



**KINRO® METAL, VINYL,
FLUSH MOUNTED AND
RECESSED FIN WINDOWS
(HUD)**

INSTALLATION MANUAL

L I P P E R T
C O M P O N E N T S®

TABLE OF CONTENTS

Introduction	2
Safety Requirements	2
Resources Required	2
Tools	2
Fasteners	3
Preparation	3
Rough Opening Preparation	3
Window Installation	4
Post Installation	7
Replacing Existing Windows	7
Additional Information Sources	7

Introduction

These installation instructions are recommendations only. Local building codes may impose additional requirements, and those codes may supersede these instructions. Additional resources include:

24 CFR Part 3280 - Manufactured Home Construction and Safety Standards (HUD Code)

AAMA 2400 - Standard Practice for Installation of Windows with a Mounting Flange in Open Stud Frame Construction for Low Wind/Water Exposure.

FMA/AAMA 100 - Standard Practice for the Installation of windows with Flanges or Mounting Fins in Wood Frame Construction. Windows specifically designed for installations subject to extreme wind/water climate exposure.

Lippert Components makes no warranty, expressed or implied, with respect to these or any other third party instructions. Lippert shall not be liable for any damage or liability that may arise in connection with any product installation not performed by Lippert.

Safety Requirements

WARNING

The "WARNING" symbol above is a sign that an installation procedure has a safety risk involved and may cause death or serious injury if not performed safely and within the parameters set forth in this manual. Always wear eye protection when performing this installation procedure. Other safety equipment to consider would be hearing protection, gloves, and possibly a full face shield, depending on the nature of the installation procedure.

CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Resources Required

Tools

- Level
- Tape Measure
- Caulking gun
- Hammer
- Screw Gun
- Sealant

Fasteners

Fasteners should be selected to ensure compliance with applicable building codes. Consideration should be given to wind loads, temperature variations, and other site conditions. 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 framing at least one (1") inch, allowing for exterior sheathing.

Fasteners for use in wood framing include:

- 6D smooth shank nails (min. 1 1/2" penetration)
- 6D ring shank nails
- 16 Gauge adhesive coated staples, 7/16" crown
- #8 pan head or hex head screws

NOTE: Any fastener, either screw, nail, or staple that is left exposed to the weather should be plated or otherwise coated to prevent corrosion.

It is suggested that one fastener be placed in or near every prepunched mounting hole for maximum fastening strength. Fasteners should be spaced a maximum of 4" from mounting flange corners and a maximum of 4 1/2" on center between fasteners around the perimeter of the mounting flange. The fastener location from the mounting flange edge should be no less than 9/64" for all products.

NOTE: Actual fastening methods and materials may be dictated by the project plans or applicable local codes. Methods may also be as directed by an Architect or Professional Engineer. Site specific requirements may be enforced by the Florida Building Code or Texas Department of Insurance. Consult the FBC and/or TDI website for anchorage specifics when applicable.

Preparation

Rough Opening Preparation

1. Opening for windows should be framed in accordance with the 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 a minimum 1/8" clearance on each side, the head and the sill, including the thickness of pre-finished paneling, shims, liners, etc. where used.
2. Window rough opening should be level, plumb and square: check width, height, and diagonal measurements to assure the opening is level, plumb and square. 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.
3. Make certain all window mounting surfaces are securely fastened and flat around the perimeter of the rough opening. Check the opening for correct size per step 1 above.
4. According to Federal Manufactured Home Construction and Safety Standard, the bottom of an Egress window shall not exceed 36 " 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" from the finished floor.
5. Weather Resistance: Prepare the rough opening to achieve performance in accordance with HUD Code sections 3280.307, 3280.403(c), 3280.504 and 3280.505. A number of solutions exist that are appropriate for site location and it is not the intent of Lippert to advocate only one. Flashing guidelines for openings can be found in the current version of AAMA 2400, The Standard Practice for Installation of Windows with a Mounting Flange in Stud Frame Construction.

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 make sure 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.

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.

For vinyl horizontal sliding & fixed windows 72" in width and greater, Lippert recommends a 1" min. sill support or angle bracket support, dependent on exterior home finish, to be installed underneath the projected frame sill on the outside.

The use of any appurtenance system not approved for the Egress window or any alterations of an approved appurtenance system voids the windows certification. The operating instructions and certification label are a permanent part of the Egress unit and must not be removed.

Window Installation

To 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 and Lippert warranty.

NOTE: Installing vinyl windows with vinyl nailing fins on top of vertical or horizontal metal siding will void all warranties. Vinyl nailing fins will be damaged and leaks may occur. Aluminum mounting flanges are available specifically for this condition.

1. Apply a quality, non-hardening, water resistant sealant to the back of the window mounting flanges in order to provide a water tight seal with the homes weather-proof envelope. Suitable types include 1/8" thick putty or butyl tape or a 1/4" bead of gunnable sealant. The tape or caulk bead should be applied centered over the mounting holes on the back of the window mounting flange.



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 vinyl window installation.

2. Do not remove any shipping clips if provided on the window series being installed. Always keep operating sash closed and locked during installation.
3. Always handle windows with care. 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 window and possibly rupture the glazing seal and/or joint caulking, resulting in a possible leak.

NOTE: Double hung windows require extra care during installation. Double hung windows do not have fixed glass, which offers additional frame stability. Pattern of Figure 1 applies to both single pane and double hung windows.

4. 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. Press the mounting flange against the mounting surface.

NOTE: All fasteners should be driven straight into the mounting flange. See Fasteners section for fastener information.

5. The following sequence of fastener installation is suggested. Refer to Figures 1-3 for a visual guide to fastener placement of assorted window types.
 - A. Drive the first fastener at approximately the center of either the left or right vertical frame jamb mounting flange (Fig. 1A).
 - B. Moving across, drive the second fastener on the opposite vertical mounting flange at the approximate center (Fig. 1B).

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 flange.

- C.** Drive the third fastener at the center of the sill flange (Fig. 1C).
- D.** Drive the fourth fastener at the center of the head flange (Fig. 1D).
- E.** Beginning with one of the above already installed fasteners, install remaining fasteners to the end of each frame member. Repeat this step until all the fasteners have been inserted from the center of the vertical frame jamb outward to both ends of each member.
- F.** Finish installing the fasteners from the center of the frame head and sill outward to the ends of each member (Fig. 3).

This sequence of fastener installation applies to both vertical (Fig. 1) and horizontal (Fig. 2 and 3) sliding windows, flush mount and recessed fin mount, for both metal and vinyl windows.

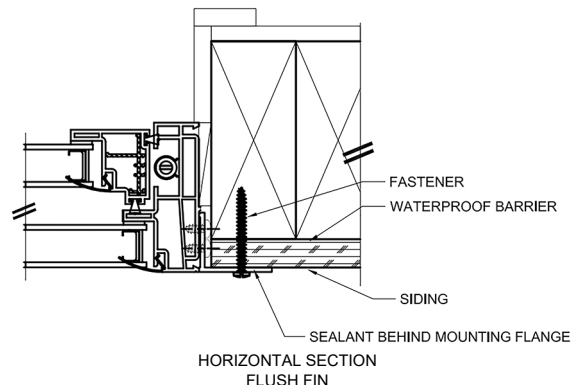
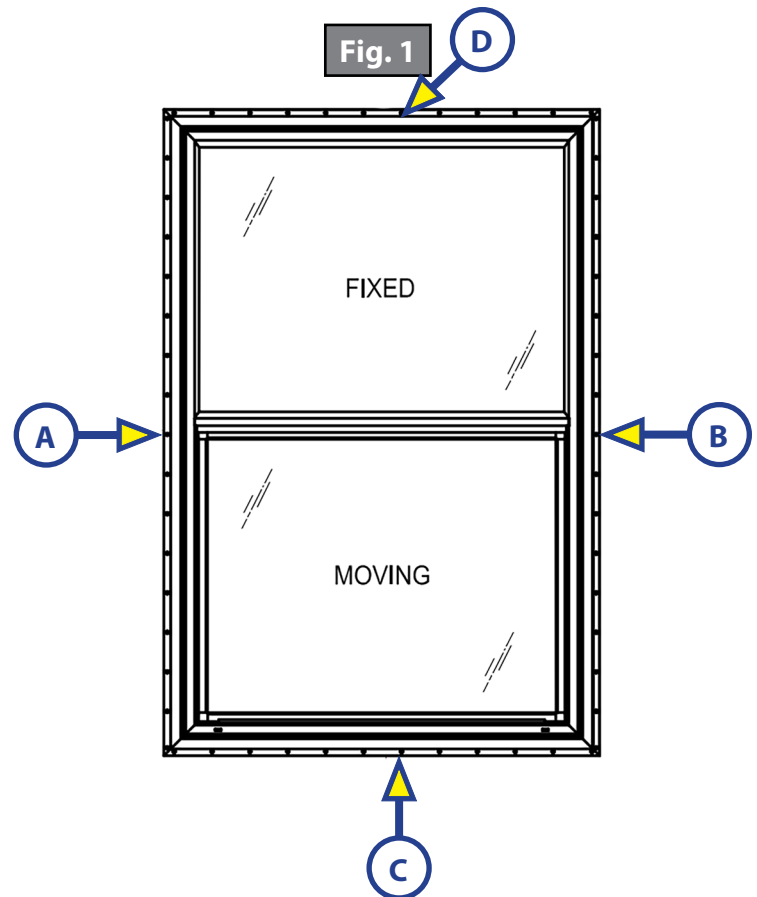
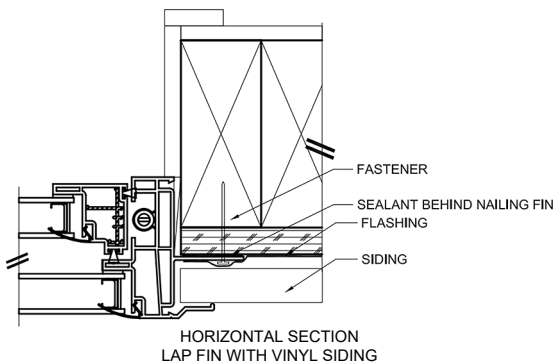
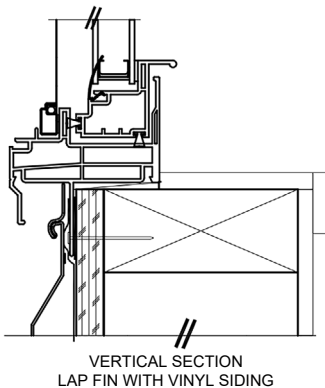
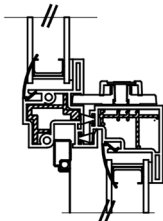
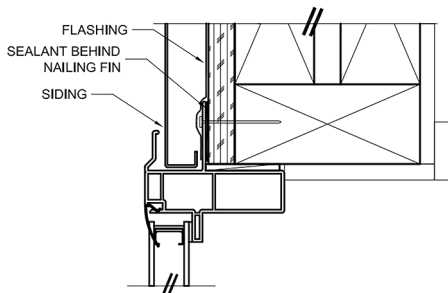


Fig. 2

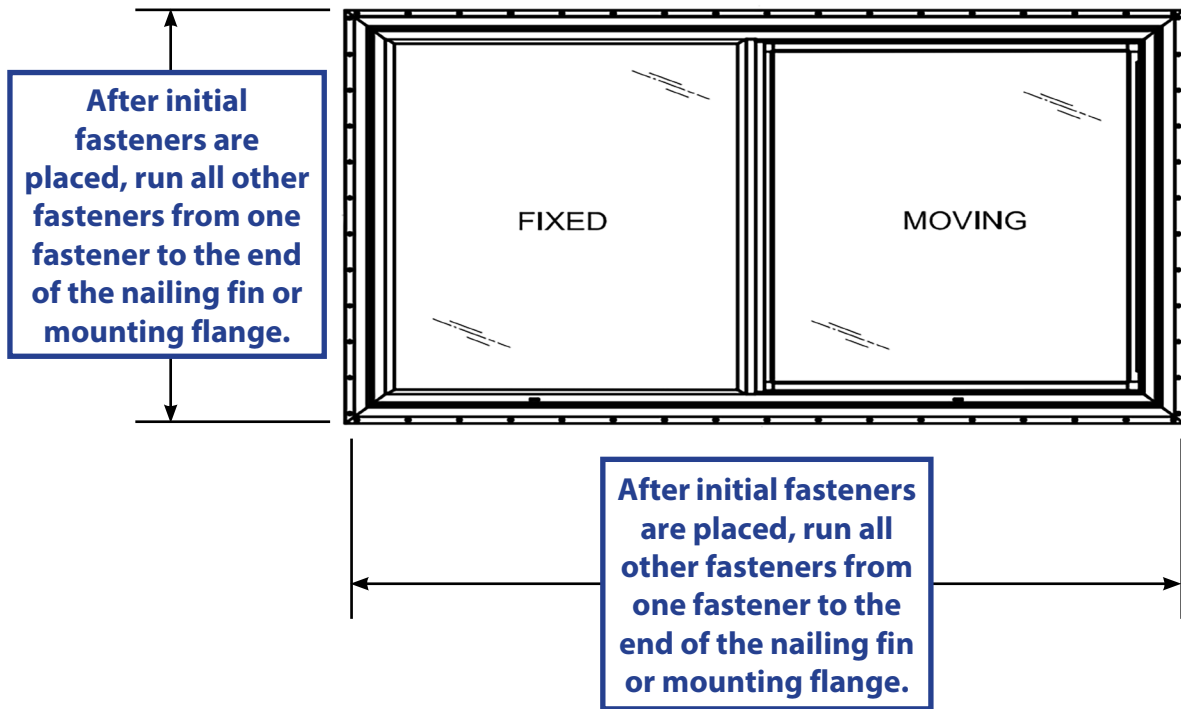
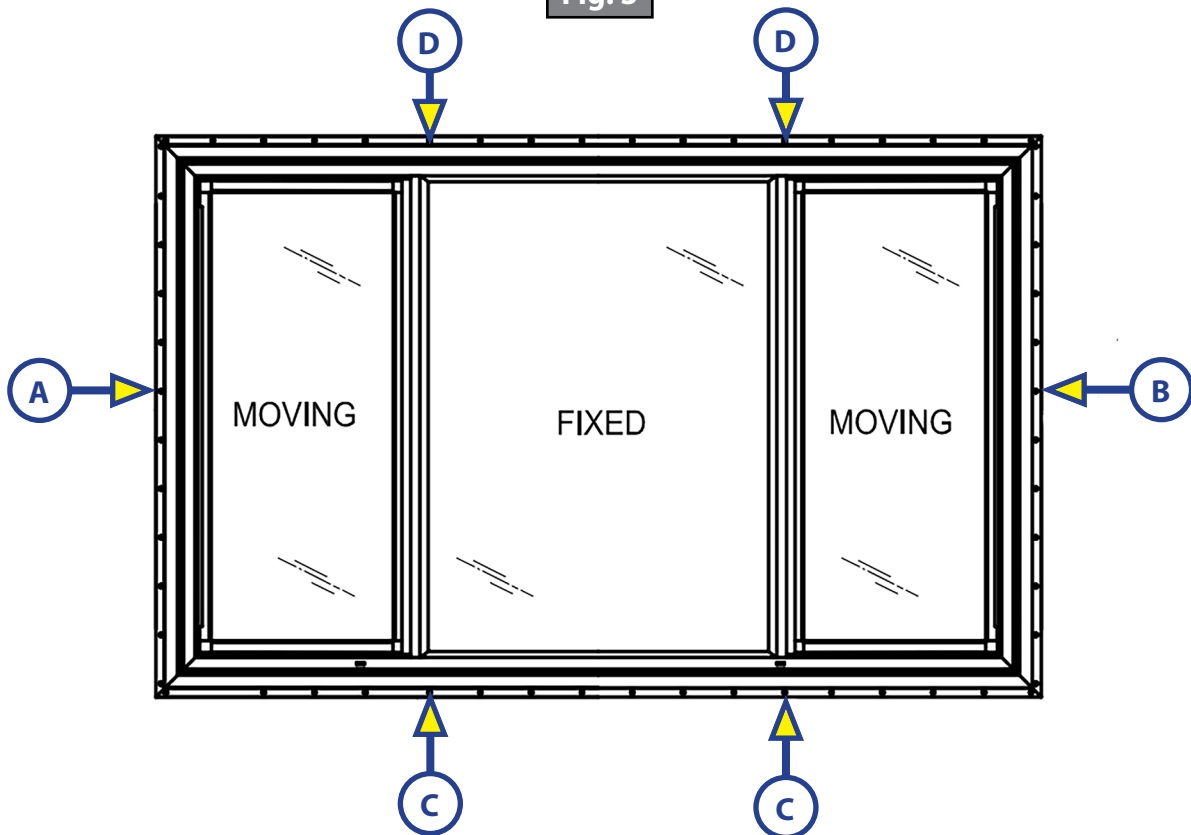


Fig. 3



Post Installation

Windows should be checked after installation to make sure that all moving panels, mechanisms, latches, and other hardware function properly.

- All shipping clips must be removed prior to operation of the window.
- All windows should be checked for out-of-square bowing of frame members.
- If any of the above problems are present, window should be removed and re-installed properly.

NOTE: 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 and/or flash after installation in accordance with AAMA 2400 or FMA/AAMA 100 or instructions published by the manufacturer of the flashing system in use.

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 an area required for exiting.



Flammable fabrics could prevent access to the exit devices.

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 home manufacturer 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 noncompliant defects and/or imminent safety hazards.

Replacing Existing Windows

1. Homes built prior to 1978 may contain lead based paints. Consult www.epa.gov/lead for guidelines on removal of old products and management of lead paint.
2. Guidelines for disposal and/or recycling of old products can be found at www.epa.gov/recycle.

Additional Information Sources

Additional information about this product can be obtained from lci1.com/support or by downloading the free myLCI app. The app is available on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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