

C.R. LAURENCE CO., INC.

Intelli-Track SPS

Phase One - Installation Instructions

Tools and Supplies:

Ratchet Wrench with 4" Extension
9/16" Open-End Wrench (two required for suspension mounting)
9/16" Hex Socket
3/16" Hex Socket or Open-End Wrench
7/32" Hex Socket or Open-End Wrench
Hammer with Smooth Face
Measuring Tape
CRL PLS2 Palm Laser or Optional Conventional Bubble Vial Level
Circular Table/Bench Saw with Aluminum Cutting Blade

Phase One SPS Track Installation

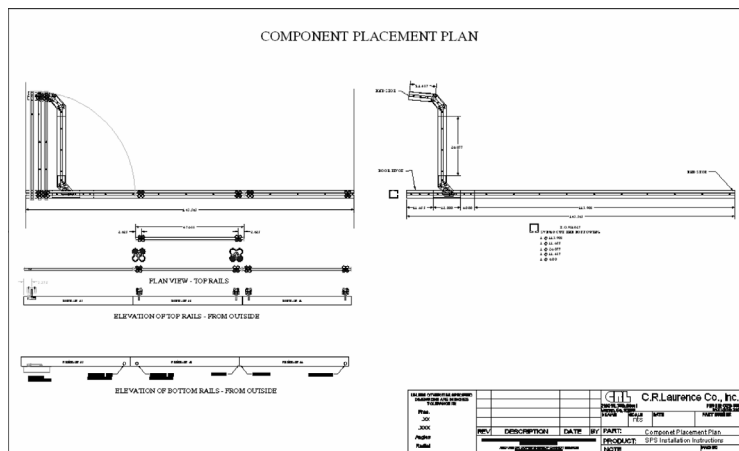
IMPORTANT NOTES:

- 1) THE CRL STACKING PARTITION SYSTEM HAS UNIQUE STRUCTURAL SUPPORT REQUIREMENTS. PLEASE REQUEST OR DOWNLOAD, FREE OF CHARGE, OUR "SPS STRUCTURAL ENGINEERING DESIGN GUIDE" FOR USE BY THE ARCHITECTURAL/ENGINEERING DESIGN GROUP ON THIS PROJECT.
- 2) FASTEN TRACK TO THE OVERHEAD SUPPORT STRUCTURE WITH 3/8" HEX HEAD TYPE FASTENERS MADE FROM ONE OF FOLLOWING MATERIALS: A307 GALVANIZED OR A316 STAINLESS STEEL. ALWAYS USE LOCK WASHERS.
- 3) ALL GLASS SHOULD BE FULLY TEMPERED WITH POLISHED EDGES. LAMINATED GLASS SHOULD NOT BE USED WITH CRL WEDGE-LOCK™ RAILS. HOWEVER, LAMINATED GLASS CAN BE USED FOR FULLY FRAMED WALL PANEL INSTALLATIONS.
- 4) TRACK IS PRE-DRILLED TO ALLOW FOR MOUNTING TO OPTIONAL SUSPENSION BRACKETS OR DIRECTLY TO CONCRETE, METAL OR WOOD. PLEASE CONSULT WITH CRL TECHNICAL SALES. FASTENERS TO ATTACH TRACK OR BRACKETS TO STRUCTURE ARE NOT PROVIDED BY CRL.
- 5) THE CIRCULAR TABLE/BENCH SAW MUST BE CAPABLE OF CUTTING 3/8" (9.5 MM) THICK ALUMINUM SECTIONS. THE DIAMETER OF THE ALUMINUM CUTTING BLADE MUST ACCOMMODATE AN EXTRUSION PROFILE WITH THE FOLLOWING DIMENSIONS: 4-7/8" (124 MM) WIDE X 3-9/16" (90.5 MM) TALL. MITER CUTTING CAPABILITY WILL NOT BE REQUIRED IN MOST CASES, AS CRL PROVIDES PREFABRICATED CORNERS AND INTERSECTIONS.

Steps:

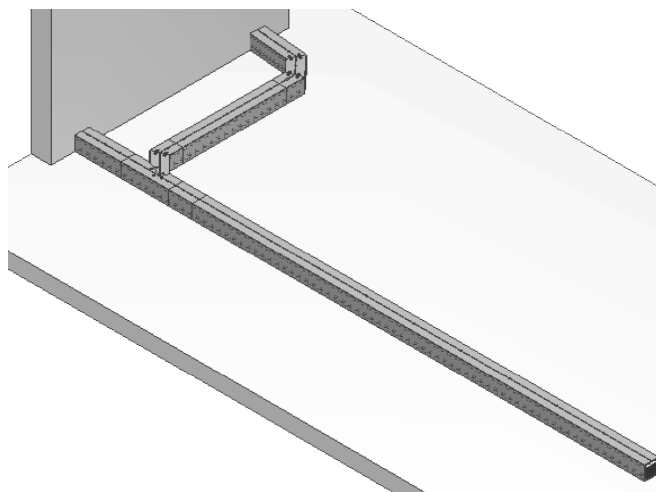
Read these instructions completely before beginning the installation.

1) Component Placement Plan (CPP)

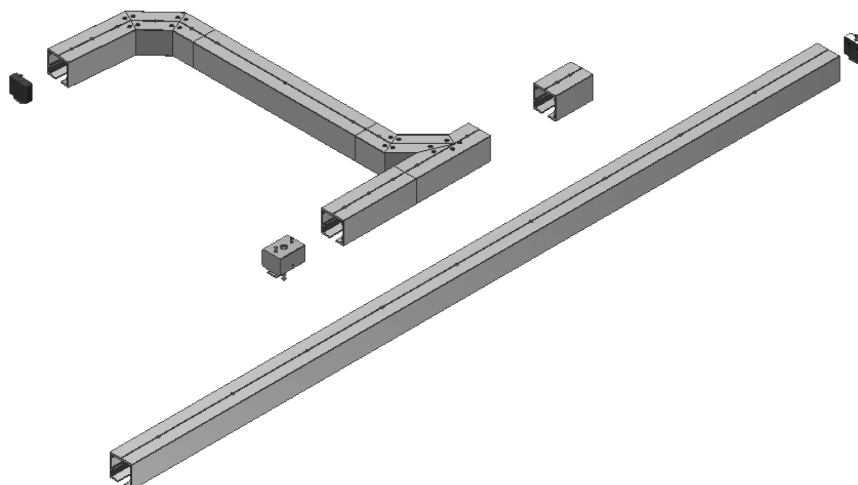


Review the Component Placement Plan provided by CRL to determine placement of the Track Components. Each component is labeled to match its designated location on the plan.

2) Lay Out the Track



2a) Lay out the Track on the floor as detailed by the Component Placement Plan. This will verify that all component pieces are present and correct.

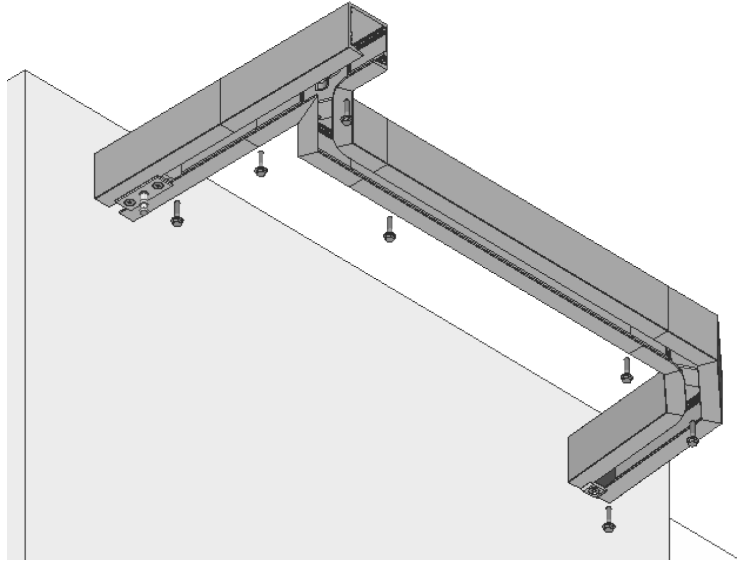


2b) Position all Stops and Door Top Pivots in their approximate locations in the Track as detailed by the CPP. See **Step 3** of the "SPS Door Top Pivot and Adjustable Roller Stop Installation Instructions" for proper installation procedures. Final adjustment will be done in **Phase 2** after the Track has been completely installed.

3) Before Track Installation, Consider the Following:

- 3a) CRL provides mounting systems for attaching Track directly to concrete, metal, and wood, as well as mounting systems for suspending Track beneath concrete and steel structures. When mounting Track directly to building structure, it is important that the mounting surface be level and parallel to the floor. The use of CRL shims to correct minor variations is acceptable.
- 3b) Measure from the track-mounting surface to the floor at multiple locations. The floor should be flat in all areas of panel movement. Abrupt changes in elevation can force all panels to be elevated above the nominal 1/4" (6.3 mm) floor clearance, as they must all clear the highest elevation when moving toward the parking area.
- 3c) 1/4" (6.3 mm) is the nominal clearance between the floor and bottom Wall Panel Rails; 5/16" (7.9 mm) is the maximum recommended clearance.

4) Install the Parking Area Assembly

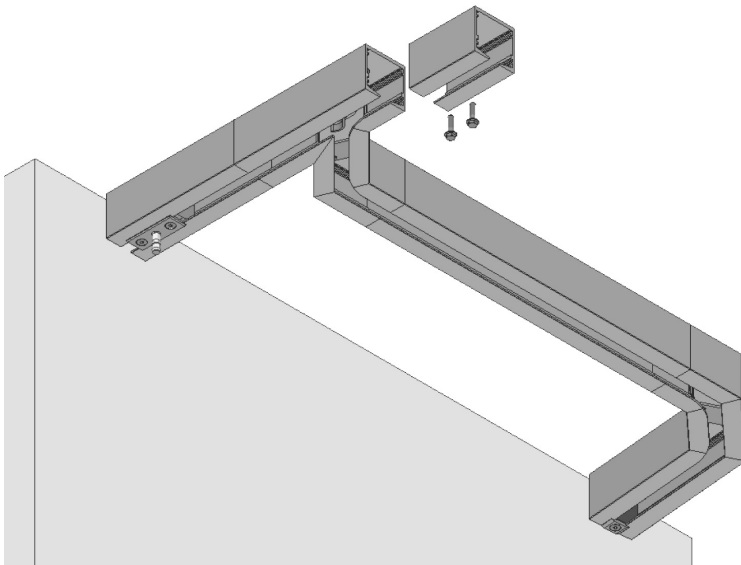


Install the Parking Area Assembly (ies), align and fasten to the overhead support structure. Use 3/8" hex head type fasteners made from one of the following materials: A307 Galvanized or A316 Stainless Steel.

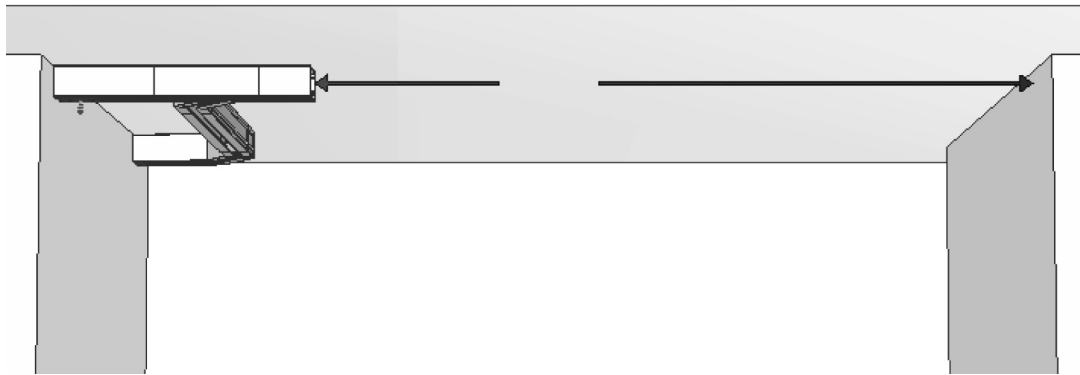
ALWAYS USE LOCK WASHERS.

5) Install the Remaining Track Sections

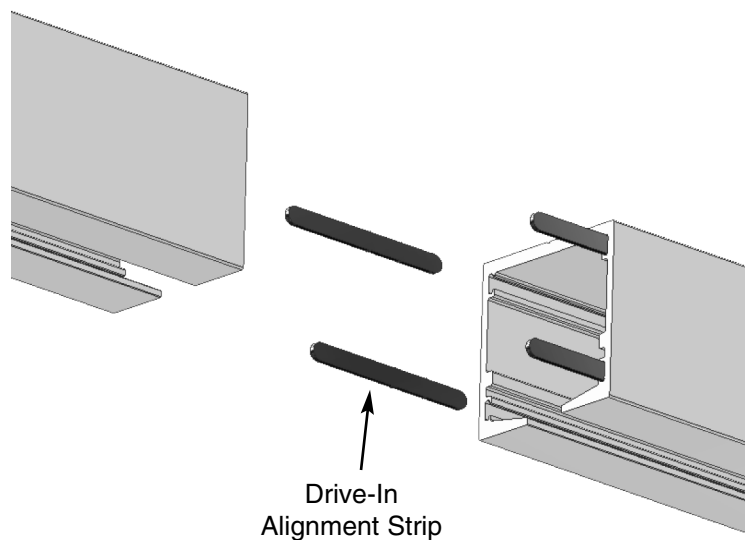
- 5a) If your SPS System Track was ordered prefabricated, proceed to **Step 5d**.



- 5b) If your SPS System was ordered with stock length Track(s), locate and install the Roller Access Splice as shown on the CPP. The Roller Access Splice is pre-drilled and ready to receive two fasteners. Align the Roller Access Splice with the end of the Parking Area Assembly, and fasten into place. Use 3/8" hex head type fasteners made from one of the following materials: A307 Galvanized or A316 Stainless Steel. **ALWAYS USE LOCK WASHERS.**



- 5c) Carefully measure back to the Roller Access Splice to determine your cut lengths of the remaining Track, allowing for slight clearance for later removal of the Roller Access Splice. Cut Track and then proceed to **Step 5d.**

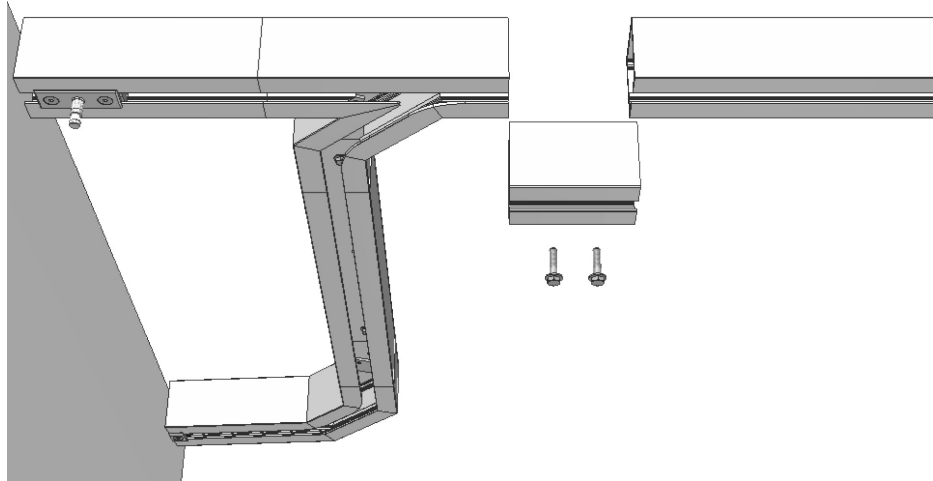


- 5d) Install four Drive-In Alignment Strips at all Track joints, except at the Roller Access Splice. Each Drive-In Alignment Strip installs barbed-end first, align with the receiving socket in the Track extrusion, and then drive-in with a smooth faced hammer. One half of each Alignment Strip's length should remain exposed, ready to engage the next Track section.
- 5e) Install the remaining Track section(s), working toward the Roller Access Splice and carefully following the CPP. Use 3/8" hex head type fasteners made from one of the following materials: A307 Galvanized or A316 Stainless Steel. **ALWAYS USE LOCK WASHERS.**



5f) Before installing the Track section(s) immediately before and after the Roller Access Splice, you will need to remove the Roller Access Splice, if previously installed, to allow room to engage the Drive-In Alignment Strips.

6) Roller Access Splice



6a) If you have not previously installed the Roller Access Splice, do so now. The Roller Access Splice is pre-drilled and ready to receive two fasteners. Align the Roller Access Splice with the end of the Parking Area Assembly and/or Track section(s), and fasten into place. Use 3/8" hex head type fasteners made from one of the following materials: A307 Galvanized or A316 Stainless Steel. **ALWAYS USE LOCK WASHERS.**

6B) Ensure slight clearance for later removal of the Roller Access Splice.

This First Phase of the installation is complete.

C.R. LAURENCE CO., INC.

Intelli-Track SPS

Phase Two - Installation Instructions

Tools and Supplies:

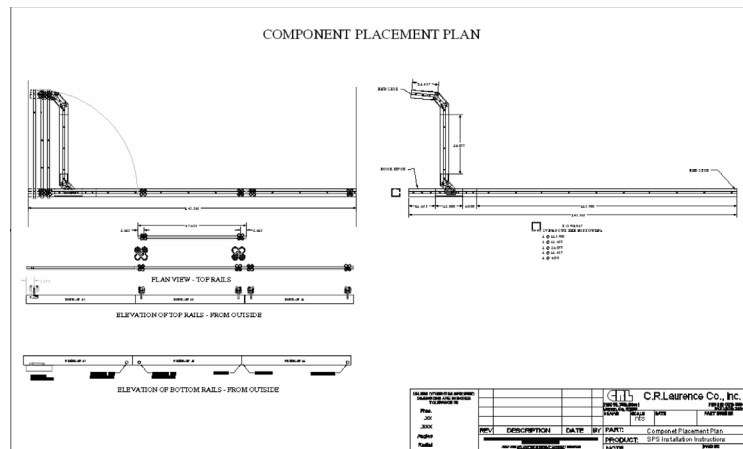
Ratchet Wrench with 4" Extension
3/16" Hex Socket or Open-End Wrench
7/32" Hex Socket or Open-End Wrench
9/16" Hex Socket
7/8" Open-End Wrench (two required)
Hammer with Smooth Face
#1 Phillips Screw Driver
Measuring Tape
Pencil
CRL Glass Cleaner

Phase Two SPS Glass Wall Panel Assembly, Installation

Steps:

Read these instructions completely before beginning.

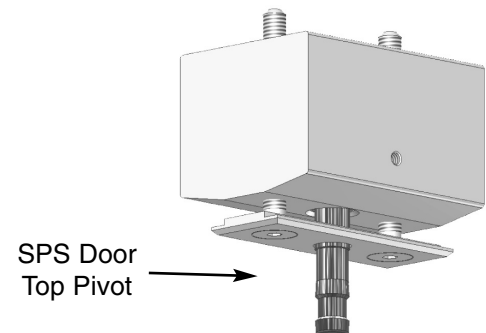
1) Component Placement Plan (CPP)



Review the Component Placement Plan provided by CRL to determine wall panel bottom rail configuration, size, and sequence number. **NOTE:** The #1 wall panel is the panel farthest from the parking closet. Each component is labeled to match its designated location on the plan.

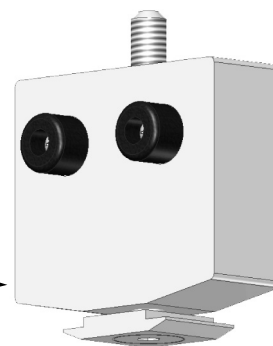
2) Adjusting Pivots and Stops

2a) If the system features Pivoting Door(s), locate the SPS Door Top Pivot that was previously installed into the Track during Phase 1 and position the center of the spindle at 2-3/4" (70 mm) away from the finished wall. Follow the "SPS Door Top Pivot and Adjustable Roller Stop Installation Instructions" to secure the Pivot(s).

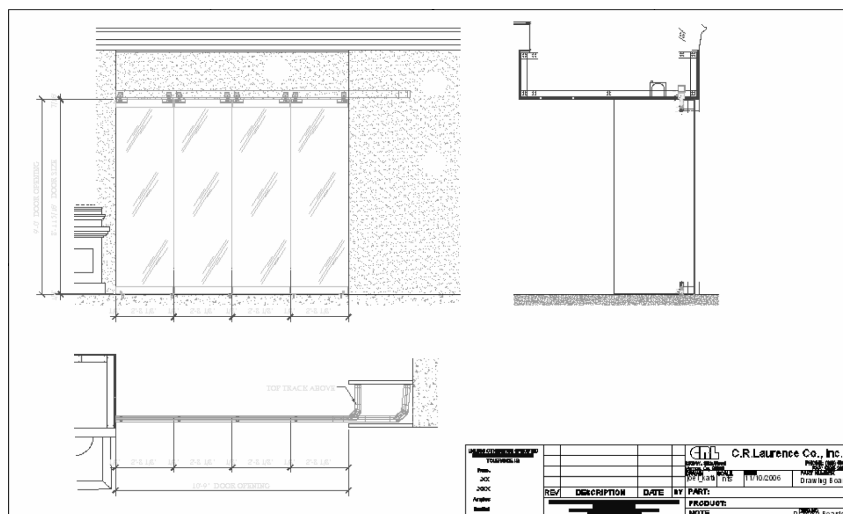


2b) Then locate the Adjustable Roller Stop(s) near the Pivoting Door(s) and position as detailed on the CPP. This stop will prevent the movable wall Panel from running into the Pivoting Door. Locate the remaining Adjustable Roller Stops and position them at the ends of the Track. Follow the "SPS Door Top Pivot and Adjustable Roller Stop Installation Instructions" to secure the Stop(s).

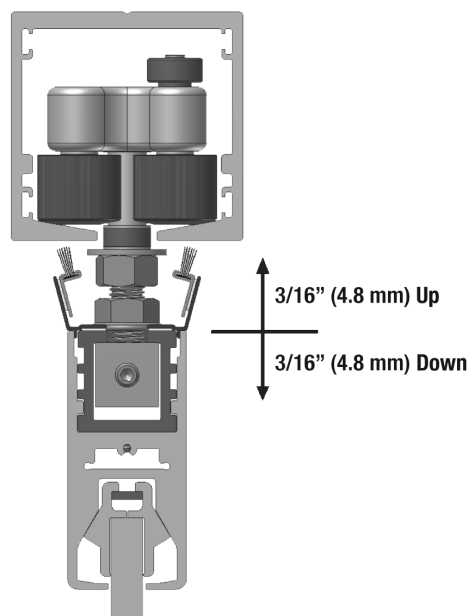
Adjustable Roller Stop



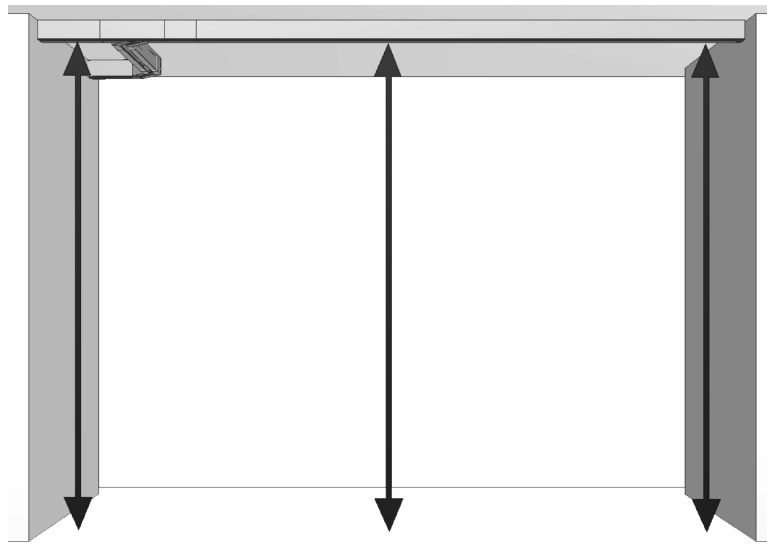
3) Determining Glass Sizes



3a) If field conditions have been carefully inspected, glass can be fabricated before Track installation, but the safest route is to measure for glass after the Track is installed.

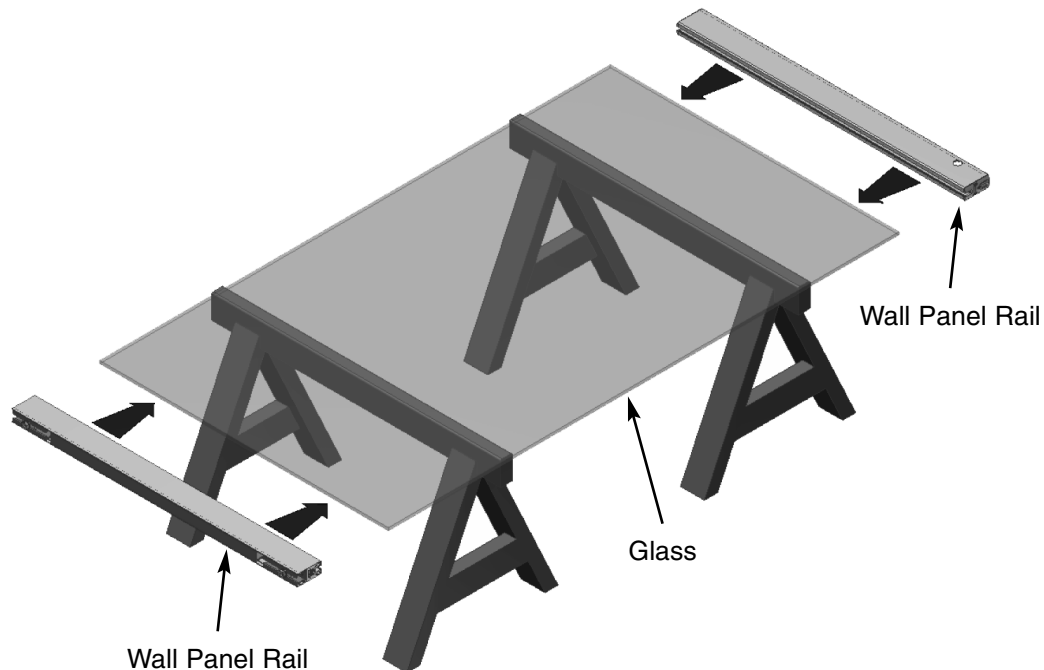


3b) CRL Technical Sales can provide glass deduction dimensions for the various combinations of Glass Wall Panel Rail profile heights, in combination with the Supporting Track (at the nominal roller height adjustment). The CRL SPS allows for plus and minus 3/16" (4.8 mm) height adjustment from nominal, for a total of 3/8" (9.5 mm) height adjustment.



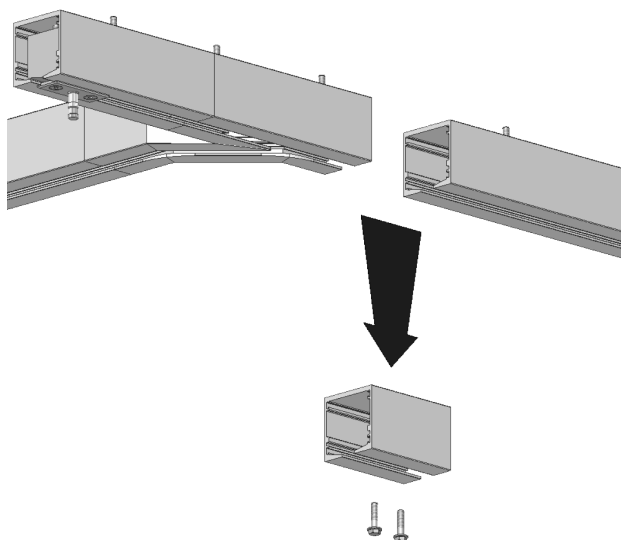
- 3c) Before measuring for glass sizes, consider conditions detailed in 3b and 3c of Phase 1. Measure from the bottom of the Track to the floor, deduct for the top and bottom rails, as well as the nominal 1/4" (6.3 mm) clearance above the floor. The determination of panel width requires many considerations, but in normal conditions the glass widths match the Wall Panel Rails and Door Rails. All vertical gaps between walls, Wall Panel Rails, and Door Rails are calculated at 1/8" (3.2 mm) unless specific instructions were given at time of ordering, refer to CPP to verify.
- IMPORTANT NOTE:** All glass should be fully tempered. Laminated glass should not be used with CRL WedgeLock™ Rails when fabricating Moving Wall Panels. However, laminated glass can be used for fully framed wall panels (supplied by others).

4) Wall Panel Assembly

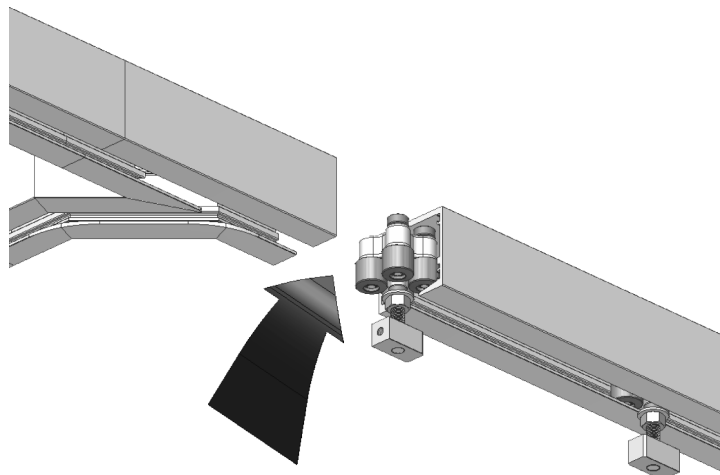


Attach the top and bottom Glass Wall Panel Rails onto the glass per the "Glass Wall Panel Assembly Instructions".

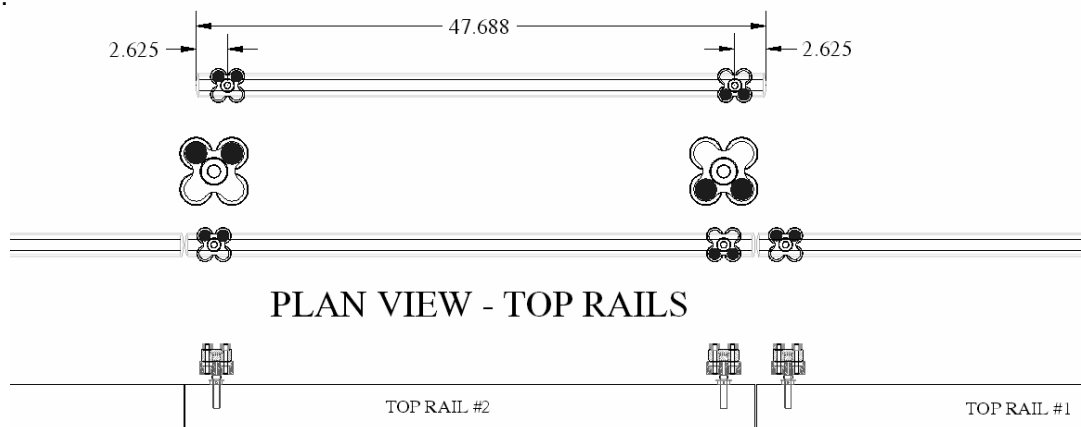
5) Installing the Sliding Wall Panels into the Track



5a) Remove the Roller Access Splice, which is typically located in front of the first Parking Area Track intersection. Consult CPP for location.

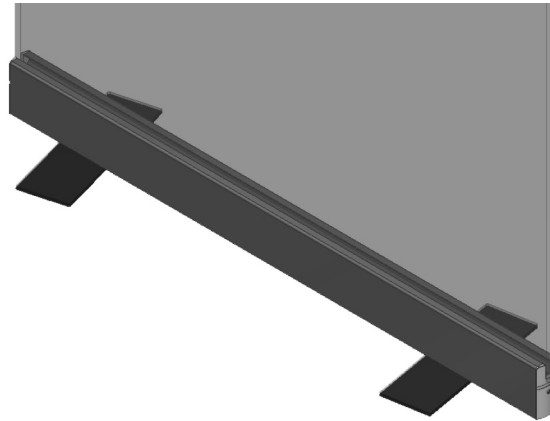


5b) Starting with panel #1, install a pair of Intelli-Track™ Roller Assemblies into the SPS Track through the roller-access opening.



ELEVATION OF TOP RAILS-FROM OUTSIDE

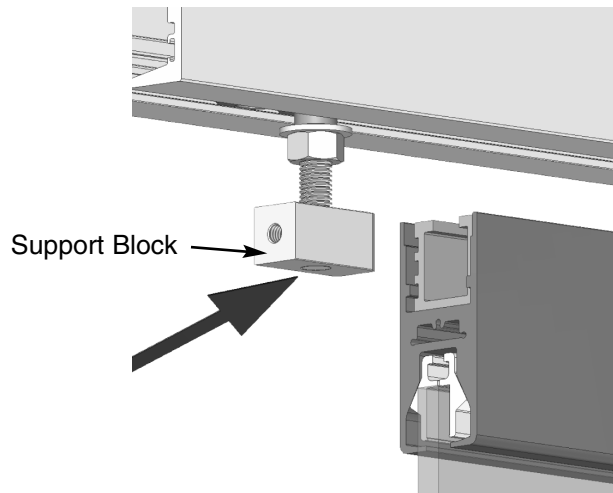
Refer to the CPP for proper orientation of the Tracking Rollers of each Intelli-Track™ Roller Assembly before installing. The programming of the Movable Wall Panels is determined by the orientation of the rollers and must match the CPP. This is the key element in determining how the Wall Panel is routed by the SPS Intersections.



- 5c) Care should be taken to protect the finished flooring from possible damage while hanging the Movable Wall Panels. Do not use protective materials under the Wall Panels that are more than 1/4" (6.3 mm) thick, as this makes hanging the panels difficult.

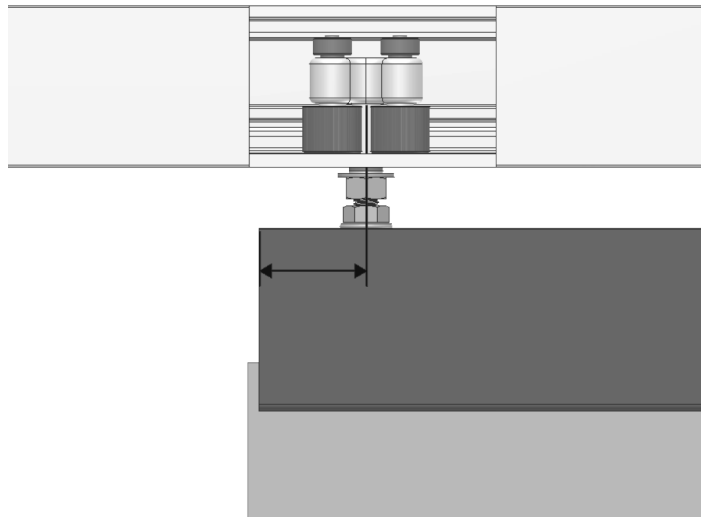


Carefully position the #1 panel, centered under the Track and between the corresponding pair of Intelli-Track™ Roller Assemblies hanging from the Track.



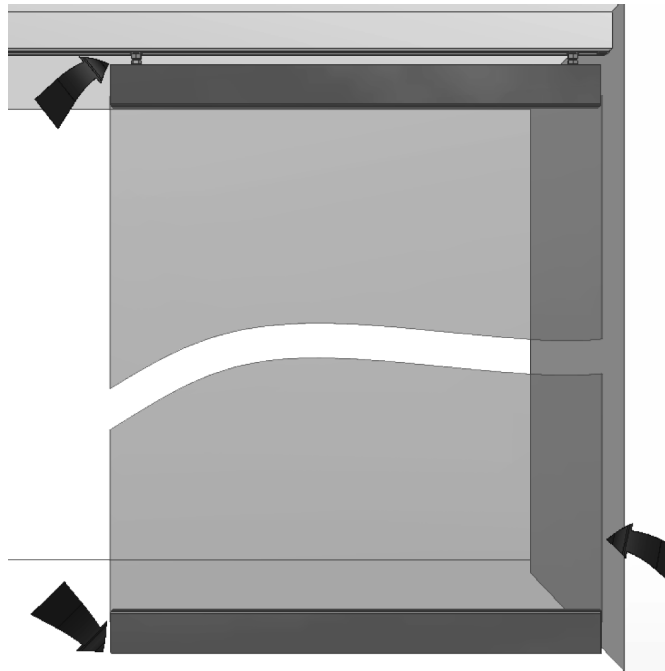
- 5d) The top Wall Panel Rail (WPR) End Caps are not installed at the factory, but are included in the WPR box. The End Caps should not be installed onto the top WPR until the panels are hung and adjusted. Rotate the Support Block until the setscrew is facing outward. Lift one end of the Wall Panel until aligned and push the Support Block into the WPR. Repeat this process for both ends of the WPR.

The Roller Assemblies are set to the maximum floor clearance adjustment at the factory. This can be verified by seeing that the pendant bolt is flush with the bottom of the Support Block. This should provide adequate clearance between the floor and Wall Panel for movement.

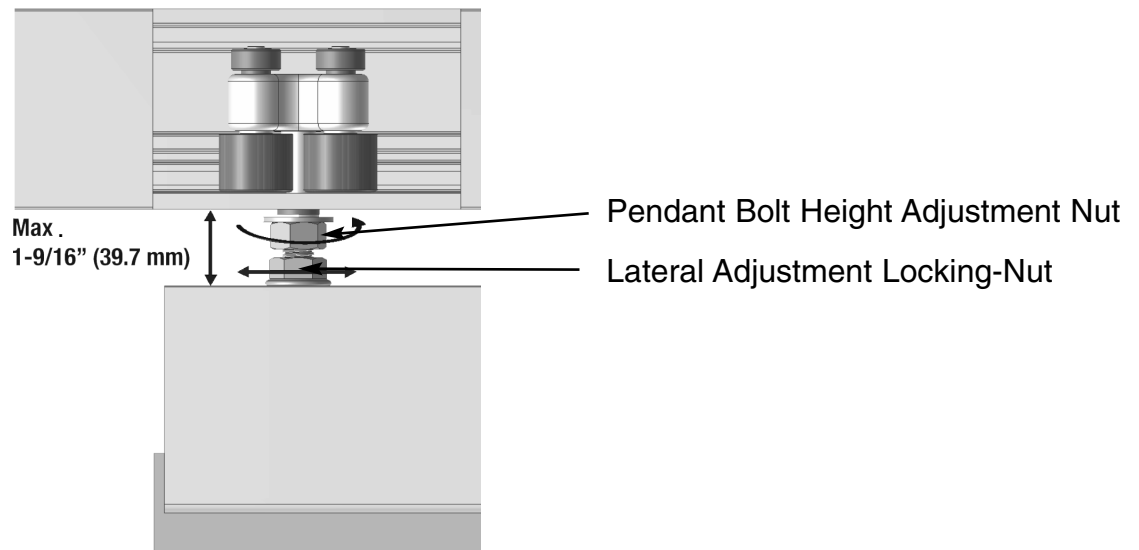


5e) Slide the Intelli-Track™ Roller Assemblies inline with the WPR (Wall Panel Rail) until the distance from the WPR's ends (without the End Cap) to the centers of the pendant bolts equals 2-3/8" (60.3 mm) or matches a custom dimension given on the CPP. Tighten the Lateral Adjustment Locking-nuts with a 7/8" open-end wrench to lock the rollers at this location. The weight of the Wall Panel is now fully supported by the Track. **CAUTION: Do not attempt to slide the Wall Panel until this step is completed. When you first move the panel, make sure to check floor clearance throughout the entire opening as you move the panel, and be aware at all times where the open splice is located in the Upper Track.**

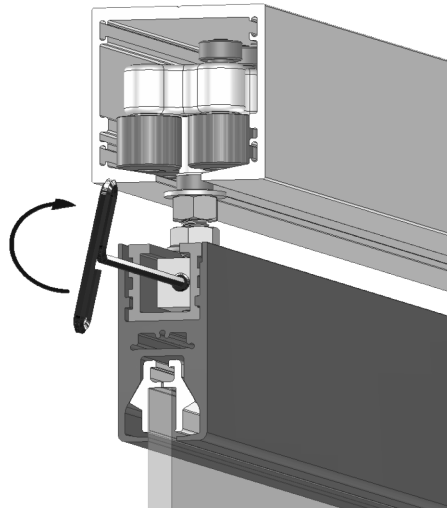
6) Adjusting the Sliding Wall Panels



6a) Slide the #1 Wall Panel to its proper location as indicated on the CPP. Position the panel against the wall or pivoting door's edge. Examine the vertical and horizontal gaps and adjust as required.

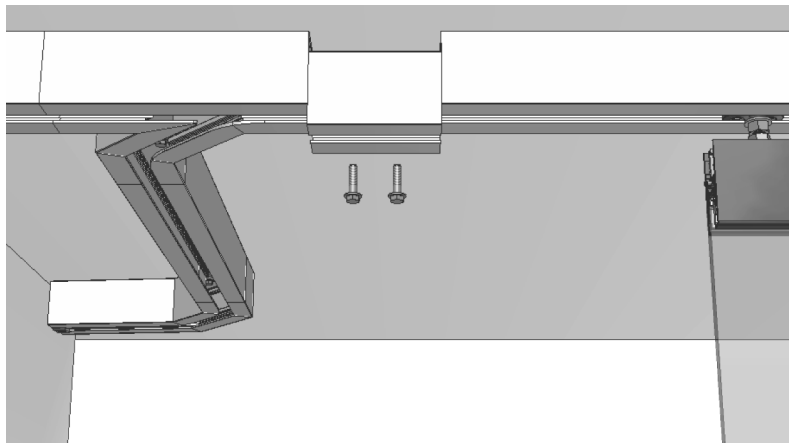


- 6b) To adjust the panels, loosen the Lateral Adjustment Locking Nut with a 7/8" open-end wrench, and rotate the Pendant Bolt Height Adjustment Nut to set the floor clearance gap at 1/4" (6.3 mm) depending on field conditions.
CAUTION: The gap between the Track and top of Wall Panel Rail must not exceed 1-9/16" (39.7 mm). Do this for both Roller Assemblies, while at the same time, checking the vertical edge gaps to produce a consistent 1/8" (3.2 mm) vertical gap from top to bottom.



- 6c) When desired clearances are attained, using a 3/16" hex wrench, tighten the setscrew located at the end of the support block in a clockwise rotation until locked against the pendant bolt. Now re-tighten the Lateral Adjustment Locking Nuts to lock the rollers at this location.
- 6d) Repeat steps **5b** through **6c** for each Sliding Wall Panel.

7) Re-install the Roller Access Splice



After all Sliding Wall Panels have been attached to the Top Track, re-install the Roller Access Splice that was removed in **Step 5a**.

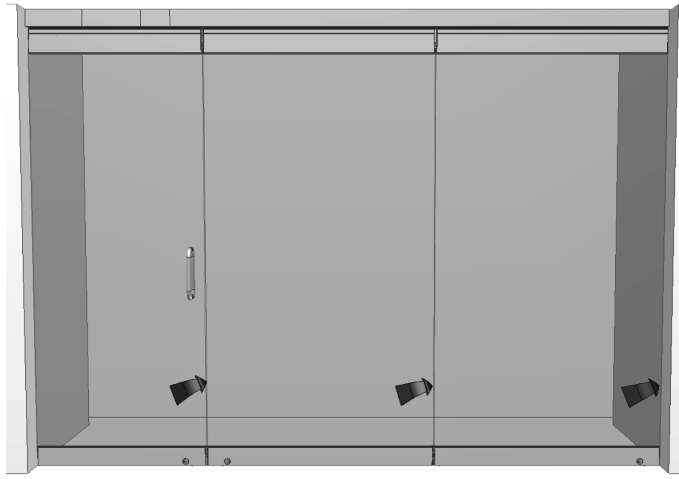
8) Adjust Roller Spacing for the Parking Area



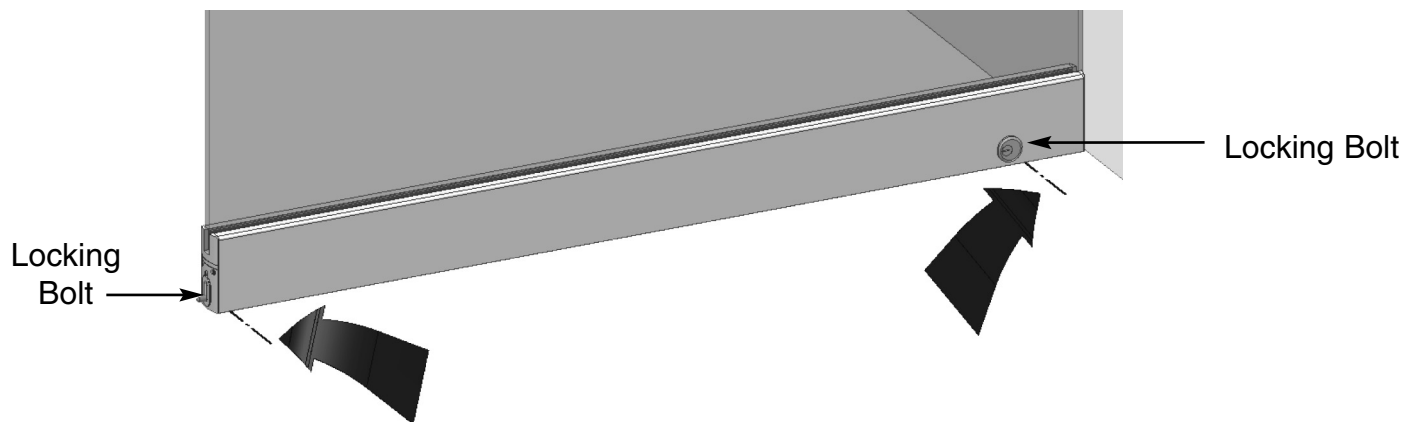
8a) Move the panel nearest to the parking area to the parking area's double track entrance. Working with the roller assembly that first enters the parking area, loosen the Lateral Adjustment Locking Nut **on this end only**. Carefully move the Wall Panel into the parking area until it comes to rest. Adjust the position of the IntelliTrack™ Roller Assemblies laterally until both pendant bolts are centered in the track slots (**important step for smooth operation**), and retighten the Lateral Adjustment Locking Nut.

8b) Repeat step **8a** for all of the Sliding Wall Panels.

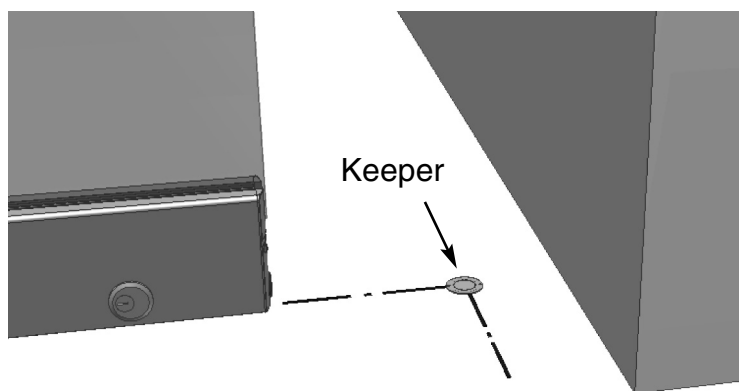
9) Install Floor Keepers



9a) Move the #1 Wall Panel into its closed position and verify the vertical gap of 1/8" (3.2 mm), or as specified. Adjust if necessary as described in **Step 6**.



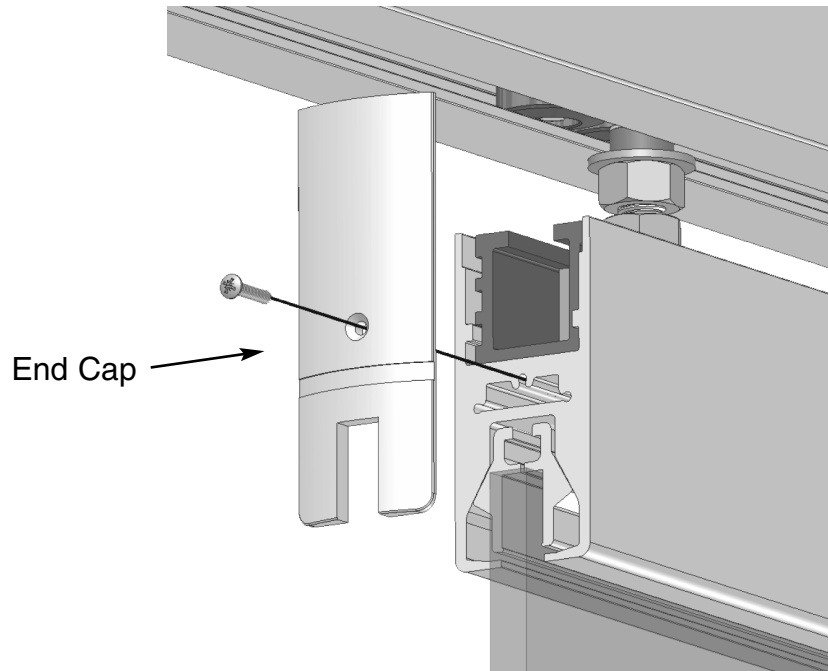
9b) The #1 Wall Panel will have two locking bolts. Mark their centerline positions on the floor.



Then slide the panel out of the way, drill for, and install, the Keepers into the floor. Move the Wall Panel into position and lock it to the floor.

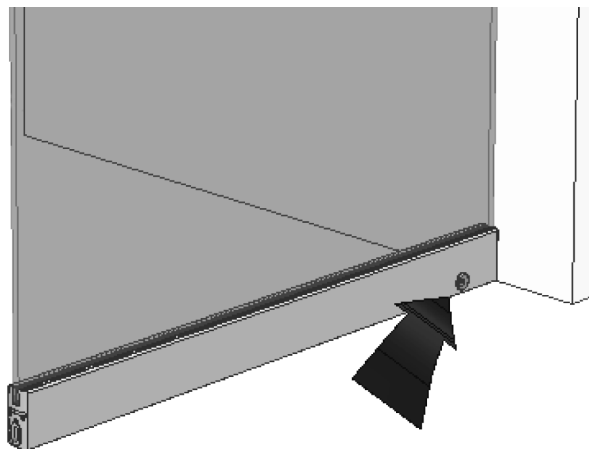
9c) Repeat **Steps 9a and 9b** for all sliding Wall Panels.

10) Install the Top Wall Panel Rail End Caps

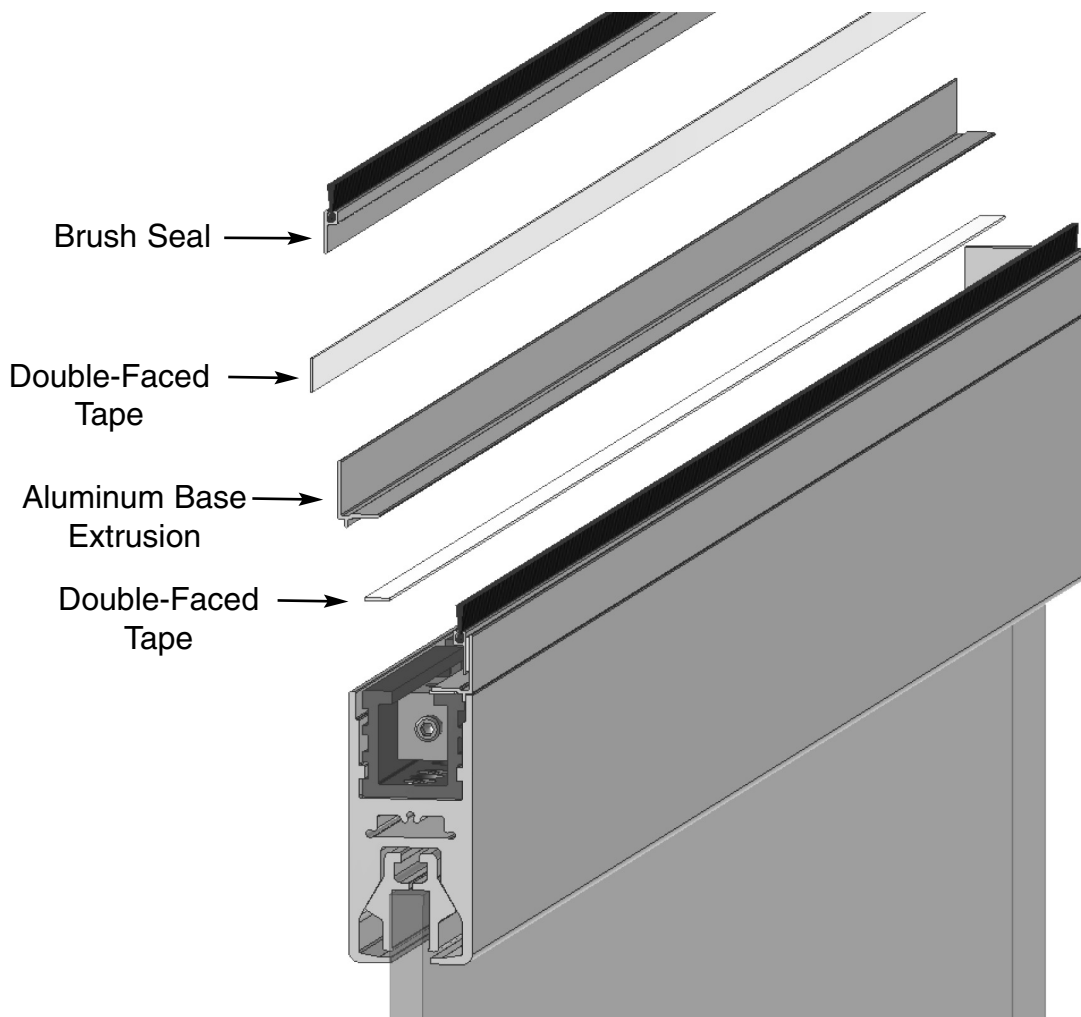


The End Caps are located in a package along with the Seal Kits. using a Phillips screwdriver, fasten the End Caps to both ends of all Sliding Wall Panels in the system. Finish matched fasteners are taped to the back side of the End Caps. **Note: SPS End Caps are taller than the bottom rail's in order to match up with Top Seal System as described in the next step.**

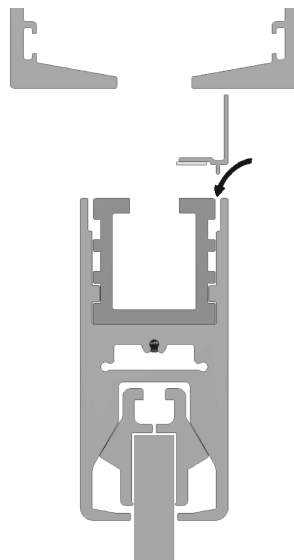
11) Install the Top Seal System



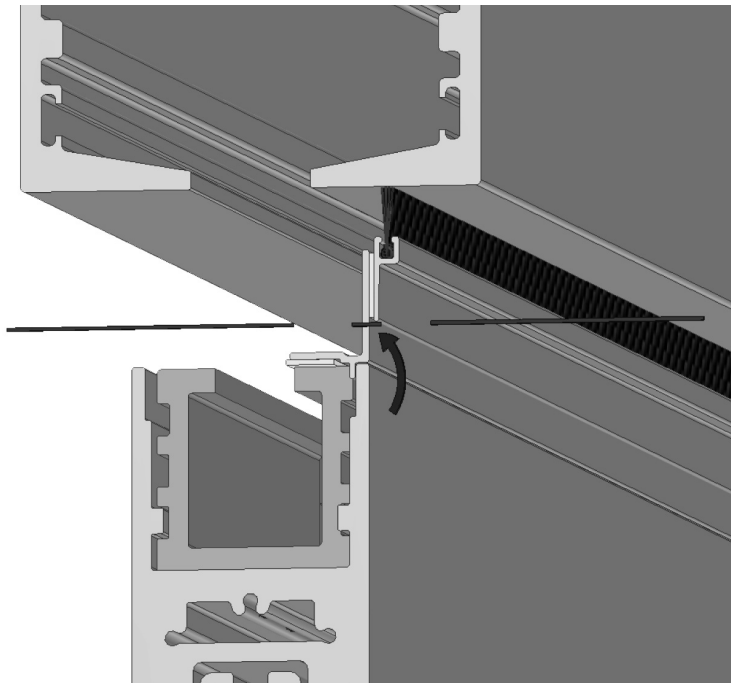
11a) Move #1 Panel into the closed position and lock.



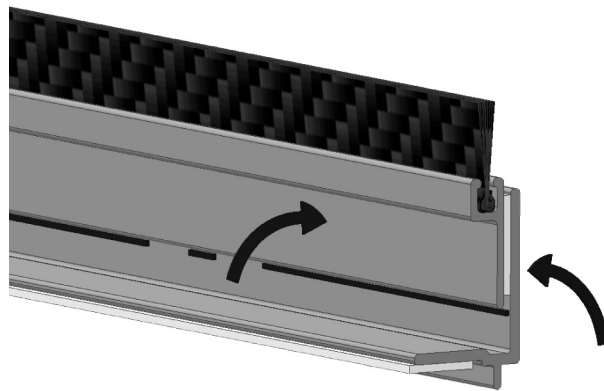
11b) The Top Seal Kits are numbered to match the Wall Panel Rail for ease of mating. There is an Aluminum Base Extrusion and a Brush Seal for both sides of each rail. For clad finishes there is a strip of matching cladding attached to the aluminum Base Extrusion. Double-faced tape is factory applied to the bottom surface of the Base Extrusion for adhesion to the Wall Panel Rail, and to the Brush Seal for adhesion to the Base Extrusion.



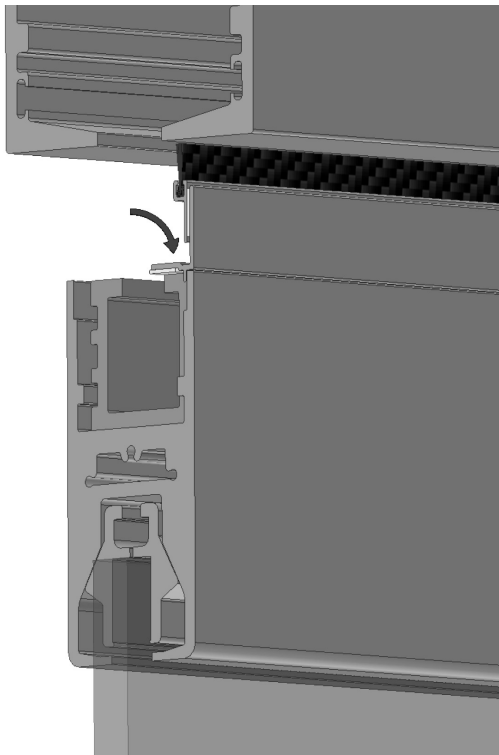
11c) Dry-fit by placing the Base Extrusion on top of its Wall Panel Rail mate with the tape liner intact. If properly aligned with the rail's edge, it will drop down into an alignment slot.



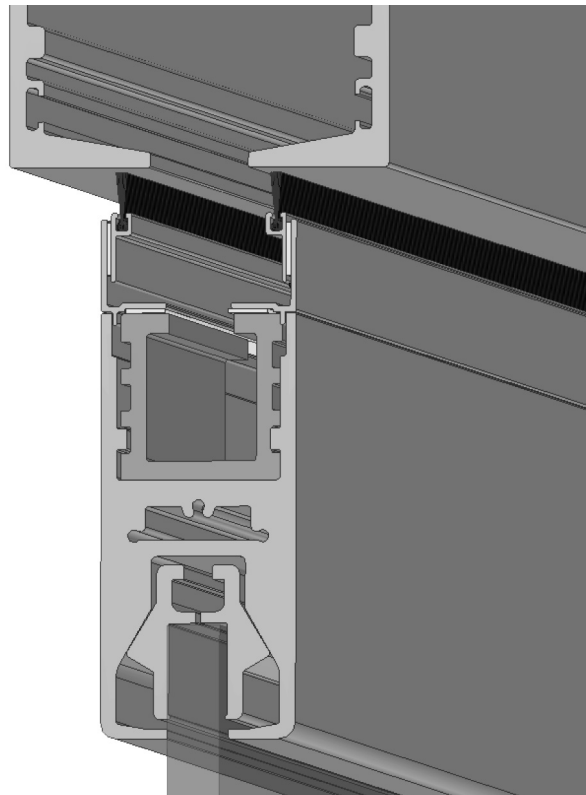
11d) Dry-fit by positioning the Brush Seal on the exterior side of the Base Extrusion with its tape liner intact. Move the Brush Seal up until it has an even line with the Track above, and make a pencil mark on the Base Extrusion at both ends for later alignment of the Brush Seal. Remove the Brush Seal and Base Extrusion from the Wall Panel Rail.



11e) The Brush Seal is tape applied to the interior of the Base Extrusion (the opposite side that was marked with the pencil in the previous step). Remove the tape liner from the Brush Seal, align the bottom edge with the pencil marks made on the opposite side, and press the two pieces together. Apply moderate pressure for the full length of the extrusions to set the tape.



11f) Remove the tape liner from the Base Extrusion and adhere the assembly into the Wall Panel. Pressure should be applied to the top of the Base Extrusion along its full length to set the tape.



11g) Repeat **Steps 11b through 11f** for both sides of all Wall Panels in the system.

The Second and Final Phase of the installation is complete.