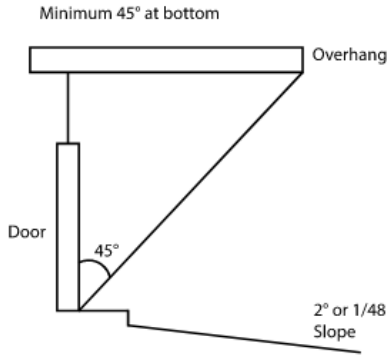
Bonelli 512 Multi-Slide Door Installation Instructions:

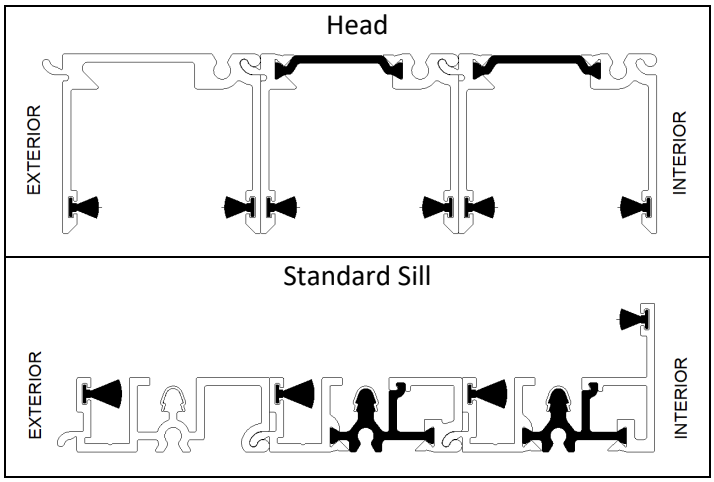
Parts and Materials

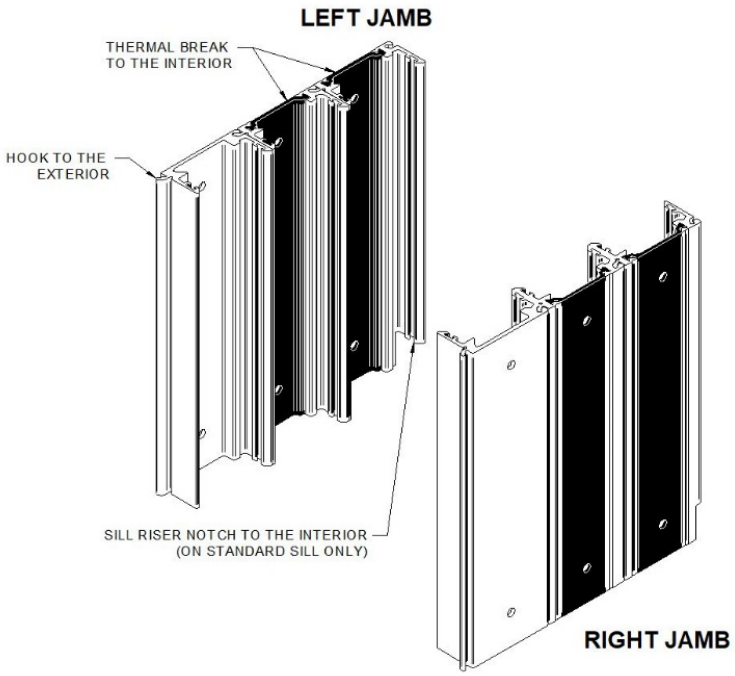
- Provided: Head, jambs, sill, frame covers, panels, head end plate to jamb and sill end plate to jamb assembly screws (#8 x 3/8" PH), anchoring screws (#10 x 2.5" PH) and masonry plugs, fixed panel bracket and screws (#10 x 1" PH), fixed panel interior screw (#8 x 1-1/4" FH drill tip), lock keeper anchor screw (#10 x 3" FH), head and sill foam plugs*, bristle pads* * Foam plugs and bristle pads may be included in the head and/or sill
- By others: Waterproof flashing membrane, shims, closed cell backer rod, polyurethane based low-expansion window/door insulation foam, high quality window/door installation sealant capable of being used as a bedding seal, 2" x 4" at least equal to height of frame to be used as a marking gauge (or laser level)

Before purchasing and installing, verify performance of product meets the requirements of the application and region. Not all products or sill types are rated for water performance. To reduce the likelihood of water infiltration where application exceeds product performance, install doors under an overhang that extends to meet a 45° line from the door sill and slope the exterior 2 degrees away from the door or use a stepdown.



Unwrap bundled frame and ensure that all required parts are present: (1) Head, (2) Jambs, and (1) Sill – note jambs used with the standard sill option are handed with notch at sill orientated to the interior. Figures show part orientation for a three-track frame.





1. Opening Preparation and Sill Installation

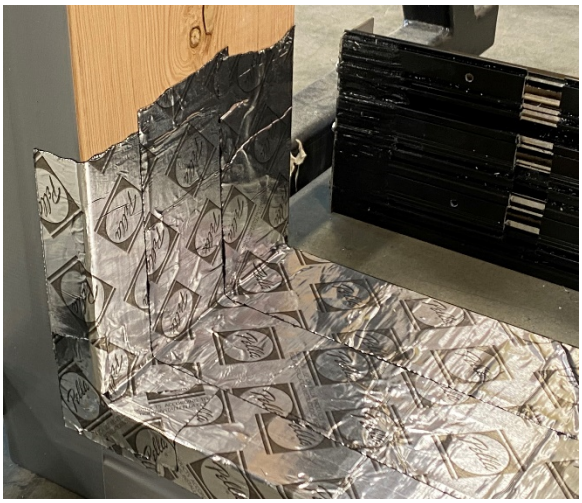
Note:

- Header must be designed to bear the weight of all building (roofing) and construction loads. Maximum allowable header deflection of 1/4" over total span of the opening.
- Sill structure and framing must be designed and constructed to carry the weight of the door frame and door panels.
- Installation Instructions for Typical Wood Frame Construction. These instructions were developed and tested for use with typical wood frame wall construction in a wall system designed to manage water. These instructions are not to be used with any other construction method.

1.A. Prior to installation, inspect the rough opening to ensure it is plumb, level, and square. Confirm sill subfloor is level.

1.B. Check the Rough Opening for the unit and verify that there is adequate clearance to insert the frame into the opening.

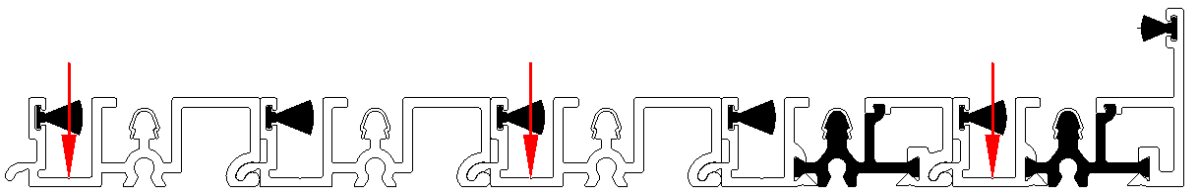
1.C. Apply waterproof flashing membrane at the sill extending 1” to the exterior and 6” up each jamb. Fold down the tape onto the exterior weather resistive barrier and ensure the corner is fully covered as shown. Apply additional rows of flashing extending 6” up each jamb and overlapping the previous piece by at least 1”. Repeat until the flashing extends past the sill depth. Use a J-Roller to ensure the flashing membrane is fully seated.



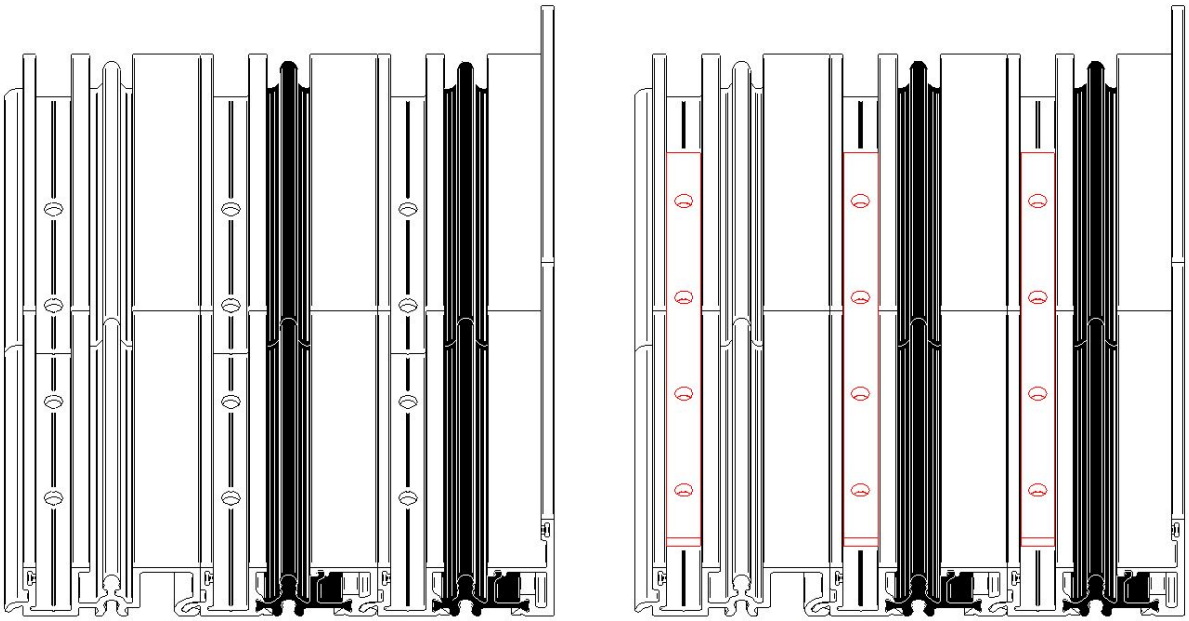
1.D. Position the door sill into place. Mark the interior sill edge (full length), sill ends, and pre-piloted anchor locations. Sill anchor pilot holes will be located in interior and exterior tracks (and middle track on a five-track frame) under the weatherstrip approx. 4” from each end and 18” OC.

Sill Anchor Locations

(Center screw location on five track frame only)



If the door has a spliced sill, mark holes on the splice plates.



SILL SPLICE PILOT HOLES

SILL WITH SPLICE PLATES

1.E. Remove sill from the opening. If the sill condition is concrete, pilot drill and install provided anchor plugs at each anchor location.

1.F. Apply 3/8” bead of sealant along exterior side of the sill mark from jamb-to-jamb and across the sill end marks, full width of the sill. Extend sealant 6” up each jamb. Apply a dab of sealant at each anchor location mark. Ensure the sealant can be used as a bedding sealant.

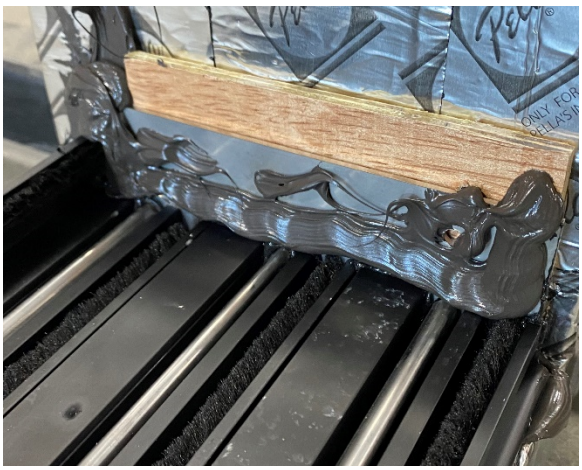
1.G. Reinstall the sill onto the sealant, position into place, centered in opening.

1.H. Install with provided anchor screws at each pre-piloted location.

2. Head and Jamb Installation

2.A. Locate and determine left and right jambs (reference jamb orientation figure on page 1).

2.B. Apply sealant to sill end plate. Locate sealant bead along the sill joint, wrapping up the sill riser and exterior edge of the plate.



2.C. Install jamb by setting the sill edge in place and firmly pushing tight against the end plate, seating into the sealant. Confirm jamb is flush on the interior and exterior edges of the sill and plumb to the opening. Attach jamb to sill end plate with provided screws.

2.D. Repeat previous step for the other jamb.

2.E. Shim jamb plumb and install lower row of jamb anchors (taller jambs may require additional row of anchors to support jamb prior to head installation).

2.F. Use a piece of packaging foam to hold jamb away from the stud at each side, set head into place positioning on top of jambs.

2.G. Apply sealant to the head end plate. Locate sealant bead along bottom of the head tracks at the head/jamb joint, extend down each end of the plate and track location. Remove packaging foam used as a spacer and attach jamb to head end plate with provided screws.

2.H. Repeat previous step for the other jamb.

2.I. Measure the width from jamb to jamb and adjust shims as needed to make the measurement across the same from top to bottom. Install the remaining installation screws, shim and check for plumb, level and square as each installation screw is installed.

2.J. On the exterior side, measure the frame opening height at each jamb and cut a board to use as a gauge/guide to help level the head to the height of the frame opening at the jambs. Position the gauge board in the frame at each installation screw hole location to confirm the frame

opening height across the entire opening when installing the screws. An alternate head fastening method is to use a tape measure at each installation screw location to confirm the same frame opening height across the opening is identical to the height at each jamb or use a laser level.

2.K. Starting in the center of the frame width, position the gauge board plumb near the center installation holes. Shim at the screw hole locations ensuring the shim extends the full depth of the head. Install the center head installation screws.

2.L. Once the center is secure, begin moving toward each end of the head. Move the gauge board near each installation hole, shim and fasten the head at each screw location. Confirm the frame opening height measurement is identical at all points along the width of the opening.

3. Panel Installation

3.A. Locate panels and remove packaging.

3.B. Identify the interior-most panel. From the exterior, insert the most interior panel into the frame. Start by inserting the top of the panel into the interior-most head track and tip the bottom of the panel into vertical alignment, making sure the rollers are aligned with the track.

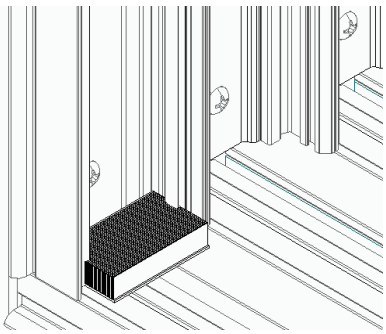
3.C. Remove the roller adjustment hole plug, with a Phillips screwdriver, and adjust the height of each side of the panel so it is approximately 3/16” above the track.

3.D. Slide the panel over to the vent frame jamb and confirm the panel to frame reveal is even along the height of the panel. Adjust roller/panel height as needed. Adjust rollers up when leveling rather than down to bias the panel into the head of the unit. Also check to ensure weatherstrips on the bottom of the panels maintain contact with the sill.

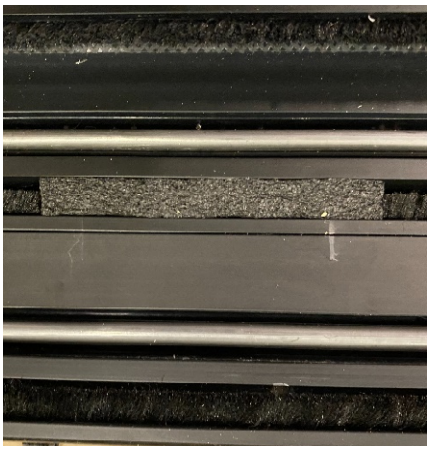
3.E. Install second panel, ensuring to position it overlapping the previous panel to allow the interlockers to engage. Confirm smooth panel operation and interlocker engagement. Repeat the roller adjustment process to the panel so it is even with the previous panel.

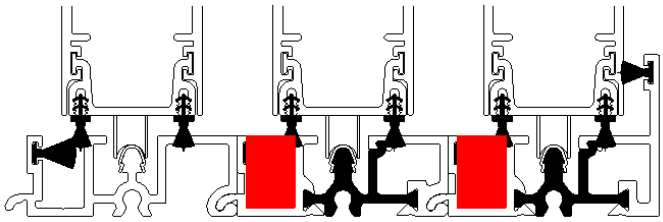
3.F. Repeat the panel installation process for all remaining panels, making sure all panels have an even reveal and are level.

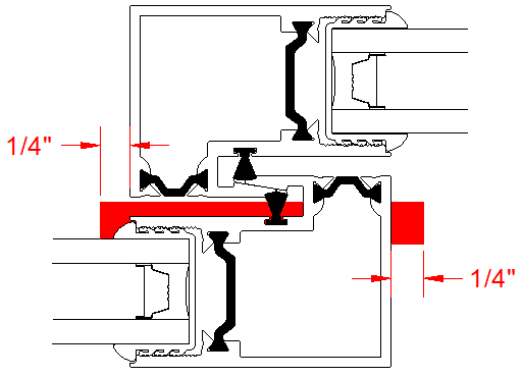
3.G. Sill bristle pads – where the fixed and vent panels meet the jamb, locate a bristle pad on the sill as shown.



3.H. Sill channel foam plugs – With the panels closed, mark each interlock location at the sill on the interior and exterior. Move panels and insert a sill channel foam plug into the sill channel at each marked location. Plug will extend approximately 1/4” past the interlock in both directions. Ensure the plug is flush with the top of the sill.

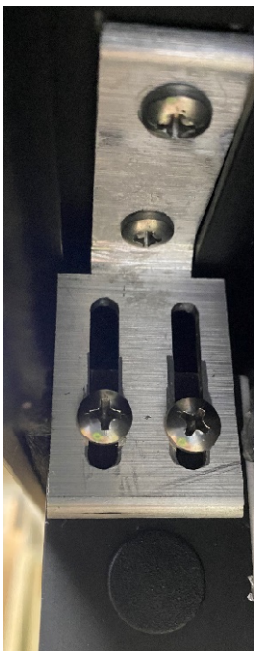




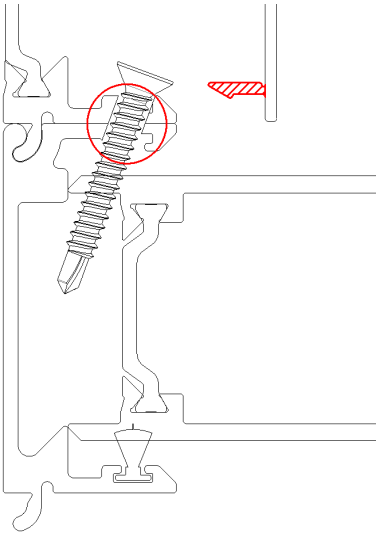


3.I. Slide all panels into the closed position. The fixed panel(s) will be on the exterior most track. Check for proper fit within the frame. Confirm even reveal and fit at the fixed jamb. Adjust as needed.

3.J. Fixed panel bracket – Ensure the fixed panel is fully seated into the fixed jamb. On the end of the fixed panel at the interlock in the head, position the fixed panel bracket against the head and attach on the fixed panel with provided screws. Using the bracket holes as a guide, pilot drill through the head and install an anchor screw into each hole into the rough opening.



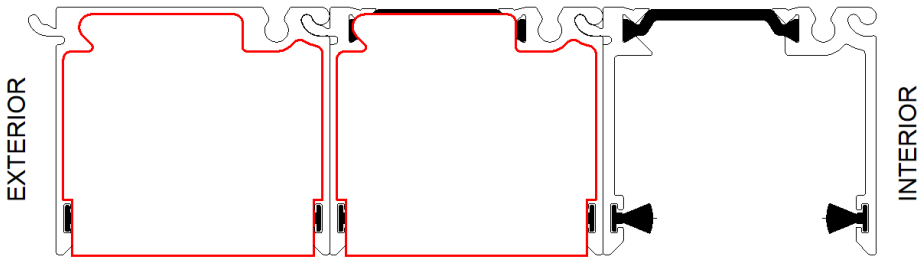
3.K. Interior fixed panel screw – approximately centered on the jamb, drill a clearance hole through the two jambs as shown. Install the provided interior fixed panel drill-tip screw into the fixed stile as shown.



3.L. Locate jamb covers and identify the jamb cover(s) with a notch in the corner – this is the interior-most cover, notch located at the sill. Snap jamb covers into place. If interior fixed panel screw does not fully seat into the jamb, notch the jamb cover leg around the screw for clearance.

3.M. Lock keeper – close and lock the vent panel. Shim behind the lock keeper, adjust the lock keeper height and lock engagement as needed. Once all adjustments have been made, pilot and install the provided lock keeper anchor screw through the middle hole in the lock keeper.

3.N. Head foam plugs – Orientate the head foam plug as shown (three-track frame shown). From the exterior, at the head where the first and second panel meet, insert the foam plug. Firmly press against the head track and panel to assure foam is seated properly. Repeat for all middle panels. A head foam plug is not required on the last panel.



4. Interior Seal

CAUTION: ENSURE USE OF LOW-PRESSURE POLYURETHANE WINDOW AND DOOR INSULATING FOAMS AND STRICTLY FOLLOW THE FOAM MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION. USE OF HIGH-PRESSURE FOAMS OR IMPROPER APPLICATION OF THE FOAM MAY CAUSE THE DOOR FRAME TO BOW AND HINDER OPERATION.

4.A. Apply insulating foam sealant. From the interior, insert the nozzle of the applicator into the space between the door and the rough opening approximately 1" past the edge of the frame (and past the jamb extensions) and apply a 1" deep bead of foam. This will allow room for expansion of the foam and will minimize squeeze out. Apply sealant across interior surface of shims to create a continuous seal. Follow foam manufacturer's instructions.

NOTE: It may be necessary to squeeze the end of the tube with pliers to be able to insert into the space between the door frame and the rough opening. DO NOT completely fill the space from the exterior seal to the interior face of the opening.

4.B. Check the door operation by opening and closing the door.

NOTE: If the door does not operate correctly, check to make sure it is still plumb, level, square and that the sides are not bowed. If adjustments are required, remove the foam with a serrated knife. Adjust the shims and reapply the insulating foam sealant.

4.C. Apply a bead of sealant at the sill to opening joint and 6" up each jamb. For a continuous interior seal, apply sealant over the interior surface of any shims or clips interrupting the foam seal. Backer rod (as necessary) and sealant can be used in place of the low expansion foam to create the interior seal. However, foam has greater insulating properties. Fiberglass batt or similar insulation is not recommended as it can absorb water and does not act as an air seal.

NOTE: Use a low odor, paintable sealant.

Re-check door operation after foam installation. Excess foam may be removed with a serrated knife after it cures.

5. Exterior Seal

5.A. Block Frame – If the space between the new door frame and the opening is greater than 1/4", insert backer rod 3/8" deep in the space around the door. Backer rod adds shape and controls the depth of the sealant line. Apply a continuous bead of sealant to the entire perimeter of the door. Shape, tool, and clean excess sealant.