MaxView Sliding Patio Door

Ply Gem® WINDOWS & DOORS

Installation Instructions

MaxView

Let's get started.

KIT CONTENTS:

- (1) Frame Head
- (1) Frame Sill
- (1) Frame Left Side Jamb (with covers)
- (1) Frame Right Side Jamb (with covers)
- (2-3) Door Panels
- (2-3) Roller Assemblies (one per panel)
- (8-12-16) Frame Corner Keys (frame size dictates)
- (2-3) Tubes Color Matched Sealant (for assembly of the frame)
- (Multiple) Plastic Shims (color coded for different thickness)
- (1) Rigid Drain Pan Assembly (one piece assembly)
- (2-8) Lock Keepers/Strikes (will vary by door size)
- (Multiple) Screws for Lock Keepers/Strikes
- (Multiple) Shims for Lock Keeper/Strikes
- (1-2) Lock Keys (one set of two keys for each lock)
- (2-6) Head and Sill Sweeps

ADDITIONAL MATERIALS NEEDED *(not provided)*

- Tape Measure
- Rubber Mallet
- Level (4' or larger)
- Approved Fasteners from the Fastening Chart
- Load Bearing Shims
- Drill with Metal Bits
- Drill Driver for securing fasteners
- 5/16" Allen Wrench
- Shims for installing door plumb, level and square
- #8 x 3" or longer Corrosion Resistant Screw for a minimum 1.5" fastener embedment into the framing
- Exterior Grade Sealant and Perimeter Sealant (sealant shall conform to Fed. Spec. TTs-S-00230C Type II Class. ASTM C920 Type S. Grade NS class 25. AAMA 808.3-92 exterior perimeter sealing compound)
- Pan Flashing/Sealant Material
- Flashing Membrane Material as desired
- Low Expanding Spray Foam Insulation
- Exterior & Interior Trim around perimeter of the door frame
- French Drain System to manage water away from the door opening

⚠ WARNING

This product can expose you to chemicals, including Titanium Dioxide, which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to **www.P65warnings.ca.gov**

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⚠ READ ALL INSTRUCTIONS BEFORE BEGINNING ASSEMBLY & INSTALLATION

These instructions cover how to install MaxView doors. Check doors thoroughly for possible transit damage. Follow your local building codes, customs and building practices for additional installation requirements. The manufacturer warrants this product only when installed according to these instructions. These instructions are general in nature, and a design or building professional may need to be consulted. Ply Gem Residential Solutions will accept no responsibility for air or water leakage above, under, or around the door unit.

These assembly instructions are specifically for the assembly of the MaxView Door. They are intended to be used in conjunction with the installation instructions provided with the unit.

UNPACKING THE KIT:

1. Please take adequate time to carefully unpack all the components supplied with the MaxView Door. It may be helpful to group all the like items together to help you keep track of everything you need to assemble the door.

2. Please review "Kit Contents" (listed on page 2) and ensure all your parts have been received.

DOOR PANELS:

Inspect the panels for dents, scratches and broken glass. When shipped, items may become damaged even when care is taken to help prevent that from occurring. Please inspect the panels closely and set aside for later use.

SUB-SILL RIGID DRAIN PAN:

Like most of the components in this door application, the Sub-sill Rigid Drain Pan manages water that gets into the tracks of the door away from the opening and when properly integrated into the foundation drainage system, away from the structure.

CORNER KEYS:

Minimum of 8 Corner Keys depending on the size of the door unit, (number of panels). These corner keys are always in even numbers, 8, 12 or 16. They are critical in holding the door frame relatively square and if there's a slot for a corner key, it should be used.

COLOR MATCHED, EXTERIOR GRADE SEALANT:

As a minimum there are two or more tubes of color matched sealant supplied with the door. This sealant is more than enough when applied as indicated in these instructions. This sealant does not include enough for the installation process or the perimeter sealing of the door unit to the structure as a final step and must be purchased additionally to do so.

ROLLER ASSEMBLIES:

3. There is a roller assembly for each door panel packed along with the door. (See **Figure 22**) It is important that you inspect and set aside so they do not get damaged while assembling and installing the door frame.

   Additional components contained in this door package may include: Shim packs (color coded by thickness), keeper/strikes, screws, head and sill sweeps & door lock keys.

PREPARING THE EXTERIOR OPENING & PRE-ASSEMBLY

4. The rough opening should have a minimum 1-¾" step down in the framing subfloor or poured in place concrete floor to accommodate the rigid pan drainage system. This rigid pan drain is supplied with each door and must be considered and applied when setting the door frame. See **Figure 1**.

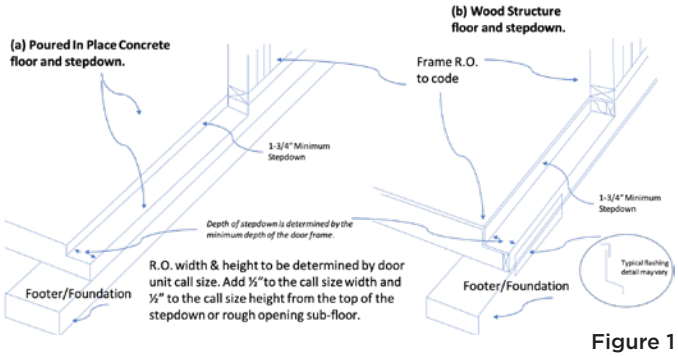


Figure 1

5. This step down shall be treated in such a manner as to provide adequate waterproofing/resistance prior to applying any portion of the drainage pan or frame installation. Please refer to the typical pan flashing guidelines provided by your chosen flashing product manufacturer.

6. Additionally, a French drain system should be constructed as a vital part of the door application to manage all water away from the door and surrounding area. See **Figure 2**.

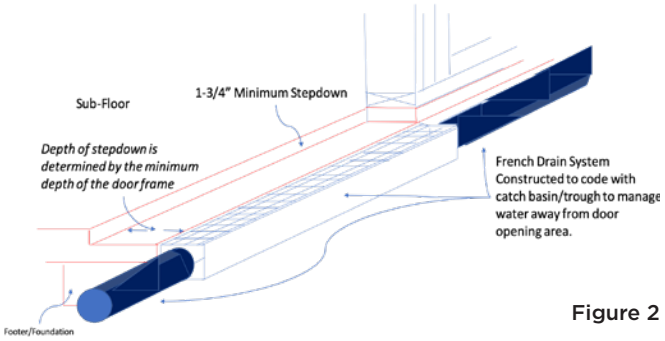


Figure 2

- The Sill Pan application must be considered prior to any construction to manage all water away from the door area. The details shown are designed as a minimum application and are subject to the installers preparation prior to the installation.
- When considering the application of this door, any and all excavation, foundation, drainage and finished exterior and interior floor elevations must be carefully considered as it may affect the overall quality of the installation and cause failures not covered by Ply Gem Residential Solutions.

PRIOR TO ASSEMBLY OF THE FRAME:

7. Verify the door opening is ½" larger in width and 2" taller than the maximum door frame dimensions measured from the bottom of the step-down and that the floor/sill condition is level. The structures frame, jack and king stud configuration must be to code and plumb, and the header must be properly sized to support the building structure to include all foreseeable floor, live and roof loads from above, without deflecting and adding weight to the door.

8. The Rigid Sill Pan (see **Figures 3 and 4**), must be sealed and installed below grade in such a manner that the door sill will finish at or above both the finished interior floor and exterior deck/surface condition.

9. In most cases, a French drain must be applied outside the door area to properly ensure the Rigid Sill Pan drains into the French drain and away from the structure. Please refer back to **Figure 1**.

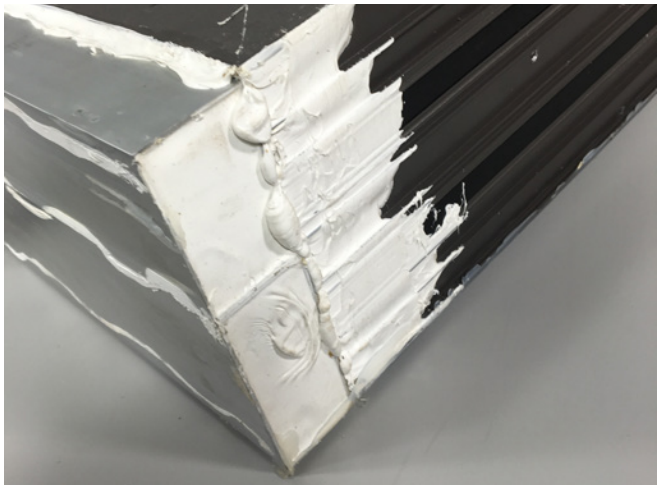


Figure 3

Figure 4

APPLYING THE RIGID SILL PAN:

10. Prior to installing the Rigid Sill Pan Assembly, the Sill Pan area must be level, dry and clean of any debris. It is suggested that some type of pan flashing detail suitable for this door opening be applied at this time in accordance with the pan flashing manufacturer's instructions.

11. Once the Sill Pan Flashing has been applied, apply a minimum of (3) ⅜" beads of OSI Quad Max sealant or better to the bottom of the Sill Pan and at both ends. Carefully center sill pan left and right in the opening with the drainage holes facing to the exterior. See **Figure 5**.

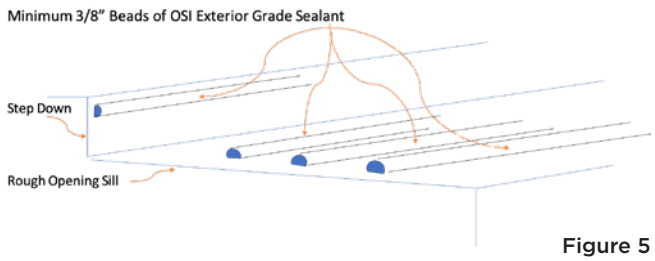


Figure 5

12. Once Sill Pan is in place, it is time to tool any sealant "squeeze out" that may have been pushed out from under the Sill Pan. Apply a fillet bead of sealant into all voids at the Sill Pan/Sill flashing juncture, similar to what you experience when setting the frame on top of the Rigid Sill Pan. See **Figure 6**.

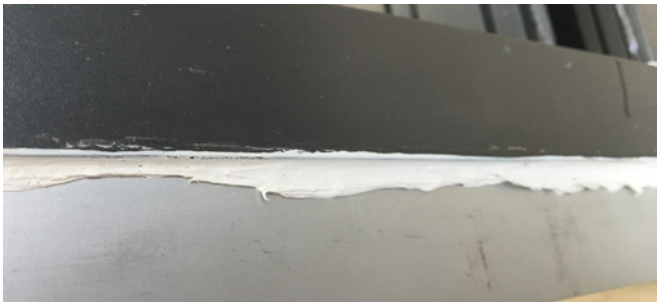


Figure 6

ASSEMBLING THE DOOR FRAME

13. Clear adequate floor space in the area where the door will be installed to assemble the frame. Place cardboard or drop cloths on the floor to protect the frame from scratches and damages.

14. Locate the sill track and place it with the exterior side of the frame facing up. See **Figure 7**. This frame part can be easily identified as it is the only frame section with the weep holes in it. See **Figure 8**.

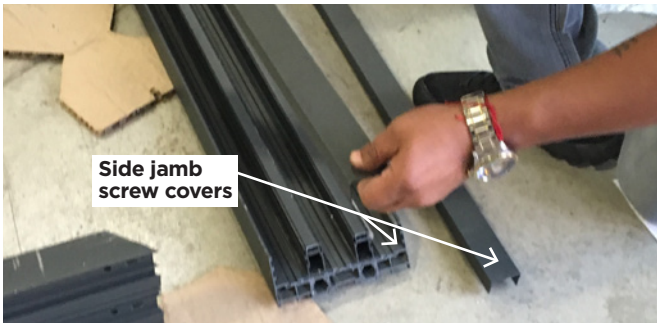


Figure 7

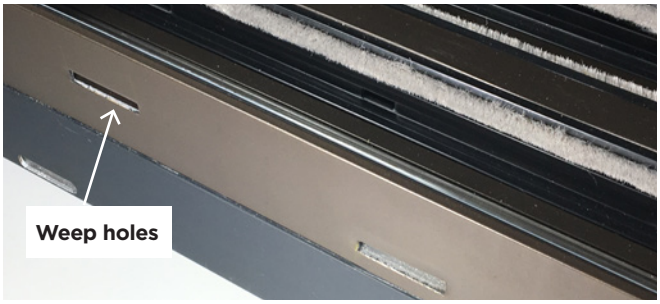


Figure 8

15. The side jamb frame components, (one left, one right) should be placed in their proper location, making note that the weather stripping orientation matches the sill weather stripping orientation. See **Figure 9**. Remove screw covers from frame as shown, (see **Figure 7**) and place in a secure location to be reinstalled once the frame is set.

Figure 9

16. Locate the corner keys. See **Figure 10**. Using an Allen wrench adjust the corner key as far open as possible without disengaging the tensioning screw. Then insert the non-adjusting section of the corner key into one of the frame sill corner key pockets until the retention pin engages into the pre-punched holes. See **Figures 11 and 12**.

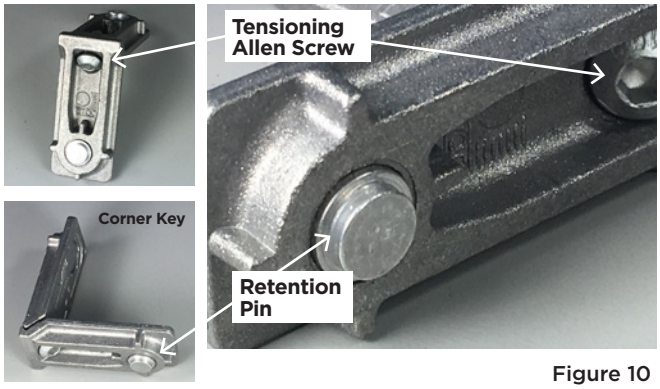


Figure 10

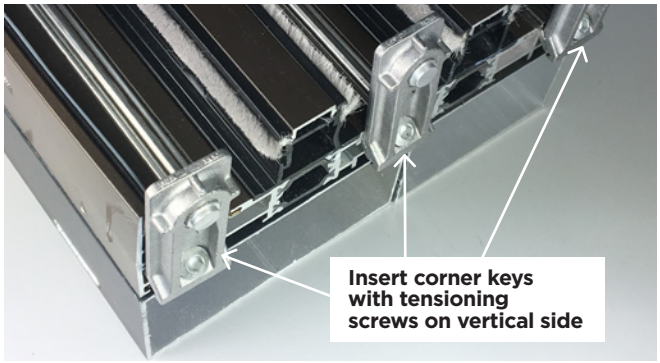


Figure 11

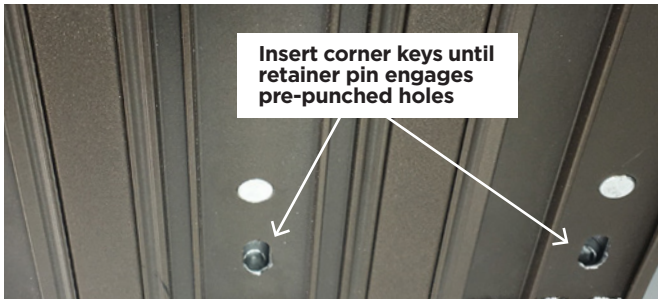


Figure 12

17. Repeat as appropriate, 2 or 3 per corner.

18. Repeat for the other end of the sill profile. Once this is completed, carefully position the side jamb to insert the corner keys and once again insert until the retention pin engages into the pre-punched holes.

19. Repeat as appropriate, 2 or 3 per side.

20. Once the corner keys are properly anchored in their location, apply a bead of color match sealant on the unpainted mitered edges of the entire frame profile. Then, adjust the corner key screws through the slotted access holes provided. See **Figure 13**.

    Note: It may be helpful to adjust each tensioning screw intermittently, until completely tight. Repeat for other side. Clean excess squeeze out of color match sealant with a clean disposable cloth.

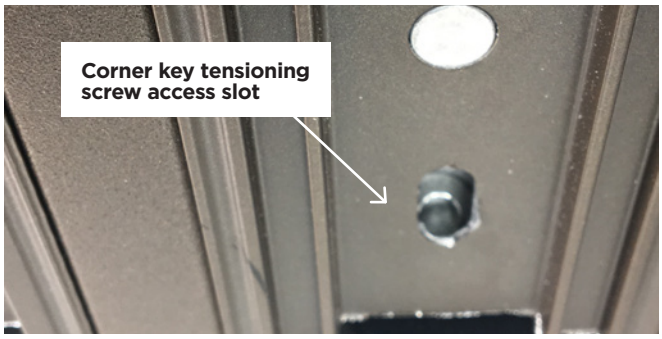


Figure 13

21. Repeat assembly of the frame head jamb to the frame side jambs in the same fashion as the previous sill condition. Note: The bulb weather stripping in the head frame member must be to the exterior side of the frame assembly. Ensure that it is correctly oriented prior to locking it into place with the corner keys.

22. Once the frame is completely assembled and all corner keys have been properly tightened, carefully apply a bead of color match sealant into the interior mitered corners and tool it so it doesn't interfere with the doors operation once dry. Additionally, apply a copious amount of the color match sealant along the exterior corners of the frame to ensure a weather-tight juncture. See **Figures 14 and 15**.

Figure 14

Figure 15

23. Once the frame is assembled and ready to be installed into the opening, ensure the opening is clear of any high fasteners or debris that may hinder the installation of the MaxView Door frame assembly in a plumb, level and square condition. Apply sealant to the bottom of the frame that will contact the Rigid Drain Pan. Also, apply a substantial bead of sealant at each end of the door frame very near the transition of the corner. See **Figures 16, 17 and 18**.

Figure 16

Figure 17

Figure 18

24. Using sufficient help, stand the door frame up into the opening and adjust left and right as needed and establish a plumb condition of the frame. Once this is complete, measuring from the top corner down each vertical leg of the frame, mark and drill a nominal ¼" hole through the frame to align with the structural framing of the home. See **Figure 19**.

Figure 19

25. Apply a corrosion resistant fastener, with a minimum 3⁄16" shank and 3⁄8" head size, in this location, it must penetrate the framing of the structure a minimum of 1-½". See **Figure 20**. Note: It is equally important to shim at all fastening points in line with each fastener location in such a manner as to eliminate movement of the door frame. While fastening, ensure that the frame remains plumb level and square.

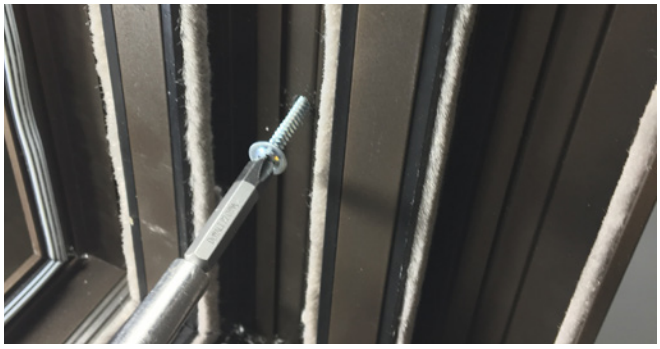


Figure 20

26. Next, mark and drill a hole through the vertical frame members on each side of the opening measuring 6" from the bottom of the frame sill, (not including the Rigid Drain Pan). The maximum on center spacing for each vertical fastener is 16" on center and 16" on center horizontally, unless otherwise dictated by state or local laws. Fasteners should be placed in the vertical side jamb pockets where the covers will hide them. Pre-drill and place a fastener in the head jamb a maximum of 6" of the corner and every 16" on center.

27. Once all fasteners and shims are applied, it is time to adjust the sash rollers to level the panels (the adjustment screws aren't assessable once installed). Using a shim or other "template", adjust the roller assembly using the "template" as a guide prior to installing the assembly. See **Figures 21, 22 and 23**.

Figure 21

Figure 22

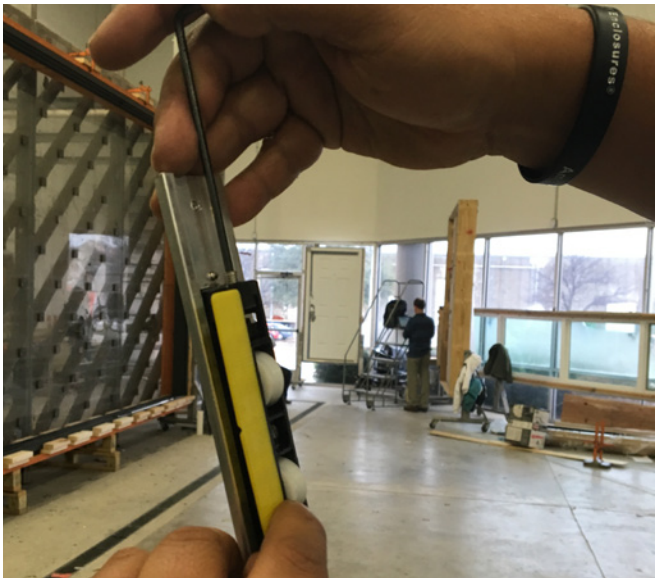


Figure 23

28. After all adjustments are made, simply apply one roller assembly per track into the bottom frame sill, placing each end panel roller approximately 24" away from the side jamb to begin with.

29. Locate the inner most panel (has handle set installed and keyed lock cylinder facing toward the exterior), center panel(s) (if more than two panels) and exterior most panel (again, has handle set installed and keyed lock cylinder facing toward the exterior.)

30. Once located, install the first panel. If installing from the interior of the home set the exterior most panel first into the outermost track by inserting the panel into the head jamb first, then down onto the roller assembly. Ensure the panel is centered and saddled on the roller assembly. See **Figure 24**.

Figure 24

31. Carefully operate the door panel, while assuring it has proper clearance and will remain properly secured in the frame pocket. Now is the time to check the reveal between the panel and side jamb and possibly removing and readjusting the roller assembly and reinstalling.

32. Upon completion of the installation of the first panel, position the first panel to fully engage into the frame side jamb. Center the next roller assembly at the meeting style of the first panel then, just as before, insert the panel into the head jamb first then down onto the roller assembly. Ensure the panel is centered and saddled on the roller assembly. Repeat this process until all panels are installed.

33. Once the panels are installed, locate the lock keepers at each lock location using the supplied screws and shim as needed with the supplied keeper shims. See **Figure 25.**

Figure 25

34. Reinstall the screw covers on the vertical side jambs by firmly pressing into place. See **Figure 26**.

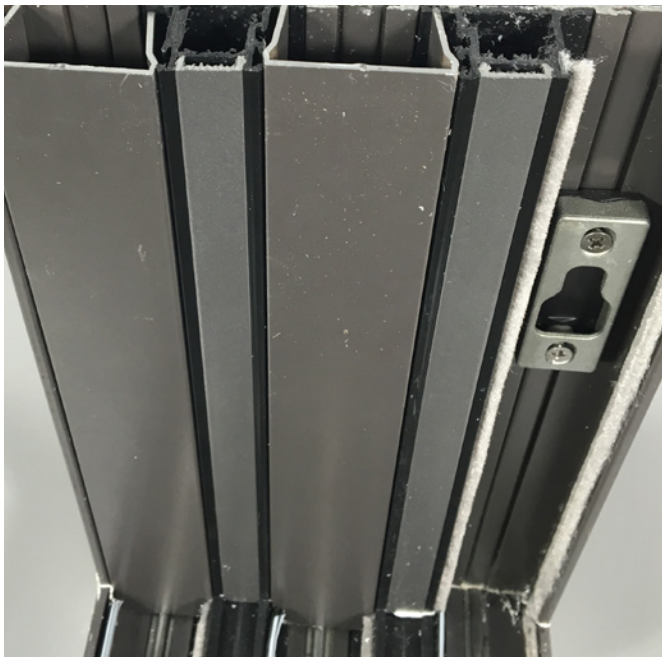
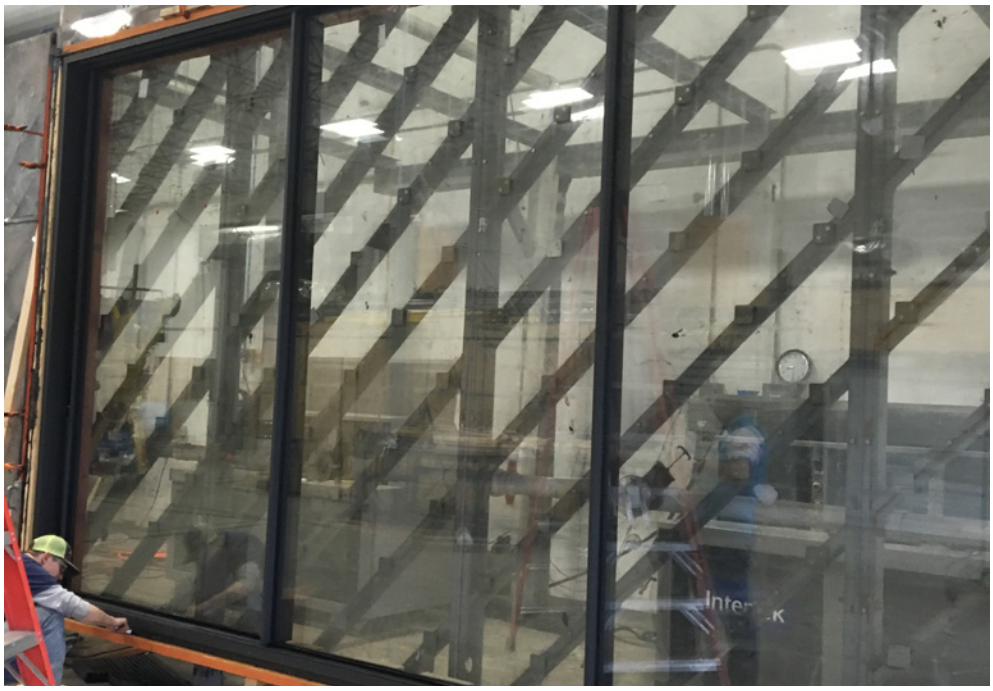


Figure 26

35. Insulate and seal around the perimeter of the door frame prior to final trim out.

ASSEMBLY COMPLETE.



Assembled MaxView Door