



PERIMETER FLASHING AND SEALANT APPLICATION

! RECOGNIZE THIS SYMBOL. WHEN THIS SYMBOL APPEARS, BE AWARE OF POSSIBLE INJURY OR PRODUCT DAMAGE.

INTRODUCTION

To ensure that a proper seal has been created between the weatherable surface of the window/door unit and the primary surface for shedding water from the exterior surface of the building envelope, one of two basic methods for the installation of your unit should be followed. They include a barrier system and membrane/drainage system. The following are general guidelines. Consult local building codes for specific materials and application procedures.

The “barrier type” system establishes the exterior surface of a building envelope as the primary surface for shielding against air and water infiltration. A concrete structure, which has had the exterior surface protected with a paint or sealant, can be used as an example of a barrier type system. After the unit has been properly shimmed and secured into the opening a sealant can be applied to the perimeter. Span the sealant from the exterior surface of the concrete structure to the weatherable perimeter of the window or door unit, preventing the infiltration of moisture.

A “membrane/drainage” system employs a first surface and secondary path for shedding water. Included in this type of installation is a building envelope with a stucco, siding, veneers, panels, shingles (wood, metal panels, tile, etc.) provided on its exterior surface (first water resistive surface). The secondary or back-up surface behind the first surface becomes a barrier to the infiltration of air and water. Building envelopes designed with a cavity between two walls are included in this category. The second (interior) wall is considered the secondary barrier (example: EIFS walls). When installing a unit into this type of system it must be understood that an exterior siding is not the sole method of protecting a structure from moisture. These surfaces are designed to enhance the aesthetic quality of a structure and act as a system with the interior surfaces.

! CAUTION: The installer must never use the first surface of a “membrane/drainage” system as the only method of sealing between the window/door unit and building envelope.

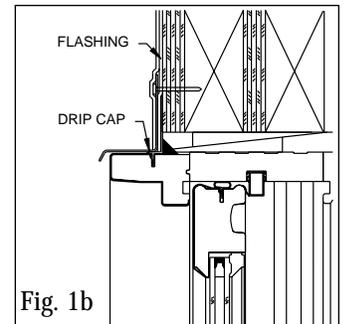
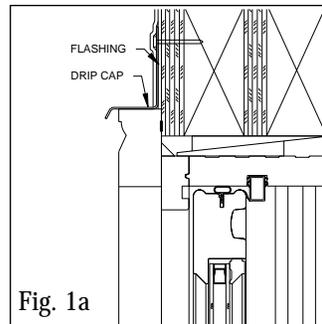
! NOTE: The following deals only with the “membrane/drainage” type systems.

STEP #1: INSTALLATION OF UNITS IN A MEMBRANE/DRAINAGE TYPE SYSTEM

! NOTE: Select one of the following methods, which best represents your window/door installation application. If the perimeter flashing is to be applied after the units installation, follow methods “A” or “A1”. If the perimeter flashing is to be applied prior to the units installation, follow methods “B” or “B1”. Once a method has been selected, it is crucial that all procedures be performed in the sequence in which they are described.

Each method requires strips of an approved flashing material at least 9” in width. Methods “A” and “B” provide procedures for applying a weather resistant barrier paper after window/door and flashing is applied. Methods “A1” and “B1” provide procedures for applying a weather resistant barrier paper prior to the window/door installation and flashing application. The flashing shall be applied in a weather-board fashion around the perimeter of the opening.

! NOTE: Kolbe & Kolbe recommends the application of a drip cap at the head of your wood/clad units (Fig. 1a & 1b).



! NOTE: Material for flashing shall be barrier coated reinforced flashing material and shall provide for 24-hour minimum protection from water penetration when tested in accordance with ASTM D-779. Sealant used in conjunction with the flashing must be compatible. Consult the sealant manufacturer for recommendations.



METHOD "A" FLASHING APPLIED AFTER UNIT INSTALLATION

Windows: Apply a horizontal strip of flashing flush with the top edge of the rough opening sill. It must be cut long enough to extend past the vertical flashing, applied later (Fig. 2). Fasten the top edge of the flashing to the exterior sheathing. The bottom edge must be left unattached (when the building paper is applied to the structure the sill flashing can be lifted up, allowing the building paper to be tucked underneath).

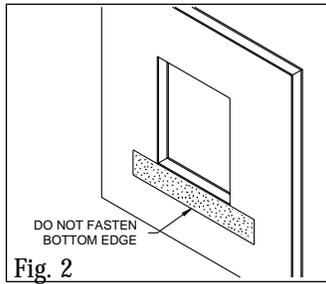


Fig. 2

Install unit (Fig. 3 & 4) following the instructions provided with your window/door.

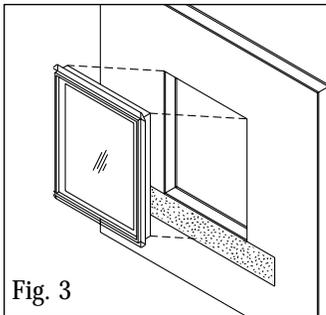


Fig. 3

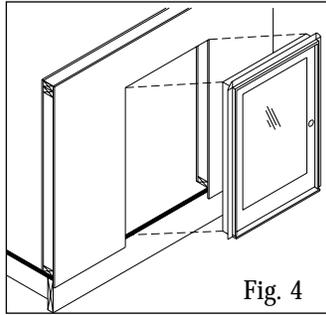


Fig. 4

Apply a drip cap to the head clad nosing/ exterior casing at this time.

On **Clad Units** run a bead of sealant over the face of the head and side jamb nailing fin.

On **Wood Units** apply a bead to the inside corner created by the exterior casing and the exterior sheathing, sealing around the perimeter of the unit.

Place a strip of flashing material up against the edge of the side jamb nosing/ exterior casing and embed in the sealant. The flashing should start slightly above the head of the unit (this includes exterior casing on wood units) and extend below the bottom of the sill (Fig. 5a & 5b). Tack in place.

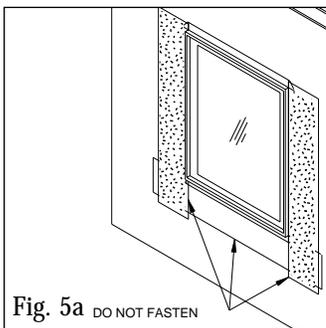


Fig. 5a DO NOT FASTEN

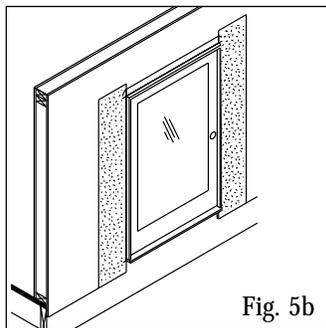


Fig. 5b

Finally, fasten a strip of flashing along the head of the unit extending each end past the side jamb flashing. Again the flashing must be embedded into the sealant (Fig. 6).

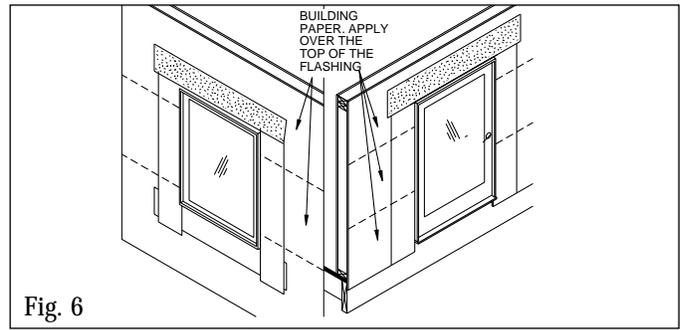


Fig. 6

METHOD "B" FLASHING APPLIED PRIOR TO UNIT INSTALLATION

Windows: Apply a horizontal strip of flashing flush with the top edge of the rough opening sill. It must be cut long enough to extend past the vertical flashing, applied later (Fig. 2). Fasten the top edge of the flashing to the exterior sheathing. The bottom edge must be left unattached (when the building paper is applied to the structure the sill flashing can be lifted up, allowing the building paper to be tucked underneath).

Place a strip of flashing material up against the edge of the rough opening side jamb. The flashing should start slightly above the top of the rough opening on **Clad Units** and extend below the bottom of the sill (Fig. 7a & 7b). When

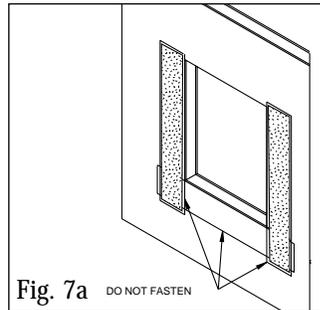


Fig. 7a DO NOT FASTEN

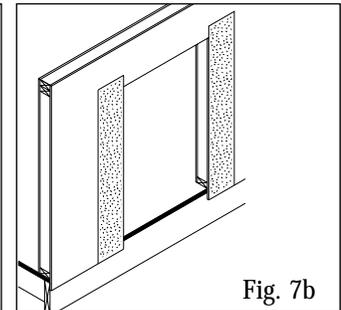


Fig. 7b

flashing for a **Wood Unit**, you must determine how high the exterior casing will extend above the rough opening and apply the end of the flashing a few inches above it. Tack in place. Install unit following the instructions provided with your window/door.

Apply a drip cap to the head clad nosing/ exterior casing at this time.

On **Clad Units** run a bead of sealant over the face of the head jamb nailing fin.

On **Wood Units** apply a bead to the inside corner created by the head exterior casing and the exterior sheathing.

Fasten a strip of flashing along the head of the unit, extending each end past the side jamb flashing (Fig. 6). The flashing must be embedded into the sealant.

Finally apply a bead of sealant to the base of the sill and face of the sill flashing/ exterior sheathing.



METHOD "A1" FLASHING APPLIED AFTER UNIT INSTALLATION

Cut the weather resistive barrier wherever a rough opening has been covered over. A modified- "I" pattern should be cut for window opening and an "I" pattern for doors (Fig. 8). A slit, the height of the flashing, should

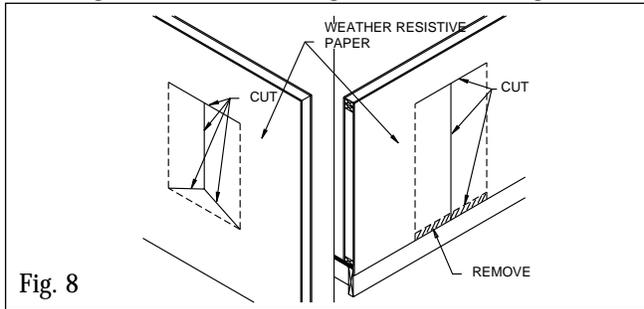


Fig. 8

be cut at a 45° angle into the barrier material just above each rough opening side jamb (Fig. 9). Fold the side barrier flaps in and around the rough opening frame.

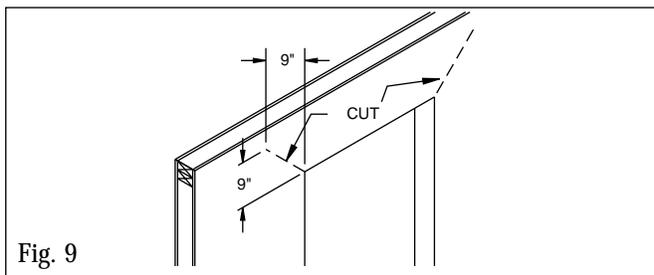


Fig. 9

Windows: Apply a horizontal strip of flashing flush with the top edge of the rough opening sill. It must be cut long enough to extend past the vertical flashing, applied later (Fig. 10). Fasten the top edge of the flashing to the exterior

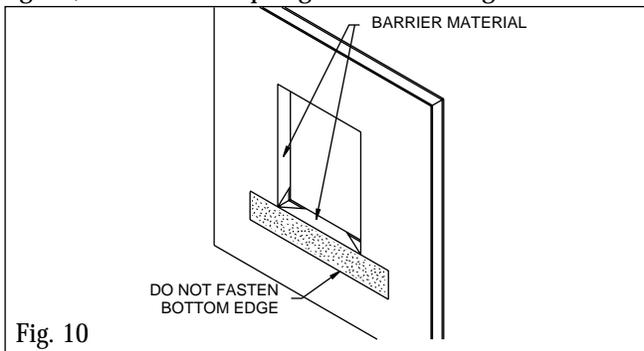


Fig. 10

sheathing. The bottom edge must be left unattached (when the building paper is applied to the structure the sill flashing can be lifted up, allowing the building paper to be tucked underneath).

Install unit follow the instructions provided with your window/door. While tilting the unit into the opening, lift the flap above the rough opening allowing the nailing fin/exterior casing to sit up against the exterior sheathing (Fig. 11 or 12).

Apply a drip cap to the head clad nosing/exterior casing at this time.

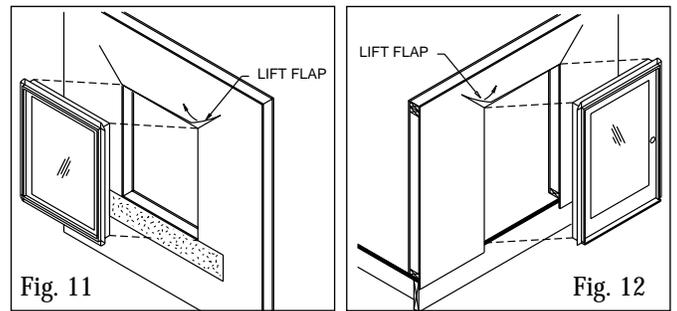


Fig. 11

Fig. 12

On **Wood Units**, trim the head weather resistant barrier allowing it to butt up to the exterior casing. Apply a bead of sealant around the perimeter of the unit in the valley created by the casing and exterior sheathing.

On **Clad Units** apply the sealant to the face of the nailing fin. You may wish to temporarily tape the flap of barrier material up out of the way for the application of sealant and flashing.

Place a strip of flashing material up against the edge of the side jamb nosing/exterior casing and embed in the sealant. The flashing should start slightly above the head of the unit (this includes the exterior casing on wood units) and extend below the bottom of the sill (Fig. 7). Tack in place. Finally fasten a strip of flashing along the head of the unit, extending each end past the side jamb flashing. The flashing must be placed under the barrier material. Again embed the flashing into the sealant. Overlap flashing with the flap of barrier material (Fig. 13).

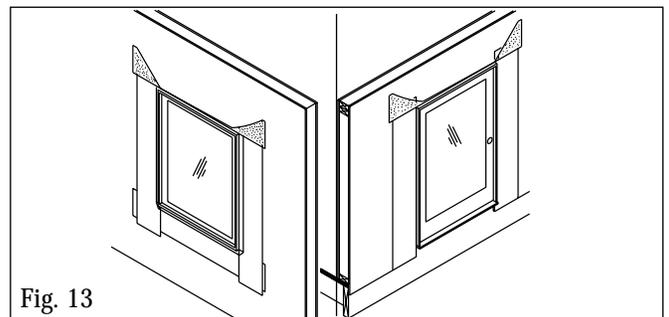


Fig. 13

Using a sheathing tape, approved by the manufacturer of the barrier material, secure the seam created at each end of the head jamb (Fig. 14).

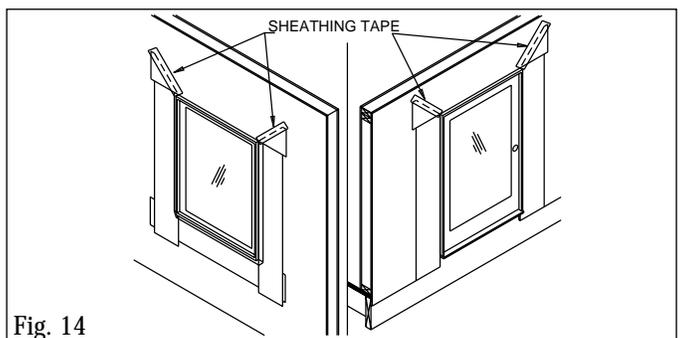


Fig. 14

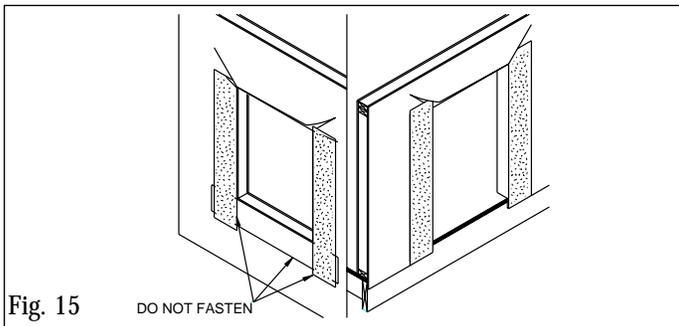


METHOD "B1" FLASHING APPLIED PRIOR TO UNIT INSTALLATION

Cut the weather resistive barrier wherever a rough opening has been covered over. A modified- "I" pattern should be cut for a window opening and an "I" pattern for doors (Fig. 8). A slit, the height of the flashing, should be cut at a 45° angle into the barrier material just above each rough opening side jamb (Fig. 9). Fold the side barrier around the rough opening frame.

Windows: Apply a horizontal strip of flashing flush with the top edge of the rough opening sill. It must be cut long enough to extend past the vertical flashing, applied later (Fig. 10). Fasten the top edge of the flashing to the exterior sheathing. The bottom edge must be left unattached

Place a strip of flashing material up against the edge of the rough opening side jamb. The flashing should start slightly above the top of the rough opening on **Clad Units** and extend below the bottom of the sill (Fig. 15).



When flashing for a **Wood Unit** you must determine how high the exterior casing will extend above the rough opening and apply the end of the flashing a few inches above it. Tack in place.

Install unit following the instructions provided with your window/door.

On **Clad Units** run a bead of sealant over the face of the head jamb nailing fin.

On **Wood Units** apply a bead to the inside corner created by the head exterior casing and the exterior sheathing.

Fasten a strip of flashing along the head of the unit, extending each end past the side jamb flashing (Fig. 13). The flashing must be embedded into the sealant.

Using a sheathing tape, approved by the manufacturer of the barrier material, secure seams created at each end of the head jamb (Fig. 14).

In all applications, a bead of sealant must be applied to

the bottom of the sill at the point of contact to the exterior sheathing. Continue to follow the steps presented in your units installation instructions.

If EIFS or GFRC systems are employed in the building walls, the manufacturers of those systems should be consulted for the methodology used to install the fenestration products into the building. Details of the fenestration product sealant selection should be presented to the approving authorities and the supplier of the wall system.