

Series 9550

Floor Load Bi-Fold Door

Installation Instructions

Things to know before you start

Removal of old fenestration products

Ensure any old fenestration products are removed and properly disposed of. You may be able to recycle or donate removed glass and frames. For more information, check with your local recycling agency, the American Architectural Manufacturers Association (AAMA), the US Environmental Protection Agency at www.epa.gov/recycle or the Building Materials Reuse Association website to locate a nearby company or organization that accepts used windows and doors. To donate removed products, contact local nonprofits needing building supplies, such as Habitat for Humanity.

Please note: homes and condominiums built before 1978 may have lead-based paint, posing severe health hazards during removal. Information and instruction regarding proper management of lead paint is available at www.epa.gov/lead.

Installation preparation

Bi-Fold Doors are custom manufactured specifically for each application. Before installation, you must carefully review and understand the installation instructions and any drawings supplied. Failure to follow these instructions may result in poor performance, including, but not limited to, operation, security, and weatherproofing failures, and may void Western Window Systems' express limited warranties. Only experienced and qualified installation professionals should install Western Window Systems' fenestration products.

Product handling and storage

The Bi-fold door is a finished product that requires protection before, during, and after installation to prevent damage to the glass, frame, finish, and hardware. Western supplies the flush and water barrier sill tracks with individual track protectors that the installer must remove before assembly and installation of the frames. Upon completion of door installation, the track protectors can be selectively cut to length and re-installed to allow for specific panel operation or no panel operation.

Store door panels in a dry location, protected from the elements. Wet packaging can cause damage to product finishes. If the packaging becomes wet, immediately replace it with dry packaging. Door panels should be stored and transported upside down; do not drop or drag from the delivery truck to avoid damage to the bottom rail extension.

Components

The components supplied will vary depending on the configuration you are installing. Before proceeding with the installation, inspect the components to become familiar with them and confirm that no damage will affect the appearance or performance of the installed product. Install any included

screens similar to the glass panels. Damaged or missing parts should be reported to your supplier immediately.

Other tools necessary for installation

1. flashing membrane
2. sealant
3. #10 x 2 1/2 pph anchors

Frame Installation

1. **Frame Components:** Head Assembly, Threshold Assembly, and two Jamb Assemblies. *See Fig. 1:*

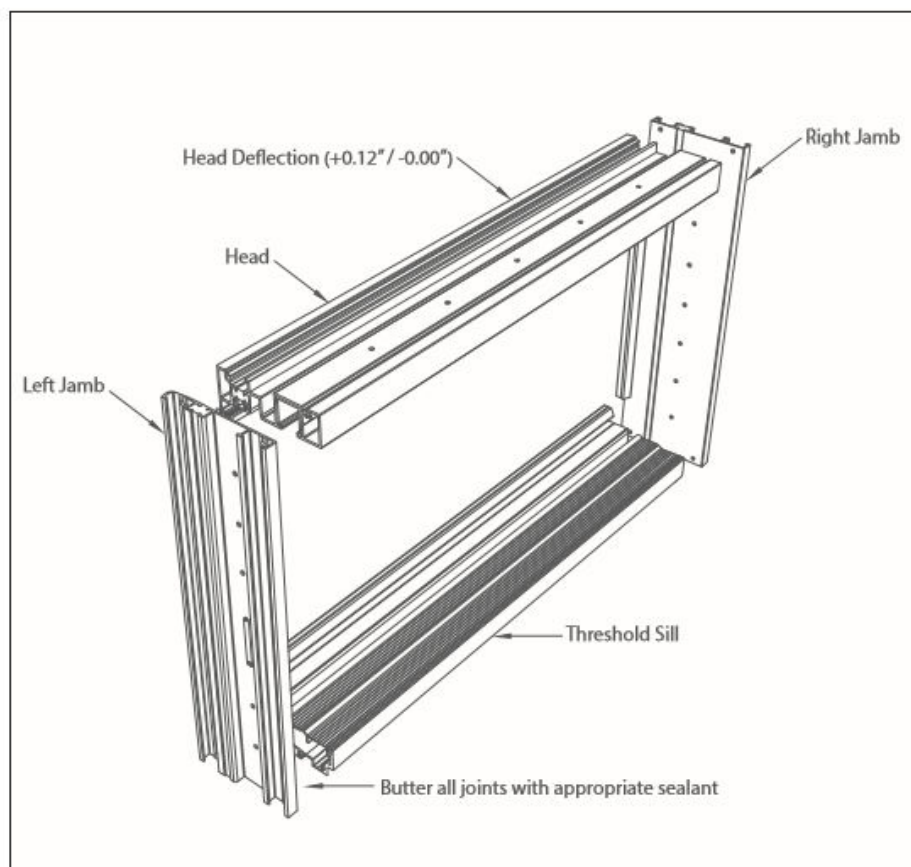


Fig. 1

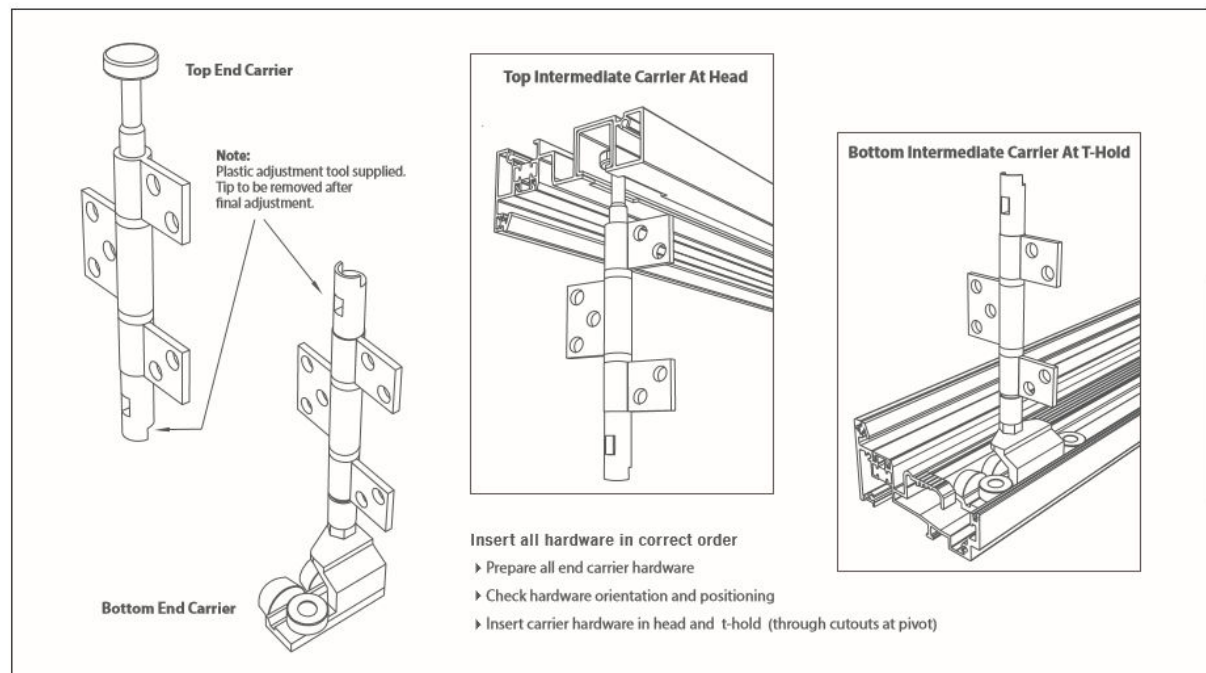
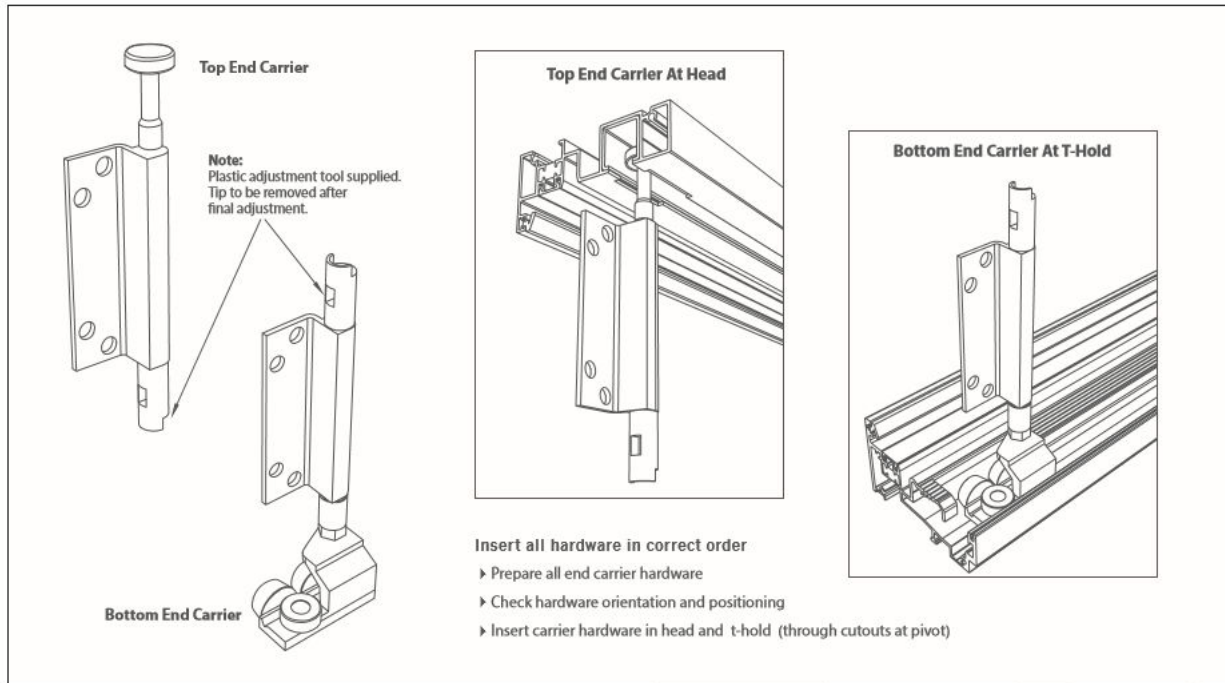
NOTE: This is a bottom-hung product. Provide adequate structure at Threshold Sill. Continuous threshold support is required.

2. Refer to the supplied CADD drawings or order acknowledgment and carefully inspect the rough opening to ensure it will accept the configuration and size you are installing. The rough opening should be 1/4" wider and 1/2" taller than the net frame size.

3. Before doorframe installation, installers must ensure they protect any wood substrate with appropriate flashing or waterproofing material. Rough openings must be waterproofed per AAMA InstallationMasters® standards, flashing and sealant manufacturer instructions, and meet all local building codes. If the floor condition is concrete, use a waterproofing membrane to separate aluminum from concrete.
4. Check the floor to see that it is flat and level. If the floor varies more than 0.0625" (1/16") per foot or a total of 0.25" (1/4") over the entire width of the opening, correct the floor before proceeding with the installation.
5. Begin by laying the frame pieces on the ground.
6. Insert the bottom carrier hardware into the Threshold channel with the intermediate carrier in the center. Insert the bottom pivot carriers with the adjustment screw facing toward the center of the frame. The screw on the end carriers must face toward the center of the door.
7. Apply sealant on all the joints. Then attach it with frame assembly screws.
8. Set the frame in the opening to mark the placement of the Threshold. For concrete applications, mark and pre-drill anchor holes and apply anchors.
9. After assembling the frame, lay a bead of sealant under the Threshold and both Jambs 1/2" to the exterior of the frame's interior. Sealant and flashing must be compatible with the structure and approved for use by the manufacturer.
10. Set the frame in the opening and square it using temporary shims. Level the Threshold as required with shims.
11. Pump sealant into the Threshold anchor holes.
12. Anchor the Threshold with #10 screws.
13. Continue to anchor the Head and Jambs with #10 screws, shimming as necessary to keep the frame plumb and square.
14. With the Threshold securely anchored, pump sealant into Jamb and Header mounting holes to seal penetrations completely. Shim the entire frame and attach it with screws.

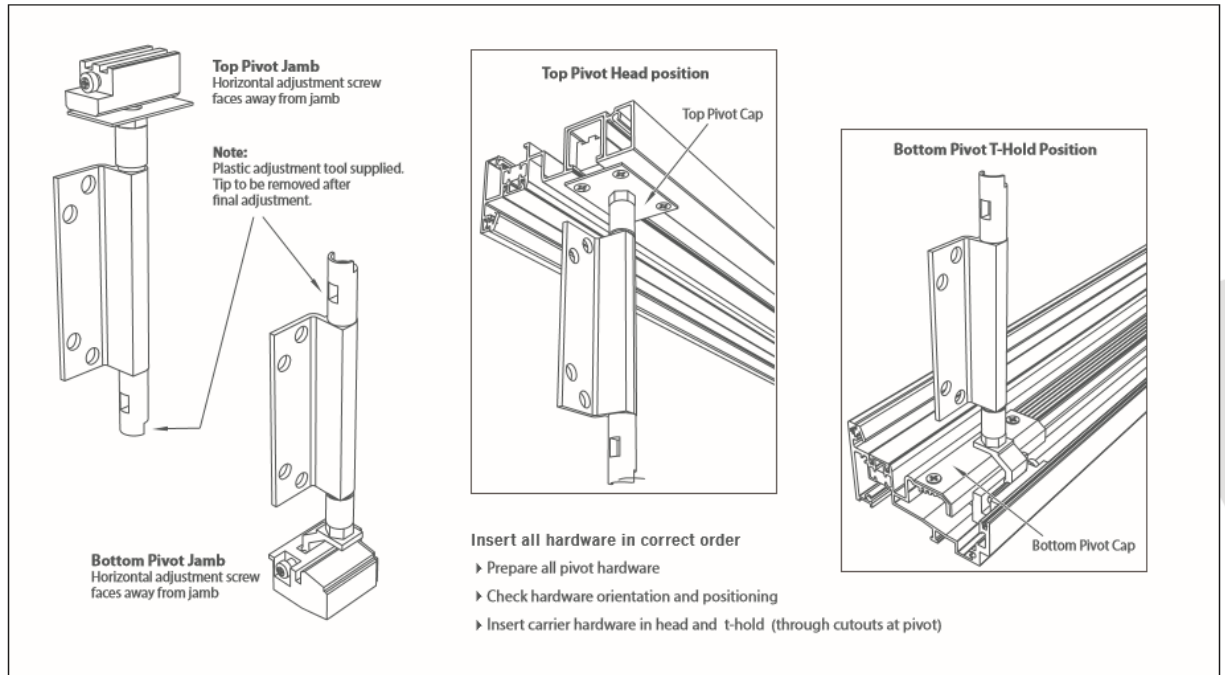
Door assembly – top and bottom pivots

1. Locate the remainder of the hardware and organize it in order of installation: Top and Bottom Intermediate Carriers (number of carriers will depend on the number of panels).



2. Check for correct orientation and positioning.
3. Starting from the exterior side of the frame with passive panels, insert the top intermediate carrier to the Head through the cutouts at the pivot point.

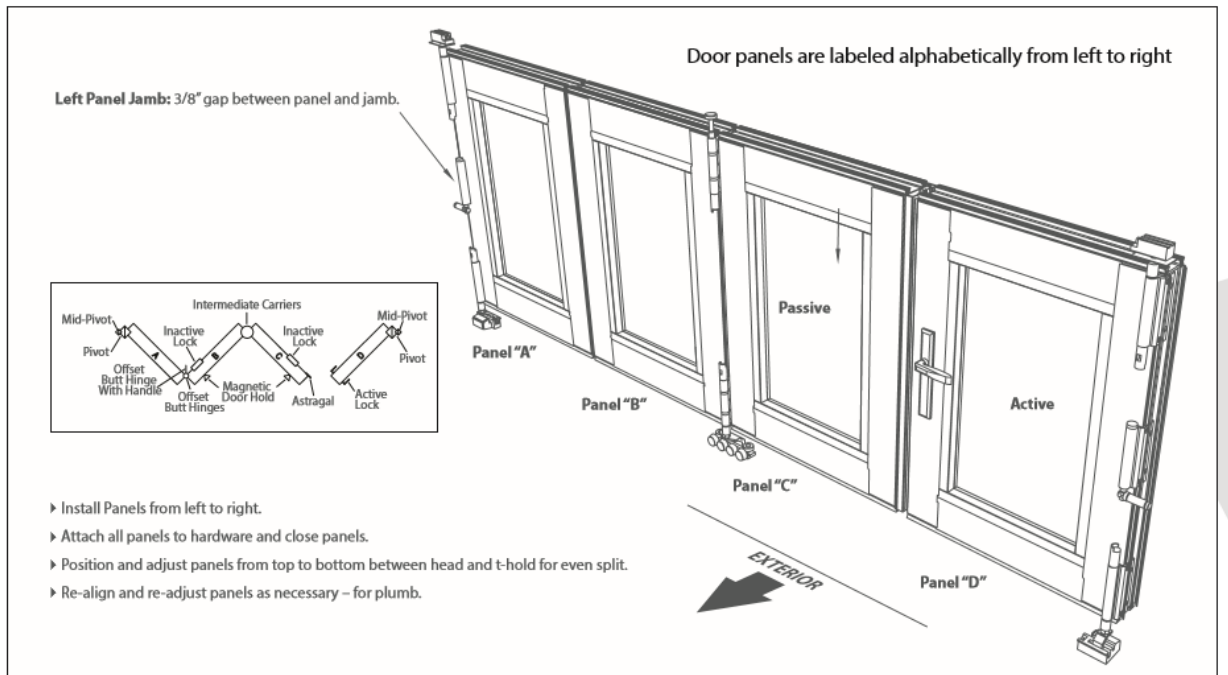
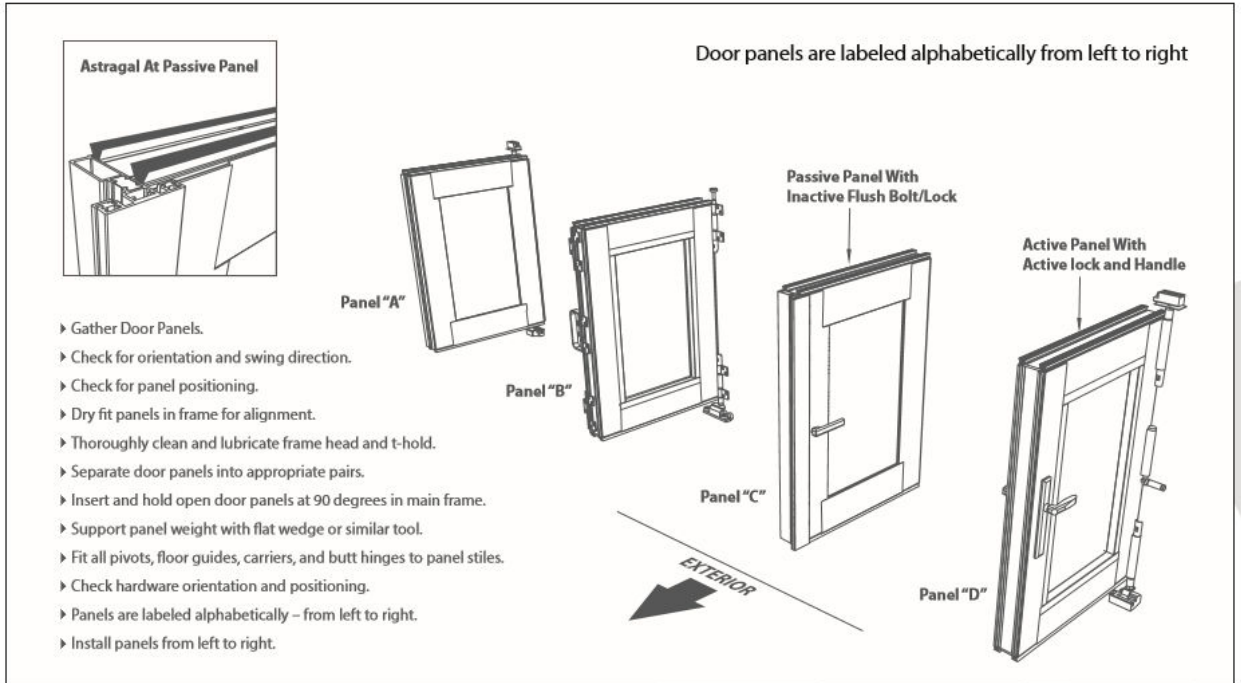
4. Insert the top pivot carrier into the Head.



5. Insert the other top pivot carrier on the Active Panel side of the frame. Fasten the wall mid-pivot on each Jamb. Attach fasteners in cross-pattern order.
6. When all the hardware is in place, screw the housing down using 1" screws. Attach the cover plates with 3/8" screws on each end.
7. To mount the wall mid-pivot, drill a 3/8" hole through the mounting hole in the Jambs and insert the mounting brackets using finished screws.
8. Thoroughly clean the tracks and lubricate the Head and Threshold using silicone spray.

panel assembly

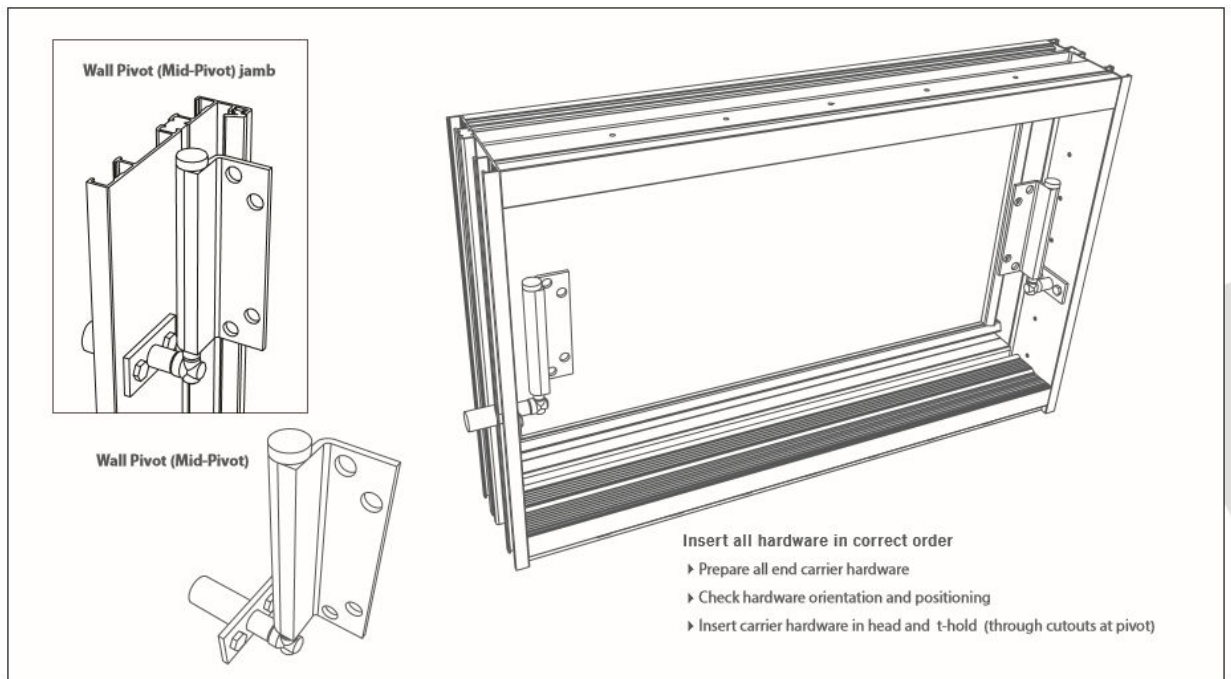
9. Organize door panels alphabetically from left to right from the exterior opening. The door will have one Active Panel operating separately from the other panels. The other panels are the Passive Panels. Check for orientation and swing direction.



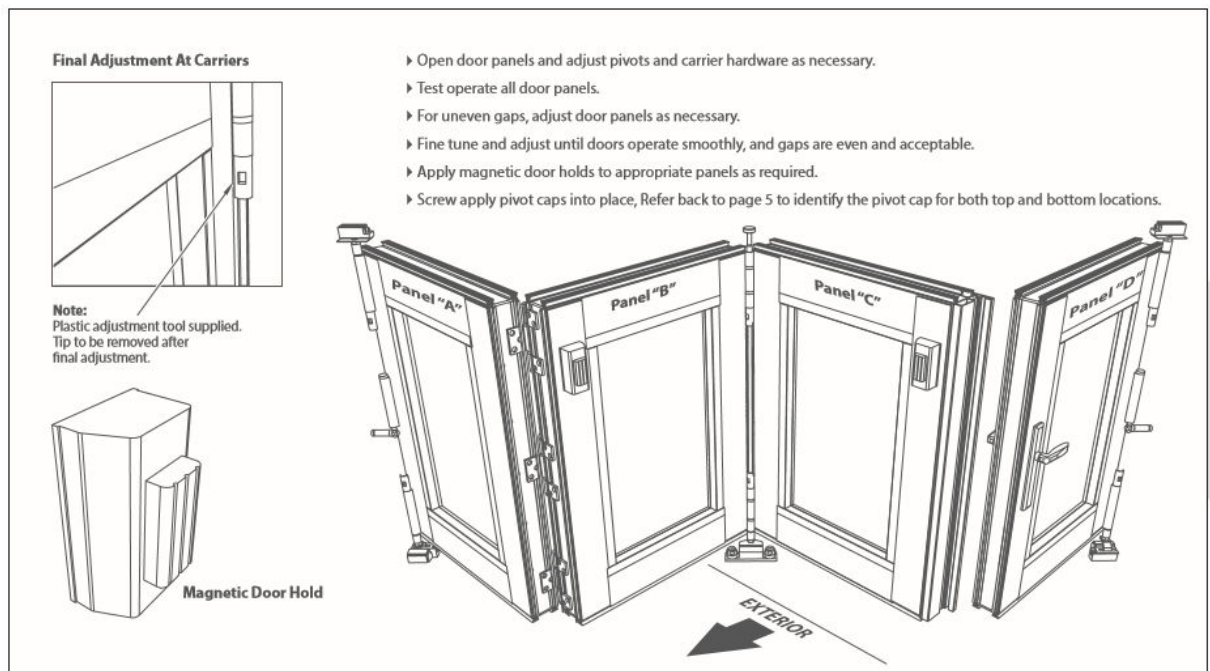
10. Using a hinge from the install kit, align the hinge with pre-drill holes and notch the vertical weatherstrip where the hinge will rest. This is required for the hinge to lay flat.

11. Dry fit the Panels in the frame to check alignment.

12. Starting with Panel “A,” set the Panel at a 90-degree angle to the frame, supporting it with a block or similar tool at the bottom.
13. Apply the top hinge onto the top pivot carrier.
14. Slide the middle hinge onto the mid-pivot carrier and insert it into the mounting bracket. Attach with ½” screws. Using a paddle bit for a drill or impact driver, make a deeper mid-pivot hole before attaching panels.
15. Place the hinge on the bottom pivot carrier. Remove the screws from the bottom hinge and attach the hinge to the Panel using the same screws.
16. Set the last Panel 90 degrees to the frame supporting it at the bottom. Attach the top, mid, and bottom pivot carriers using the same process.
17. To begin installing the remainder of the panels, the Passive Panels should be open 90 degrees to the opening. Remove the tape covering the hinges.
18. Move the next Panel parallel to the installed Panel and line up the hinges to the screws. Starting at the center hinge, remove the screws. Then move the hinge into place and replace the screws. Do the same at the top and bottom hinges.
19. From the inside of the just-installed Panel, attach the center hinge plate of the intermediate carriers to the Panel at both the top and bottom.



20. Move the final Panel into place parallel to the other panels. After removing the tape from the hinges and starting with the bottom hinge, attach the hinge plates using the screws supplied in the hardware kit. Attach the center hinge plate and the top hinge plate the same way.
21. Once all the Panels are attached, move the Panels to a closed position. With a 9/16" wrench and a small screwdriver, release the lock pin and rotate the nut on the hinge keeping the weather stripping in contact with the cell. Rotate slightly until the pin locks are back into place.
22. Adjust for plumb by rotating the screw in the Track on the bottom pivot carrier.
23. Adjust the door Panels until they operate smoothly, and gaps are even.
24. Apply the foam strips around three hinges on each Panel. Foam strips should not butt up against each other.
25. Locate the magnets. Using the magnet housing, mark the magnets' placement on the two outer panels. Please make sure they are in identical positions on each Panel. Magnets can be positioned horizontally on the top stile or vertically on the side stile. Pre-drill the holes. Assemble the magnets into the housing and attach them to each Panel.
26. Do not drag the Panels to the closed position when closing the door. Instead, move each Panel in sequence to the closed position and latch.



27. Installation is now complete.