5200 Series Window Installation Instructions

This Document describes the key steps for installing into a properly prepared opening, and glazing the frame of a 5200 fixed window. 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/sash 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 5200 series windows.

- 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.

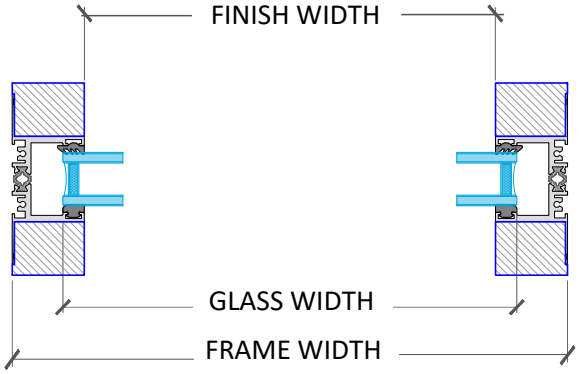
- Monumental Windows & Doors™ is not responsible for claims or damages related to moisture infiltration resulting from:

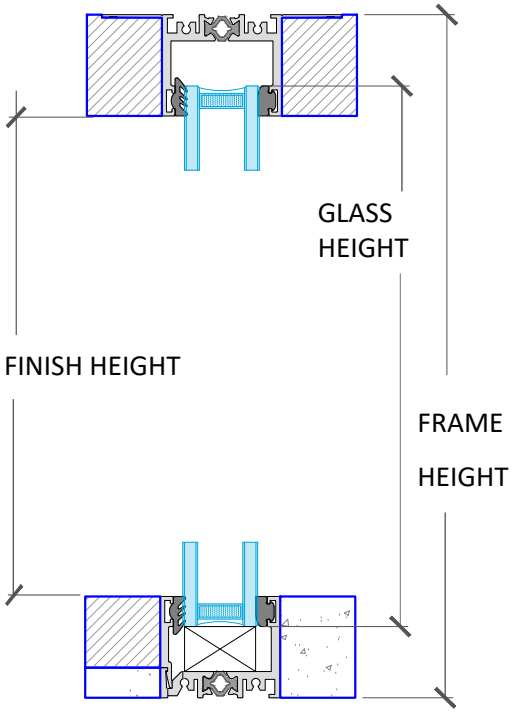
    - Failure to install in accordance with local building codes which, when integrated with the 5200, allows for excessive moisture within the wall system.
    - Deficient building maintenance.
    - Unanticipated water infiltration.
    - Neglect
- The site-specific suitability of all building details, 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 5200 Sublinear fixed window is designed to sit recessed into the surrounding structure, flush with surface finishes. Typically, it is installed ***recessed into the window opening***, with interior and exterior finishes terminating at the frame edge. Jobsite ***finish*** dimensions must be obtained from the architectural plans in coordination with the project building/design professional. *Rough openings are best obtained by adding the frame profile dimension, plus shim space, to the finish dimension, as in the following example:

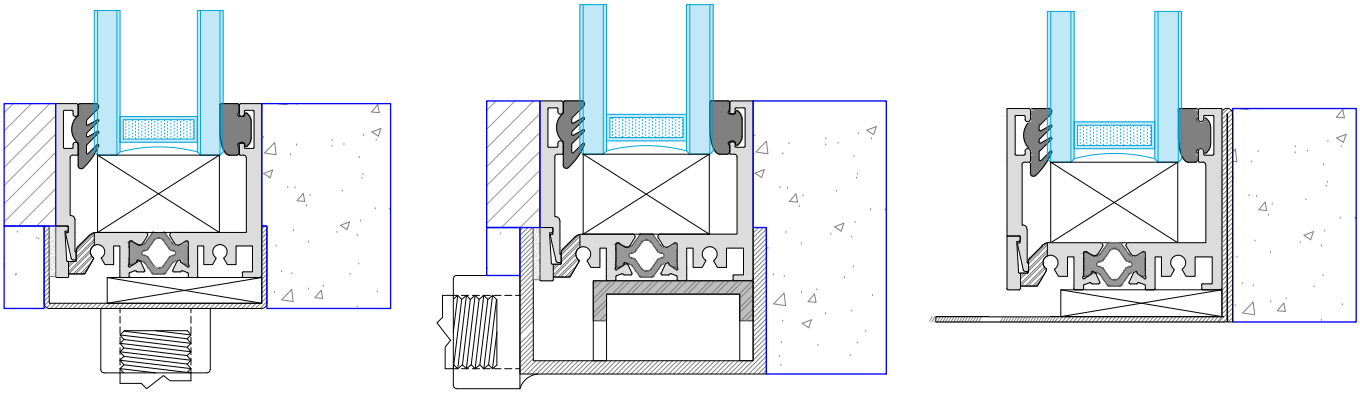




*Alternatively, the frame can be installed into the existing rough opening, and finishes can be adjusted to align with frame edge after installation.

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 will 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.



Glass Stop Location

The glass stop will be located at the bottom (sill) of the frame unless specified otherwise prior to fabrication. Alternatively, the glass stop may be located at either jamb, or at the head, if desired. The glass stop placement should be selected by determining which location would be preferable to remove the exterior finish, should glass need to be replaced in the future.

Frame Installation

Frame Assembly – Jobsite

5200 series frames are usually provided factory assembled. In some cases; as with larger frames, or corner units, or where field splicing is required, the frames may need to be field assembled.

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

2. Apply compatible sealant to ends of frame and assemble with screws provided, using wax to reduce friction. Trim excess sealant and verify that joint is air and water-tight.

Notes:

- Before assembling frame, inspect rough opening to confirm plumb, level, and verify dimensions.
- Frame **MUST** be installed 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.

Preparing the opening – Jobsite

Verify that opening dimensions are within normal shimming tolerances (max ½") for frame installation. Verify that opening is continuously backed and properly supported – with no gaps or interruptions in structure. If a draining sill pan is to be used:

- Dry set the pan in the opening and confirm leveling and shimming requirements, as well as clearances for drain connections. Remove the pan for flashing.
- Use a liquid membrane, following manufacturers' instructions, to completely waterproof the sill.
- The liquid membrane may be used for the jambs and head as well, following manufacturers' instructions - see **Typical Flashing Application** on page 6.
- Alternatively, a self-adhesive membrane may be used at the jambs & head, which extends into the recess and at least 6" onto the vertical face.
- Replace sill pan in opening, connect drains to fittings and block outlets, and fill pan with water.
- Inspect pan, drains, and connections after 12 hours for signs of leakage, and if assembly is water-tight, proceed with installation.

Typical Frame Installation

Use only non-organic, non-corrosive shim material - high impact plastic shims are recommended. Window frames are not designed to absorb structural loads imposed by twisting and bowing lumber, or otherwise unreinforced framing. Framed window 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.

1. Set sill pan or drain pan in place, centered in opening, and level. The use of screws/mechanical fasteners through the sill pan is discouraged. If mechanical attachment is required, seal all screw heads with compatible sealant.

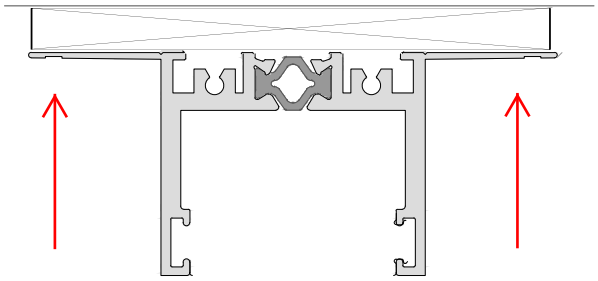
2. Water test all drain pans by making drain connections, blocking drains at termination, and filling pans with water. Check for leaks at connections and seams. Water level in pan should remain unchanged. If drain pan assembly is water-tight, proceed with installation.

3. Use dry-pack or other non-shrink adhesive to secure the sill pan in place.

4. Notch jamb nail fins at sill – to clear panning, if applicable.

5. Apply a small bead of silicone sealant to the back and side legs of the sill/drain pan prior to setting the frame in place. Set frame in pan and use temporary fasteners through the nail fin to secure in opening. Make any necessary adjustments to ensure correct plumb and level placement.

6. Securely attach frame at jambs first, then head. Use appropriate fasteners, shims, and anchoring for attachment to structure. Place shim behind frame base and attach through nail fins. Ensure that frame is secured against twisting and warping, and that all members are plumb and level.



Intermediates	Intermediate verticals can be installed at any time prior to head & sill finishes. Locate desired centerline of mullion placement. Place mullion against interior leg of frame and secure by attachment at each side of both ends.
Sills	Avoid penetrating the frame sill, if possible. If sill attachment is required, fill hole with sealant and cap screw head with silicone to prevent moisture penetration.
Thermal Breaks	Do not attach frame through thermal break. Use cap bead of silicone at sill thermal break as a preventative measure against incidental moisture penetration.

Glazing Frames

Fixed frames over 40sf or 120” in length must be installed prior to glazing. Glazing method is similar to “Flush Set” storefront.

1. Always confirm glass size and inspect, for defects, abrasions, chips, or any other damage and/or cause for rejection ***prior to glazing***.

2. If glass is acceptable, trim excess sealant from edges, remove protective buttons, and confirm interior/exterior.

3. If glass stop is located at sill – remove stop, then:

    a. Place 1.5” x 4” x 1/8” temporary setting blocks in sill at ¼ points, or no less than 6” from frame corner.
    b. Set glass in frame using standard “flush set” method:
        i. Insert glass edge fully into jamb,
        ii. Clearing setting blocks and head, swing glass into plane of frame and rest on temporary setting blocks.
        iii. Raise glass into head frame and replace temporary setting blocks with permanent 1.5” x 4” x ¾” permanent setting blocks. Make sure that there is a clear path for water to drain around setting blocks and through weep slots.

4. If glass stop is located at head or jamb – remove stop, then:

    a. Place 1.5” x 4” x ¾” setting blocks into sill channel
    b. Set glass in frame using flush set method:
        i. Insert glass edge fully into jamb,
        ii. Clearing head & sill members, swing glass into plane of frame and rest on setting blocks.
5. Replace glass stop and apply wedge gasket to all sides, compressing length and careful not to stretch.

Sealing Frame to Structure

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

2. 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.

Typical Flashing Application

3. Flash, wrap, or otherwise prepare structure as required to provide a completely water-tight seal (*See Fig. 1*).

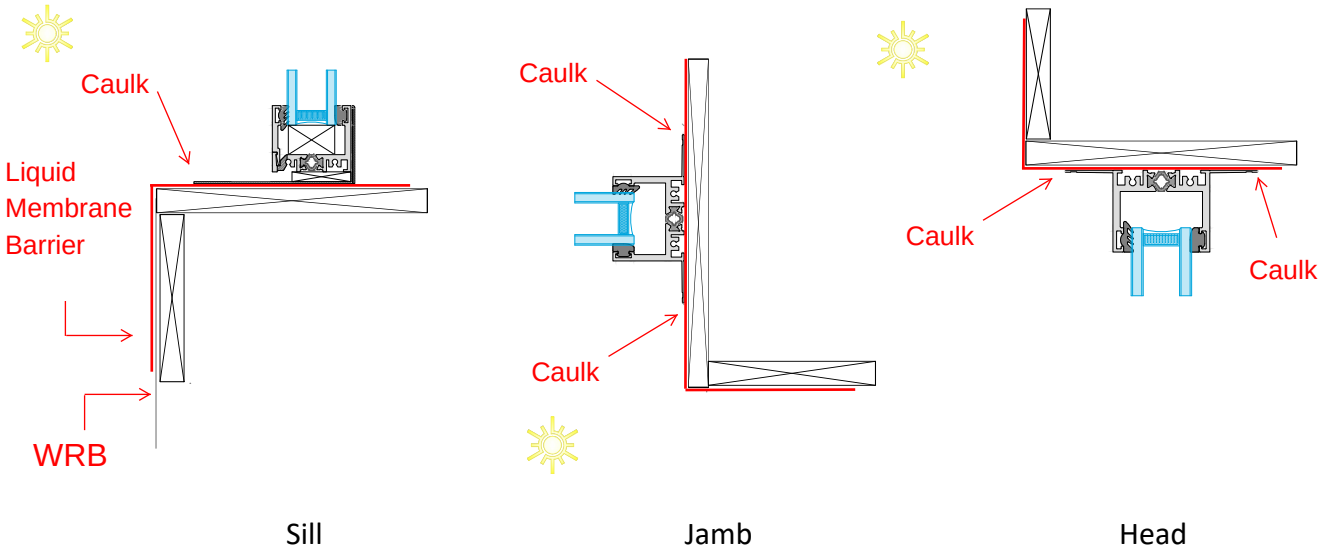


Fig. 1

Apply liquid membrane barrier at sill, jambs and head. Extend over sheathing a minimum of 6". integrate with WRB according to manufacturers instructions. Caulk frame to membrane or barrier.

4. If the frame extends to the slab, the 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 (see Sliding Glass Door instructions).

5. Use liquid membrane or other compatible barrier if necessary to ensure that no contact will be made with concrete (slab) and aluminum. Apply full bedding of compatible sealant to underside of frame sill and to slab at location where sill will be placed. Sealant should run along slab intersection and up structure jamb minimum 6". If a drop (nosing) is used, apply sealant to edges of slab as well. Marry all joints.