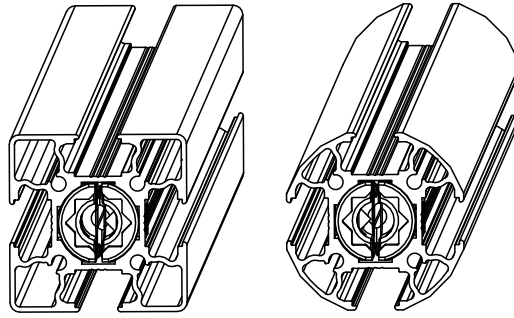


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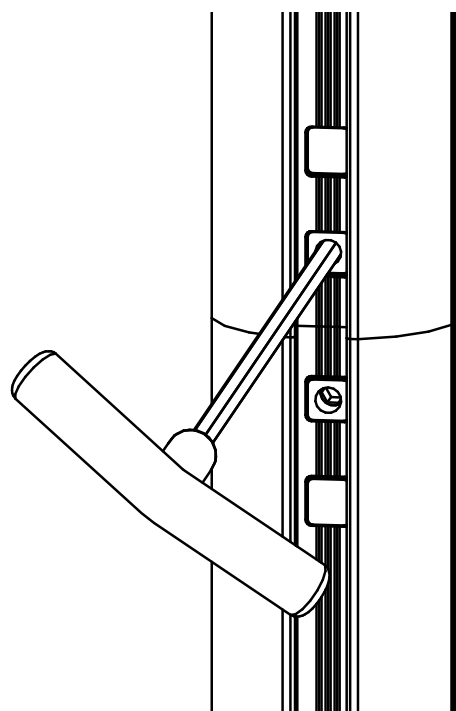
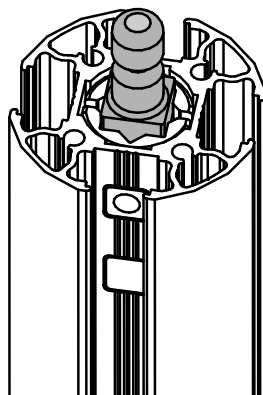
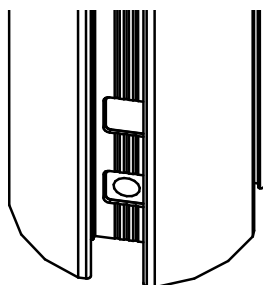
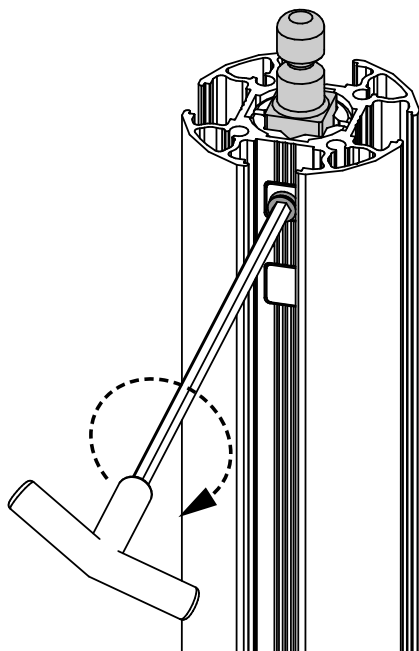
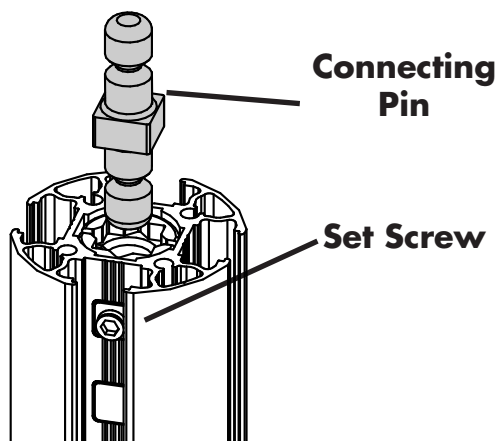
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BASIC ASSEMBLY**IMPORTANT**

- 1. Always follow set up instructions carefully.** Some assembly methods can stress components beyond the requirements of the exhibits design and the intended capacity of the system components.
- 2. Review entire design before beginning.** The first step should be an understanding of how the design goes together, and an inventory of parts. Follow the recommended assembly sequence of the design as it may be difficult to add some components at a later time.
- 3. Floor layout is important.** Moving a design can introduce undesired stress on system components. Because connections may also loosen when moved, an accurate floor layout can save time in the long run. Always build a section of the design which will stand on its own. This “base section” will then define the datum points for which all other dimensions are referenced. Make certain the base section is positioned correctly relative to the floor space because the rest of the exhibit must be assembled relative to the location of the base section.
- 4. Tools.** You will need a 1/4” and a 5/32” hex driver to assembly the tube system components. Levels, squares, and a string line can also be used to make the assembly proceed smoothly. Leveling, and checking for plumb should be done continuously as the booth is assembled.
- 5. Tighten All Connections.** Make sure primary connections are tightened and secure before adding secondary connectors. Make certain to tighten all connections as you go along! NOTE: A battery-operated driver can speed up the assembly process. However, a low battery or a weak driver can also be the culprit when loose connections are noticed. Checking for tightness (torque) by hand is preferred.
- 7. Packaging.** When unpacking your display and accessories, take note of the packing system and the materials used. Keep all packing materials and repack components in the same manner as originally shipped. Components and accessories can be damaged during shipping or storage if not packed carefully.
- 8. DO NOT DISASSEMBLE TUBES.** Although the tubes can be disassembled, this should never be done. The tubes are carefully assembled in our facility and any attempt to disassemble them will void the warranty and will render the tube unusable.packed carefully.

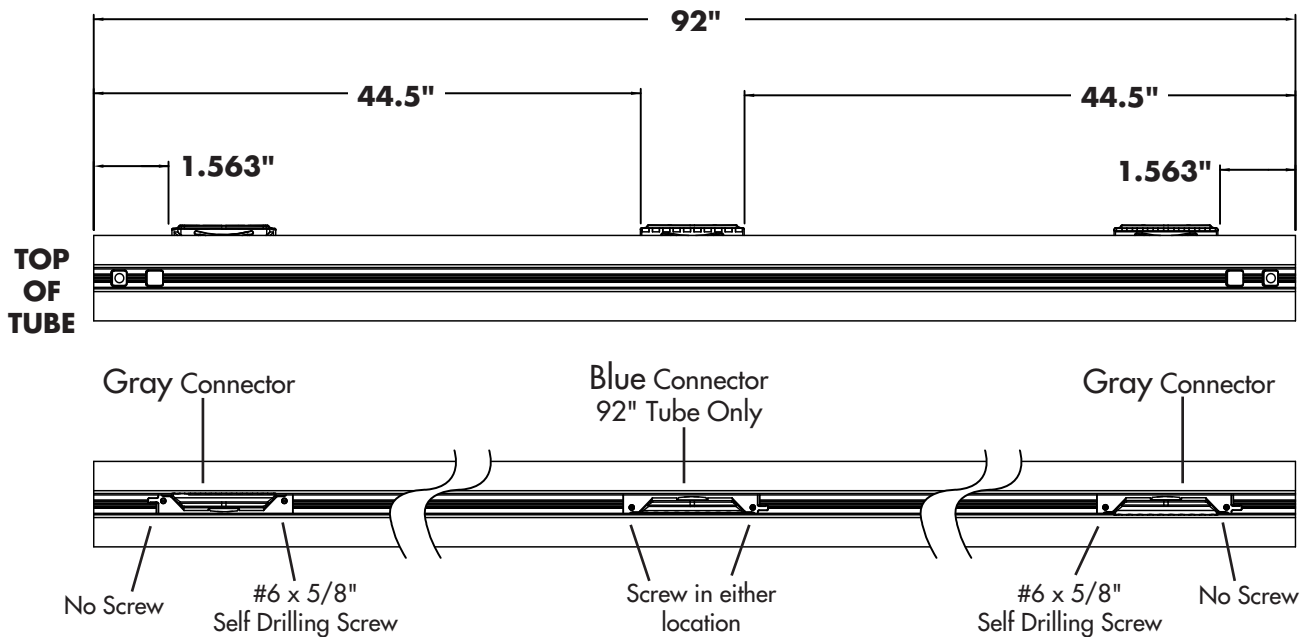
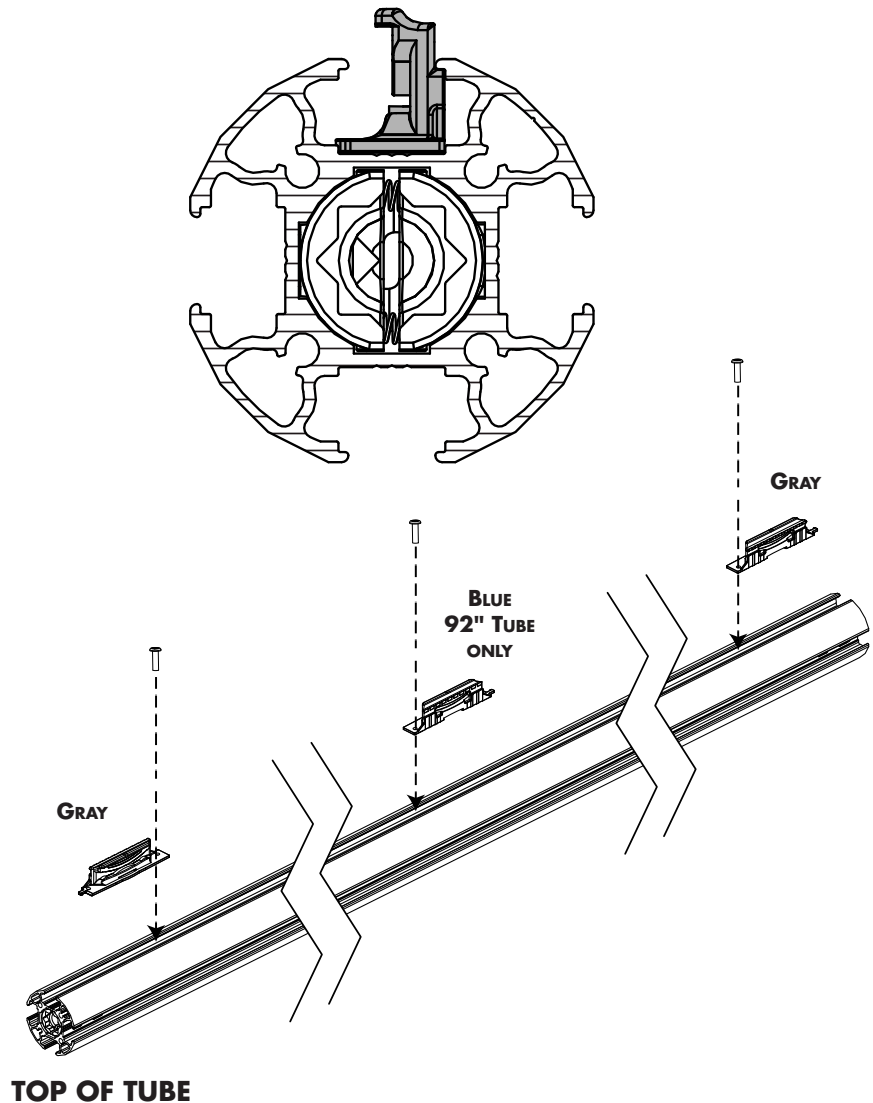
Assembling Tubes:

Connecting pins are used to join tubes together and to prevent a tube from rotating when attached to another tube or to a base plate. Fit a connecting pin into the tube insert and secure it with the tube set screw. Fit the second tube onto the pin and secure it by tightening its set screw.



Engage Connectors:

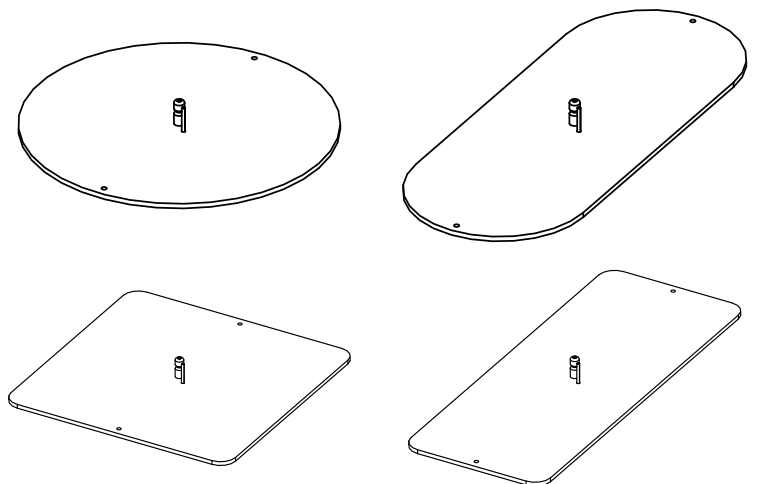
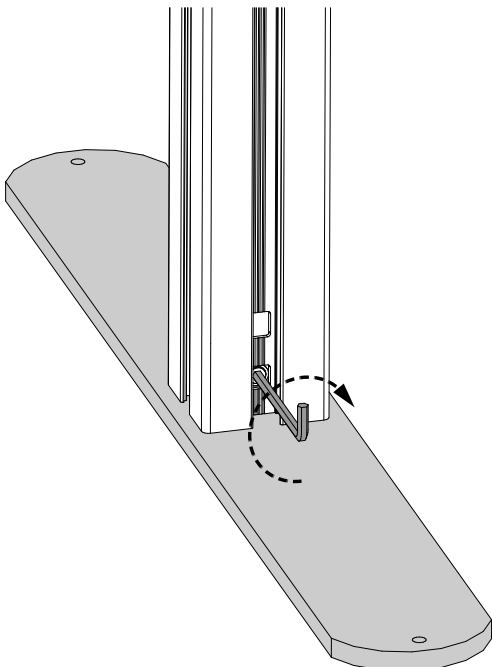
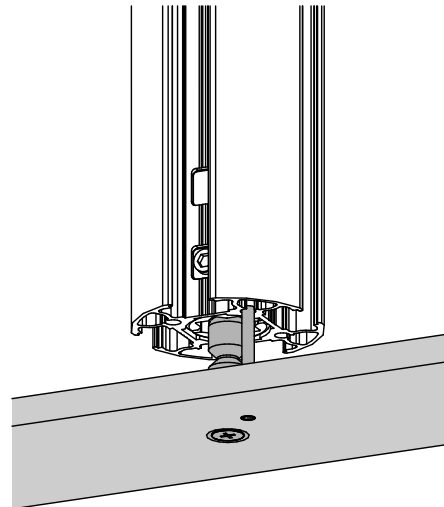
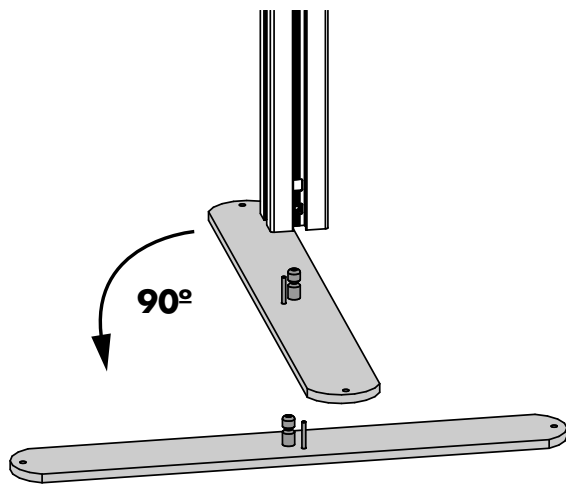
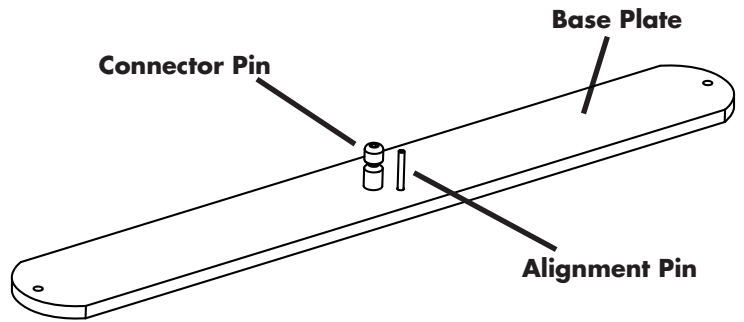
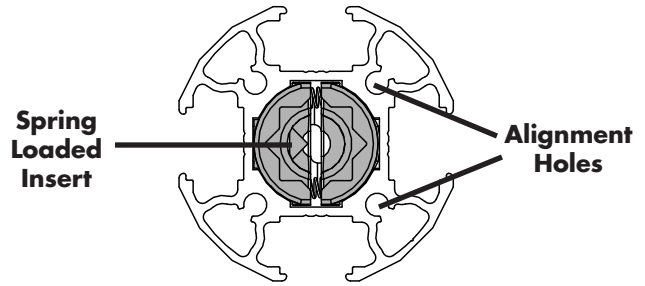
Engage® Connectors can be added to Tube Ultra but great care must be taken during the operation. Placement of connectors is critical and the preparation can be tricky. Connectors are held in place by #6 x 5/8" self drilling metal screws. Tighten the screw only until it makes contact with the connector as the screw can deform the connector (the screw is only meant to prevent the connector from sliding). If the screw is not seated against the connector, it can interfere with the connector operation.



Base Plates:

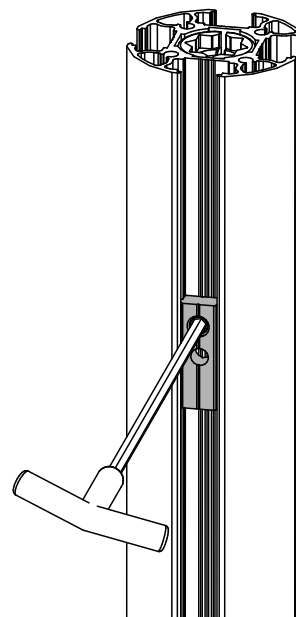
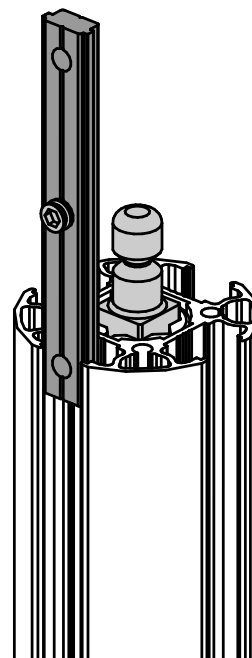
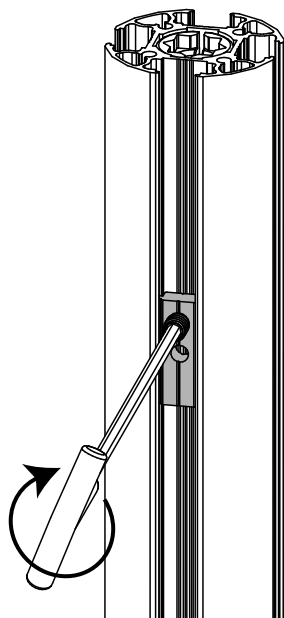
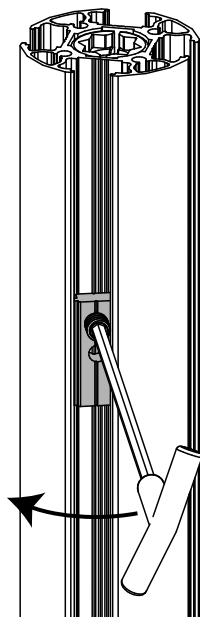
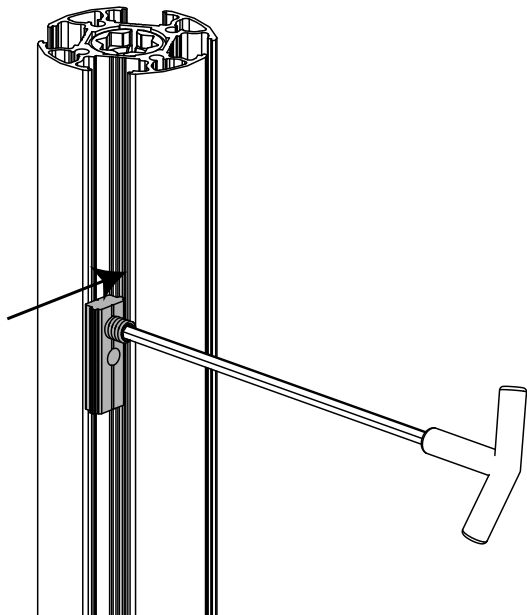
Base Plates give stability and support to vertical structures.

Install the Base Plate onto the end of a tube by fitting the Connector Pin into the Spring Loaded Insert of the tube end and the Alignment Pin into one of the four alignment holes in the tube extrusion. Tighten the tube Set Screw to secure.



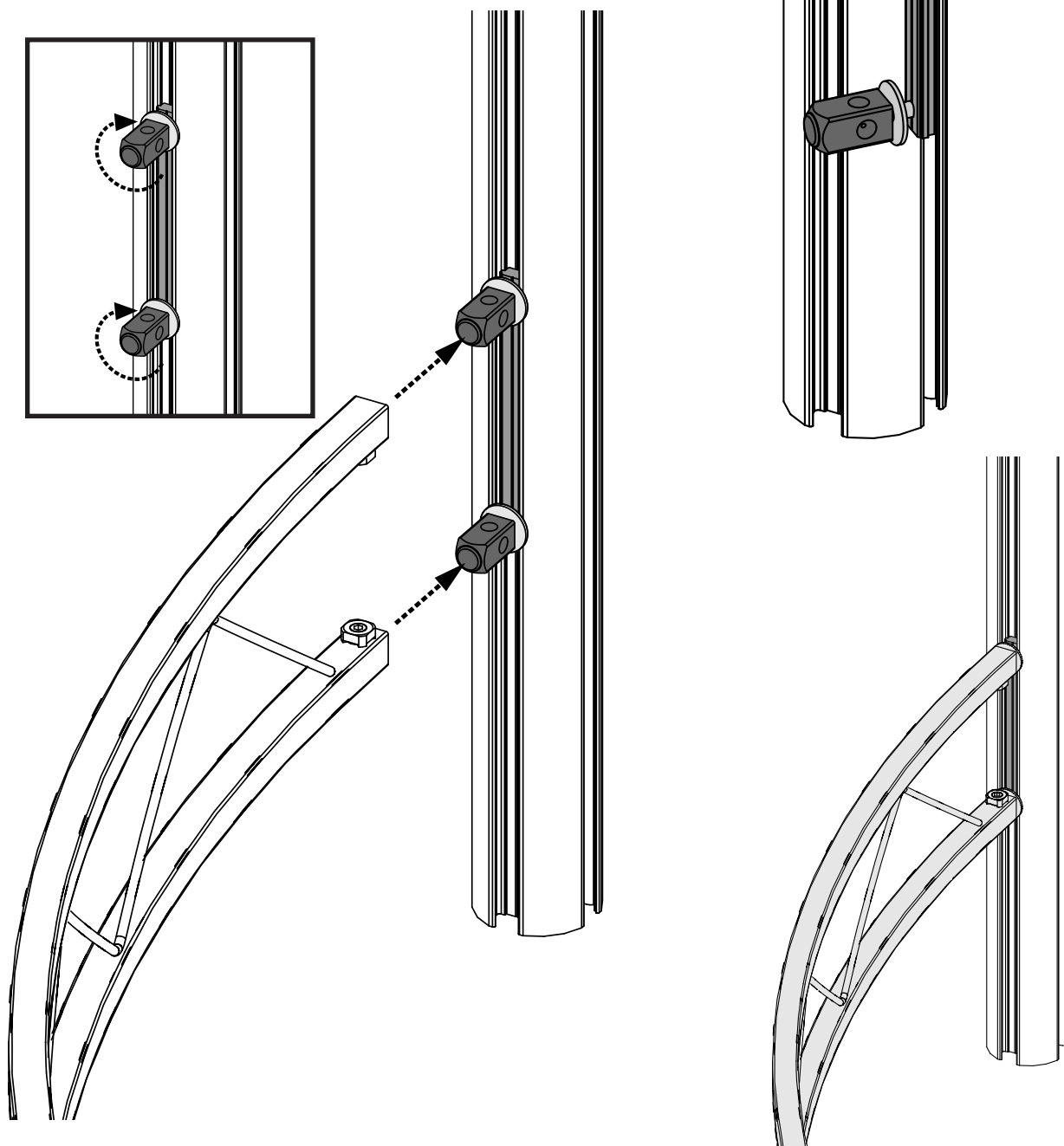
Nut Plates:

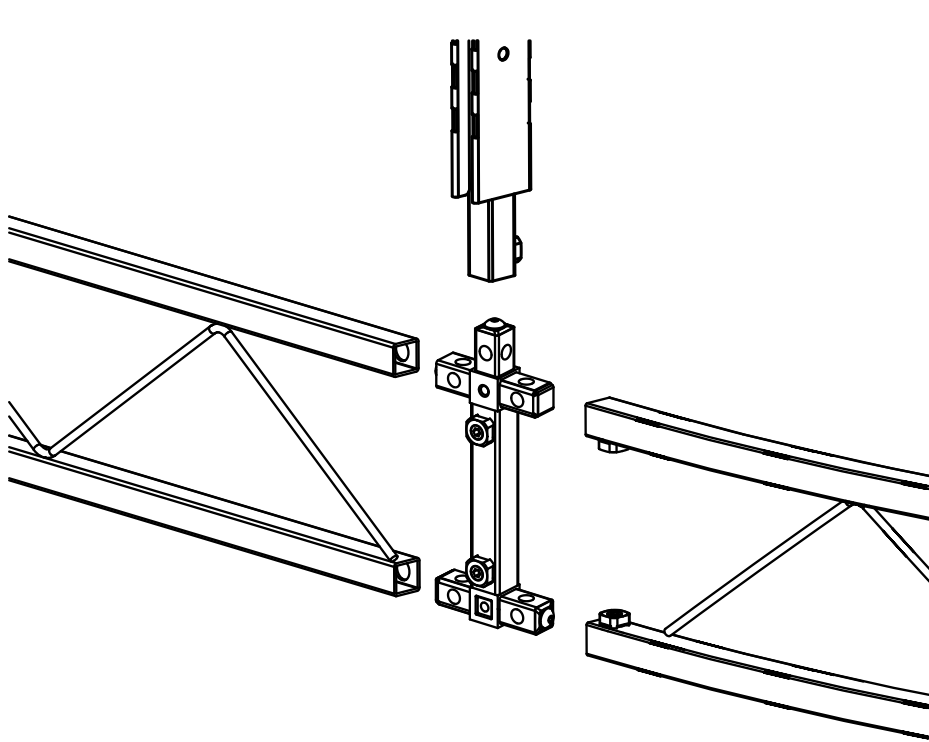
Nut Plates are needed when attaching many accessories. Nut plates can be installed in one of two ways: by sliding the plate into the slot before the tubes are assembled, or by angling the plate into the slot. Using the allen wrench inserted into the set screw will help when angling in the nut plate.



SkyTruss to Slotted Tube:

SkyTruss® to Tube Ultra™ Connectors come assembled. Slide or angle the nut plate into the slot, making sure the washer is outside the slot. Slide the connector to the desired location, then turn the SkyTruss blocks to secure. The blocks are spring loaded allowing them to adjust for mounting the SkyTruss. Fit the SkyTruss Section onto the blocks and tighten the SkyTruss set screws.

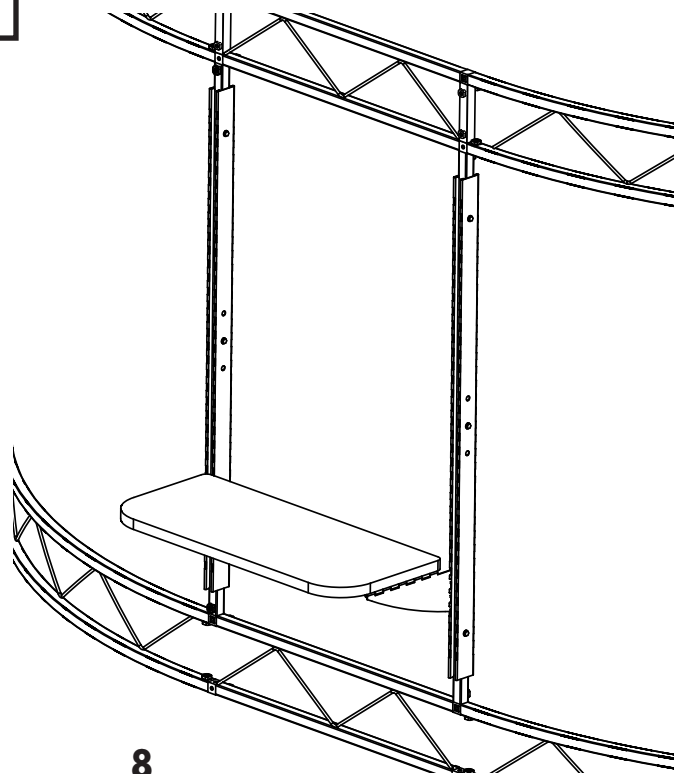




Double Shelf Standard with Vertical Support:

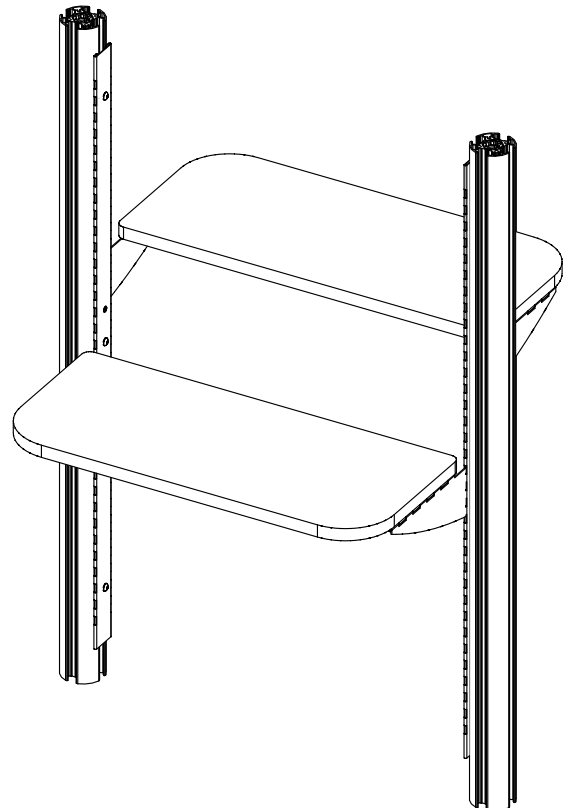
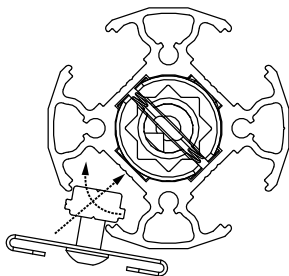
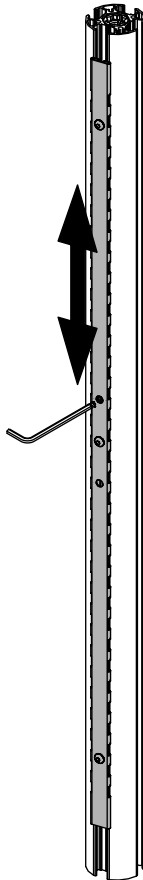
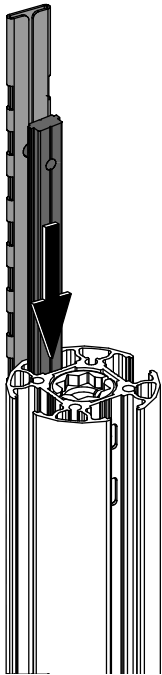
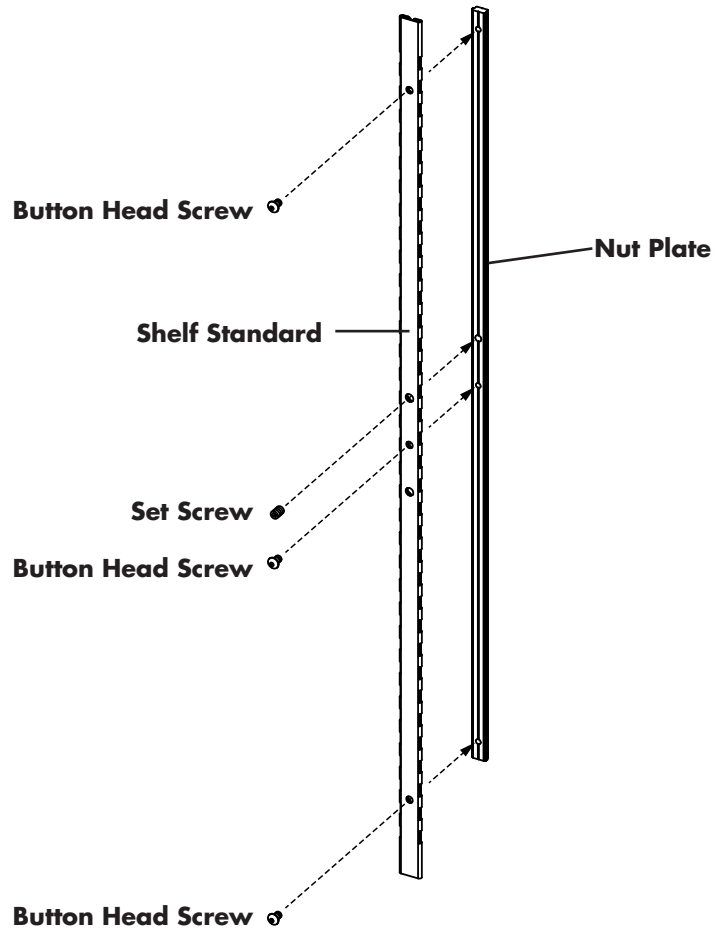
Assemble the Shelf Standards between two SkyTruss® assemblies using the Shelf Standard Connector. Shelves can be used on both sides.

Double Shelf Strip with Vertical Support Post



Shelf Standard:

Screw the set screw into the nut plate. Loosely attach the Double Shelf Standard to the nut plate with the three 1/4-20 x 3/8" button head retaining screws. Slide or angle the nut plate into the slot. Slide the shelf standard into position and screw down the set screw to lock it in place. Finish by tightening the three retaining screws. Shelf brackets can be used on either side of the shelf standard. Remove the Shelf Standard by unscrewing the retaining screws. Leave the nut plate and set screw in place for the next setup.

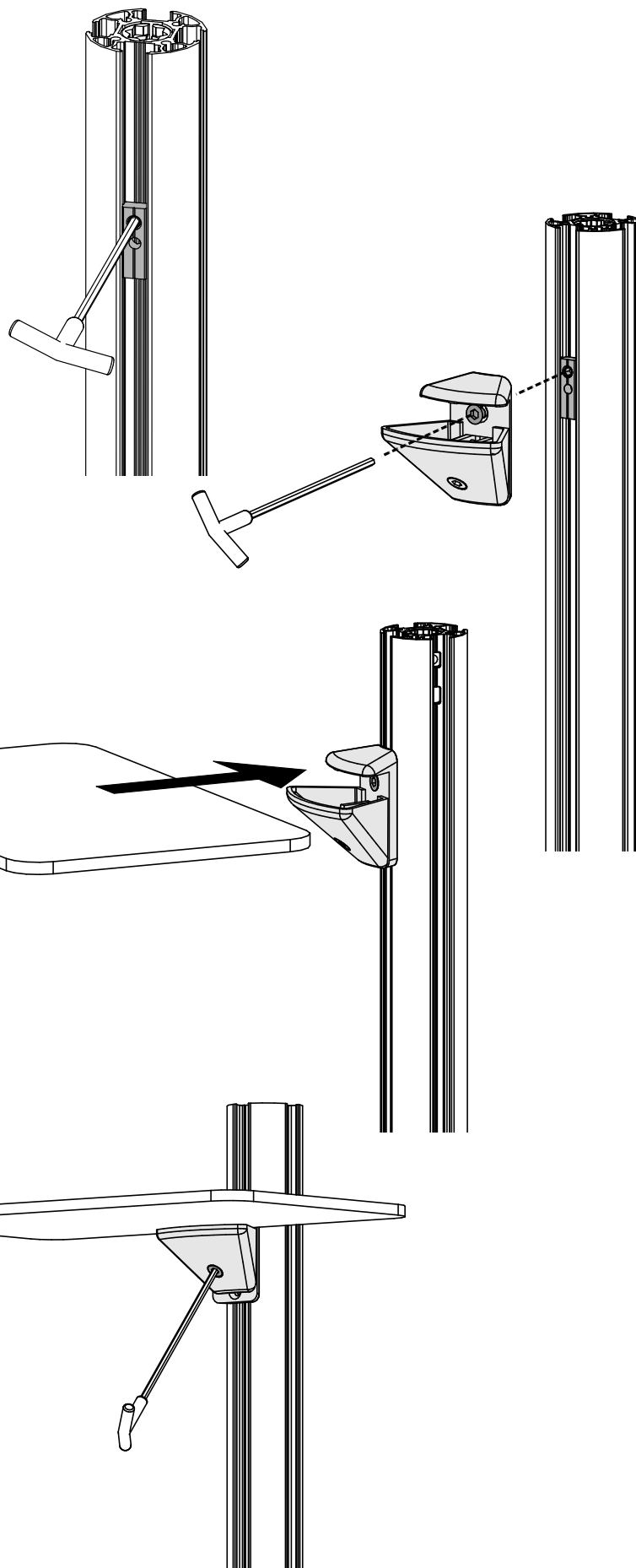


Shelves:

The shelf bracket will hold any of the plexi and wooden shelves designed for slotted tubes.

Install the nut plate and secure its position with the set screw. Mount the bracket to the nut plate with the 3/4" flat head cap screw.

Slide the shelf into the bracket and secure it by tightening the 1 1/4" flat head socket screw.



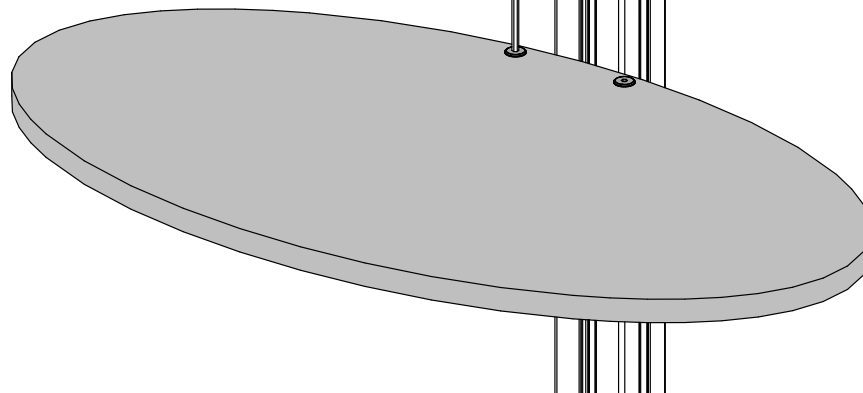
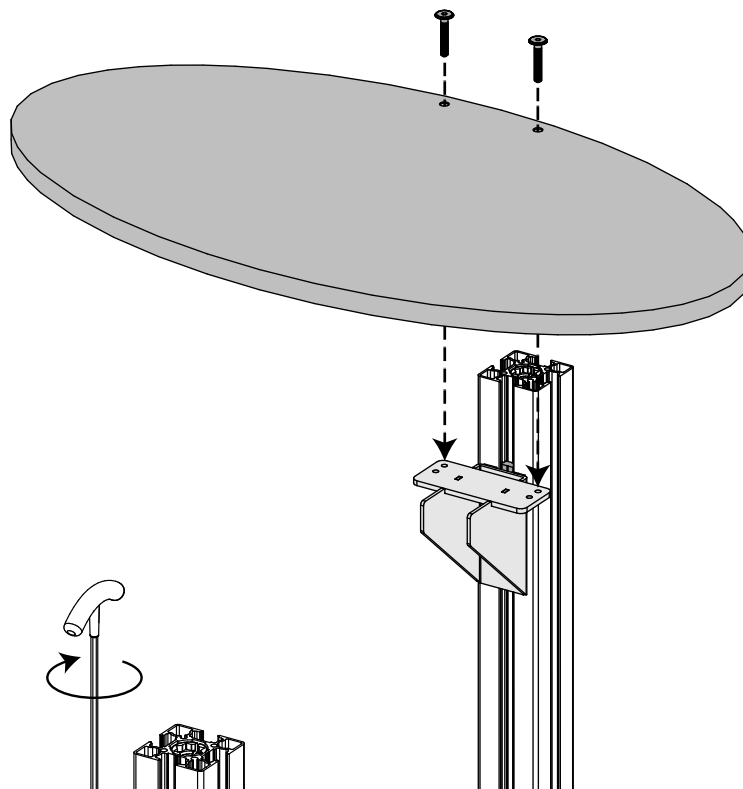
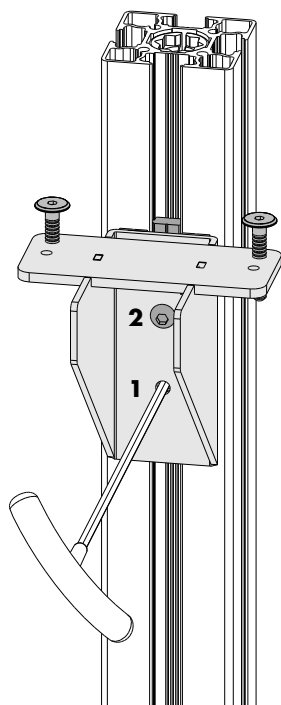
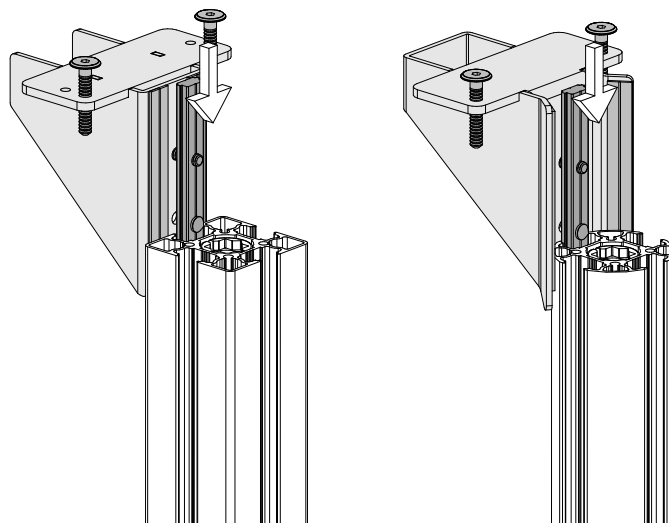
Counters:

The counter bracket will hold the heavier and larger wooden counters designed for slotted tubes. There is a different bracket for the square and the round tubes.

Slide the bracket assembly into the slot of the tube and secure its position with the nut plate set screw (1). Lock the bracket to the nut plate with the 1/4-20 x 3/4" button head cap screw (2). Fit counter onto the bracket, aligning the holes in the counter with bracket holes.

Secure the counter to the bracket with the 1/4-20 x 1 1/2" bolts.

Leave the nut plate and set screw in place for the next setup.

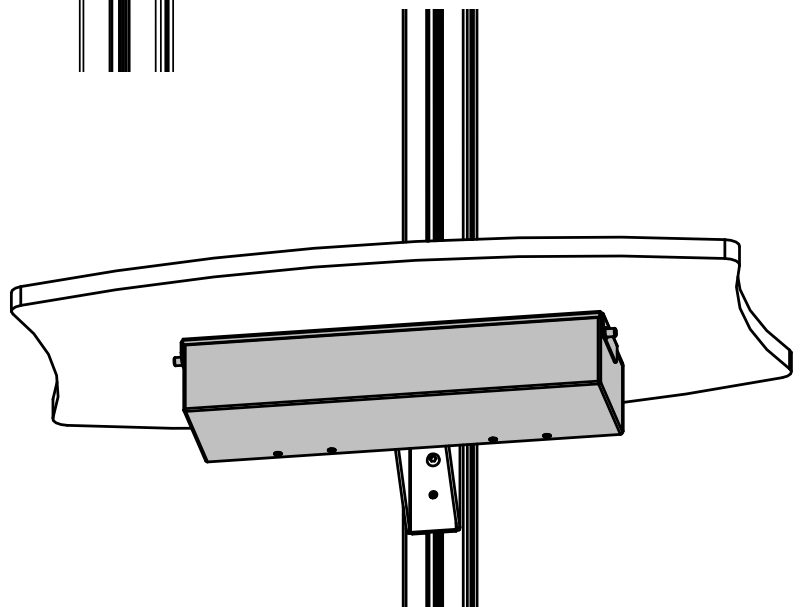
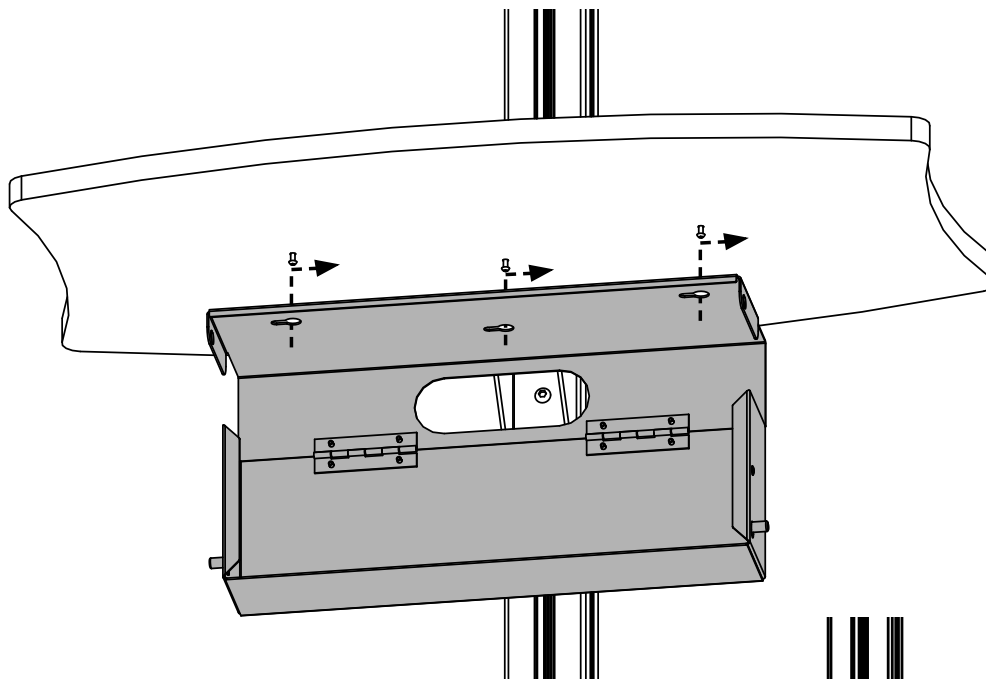
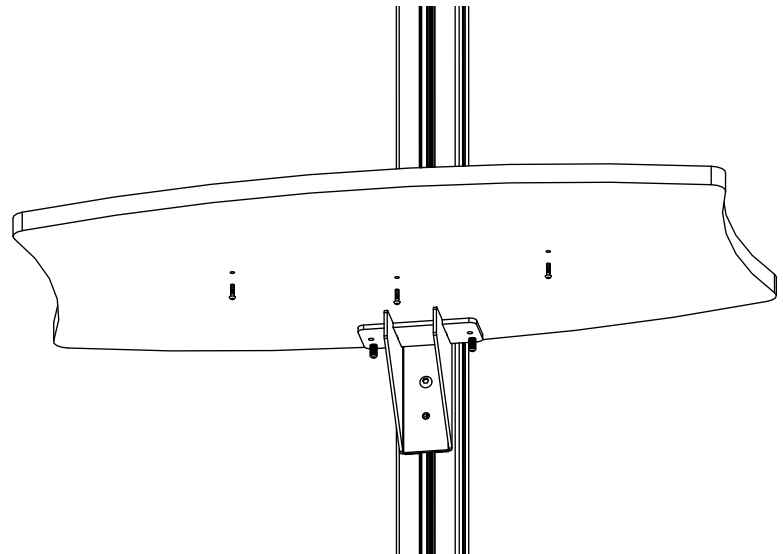


Under Counter Junction Box:

Junction boxes are used to hide power strips and excess cords.

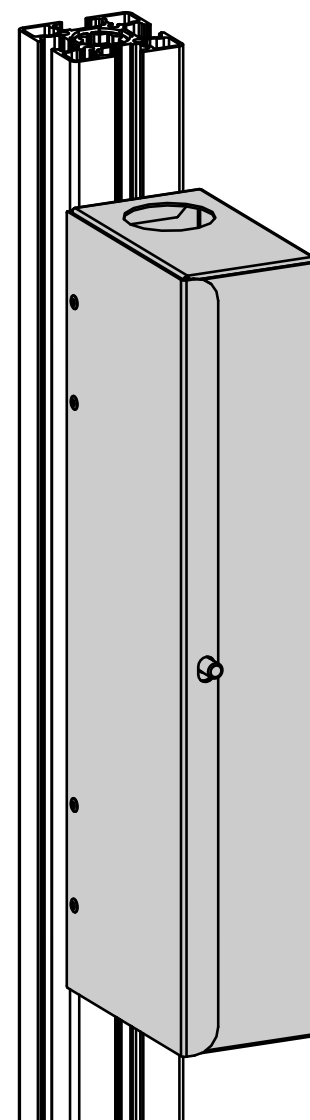
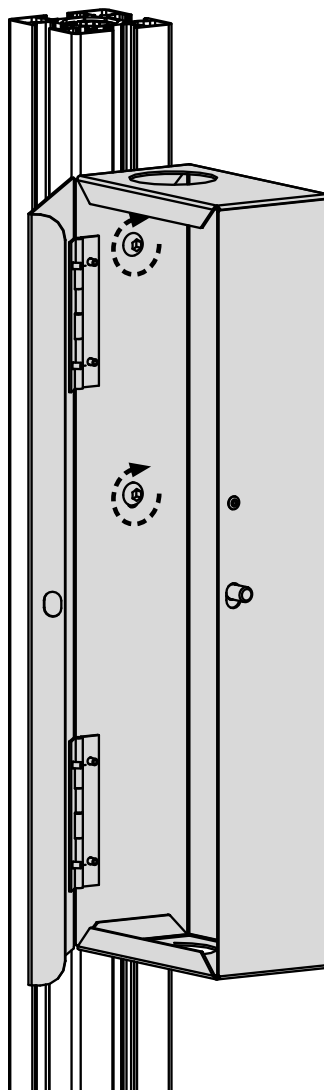
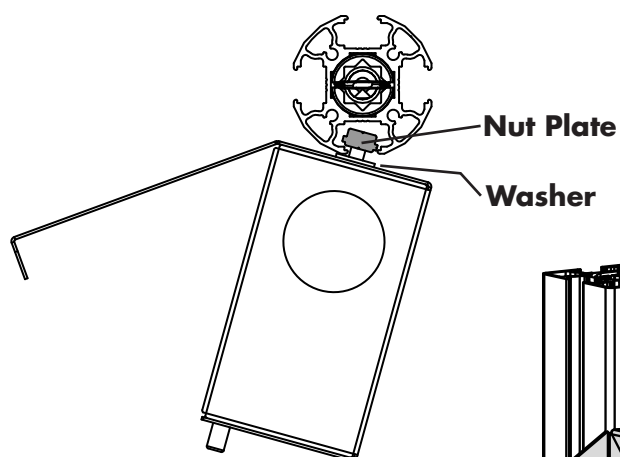
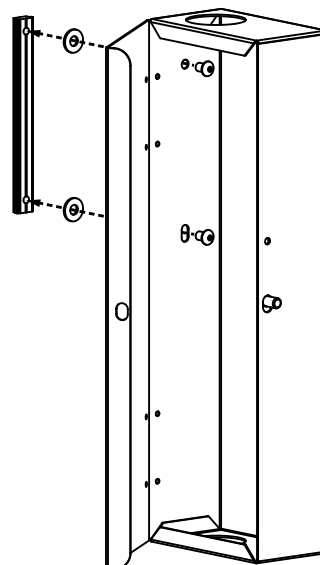
Locate the pilot holes in the underside of the counter. Screw in the 3 wood screws, leaving about 1/4" of the threads showing.

Fit the keyhole slots of the junction box top onto the screws and slide the top over to capture the screws. Tighten the screws securely, but **DO NOT OVERTIGHTEN**. The counter can be damaged if too much force is applied.



Slot Mounted Junction Box:

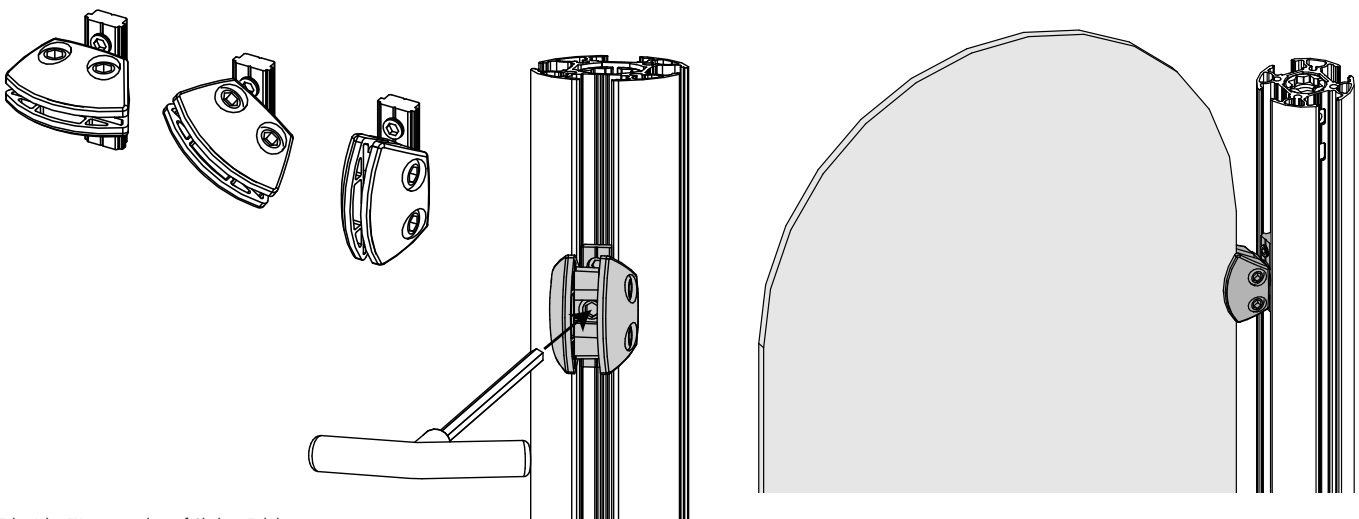
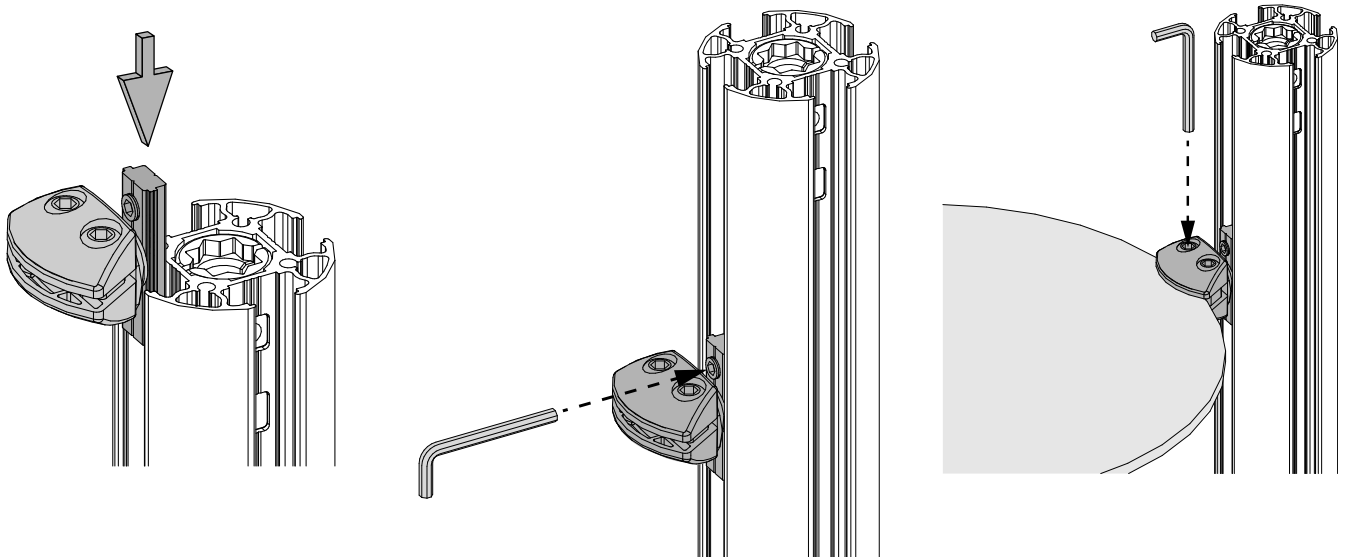
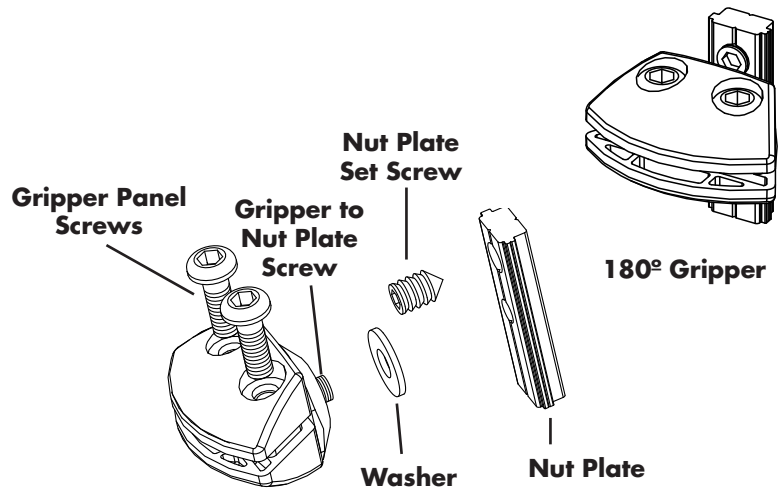
Assemble the Junction Box by fitting the screws from the inside of the box, through the holes, onto the washers, and then into the nut plate. Angle or slide the nut plate into the tube slot, position the box where desired, then tighten the screws from the inside.



Grippers:

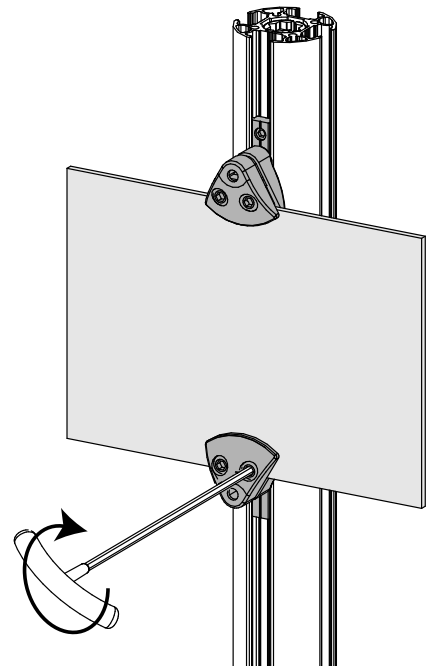
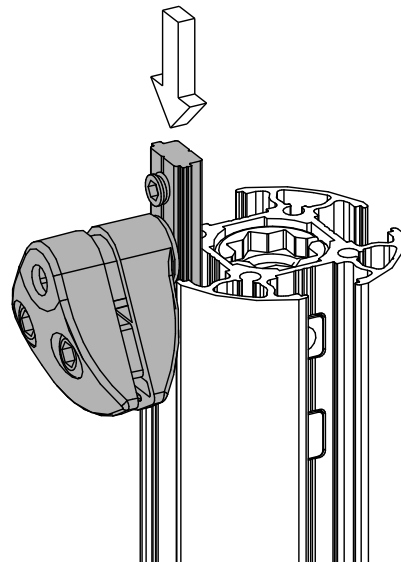
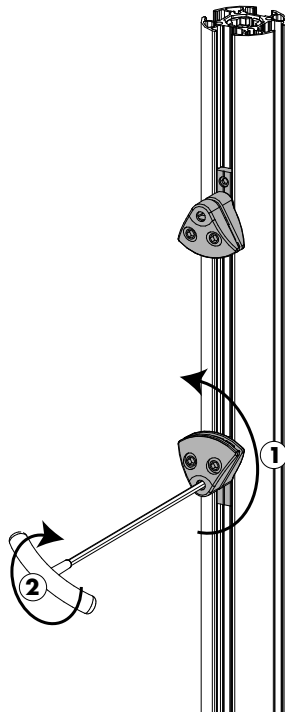
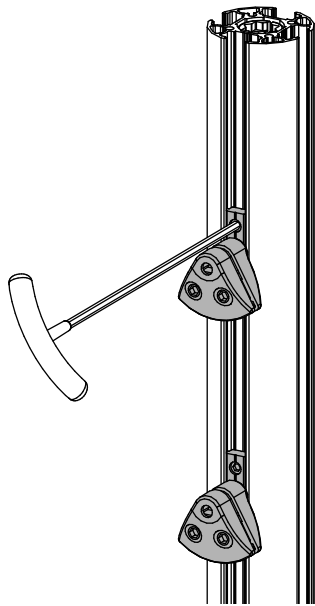
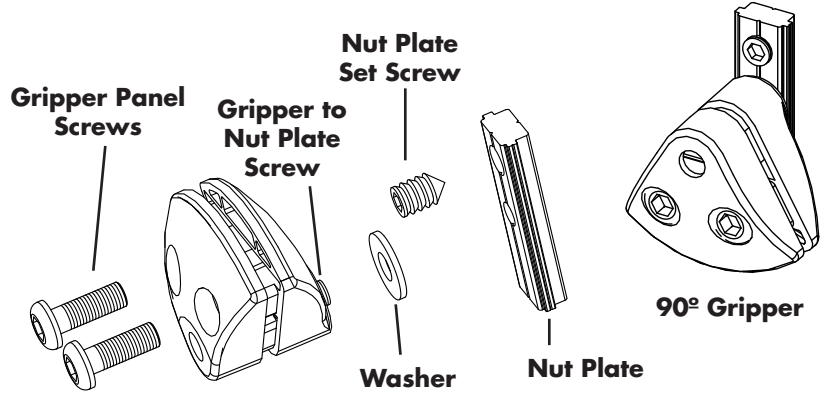
Grippers are used to hold panels or plexi shelves up to 3/16" thick. A single 180° Gripper positioned horizontally will hold one shelf. Two Grippers positioned vertically can be used to hold a larger sign.

180° Gripper: Slide or angle the nut plate into the slot making sure the washer is outside the slot, position the gripper, then tighten the nut plate set screw. Turn the gripper horizontally or vertically, then tighten the gripper to nut plate screw. Fit the panel or sign into the mouth of the gripper and secure it with the gripper panel screws.



Grippers: (cont.)

90° Gripper: With the gripper mouth pointing down so that the nut plate set screw is accessible, slide or angle the nut plate into the slot making sure the washer is outside the slot. Position the gripper, then tighten the nut plate set screw. Where required, rotate the Gripper so the mouth is pointing up (1), then tighten the gripper to nut plate screw (2). Fit the panel or sign into the mouth of the gripper and secure the panel with the gripper panel screws.

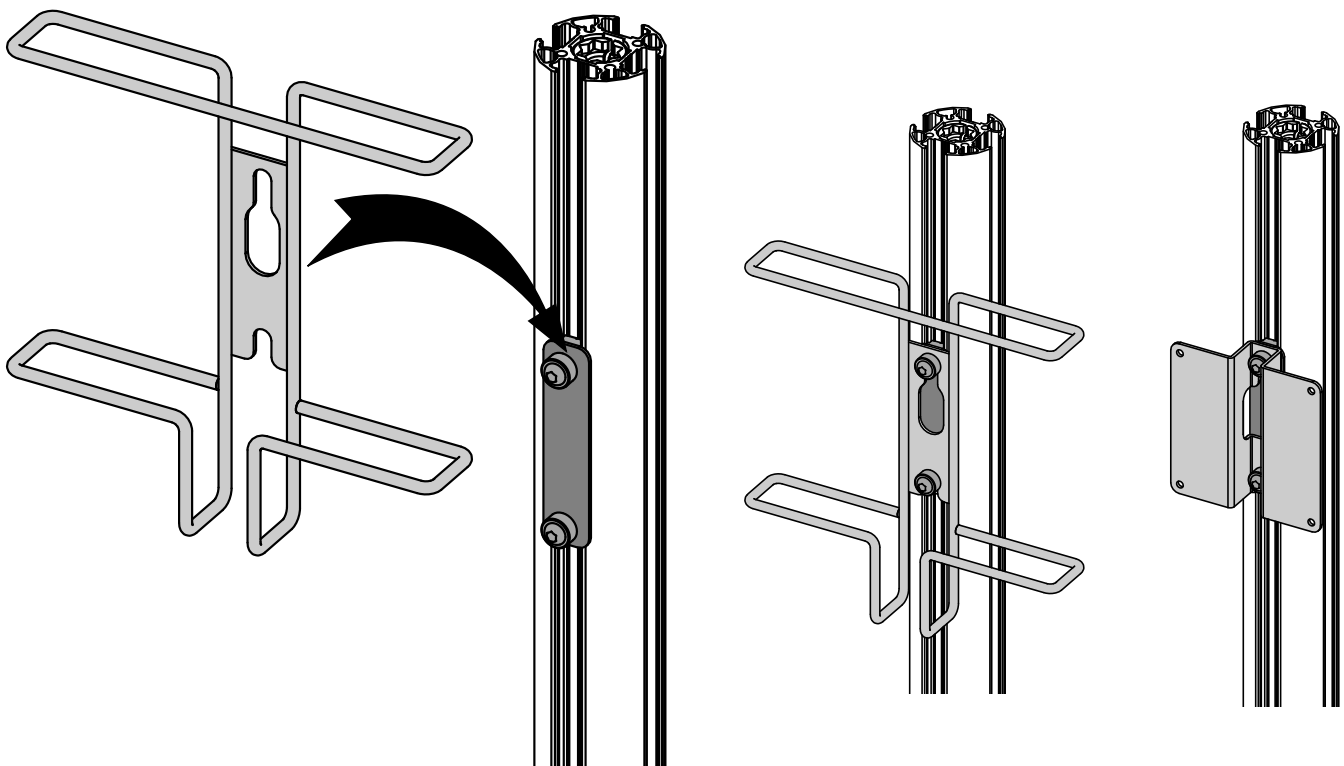
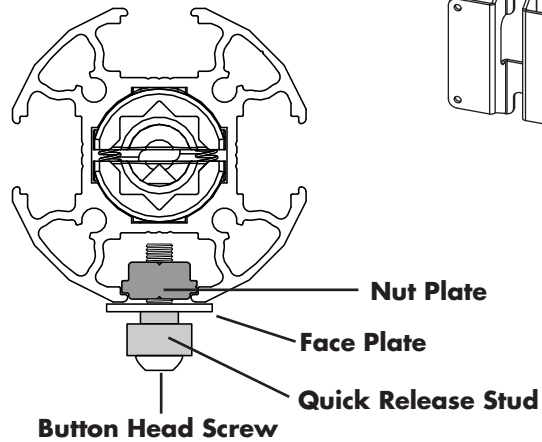
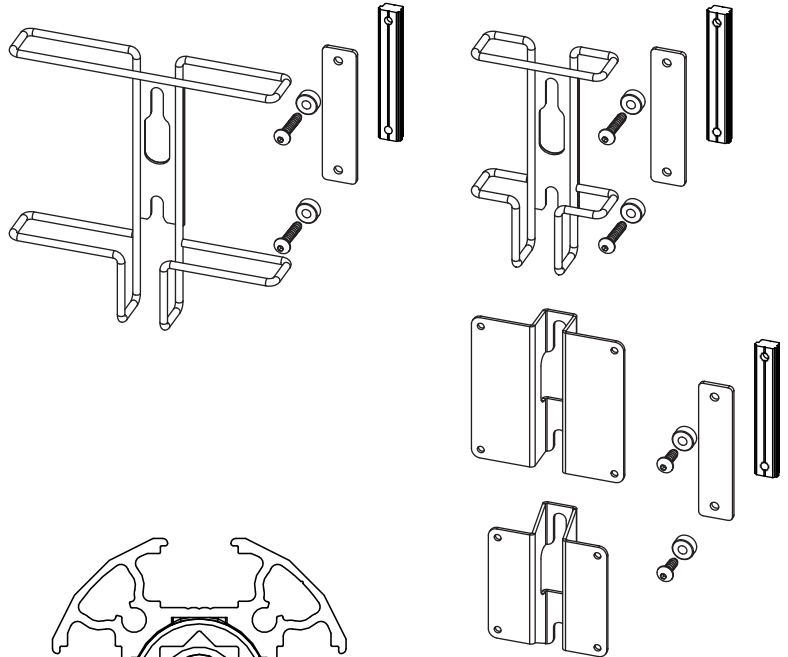


Literature Racks and Monitor Mounts:

Assemble the mounting base by fitting the 1/4-20 x 1" Button Head Screws through the Quick Release Studs, the Face Plate, and into the Nut Plate. Slide or angle the Nut Plate into the tube slot, slide the assembly to the desired location, then tighten the screws to lock it into position.

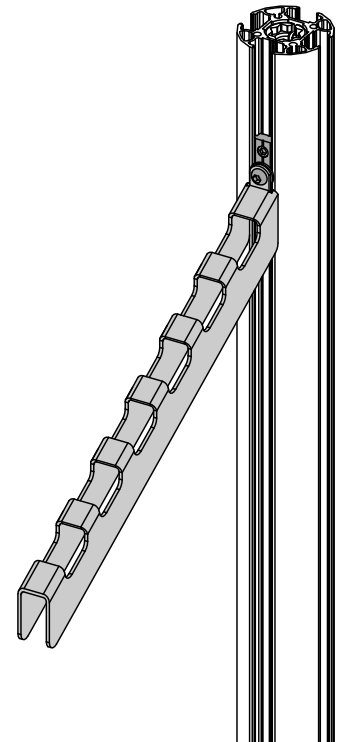
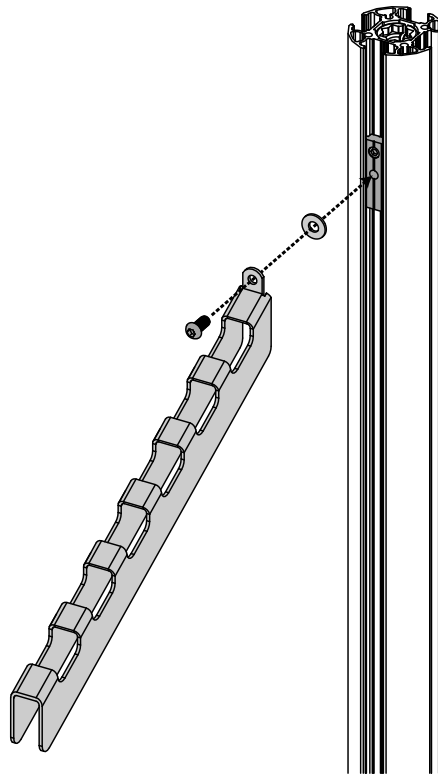
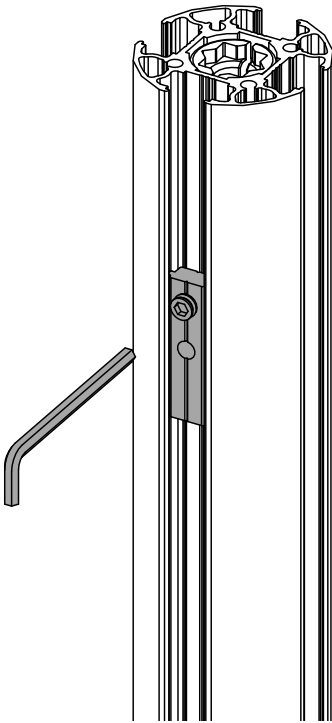
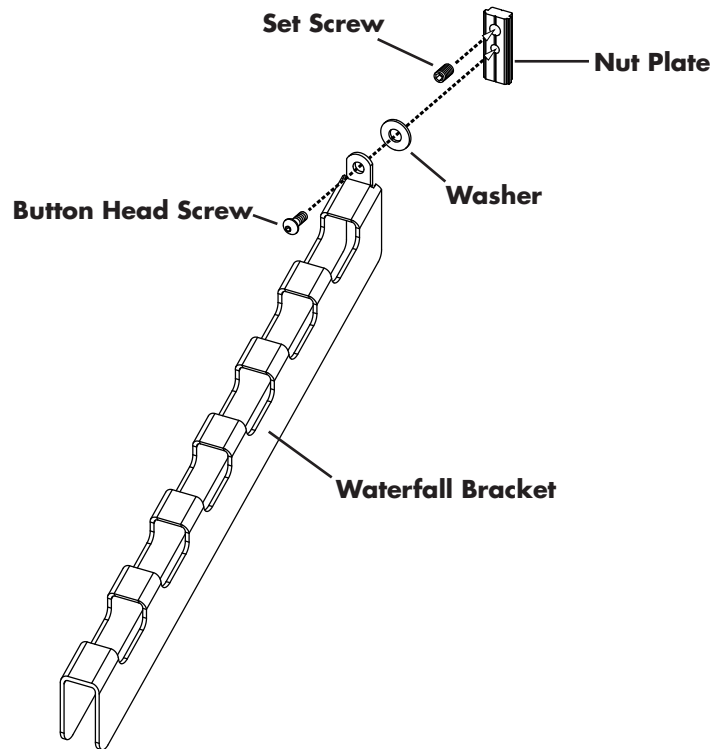
Fit the Literature Rack or Monitor Mount onto the Quick Release Studs.

To remove: lift off the Rack or Mount, loosen the screws of the base until the assembly can be angled or slid out of the slot. Keep the base assembly together for the next setup.



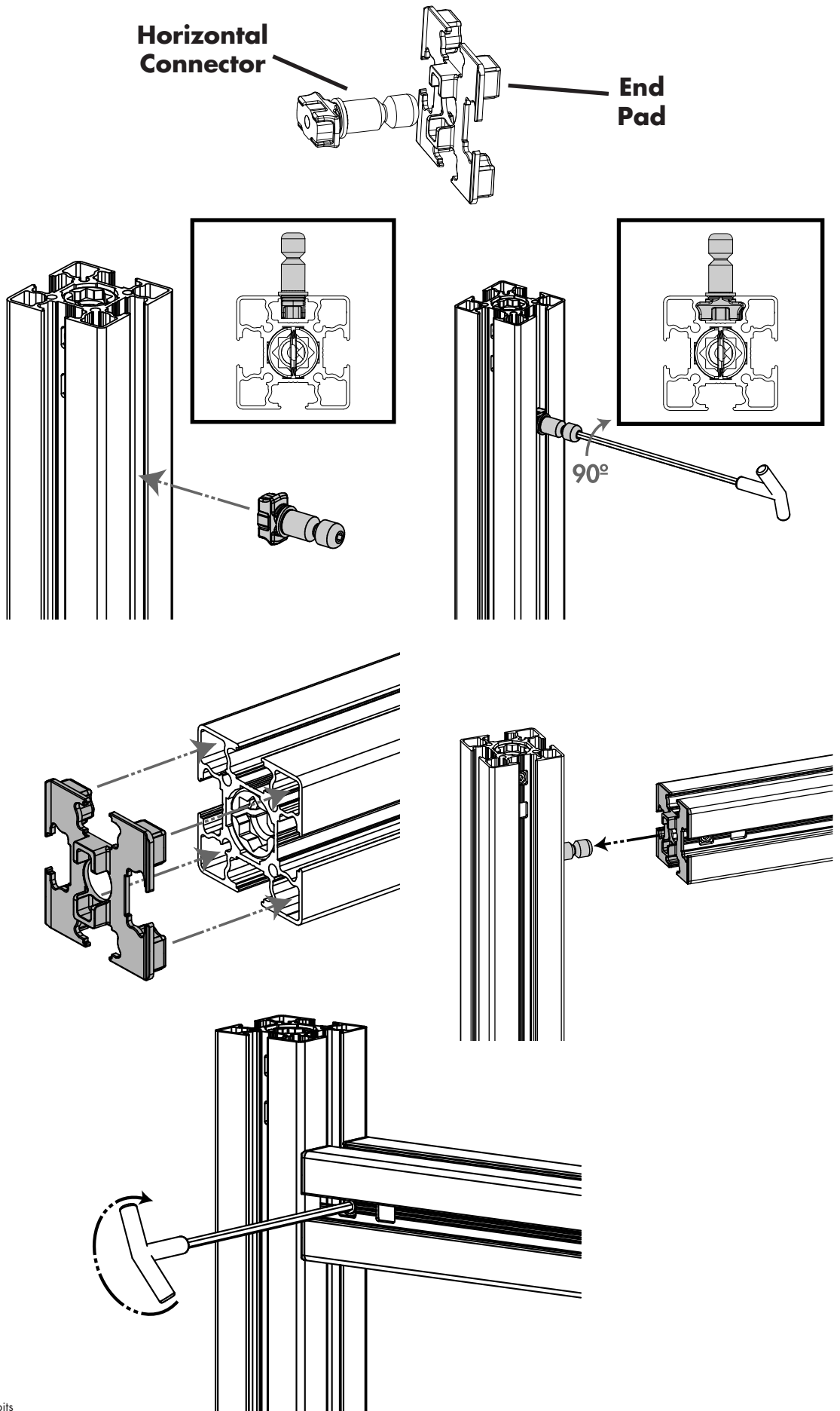
Waterfall Bracket:

Waterfall Brackets are used to hang product (usually apparel) for display. Slide or angle the Nut Plate into the slot, move it into the desired location and lock it into place with the Set Screw. Fit the 1/4-20 x 5/8" Button Head Screw through the hole in the Waterfall Bracket, through the washer and into the positioned nut plate. Tighten the screw securely.



Connecting Horizontal Tubes:

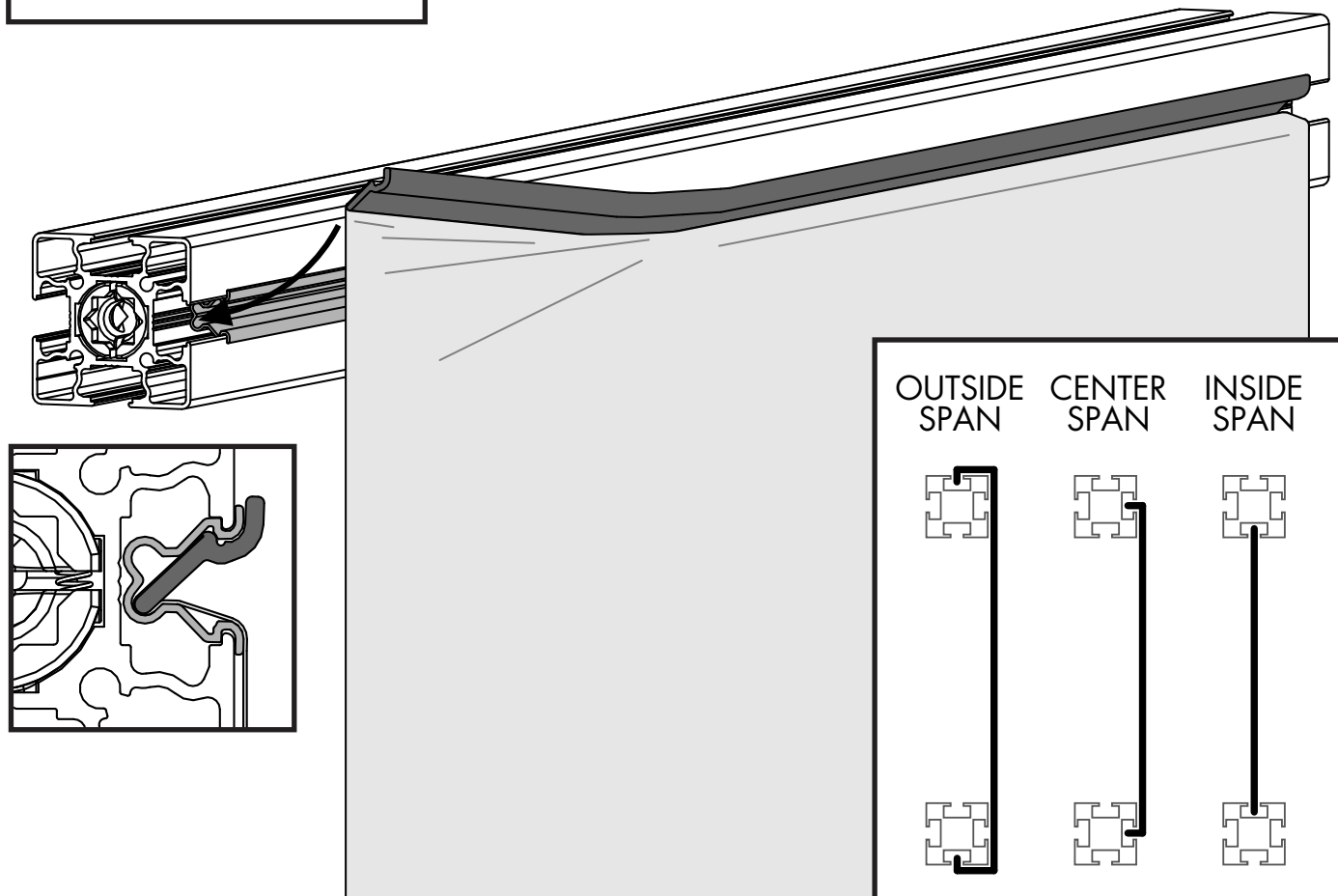
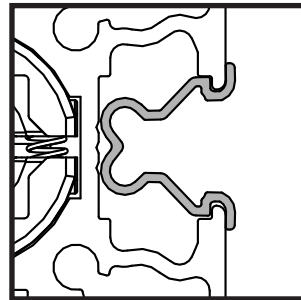
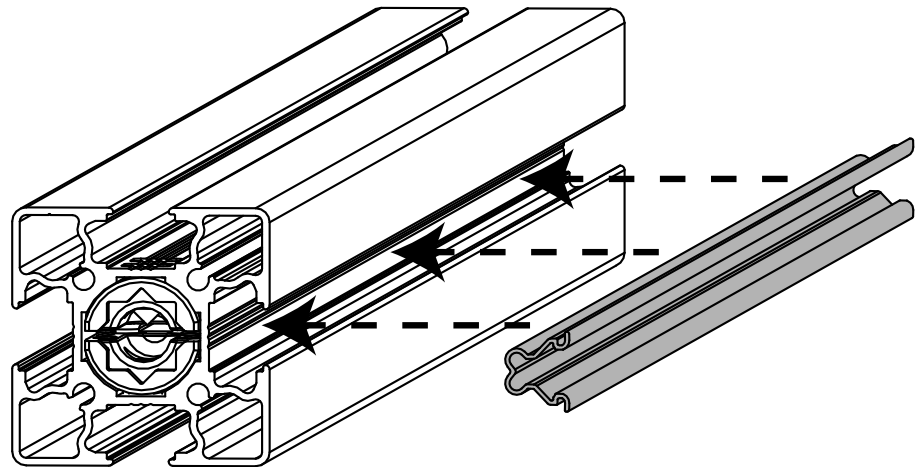
Fit Horizontal Connector into the slot of the vertical tube where the horizontal tube will be attached. Using an allen wrench, turn the Connector 90° to lock it into position. Fit the End Pad into the end of the horizontal tube. The center hole of the End Pad will fit onto the Horizontal Connector with the center "lip" fitting into the slot of the vertical tube. Secure the assembly by tightening the set screw of the horizontal tube.



Slotted Banners:

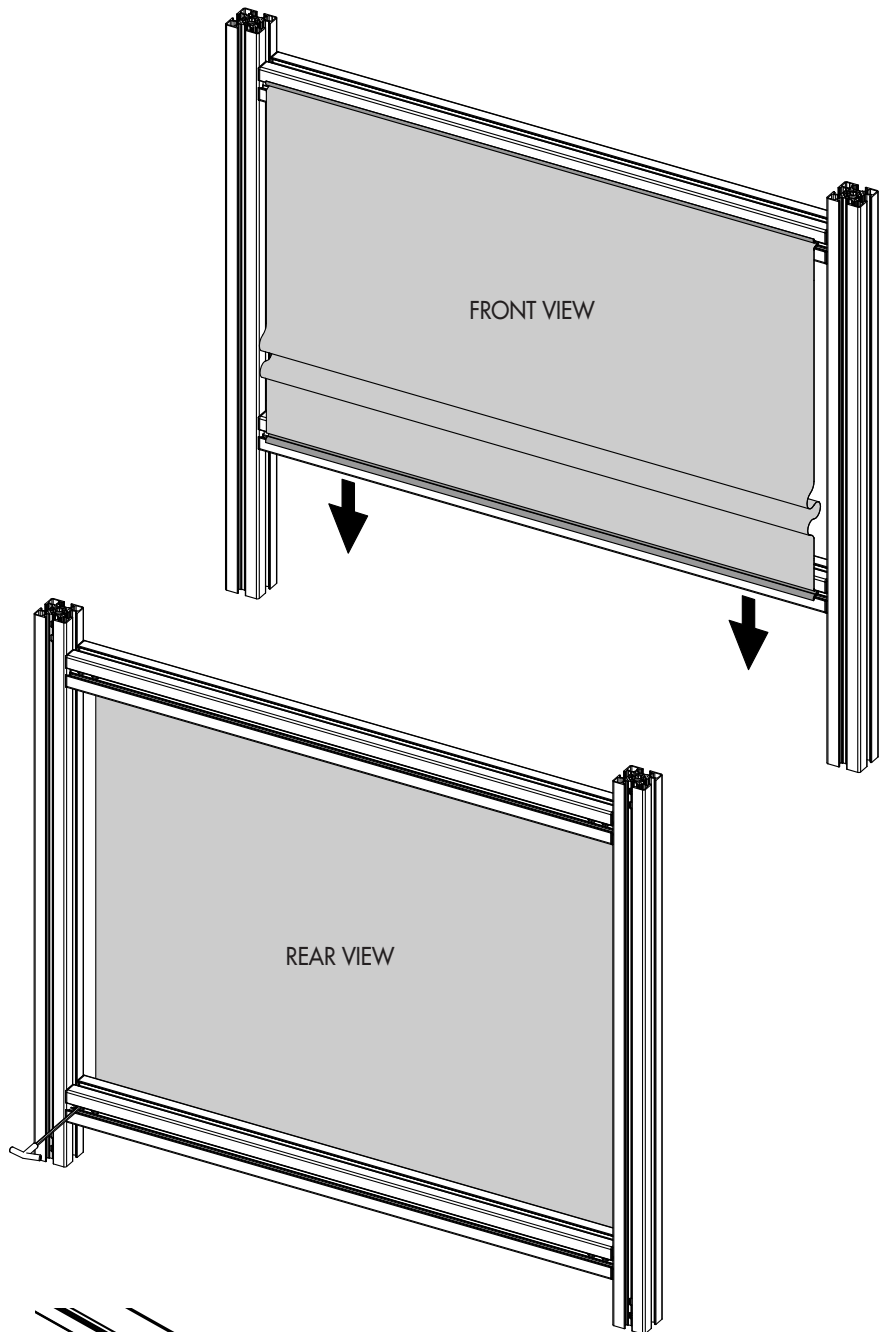
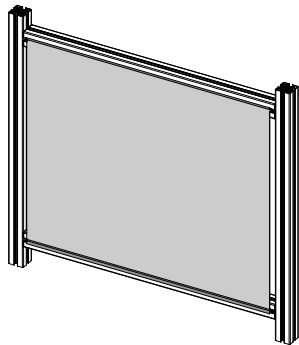
To mount banners onto Tube Ultra™, each slot where a banner will be used will have an insert installed during pre-setup before leaving the Skyline® manufacturing facility. If, at any time, the position needs to be changed, the insert can be snapped out of the slot and snapped into a different location. The banner has a flexible extrusion attached at each end. This extrusion angles into the insert as shown with the outside lip fitting over the insert. Start at one end of the banner and work your way across.

Banners can be installed in one of three variations: Outside Span, Side Span, or Inside Span.



Slotted Banners (cont.):

Fit the top horizontal tube to the desired finished level. Attach the lower horizontal tube below it some inches above its final position. This will allow some slack in the banner making the installation easier. Attach the top of the banner to the top horizontal tube and the bottom to the bottom horizontal tube (see page 19). Slightly loosen the set screws securing the bottom horizontal tube to the connector pins in the vertical tube. Carefully slide the bottom horizontal tube, end caps, and the connector pins down the vertical tube until the banner is taut. Finish by tightening the set screws on the bottom horizontal tube.



To remove the banner, simply use your finger to pull the lip of the extrusion off the insert, then, run your finger down the length of the banner extrusion.

