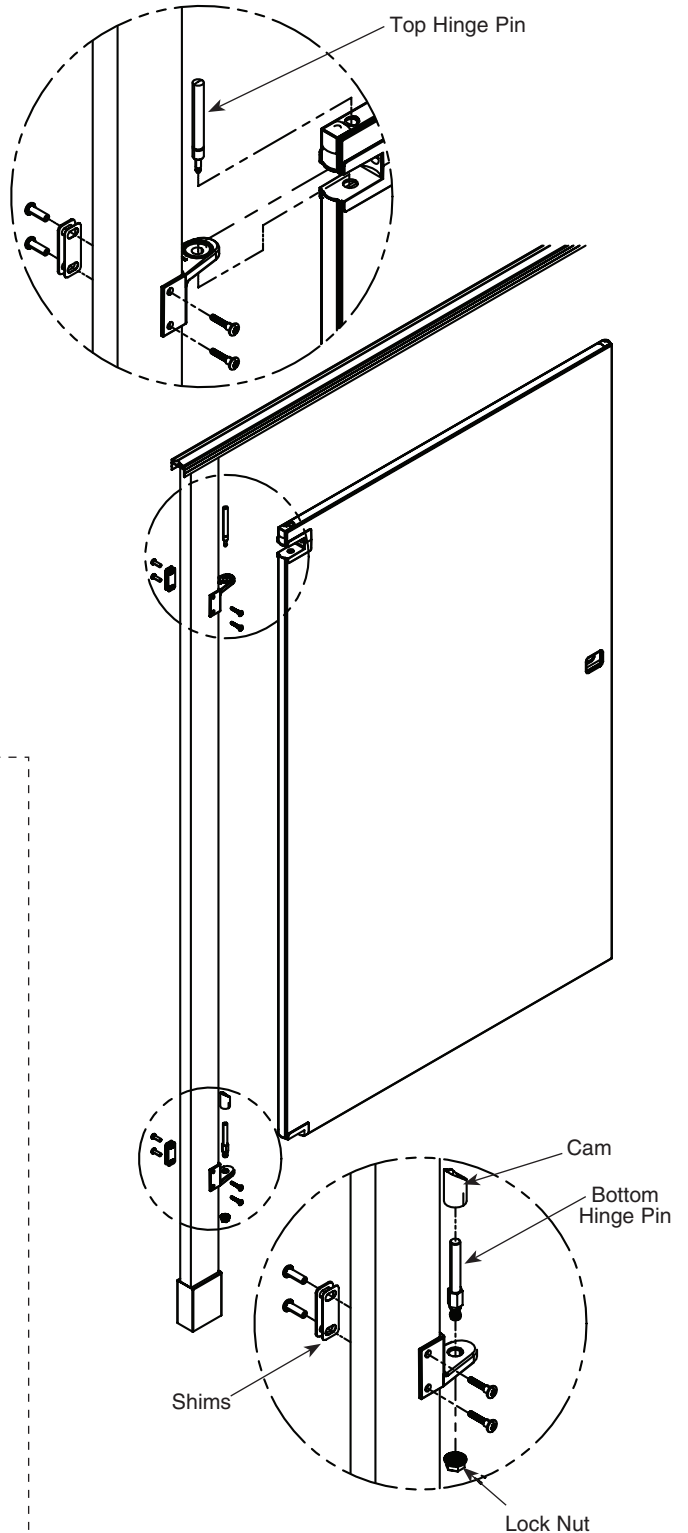
**B** Assemble the bottom hinge cam and pin as shown. Insert into the bottom hinge and thread the locknut loosely onto the bottom hinge pin.

**C** Place the bottom door hinge opening onto the bottom pilaster hinge. Position the top door hinge opening into the top pilaster hinge and insert the top hinge pin.

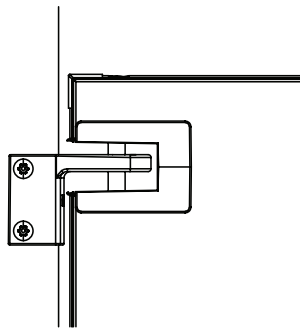
✓ *The top hinge pin should snap securely into place.*

**D** Rotate the door to the desired "at rest" position. Push down on the door while holding it in the "at rest" position. This sets the male and female cams in the bottom hinge. Tighten the hex nut to secure the door in the "at rest" position.

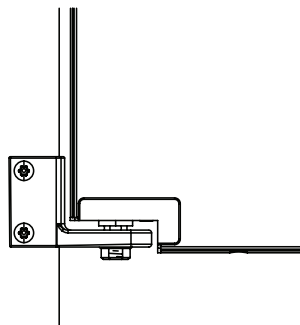
✓ *For doors requiring a full close, rotate the door 15° past the closed position*




Finished View of Top Hinge



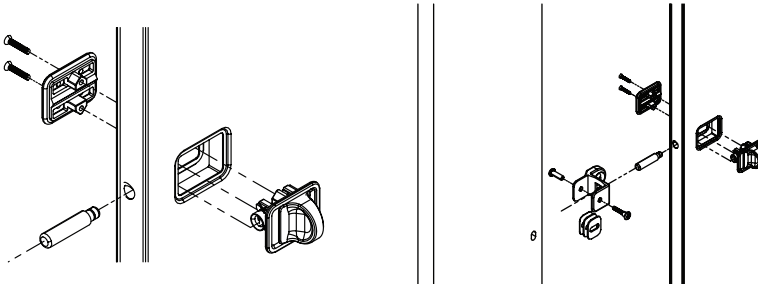
Finished View of Bottom Hinge



**10 Door Hardware for Inswing Doors**

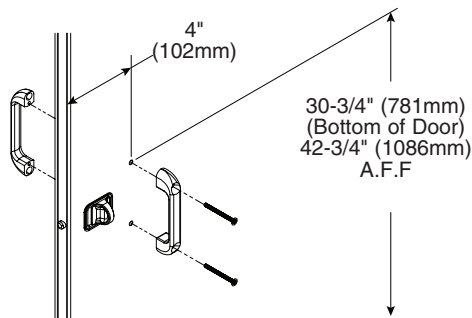
 Local codes vary from state to state. Check your local codes before installing the coat hook and door pulls.

**A** Assemble the latch as shown. Tighten the fasteners and insert the latch bolt, pushing in until it snaps into place.

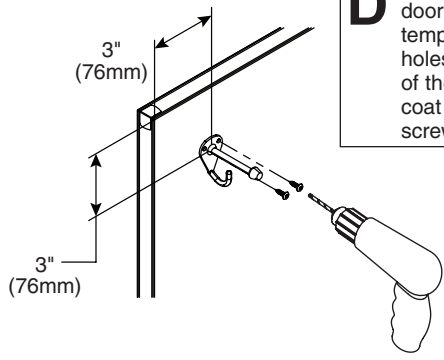


**B** Align the strike/keeper with the pre-drilled hole on the pilaster and center it on the opposing latch bolt. Secure to pilaster with the #10-24 x 3/4" barrel nut and #10-24 x 1" shoulder screw provided. If necessary, insert shims between the strike/keeper and the pilaster on the inside of the stall.

**C** For 34" - 36" doors, mark the location for the top hole on the inside face of the door 30-3/4" (781mm) up from the bottom of 58" tall doors (42-3/4" [1086mm] above finished floor) and 4" (102mm) from the door edge. Drill (2) Ø1/4" holes (spaced 3-1/2" [89mm] apart) through the door and secure the door pulls to the door with the #10-24 x 2" flat machine screws provided.

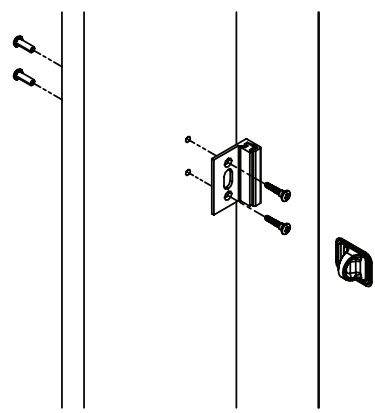


**D** Place the coat hook 3" (76mm) down from the top and 3" (76mm) from the latch side of the door (hook goes on the inside face of the door). Using the hook as a template, drill (2) Ø9/64" pilot holes through the inside face of the door only. Secure the coat hook with the #10 x 5/8" screws provided.




**Flat Strike/Keeper**

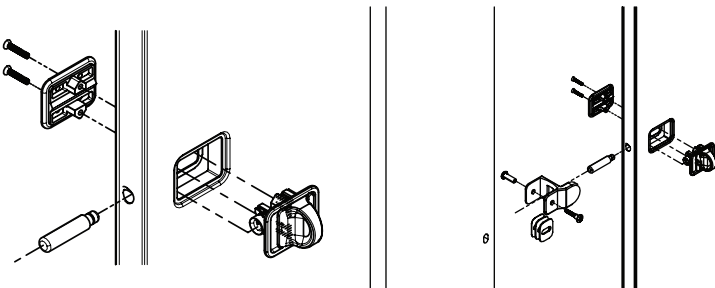
**E** Align the flat strike/keeper with the pre-drilled holes on the pilaster. Secure to pilaster with the #10-24 x 3/4" barrel nuts and #10-24 x 1" flat head machine screws provided.



**10a Door Hardware for Outswing Doors**

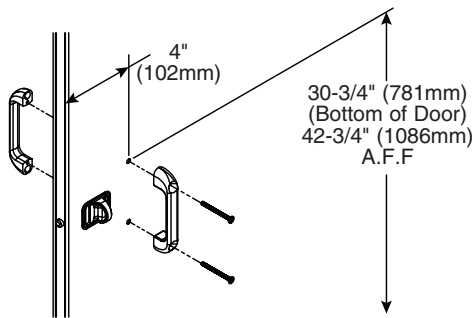
 Local codes vary from state to state. Check your local codes before installing the coat hook and door pulls.

**A** Assemble the latch as shown. Tighten the fasteners and insert the latch bolt, pushing in until it snaps into place.

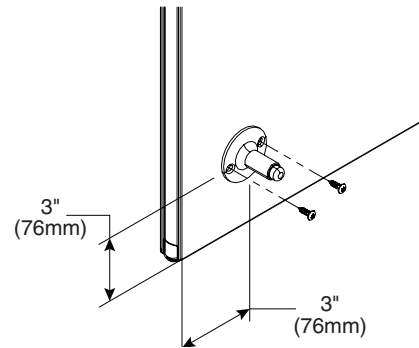


**B** Align the strike/keeper with the pre-drilled hole on the pilaster and center it on the opposing latch bolt. Secure to pilaster with the #10-24 x 3/4" barrel nut and #10-24 x 1" shoulder screw provided. If necessary, insert shims between the strike/keeper and the pilaster on the inside of the stall.

**C** Mark the location for the top hole on the inside face of the door 30-3/4" (781mm) up from the bottom of 58" tall doors (42-3/4" [1086mm] above finished floor) and 4" (102mm) from the door edge. Drill (2) Ø1/4" holes (spaced 3-1/2" [89mm] apart) through the door and secure the door pulls to the door with the #10-24 x 2" flat machine screws provided.

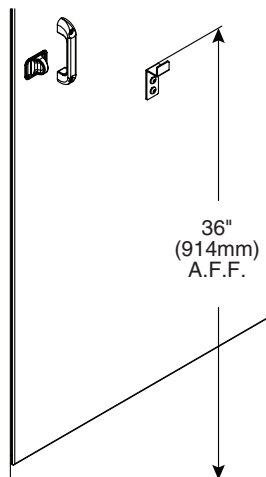
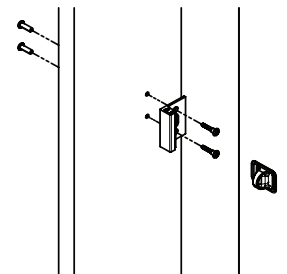


**D** Position the wall bumper 3" (76mm) up from the bottom and 3" (76mm) from the latch side of the door (bumper goes on the outside face of the door). Using the bumper as a template, drill (2) Ø9/64" pilot holes through outside face of the door only. Secure the wall bumper to door with the #10 x 5/8" screws provided.



**Flat Strike/Keeper**

**F** Align the flat strike/keeper with the pre-drilled holes on the pilaster. Secure to pilaster with the #10-24 x 3/4" barrel nuts and #10-24 x 1" flat head machine screws provided.



**E** Position the coat hook 36" (914mm) above finished floor (hook goes on the inside of compartment). Using the hook as a template, drill (2) Ø3/16" pilot holes through inside face of the door only. Secure the coat hook with the #14 x 5/8" screws provided.

## 11 Urinal Screens

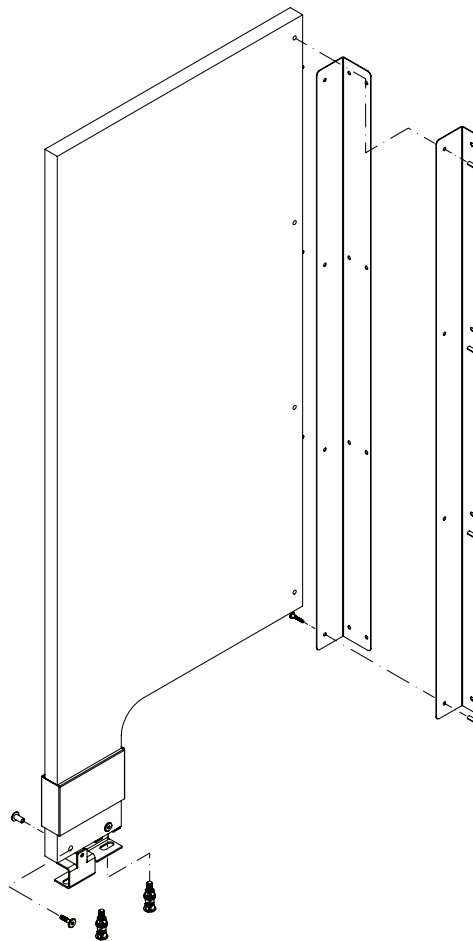
- Before installing the urinal screen components, determine the correct location for your application.
- Brackets are used as templates, but since the hold patterns may be different, the brackets may not be interchangeable.

**A** Draw a plumb line on the wall to represent the urinal screen centerline. From the highest point in the room, measure 12-1/2" (318mm) from the floor and place a mark on that plumb line.

**B** Secure the continuous urinal screen bracket to the wall following Step 2, A thru C. (The bracket ear can be positioned on either side of the urinal screen).

**C** Position shoe and secure leveling brackets to urinal screen leg by following Step 3, A thru C.

**D** Determine the urinal leg mounting hardware by measuring from the back wall forward to the required urinal screen depth. Subtract 3/4" and 5-1/4" and mark these (2) locations on the floor. Secure anchors to the floor following Step 5, B thru D.



**E** Set the urinal screen leg onto the mounting hardware while at the same time resting or clamping the urinal screen against the wall bracket. Secure the urinal screen leg to the mounting hardware using the 13/32 x 3/4" washer(s) and 3/8" hex nut(s) provided.

**F** Secure the urinal screen to the wall following Step 6a, D thru F.

**G** Verify the urinal screen has been securely tightened to the mounting hardware. Carefully slide the shoe down the urinal leg so that it rests flush with the floor. Secure shoe to urinal with clear silicone caulk (by others).