



Installation Instruction

The following instructions are applicable for the following products: Aluminum Clad Wood, Wood and Cellular PVC.

Important: Read the following documentation completely prior to attempting any installation of your FrontLine product.

These instructions do not address all possible installation options that may exist. The installer is responsible for determining whether the following instructions meet or exceed requirements previously established by local codes and/or ordinances, which supersede these instructions. For installations other than those referenced in this document, you may refer to ASTM E2112, “Standard Practice for installation of Exterior Windows, Doors and Skylights” or consult with a local contractor, structural engineer, or architect.

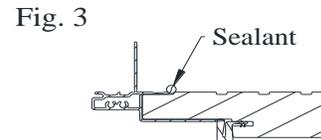
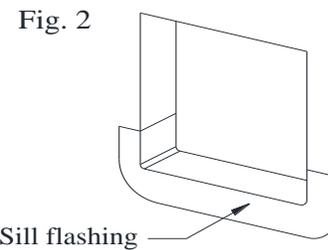
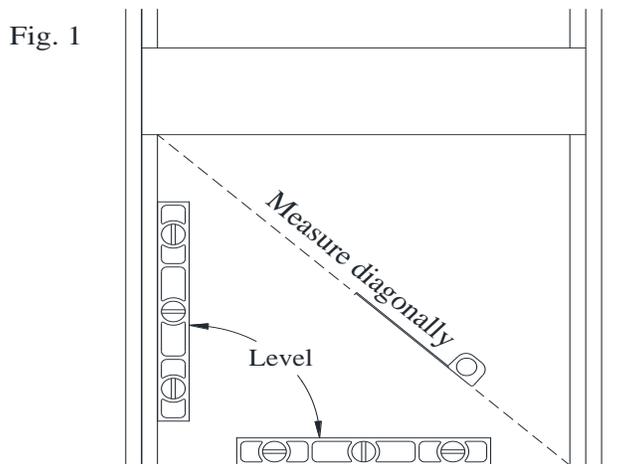
Several items will be required for the installation of your FrontLine product. The most important items are appropriate eye, hearing and hand protection. Below is a check list of items which may be required for your unit’s installation:

Item	Item	Item
Eye protection	Square	Shims
Hearing protection	Drill	Fasteners
Gloves	Utility knife	Flashing
Hammer	Level	Rags/Paper towel
Putty knife	Tape measure	Fiberglass insulation
Pry bar	Sealant & Caulk gun	Low expand foam insulation

When installation includes disturbing materials in place, prior to 1978, care must be taken with their removal. These materials may contain contaminants, such as lead, which are harmful when disturbed. The EPA has created guidelines to follow when performing any remodeling activity. The guidelines can be reviewed on the EPA website at www.epa.gov/lead. Included on the website is information on removal, recycling and/or disposal of contaminated materials.

Preparing the rough opening (opening window/door unit will be set into):

1. Check the rough opening to ensure it is plumb, square and level. Check dimensions in width, height and diagonally (Fig. 1). Check the width and height for plumb at three locations; each side of the rough opening and along the sill (Fig. 1).
2. It is recommended that an air barrier be applied to the building envelope as per ASTM E2112 guidelines.
3. Apply a self-sealing adhesive membrane flashing to the sill of the rough opening (Fig. 2). Cut the flashing long enough to extend an equal distance beyond the jamb flashing.



Perimeter Flashing:

There is a multitude of practices and procedure for properly flashing a window/door unit. It is the installers responsibility to determine the best installation practice which may be “regionally specific” in its’ suitability. A general approach to flashing around the perimeter of your FrontLine product can be found on flashing manufacturer’s websites. One such site is at: http://www2.dupont.com/Tyvek_Weatherization/en_US/tech_info/install.html

Installing the unit:

4. Before setting the product into the rough opening, a bead of sealant must be applied to bridge the outside perimeter edge of the frame cladding to the side of the wood jamb (Fig 3). This includes sealing the sheet metal plate, covering the back side of each of the hinge screw locations, to the frame. A continuous 1/4” diameter bead of sealant must also be applied to the back side of the nail fin/brickmould, around the perimeter of the unit. Sealant must be Grade NS Class 25 per ASTM C920.
5. Install the window, shimming and adjusting to square, plumb and level. Check the center width and height, to avoid bowing.
6. Fasten through the nail fin on aluminum clad wood products and through the brickmould and sill nose on wood or cellular PVC products with galvanized nails. Ensure the fasteners are long enough to penetrate the building envelope framing by 1” minimum, spaced no closer than 3” from each corner and 8” to 10” apart thereafter.

Perimeter Insulation:

10. Insulate from the home’s interior, around the perimeter edge of the window/door frame, in the void created by the window/door frame and rough opening. Pack the insulation loosely. Some building codes require foam type insulation to form an air infiltration eliminating seal. Use only low expansion type foam in combination with fiberglass insulation. Foam and foam application must conform to ASTM E2112. Follow all instructions and warnings specified by the foam manufacturer.
11. After the siding is installed, apply a continuous bead of sealant around the perimeter of the window which meets Grade NS Class 25 per ASTM C920.

Outswing Door

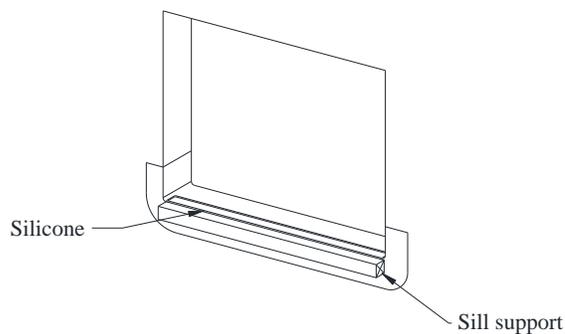
(Optional, half saddle ADA sill) Setting block application

Prior to installing your door into the rough opening, apply the provided setting block. The block is located in the installation packet included with your FrontLine door unit. The size and location of block can be

modified to fit your installation requirements, which may vary depending on the sill and/or sill placement. Determine the size which best suites your application and apply to the base of the door jamb. Secure block to the base of each jamb.

Sealing at sill

Additional steps must be taken when installing an Outswing door. Special attention must be made when preparing the rough opening and sealing below the sill. If the sill is to extend past the plane of the building envelope's exterior sheathing, a solid surface must be available to provide support. Prior to setting the door unit in place, sealant must be applied along the rough opening's sill. Apply one 1/4" diameter bead of sealant in line with nail fin/exterior sheathing plane. Run an additional 1/4" diameter bead 1 1/2" in from the first. The second bead should meet up with the first, at the lower inside corners of the rough opening. After the unit has been set in place and secured to the rough opening, seal the void below the nail fin, in between the end of the sill and rough opening frame. Back-up (foam backer rod) may be required to fill any void prior to sealing.



Securing at hinge

Following the installation of the frame into the rough opening, secure the hinge through the wood jamb into the rough opening. Shims must be located at each hinge location. Remove the silver colored jamb hinge screw, provided to temporarily secure the hinge leaf for shipping. Inject sealant into each of the two jamb hinge screw holes. Using the #12 x 3" screws, provided with your installation packet, secure the hinge and jamb to the rough opening. Repeat this step for all remaining hinge screws.