



Recommended Window Installation Instructions For Metal, Vinyl, Flush Mount and Recessed Fin Including Egress Units

MANUFACTURERS NOTE: Failure to follow these instructions may cause the window not to function properly. All product liability and warranty could be void. These installation instructions are recommendations only. Local building codes may impose additional requirements, and those codes may supersede these instructions.

I. Rough Opening Preparation

- A. Opening for windows should be framed in accordance with the required standards for size of window used in order not to apply any loading to the window which may hamper its operation. The prepared rough opening should allow 1/8" clearance on each side, the head and the sill, including the thickness of pre-finished paneling, shims, liners, etc., where used.
- B. **Window rough opening should be level, plumb and square:** Check width, height, and diagonal measurements for squareness. There should be no more than 1/8" variation between these measurements. Avoid the use of warped, twisted, or knotted framing members. **It is recommended that the sill of the rough opening be straight and level. Bowed or warped sill framing members can result in a crowned sill of the window.**
- C. Make certain all mounting surfaces (siding included) are securely fastened and flat around the perimeter of the window opening. Check the opening for correct size. Kinro recommends adding 1/4" to the actual window width and 1/4" to the actual window height for the rough opening size.
- D. According to Federal Manufactured Home Construction and Safety Standard, the bottom of an Egress window shall not exceed **36 inches above** the floor, nor shall any latch or other device for the window, screen, or storm window which needs to be operated in order to permit exiting, be located in excess of **54 inches** from the finished floor.
- E. **Flashing:** It is not the responsibility of the window manufacturer to design or recommend a flashing system appropriate to each job condition.

II. Window Installation

- A. It is recommended to apply a 1/8" thick, suitable, good quality, non-hardening, water resistant sealant tape (putty or butyl type) to the back of the window mounting flanges in order to provide a good seal with the homes weather-proof envelope. If a gunable sealant is used, a 1/4" bead should be applied centered over the mounting holes on the back of the window mounting flange.

CAUTION:

- For vinyl windows, do not use a sealant that contains solvents which may chemically attack vinyl.
 - The use of foam tapes is not recommended for window installation.
- B. **Do not** remove any shipping clips (if provided on the window series being installed) and **always keep operating sash closed and locked during installation.**

- C. Always handle windows properly. Always pick them up by both side jambs using both hands. **Never** pick up and handle windows by the header only, sill only, or by one side jamb only. This can damage the windows and possibly rupture the glazing seal and/or joint caulking, thus resulting in a possible leak.
- D. Carefully insert the window into the opening. Center the window in the rough opening with the sill of the window resting on the sill of the rough opening.
- E. Drive the first fastener at approximately the center of the vertical frame jamb. Drive the second fastener on the opposite jamb at the approximate center. Drive the third fastener at the center of the sill member. **(Note: When installing windows check the window sill for straightness. If the window sill is crowned, apply light pressure at the center of window sill until it is level. While holding the sill level, drive the third fastener into the center of the sill.)** Drive the fourth fastener at the center of the head. Run fasteners, from one of the above fasteners, to the end of each frame member). Repeat this step until all fasteners have been inserted from the center of the vertical frame jamb outward to both ends of each member. Finish installing the fasteners from the center of the Frame Head and Sill outward to the ends of each member. See attached drawing for visual guide to fastener placement of assorted window types.

Note: All fasteners should be driven straight into the window frame. See section III for fastener information.

This sequence of fastener installation applies to both vertical and horizontal sliding windows, flush mount and recessed fin mount, for both metal and vinyl windows. **A drawing is attached for visual reference.**

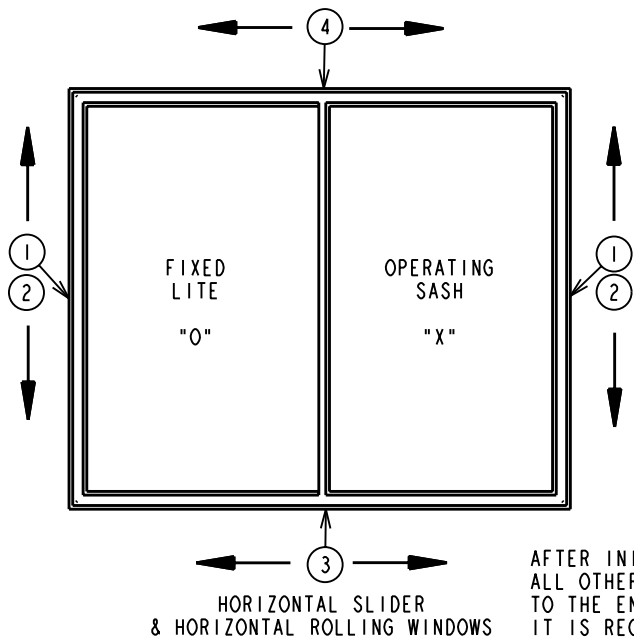
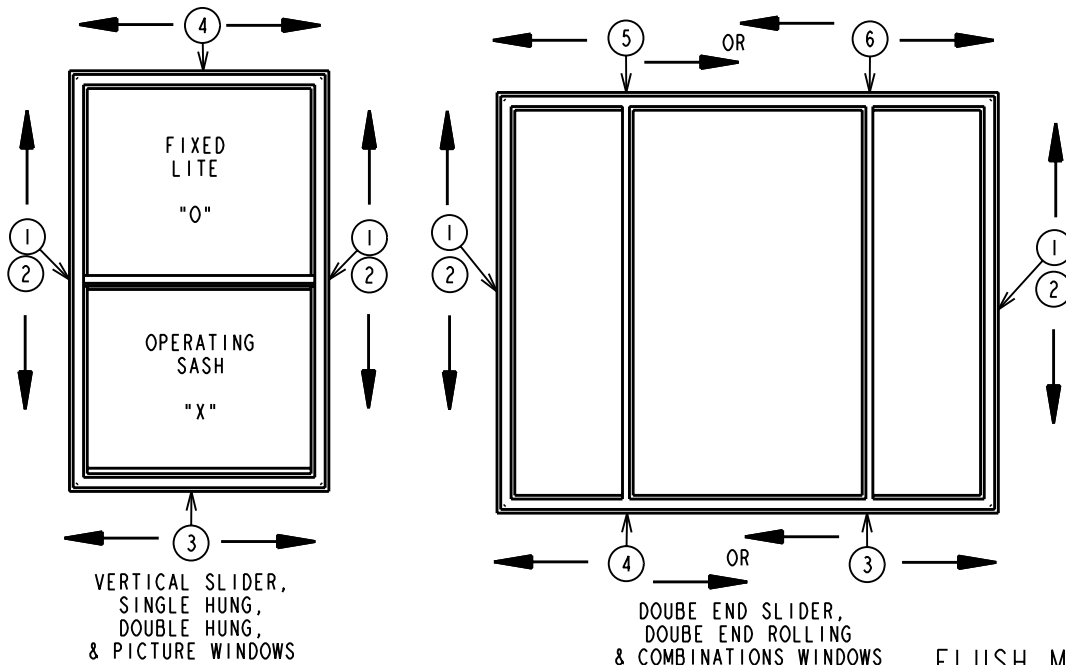
After the initial fasteners are placed, it is important that the installer does not run the remainder of the fasteners in a continuous clockwise (or counter clockwise) fashion around the window.

- F. Avoid damage to the seal between the glass and the window glazing member. Power drivers should be adjusted so as not to cause excessive dimpling of the window flanges. Careless mounting procedures could negate window certification.
- G. If the exposed surfaces of the rough inside opening are to be trimmed out with pre-finished paneling, it must be done in such a manner so as not to distort or twist the window frame members and make the operating sash tight or inoperable. If interior trim is installed prior to window installation insure that enough room is left to allow the window to fully seat against the exterior wall surface. Do not obstruct tilting sash operation or locking mechanisms with inside trim, wood molding, etc.
- H. Windows should be checked after installation to make sure that all moving panels, mechanisms, latches, and other hardware function properly. Any shipping clips must be removed prior to operation of the window. All windows should be checked for out-of-square or bowing of frame members. If any of the above problems are present, window should be removed and re-installed properly. **Double hung windows require extra care during installation. Double hung windows do not have fixed glass, which offers additional frame stability.**
- I. The window's exterior mounting flanges should be checked after the installation to assure an all-weather seal. It is recommended to seal the outside top of window (full width) with a good quality sealant for additional insurance.
- J. For vinyl windows, leave an appropriate gap between the edge of the siding material and the window frame to allow for siding expansion and contraction.

- K. For vinyl horizontal sliding & fixed windows 72" in width and greater, Kinro recommends a sill support (minimum 1" thick) or angle bracket support, dependant on exterior home finish, to be installed underneath the projected frame sill on the outside.
- L. The use of any appurtenance system not approved for the Egress window or any alterations of an approved appurtenance system negates the window certification. The operating instructions and certification label are a permanent part of the Egress unit and must not be removed.
- M. There should not be any obstruction placed, attached, or located inside or outside an Egress window which would hamper direct access to Egress Devices or encroach on the minimum dimensions for horizontal, vertical, and square feet of area required for exiting.
Caution: Flammable fabrics could prevent access to the exit devices.
- N. An operational check of each installed **Egress Window** or **Device** shall be made at the installation site. For HUD manufactured homes it is recommended that the Manufactured Home Factory record and retain a permanent record of the serial number of the Egress unit in direct correlation with the serial number of the Manufactured Home in which it is installed. This will facilitate correction, recall and notification for non-compliance defects and/or imminent safety hazards.
- O. Do not install vinyl windows on top of vertical or horizontal metal siding. Flanges may be damaged and leaks may occur. Warranty is void.

III. Fasteners

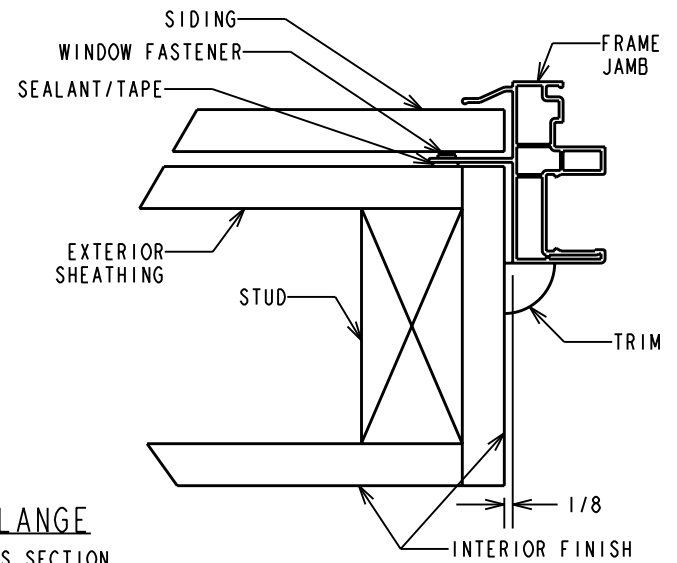
- A. Either screws, nails, or staples may be used as fasteners for your installation into wood framing. Only screws should be used for window installation into metal home framing. The fastener must penetrate the stud at least one (1") inch, allowing for exterior sheathing. The pre-punched mounting holes in our window flanges are to assist our customers who use #8 pan head screw fasteners. Other equivalent fasteners to be used in wood framing would be as follows:
 - 1. 6D smooth shank nails (min. 1 1/2" penetration)
 - 2. 6D ring shank nails
 - 3. 16 gauge adhesive coated staples, 7/16" crown.
- Note:** Any fastener, either screw, nail, or staple that is left exposed to the weather should be of a plated type that will not corrode.
- B. **In Wind Speed Zones 90 mph and less (HUD - Wind Zone I):** on uneven corrugated siding, **a fastener should be placed in or near every hole to ensure a proper weather seal around the perimeter of the window.** On smooth wood finish siding, a fastener in or near every other hole for aluminum windows and **every hole for vinyl windows is recommended.** When installing a window in this fashion, the installed window should be checked to ensure that there are no excessive dents or rises in the fin that would allow a water or air leak. Exterior type trim could then be placed over the window. When using nails or staples, they do not have to be in the hole, just in the general location.
 - C. **In Wind Speed Zones 100 mph and greater (HUD - Wind Zones II & III):** one fastener should be placed in or near every mounting hole to meet structural strength. Except for the required number of fasteners, follow all instructions listed above. Mounting location is as follows: end holes will start no more than 4-1/2" from the end of the frame and will be spaced apart no more than 4-1/2" evenly spaced between the end holes. The fastener location from the mounting flange edge will be no greater than 0.135 for all products.



AFTER INITIAL FASTENERS ARE PLACED, RUN ALL OTHER FASTENERS FROM ONE FASTENER TO THE END OF THE MEMBER. IT IS RECOMMENDED TO ALWAYS START AT THE APPROXIMATE CENTER OF THE JAMB.

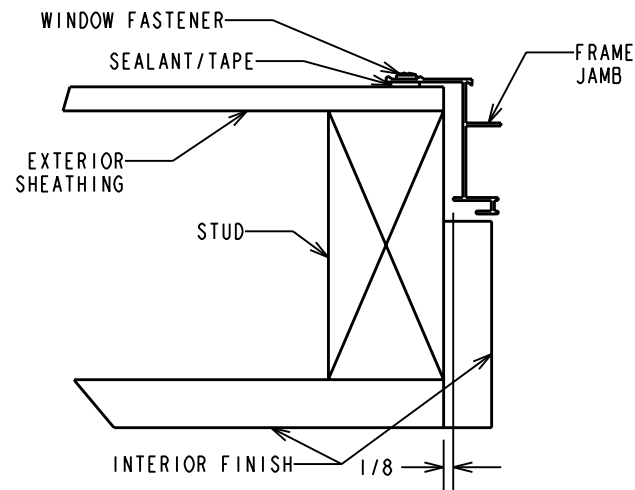
RECESSED MOUNT FLANGE

TYPICAL SIDE JAMB CROSS SECTION WITH INTERIOR TRIM INSTALLED BEFORE WINDOW




FLUSH MOUNT FLANGE

TYPICAL SIDE JAMB CROSS SECTION WITH INTERIOR TRIM INSTALLED AFTER WINDOW



SHOWN ARE TWO GENERIC REPRESENTATIONS OF WALL SECTIONS. MANY OTHER APPLICATIONS OF THE WINDOW ARE CONSIDERED ACCEPTABLE, IF THE PERIMETER OF THE WINDOW IS SEALED PROPERLY TO PREVENT WATER INFILTRATION.

Date: 19-May-06	 500 Airport Drive Mansfield, TX 76063
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