4551 Vari-Slide™ Installation Instructions

This document describes the key steps in assembling the frame and components of a 4551 Vari-Slide™ sliding glass door system, including installation into a properly prepared opening. It is intended as an informational guide only and shall not be used as a substitute for proper training and certification.

Precautions & Safety

- Do not work alone. It is recommended that at least two people work together to avoid personal injury or damage when handling glass & frame/panel members.
- Use caution when handling glass – broken or cracked glass can cause serious injury.
- Wear necessary protective gear (shoes, ear, and eye protection, etc.)
- Follow equipment manufacturer's operation instructions, warnings, and cautions when using tools, ladders, scaffolding, lift, and hoisting equipment.

Notice to Installer

- Installer is responsible for site measurements and will ensure that structural and architectural requirements are met before installation of the Vari-Slide™ sliding glass door assembly.

- Installation of Monumental Windows & Doors™ products must be in accordance with standards as outlined in ASTM E2112.

- Building design, construction methods, building materials, and site conditions unique to your project may require methods different from those contained in these instructions. It is the responsibility of the installer, architect, and/or design/construction professional to select the appropriate installation method for each project.

- All construction details and wall systems must be designed to manage the possibility of unanticipated infiltration of moisture past the exterior wall cladding. Incidental moisture penetrating past the wall cladding must be prevented from entering moisture sensitive areas through the use of a barrier and/or membrane(s) that divert water to the exterior of the building.

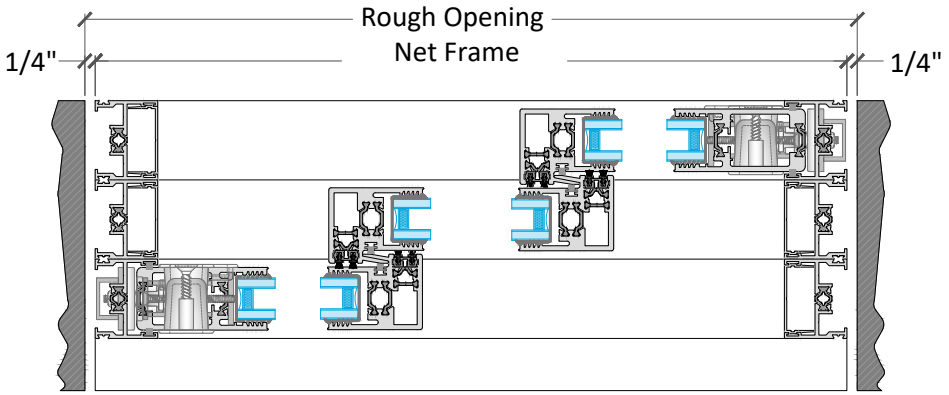
- Monumental Windows & Doors™ is not responsible for claims or damages related to moisture infiltration resulting from:

    - Failure to install in accordance with local building codes which, when integrated with the Vari-Slide™, allows for excessive moisture within the wall system.
    - Deficient building maintenance.
    - Unanticipated water infiltration.
    - Neglect
- The site-specific suitability of all building details, including the appropriate selection of Monumental Windows & Doors™ products, installation details, the means of protection against air, water, and structural forces is the responsibility of the installer, architect, and/or design/construction professional.

Advance Preparation

Measuring and Sizing

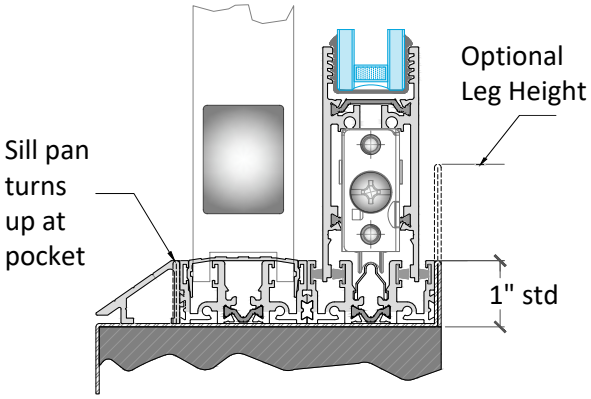
The 4551 Sliding glass door system is designed for installation without a nailing fin. Installation requires application of a self-adhesive waterproofing membrane, or liquid membrane, to the structure prior to placing sill pan or frame. Exterior finishes should not extend past frame edge, and should not block drainage at the sill or impede operation in any manner. Rough openings are best obtained by adding ½" to net frame dimension width & height. Alternately, or if measuring existing openings, deduct ½" from opening dimensions to obtain optimal frame size. Frame depth is also a concern, since the frame depth will change with the amount of panels in the assembly.

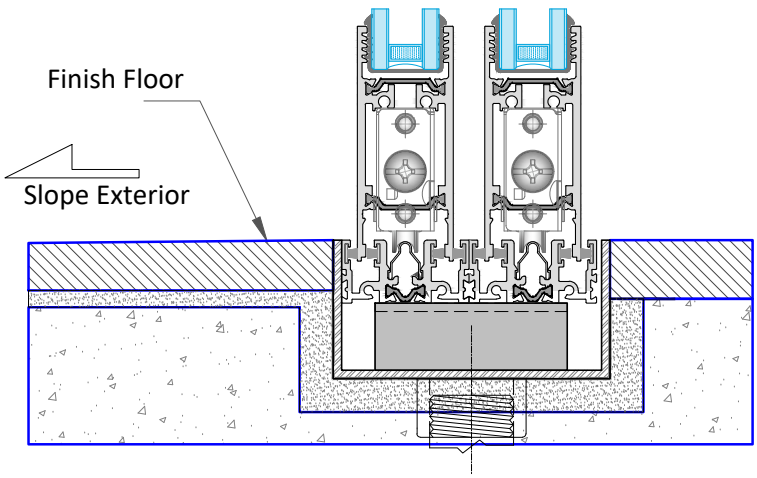


*The 4551 Sliding glass door system is also available in pocketing, and corner configurations. Use drawings provided by Monumental Windows and Doors for verification of required rough opening and finish dimensions.

Sill Pans and Drainage Concerns

Special attention should be paid to concerns regarding proper sill pan selection, application, and installation. Bottom and side draining sill pans will require a depressed sill. Front draining sill pans may require allowance for drainage beneath the exterior finish. In any case, a properly installed and glazed frame should allow only incidental moisture into the frame cavity.





Frame Installation

Frame Assembly – Jobsite

4551 frames are shipped unassembled, or “knocked down” (KD) – for assembly at the jobsite prior to installation.

1. Assemble frame in clean, dry, and dust-free environment, free of debris and obstructions. Protect frame from abrasion, impact, or other jobsite damage. Before assembling frame, confirm orientation with customer order.

2. Apply compatible sealant to ends of head and sill and attach jambs with screws provided, using wax to reduce friction. Trim excess sealant and verify that joint is air and water-tight (for pocketing doors, there will be no jamb supplied for the pocket).

Notes:

- Before assembling frame, inspect rough opening to confirm plumb, level, and verify dimensions.
- Jambs and head **MUST** be plumb, level, and properly secured against twisting and warping.
- Typical shim spacing is ¼” at jambs & head, and should not exceed ½”
- Slab or other sill support **MUST** be level, solid, and smooth - free of lumps and cavities.

Frame & Panels Installation - Jobsite

1. Apply liquid membrane waterproofing at slab/sill (including face of slab/sill) and 6” (min) up jambs. Pockets should be lined and waterproofed before frame installation.

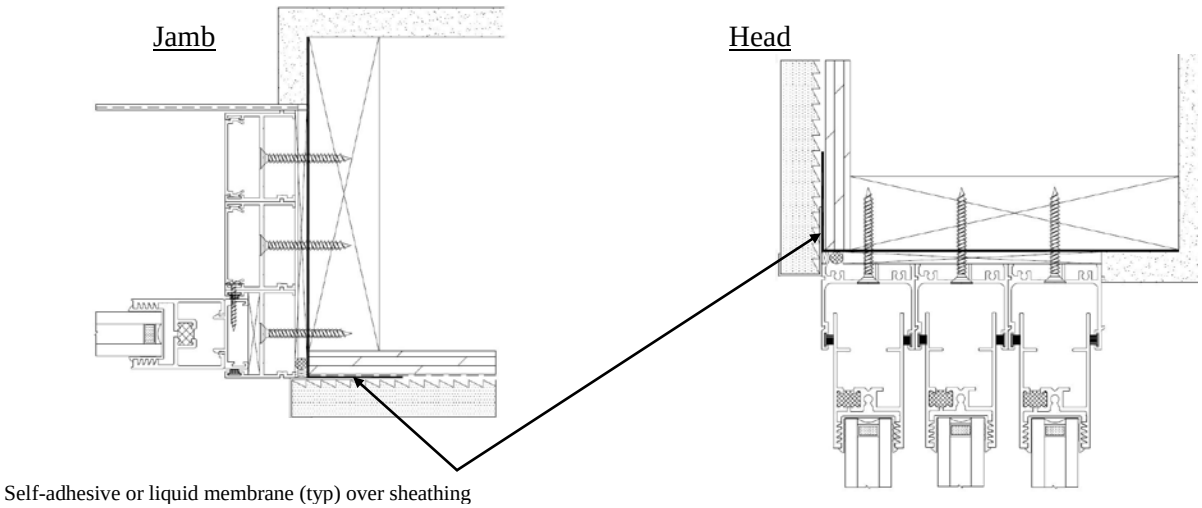


Fig. 1

Wrap Jambs and head in self-adhesive or liquid waterproofing membrane. Apply to full width of jamb and extend over sheathing minimum 4”. Lap all joints

2. Flash, wrap, or otherwise prepare structure jambs and head as required to provide a completely water-tight seal (see Fig. 1).

3. Slab should be level to within 1/8". Any shims used should support the full depth and length of sill as necessary, and should be set in sealant.

4. Apply full bedding of compatible sealant to sill at location where sill-pan will be placed. Sealant should run along sill, at intersection with jambs, and up structure jambs minimum 6". Apply sealant to face of sill and marry all joints. (see Fig. 2)

5. Place sill-pan on slab in opening, aligning with structure jambs as necessary. Ensure sill-pan is fully seated, centered, snug in opening, and level. Seal ends of sill-pan against structure jambs.

Fig. 2

Typical Frame Installation

Use only non-organic, non-corrosive shim material – high-impact plastic shims are recommended. Sliding glass door frames are not designed to absorb structural loads imposed by twisting and bowing lumber, or otherwise unreinforced framing. Framed openings must be constructed plumb, level, and square, with all sides firmly secured. Lumber shall be sufficiently dried and/or treated to resist twisting, bowing, and splitting.

6. Seal all joints of sill-pan. Apply sealant generously to back and side legs of sill-pan. Apply sealant to underside of frame sill, careful not to block weep slots.

7. Set assembled frame into sill-pan carefully, so as not to smear sealant. Ensure frame is centered, plumb, and level. Use temporary fasteners to secure the frame and make any necessary adjustments to sill to ensure correct and level placement. Confirm that a continuous seal exists against sill pan back and side legs.

8. Securely attach frame at jambs first, then head. Use appropriate fasteners and anchoring for attachment to structure. Ensure that frame is secured against twisting and warping, and that all members are plumb and level.

Corner Assemblies	Ensure head & sill are plumb and in aligned at corner
Pocketing Assemblies	Line and waterproof all pockets prior to installing frame
Sill	Avoid penetrating the frame sill, if possible. If sill attachment is required, fill penetration with sealant and cap screw head with silicone to prevent moisture penetration.
Thermal Break	Do not anchor frame through thermal break.

Setting Panels

9. Set fixed panel (if applicable) in opening first, fully seated against jamb spacer and approx 1/8” off sill. Secure to jamb through pile pocket with #8x1/2” self-tapping screws, at top & bottom rails.

10. Set intermediate rolling panels next, after adjusting rollers, careful not to drag on sill. Set lead panel and adjust rollers to align and lift all panels approx 1/8” off sill. Adjust lock strike as necessary and test operation to ensure that panels operate and lock properly.

11. For pocketing doors, install wall interlocks at this time, shimming as necessary to align with panels and panel interlocks. Confirm operation and alignment of panels in open ***and*** closed position.

12. Snap jamb fillers in place first, then head fillers and sill caps.

Final Adjustments

13. Apply backer rod at gaps and caulk exterior jambs & head to self-adhesive membrane. Apply sealant heel bead at sill pan (interior) to slab and turn up at jambs approx 6”. Apply minimally expanding foam at interior jambs and head to reduce drafts Clean & trim any excess sealant.

14. Water test assembly for leaks as soon as practical after installation, prior to placement of drywall, if applicable, to avoid damage in the event of water intrusion. Make corrections as necessary.

15. Apply hole covers at panel stiles, install and adjust screen(s) if applicable.

16. Exterior trim moulding (stucco J-mould, etc.) should be set in sealant and overlap window frame by 1/8”–1/4”