

Before You Begin

The Marvin Ultimate French Casement Push Out unit has adjustable hinges to help align the sash after installation. Similar to XX door units, the UPFCA frame must be installed in a plumb, square and true condition in order for the unit to operate correctly. Read this instruction carefully before installation. It is especially important that the sill plate is level within 1/16" (2) across the entire span before installing the unit. Please refer to the unit installation instructions for opening preparation and technical specifications.

You Will Need to Supply

- | | |
|---|-----------------------|
| Safety glasses | Square |
| Level or Laser Level | Shims |
| Hammer | Tape measure |
| Phillips Screwdriver | 3 mm Allan wrench |
| Sealant | 2" (51) Roofing nails |
| Pry bar | |
| Marvin SillGuard™ or equivalent sill pan system | |

Standard Parts Shipped

Units are sent with hardware, four #10 x 3" screws, #8 x 3" installation screws, 2 Jamb Jack screws, four nailing fin corner gaskets, and a hinge adjustment wrench. Follow installation instructions included with part if applicable.

NOTE: Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.

Prep the Unit and Opening

1. Remove packaging, skid plates and any staples that did not come off when removing the cardboard protection.
2. Open the sash and remove the interior part stops and set aside in a safe location for re-installation. See figure 1.

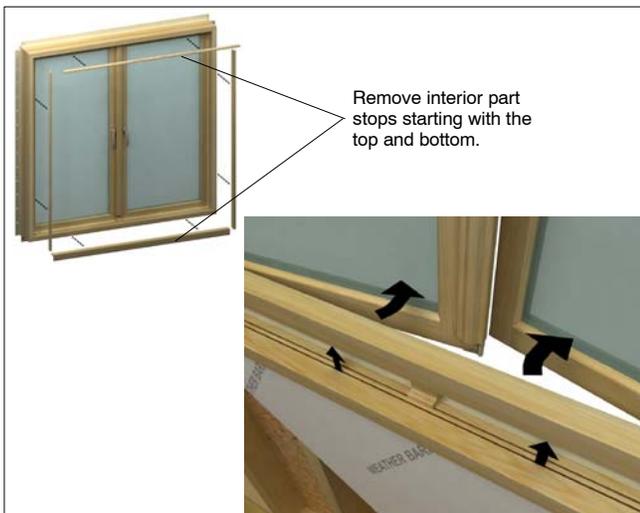


Figure 1: Removing interior part stops

3. Ensure that the sill plate has been leveled to within 1/16" (2) across the entire width and that the opening has been properly prepped. Apply a 3/16" (5) bead of sealant across the sill pan 3/4" (19) in from where the interior side of the sill of the unit makes contact with the sill pan system. See figure 2.

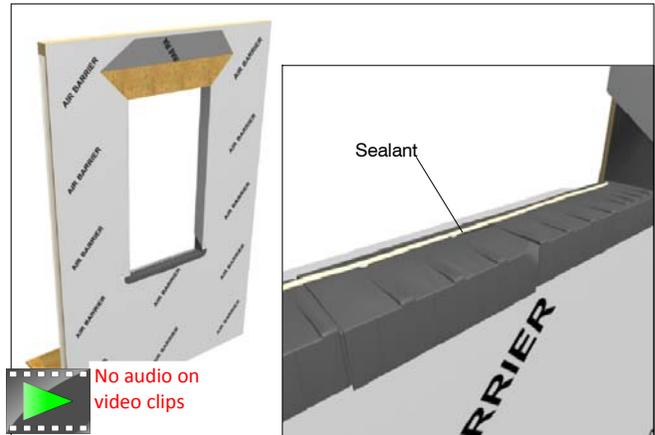


Figure 2: Prep the opening

 Latest version of Adobe Reader may be required to view Video

Install Unit

1. Use an assistant to place the unit in opening with the top of the unit tilted slightly forward until the sill can be tilted back on top of the sealant.
2. Center the top of the unit in the opening. Use a hammer and 2" (51) roofing nails to fasten the exterior nailing fin at the side jambs 3" – 4" (76 – 102) down from the top on both sides. See figure 3.



Figure 3: Fasten the top corners

- From the interior, position one of the side jambs flush with the location of the interior wall surface, shim and install a supplied #8 x 3" installation screw through the top hole in the jamb. Do the same for the other side jamb. To avoid bowing the jambs do not over tighten the screws. See figure 4.

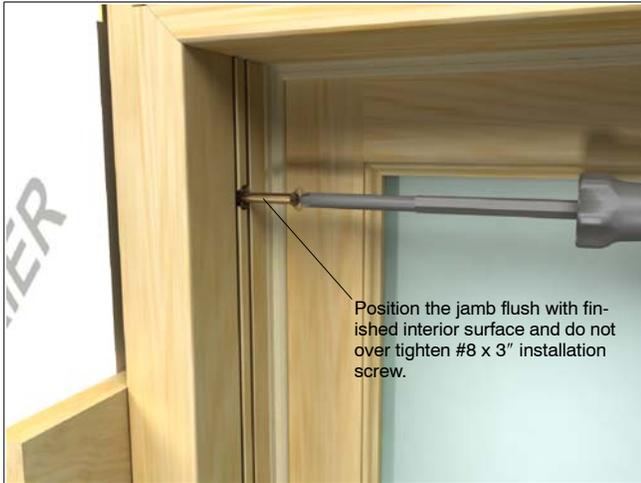


Figure 4: Fasten through top of side jambs

- Unlock and open the primary and secondary sash of the unit. Remove all shipping blocks from the sash.
- Close the secondary sash. Use a pry bar to move the sill of the unit from side to side until the sash is exactly centered between the top and bottom strikes. Make sure that the distance from the sash and the strike is the same at the top and bottom of the sash. See figure 5.

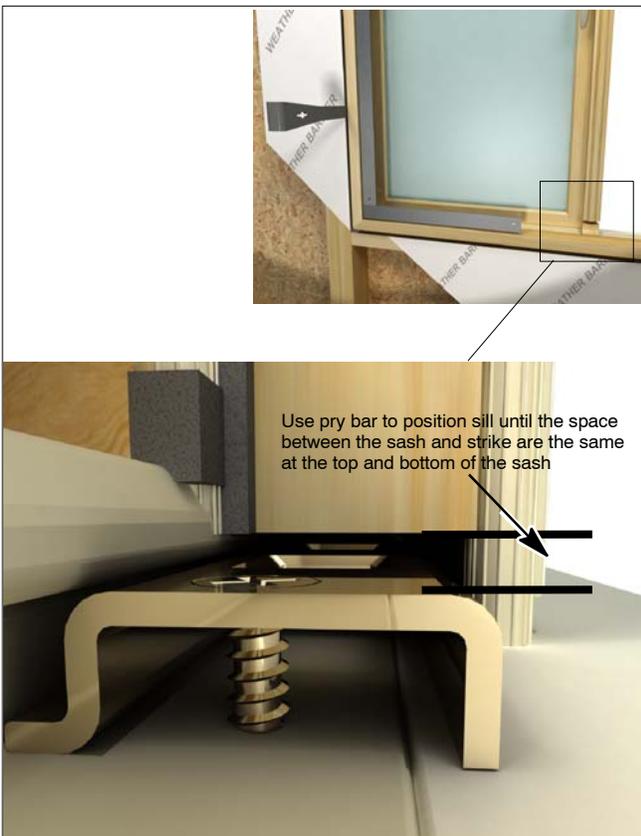


Figure 5: Position sill of the unit to center the sash between the top and bottom strikes

- Once the sash is centered in the frame, flush the jamb with the location of the interior wall surface, shim and screw through the bottom side jamb installation hole with a #8 x 3" installation screw. See figure 6.



Figure 6: Flush with interior surface and screw through lower end of side jamb

- Move the other side jamb in or out until the top and the bottom of the secondary sash are simultaneously in contact with the head jamb and sill weather strip. Once the unit is true, fasten through the bottom hole of the side jamb installation hole with a #8 x 3" installation screw.
- Secure the center of the jambs using the supplied jamb jack screws. Once the jamb jack screws have been inserted into the side jambs, adjust the jamb jack until the side jambs are plumb. See figure 7.



Figure 7: Install jamb jack and plumb jambs

- Remove the screws from the sill and head jamb strike. Place a dollop of silicone over the screw holes and reinstall the sill strike with the supplied #10 x 3" long screws. See figure 8. Insert shims between header and head jamb; adjust shims until the head jamb is flat and level and reinstall the head jamb strike with the supplied #10 x 3" long screws. See figure 8.

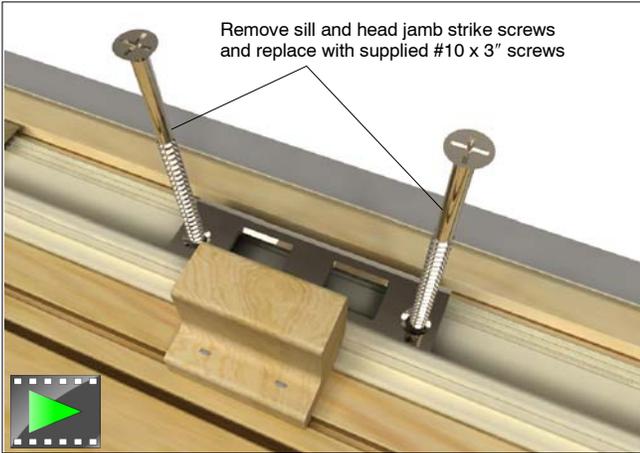


Figure 8: Replace strike screws with #10 x 3" screws

Align the Sash

- Use the supplied hinge adjustment wrench to align the top of the primary sash with the secondary sash. See figure 9.

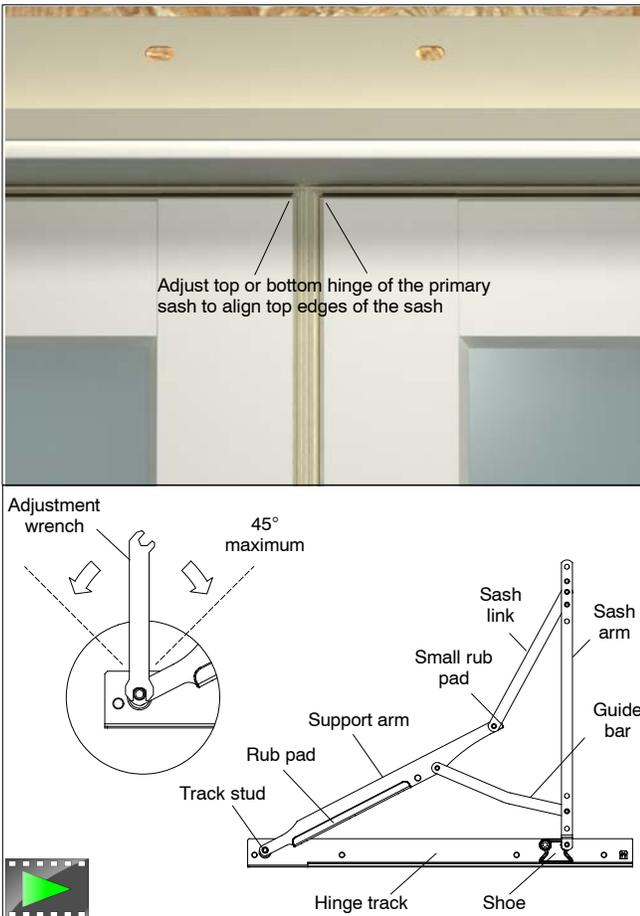


Figure 9: Aligning top edge of sash

- After the primary sash has been aligned with the secondary sash use the adjustment wrench to obtain the desired reveal between the sash by adjusting both the top and bottom hinges of the secondary sash. See figure 10.



Figure 10: Adjusting the reveal between the sash

- Open and close the primary and secondary sash, if the sash are not closing smoothly return to step 5 and make sure that the secondary sash is centered between the top and bottom strikes. Repeat the sash alignment procedures.
- If you need to make the sash close tighter along the astragal, use a 3 mm Allan wrench, rotate the cam toward the interior plane of the sash (toward the exterior plane of the sash). To make the sash lock easier, move the adjustment mark on the cams toward the interior plane of the sash. There will be two to four cams located on the top, bottom, and meeting stile of the primary sash depending on unit size. See figure 11.



Figure 11: Adjusting the active sash against the weather strip

- Install the balance of the jamb screws and install roofing nails through every other hole in the exterior nail fin around the perimeter of the unit.
- Install the interior part stops and follow unit installation instructions to complete installation of the unit.