Picture Center
Replacement Window
Installation Instructions

Installer – Please leave this booklet for the homeowner after the install is completed.

⚠ ⚠ CAUTION - IMPORTANT ⚠ ⚠

Lead-based paint may be present in older homes, and the removal of windows & doors may cause this paint to be disturbed. In order to minimize exposure to lead-based paint dust, please consult www.epa.gov-/lead for more information.

IMPORTANT: Please read completely before you begin.

Part No. 1238677 • Install 248 • Rev. 1 • 01/17

Table of Contents and Tool/Material Requirements

Customer may need to supply replacements for the following:

- Interior Casing Mouldings
- Inside Stop Mouldings
- Outside Stop Mouldings

⚠ **IMPORTANT:** Thoroughly read and follow these instructions. Failure to install as recommended will void any warranty, expressed or implied. **Before installation, check building codes for the area in which the windows are being installed, to ensure proper compliance.** The installation instructions that follow are based on typical frame construction. Specific applications may differ. Weathershield Mfg., Inc. recommends that you consult a qualified installation professional. Weathershield Mfg., Inc. is not responsible for installation.

These replacement windows must be installed from the interior.

Components

Each Replacement Unit ships with the following standard components:

Qty.	Description
1	Window Unit Complete
32	Installation Shims
6	#8 x 2-1/2" Phillips Bugle Head, Screws
1 Pkg	18' of 1/2" Backer Rod
1	Installation Instruction Booklet
Optional Contents	
1	Sill Angle Support Bracket (see below)
4	#8 x 1/2" Phillips Pan Head, TEK SS410, Screws
1 Set	Pre-Cut, Color-Matched Aluminum Trim Extender

The sill angle support bracket is provided with some units. It helps support the window and fills the gap between the unit's sill and the old window sill **(FIGURE 1)**.

Other units may have sills sloped to fit your specific opening. Sloped sill units do not require the angle support bracket **(FIGURE 2)**.

FIGURE 1

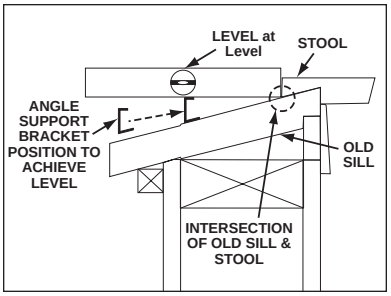
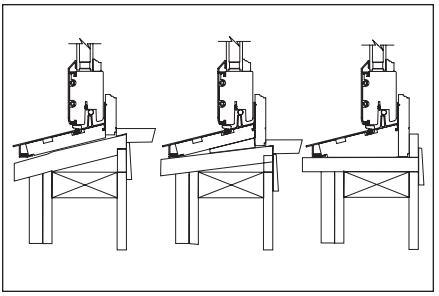


FIGURE 2



General

Installing your new Replacement Window requires removing existing window parts, test fitting and installing your new unit.

Typical wood window components are shown on the following page in **(FIGURE 1)**. Refer to this diagram for terms used in these instructions.

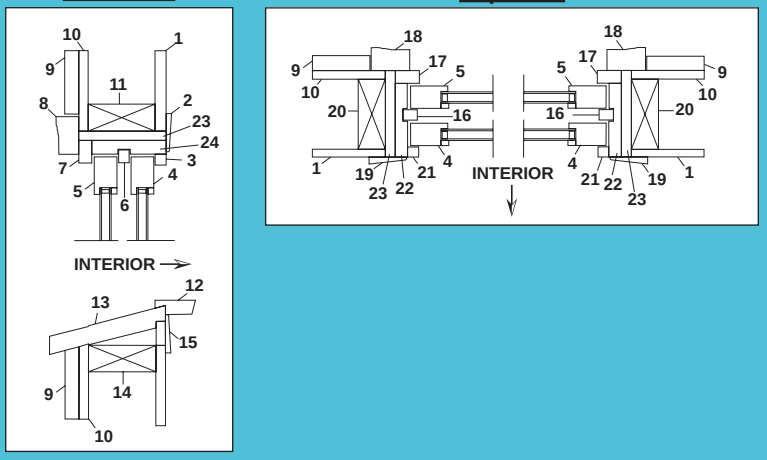
Completely read the installation instructions before starting any procedure.

IMPORTANT: Wear full protective clothing including gloves, and safety glasses.

Optional factory-applied finishes should be handled with extra care to prevent damage.

Typical Wood Window Components

FIGURE 1



1. Drywall
2. Interior Top Casing
3. Head Inside Stop
4. Bottom Sash
5. Top Sash
6. Head Parting Stop
7. Head Outside Stop
8. Head Brick Mould
9. Exterior Siding
10. Sheathing
11. Header
12. Stool
13. Sill
14. Rough Sill
15. Interior Apron
16. Side Parting Stop
17. Side Outside Stop
18. Side Brick Mould
19. Interior Side Casing
20. Trimmer Stud
21. Side Inside Stop
22. Side Jamb
23. Shim Space
24. Head Jamb

Safety Alert Symbol

Recognize this symbol. This is the Safety-Alert symbol. When you see this symbol be alert to the potential for personal injury or product damage.

DANGER

Falling from window opening may result in serious injury or death. DO NOT leave openings unattended when children are present.

DANGER

CUT HAZARD

*Non-safety Glass.
*May cause serious injuries if broken.
*Do not install where tempered safety glass is required.

WARNING

Weight of window and accessories will vary. Use a reasonable number of people with sufficient strength to lift, carry and install window unit(s) and accessories. Always consider site conditions and use appropriate techniques when installing.

DANGER

Screen will not stop children, any one or anything from falling out window.

Keep children and objects away from open window.

Synthetic Stucco

Serious concerns have been raised about excessive moisture problems in homes and other buildings that have Exterior Insulation Finish Systems, commonly referred to as EIFS or Synthetic Stucco.

Many experts agree that a certain amount of water or moisture can be expected to enter almost any building exterior system. The building system should allow such water and moisture to escape or “weep” to the exterior, so no damage occurs. However, some EIFS systems may not allow water or moisture that penetrates the wall system to “weep” to the exterior. This can cause excessive moisture to accumulate within the wall system, which can cause serious damage to wall and other building components. It has been reported that so-called “barrier” EIFS systems are particularly prone to this problem.

Moisture problems in any type of building structure can be reduced by proper design and construction with appropriate moisture control considerations, taking into account prevailing climate conditions. Examples of moisture control considerations include flashing and/or sealing of all building exterior penetration points, use of appropriate materials and construction techniques, adherence to applicable building codes, and general attention to proper design and workmanship of the entire building system, including allowances for management of moisture within the wall system.

Determination of proper building design, components and construction, including moisture management, are the responsibility of the design architect, the contractors, and the manufacturer of the exterior wall finish products. Questions and concerns about moisture management issues should be taken up with these professionals. The window manufacturer is not responsible for problems or damages caused by deficiencies in building design, construction or maintenance, failure to install our products properly, or use of our products in systems that do not allow for proper management of moisture within the wall system.

Sash Removal

FIGURE 1

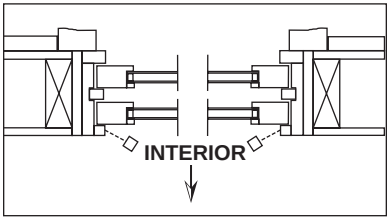


FIGURE 2

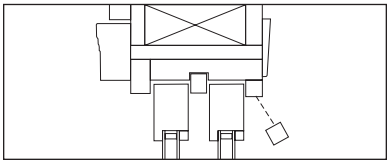


FIGURE 3

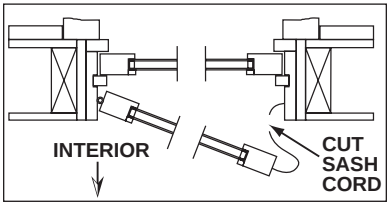


FIGURE 4

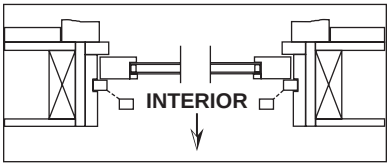


FIGURE 5

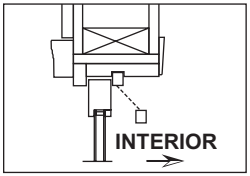
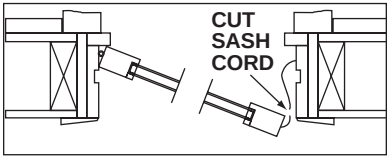


FIGURE 6



WARNING

Improper use of hand and power tools could result in personal injury and/or product damage. Follow equipment manufacturers' instructions for safe operation. Always wear safety glasses.

1. Unlock and raise bottom sash. Prop sash open with a block of wood.
2. Use a pry bar or stiff putty knife to pry side **(FIGURE 1)** and head **(FIGURE 2)** inside stop mouldings away from jambs. *Handle carefully as these mouldings can be reused.*

DANGER **Move sash slowly and carefully to prevent glass from shattering. Wear full protective clothing including gloves and safety glasses.**

3. Lower bottom sash and prop it up so its bottom edge rests above the stool **(Item 12, FIGURE 1, Page iv)**.
4. Rotate one side of bottom sash inward **(FIGURE 3)**. Cut sash cord.
5. Work sash toward interior and remove cord from opposite side.
6. Safely discard bottom sash.

NOTE: If top sash is stationary, remove the support blocks at the bottom of the top sash. If sash is "painted-in", insert a putty knife between sash and the side and head parting stops. Work knife around all sides to break paint seal.

7. Lower the top sash and prop its bottom edge slightly above the stool.
8. Use a pry bar or stiff putty knife to pry side parting stops **(FIGURE 4)** and head parting stop **(FIGURE 5)** away from side and head jambs. Remove all pieces. The parting stops will not be reused.
9. Rotate one side of sash inward. Cut sash cord **(FIGURE 6)**.
10. Work sash toward interior and remove cord from opposite side.
11. Safely discard top sash.

Opening Preparation

FIGURE 1

FIGURE 2

FIGURE 3

1. Cut sash cords and remove sash weights from both side jambs **(FIGURE 1)**.
2. Remove screws and pry out sash rope pulleys **(FIGURE 2)**.
3. Remove sash ropes.
4. Install fiberglass insulation in the sash weight and pulley rope cavities **(FIGURE 3)**. ***Do not over pack insulation.***
5. Examine opening. Remove any objects that would interfere with new window's fit.
6. Clean all loose dirt and paint from opening.

Opening Preparation (cont.)

FIGURE 4

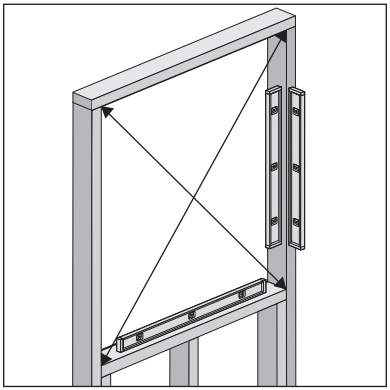


FIGURE 5

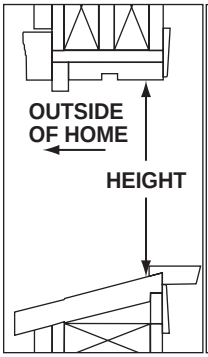


FIGURE 6

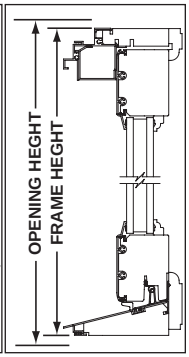


FIGURE 7

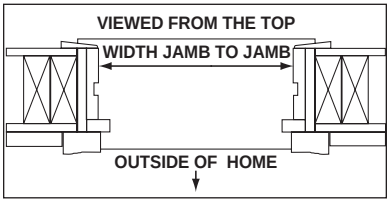
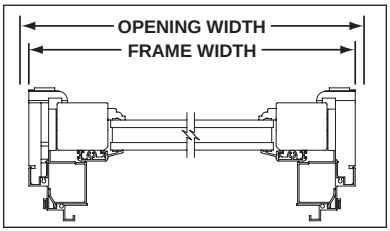


FIGURE 8



7. Check opening for the following:
   - Rotted components
   - Missing or broken stops

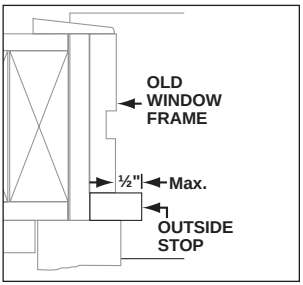
   Fix any of these conditions before proceeding.
8. Check opening for level, plumb, and square **(FIGURE 4)**. Use a level to check the sill, head and side jambs. Measure the opening diagonally from corner to corner to check for square. Measurements must be within 1/4" of each other. Fix any of these conditions before proceeding.
9. Measure the height **(FIGURE 5)** and width **(FIGURE 7)** of the opening. *Do not include the outside stops.* Compare these measurements to the frame height **(FIGURE 6)** and frame width **(FIGURE 8)** of the new window.

   The replacement window must be able to fit in the opening and be held from falling through by the outside stops on the sides and head.

   Make necessary adjustments to the opening so this support is provided to the new window.

IMPORTANT: The outside stops (blind stops) cannot exceed 1/2" in depth from the outer edge of the stop to the old window frame (FIGURE 9). Check stops around entire opening making adjustments to reach the 1/2" maximum depth.

FIGURE 9



Window Installation

FIGURE 1

FIGURE 2

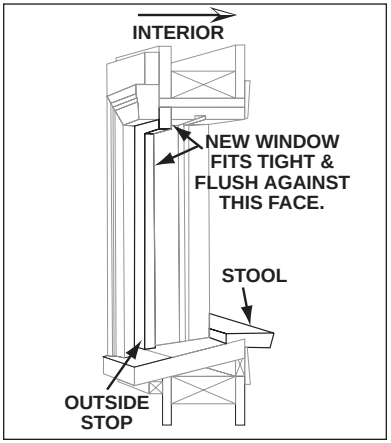
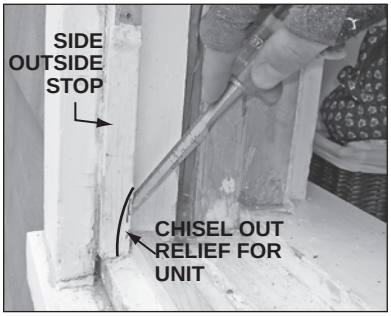


FIGURE 3



Check Replacement Window Fit

NOTE: Remove all packing. ***Do not remove the sill angle blocks (FIGURE 1)***. Clean all loose material and dirt from opening. Remove any objects that would damage new unit or interfere with proper fit.

1. Insert new window unit into opening to check fit. Unit must fit within the outside stops **(FIGURE 2)** and sit flush against the stop's face.

   It may be necessary to chisel a relief area at the bottom of the side outside stops to provide space for the unit to rotate into a vertical position **(FIGURE 3)**.

   Remove window unit after checking fit. Make adjustments to the opening/stops to obtain a good fit. A shim space is needed on sides and top; none required at the sill.

Prepare The Replacement Window

From the interior, carefully pry off both side inside stop mouldings **(FIGURE 4)** to expose the pre-drilled screw holes in the side jambs.

IMPORTANT: Be careful as these pieces will be reused. Do NOT remove the head or sill moulding.

FIGURE 4

If your unit came with a sill angle support bracket, turn to Page 6. If it did not come with an angle support bracket, continue on the next page.

Window Installation (cont.)

The new window's side inside stop mouldings must be removed before proceeding. See instructions on previous page.

FIGURE 1

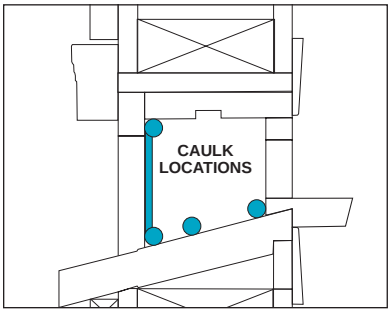


FIGURE 2

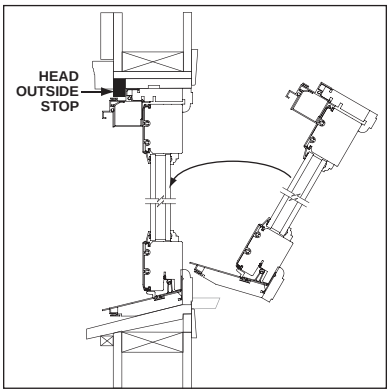
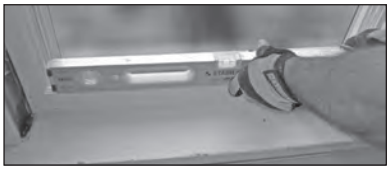


FIGURE 3



For Units Without Sill Angle Bracket

IMPORTANT: All surfaces to be caulked must be clean and free of loose material so caulk adheres to a solid surface.

1. Use a high-quality, neutral cure, exterior, silicone sealant (compatible with aluminum, the old sill, and jambs). Lay continuous generous caulk beads along the interior side of the head and side outside (blind) stops, and outer face of the stool **(FIGURE 1)**.
2. Also lay two additional beads along the sill, from side-to-side, to seal the new unit's sill to the old sill. Be sure all locations shown in **(FIGURE 1)** receive continuous generous caulk beads.
3. From the interior, lift the window into the opening. Bottom inside edge rests tight against the stool and sits on sill caulking. Outside edges of side frame and head must butt tightly against caulk bead applied to the outside stops **(FIGURE 2)**.

   Be sure to center window side-to-side in the opening. Centering window is critical for fitting interior and exterior trim.
4. Push window firmly against the side and head outside stops seating it in the caulk beads.
5. While holding unit in place, check unit for plumb, level, and square **(FIGURE 3)**. To check square, measure diagonally from corner to corner. Measurements must be the same. Adjust unit with shims to obtain level, plumb, and square unit.

   Be sure unit remains centered in opening.

Continue on Page 8 with Step 11.

Window Installation (cont.)

FIGURE 1

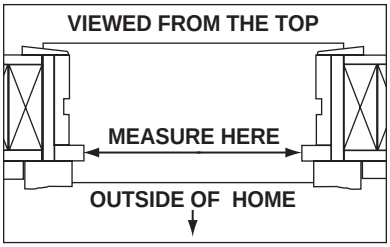
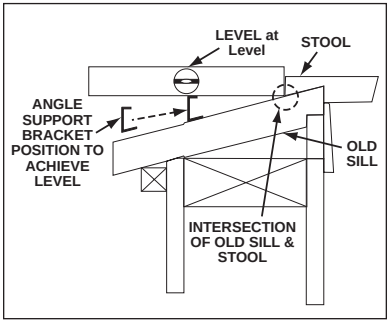


FIGURE 2



For Units Using The Sill Angle Bracket

Prepare The Opening

1. Measure inside width of the opening between the side outside stops **(FIGURE 1)**. Cut the aluminum angle support bracket to this length.
2. Using a level and the angle support bracket, find the location on the old sill that will provide a level plane between the intersection of the stool and old sill and the top of the angle support bracket **(FIGURE 2)**. Mark this location across the sill's width.
3. If attachment holes are not pre-drilled in the angle support bracket, hold bracket at the level location and pre-drill holes for the attachment screws. Space holes evenly along length of angle support bracket.

   If bracket is pre-drilled, skip to Step 4.
4. Attach bracket securely to the old sill using the included #8 x 1/2" Phillips pan head, screws **(FIGURE 3)**.

FIGURE 3

Window Installation (cont.)

The new window's side inside stop mouldings must be removed before proceeding. See instructions on Page 4.

FIGURE 4

FIGURE 5

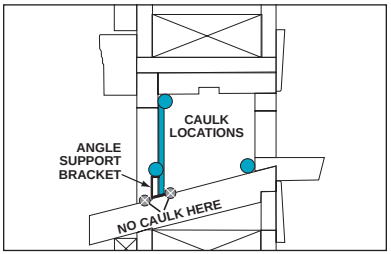


FIGURE 6

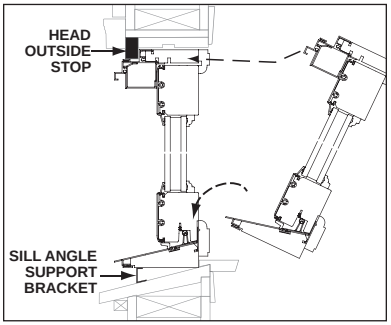
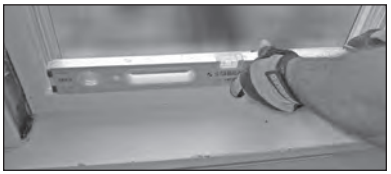


FIGURE 7



For Units Using The Sill Angle Bracket (cont.)

5. Insulate space between angle support bracket and stool with fiberglass insulation **(FIGURE 4)**. ***Do not over pack insulation.***

IMPORTANT: All surfaces to be caulked must be clean and free of loose material so caulk adheres to a solid surface.

6. Use a high-quality, neutral cure, exterior, silicone sealant (compatible with aluminum, the old sill, and jambs). Lay a continuous generous caulk bead along the interior side of the head and side outside stops **(FIGURE 5)**.
7. Be sure all locations shown in **(FIGURE 5)** receive a continuous generous caulk bead.
   NOTE: Do not caulk at the base of the angle support bracket on either the inside or outside.
8. From the interior, lift the window into the opening. Bottom inside edge rests tight against the stool and sits on sill caulking. Outside sill bottom sits on angle support bracket. Outside edges of side frame and head must butt tightly against caulk bead applied to side and head outside stops **(FIGURE 6)**.

   Be sure to center window side-to-side in the opening. Centering window is critical for fitting interior and exterior trim.
9. Push window firmly toward the outside stops to seat it in the caulk beads.
10. While holding unit in place, check unit for plumb and level on the interior or exterior **(FIGURE 7)**.

Continue with Step 11 on the next page.

Window Installation (cont.)

FIGURE 8

FIGURE 9

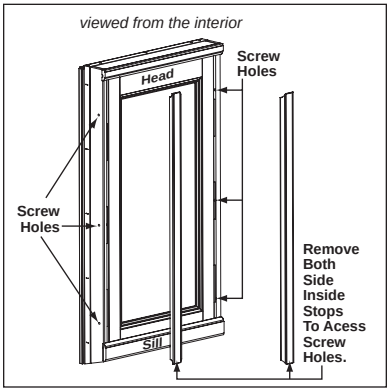


FIGURE 10

11. Using shims provided, shim at head **(FIGURE 8)** and side jambs so unit is level and plumb. Place shims between side jambs and head and the old window frame. Locate shims at the pre-drilled fastening holes.
12. When unit is level and plumb, secure in opening with the #8 x 2-1/2" Phillips bugle head screws provided. Install screws through the pre-drilled holes (three on each side) in the side jambs **(FIGURES 9 & 10)**.

Window Installation (cont.)

FIGURE 11

13. Loosely insulate between the new window jambs and the old window frame with fiberglass insulation **(FIGURE 11)**. ***Do NOT use expanding foam.***
14. Use appropriate length finish nails and reinstall the new unit's side inside stops (that were removed to access screw holes) **(FIGURE 12)**.
15. Use appropriate length finish nails and reinstall the old head and side inside stops **(FIGURES 13, & 13A)**.

NOTE: If any inside stops or the casing mouldings were damaged during removal, install new pieces.

FIGURE 12

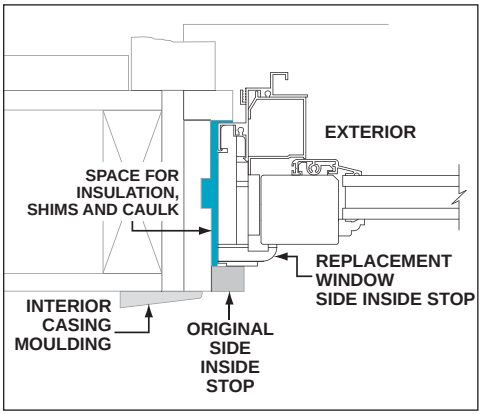
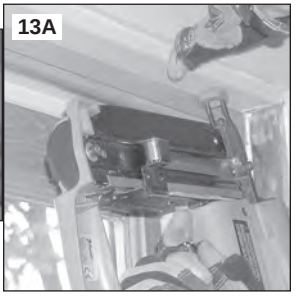
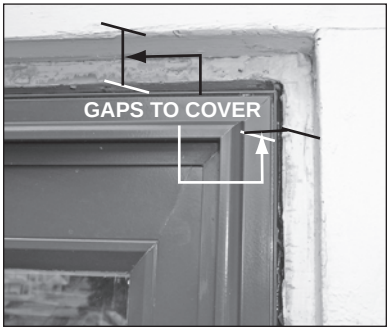


FIGURE 13



Optional Exterior Trim Application

FIGURE 1



Gaps **(FIGURE 1)** between the window, and the siding or brickmould can be covered with optional color-matched aluminum trim.

Aluminum trim will be factory pre-cut to nominal length. Each piece will be too long so it can be adjusted to fit each window opening.

Trim will be notched at the ends **(FIGURE 2)** so it can run past the window cladding and reach out to the existing siding or casing mouldings.

FIGURE 2

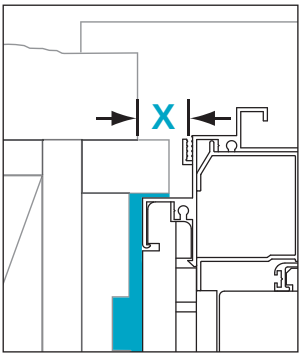
FIGURE 3

The head piece must be applied with a notch at each end. The side pieces are cut flat at the top and notched at the bottom. The sill piece is cut flat on both ends.

(FIGURE 3) shows the length measuring locations.

Trim width is determined by distance measured from the exterior accessory groove to the existing casing moulding or siding and the sill. The **X** in **(FIGURE 4)** shows a typical width measurement.

FIGURE 4



Optional Exterior Trim Application (cont.)

FIGURE 5

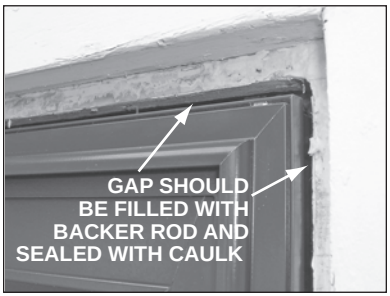


FIGURE 6

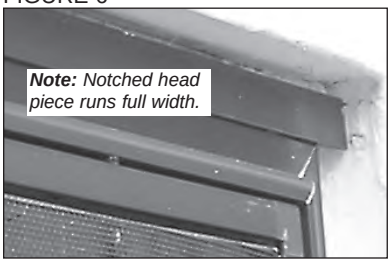
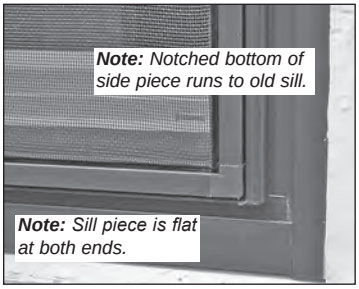


FIGURE 7

FIGURE 8



Proceed as follows:

1. Fill gap between new window frame and old with backer rod and then seal with a bead of caulk **(FIGURE 5)**.

IMPORTANT: Head notched piece must be cut to final length by removing an equal amount from each end.

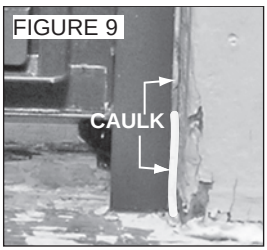
2. Measure and cut head piece to length and width. Use a table saw properly equipped with an aluminum cutting blade, a hack saw, or tin snips.

DANGER Follow all procedures for safe table saw operation. Wear safety glasses and hearing protection.

CAUTION Cut edges can be sharp. Wear gloves and handle carefully to prevent injury.

3. After trim is cut to size, remove sharp or rough edges.
4. Install head piece **(FIGURE 6)**. Trim is applied by inserting short leg into window's accessory groove **(FIGURE 7)**.
5. Measure, cut and install side pieces. Side trim runs from bottom of head piece to old sill and is **flat at the top and notched at the bottom (FIGURES 7 & 8)**.
6. Measure, cut, and install sill piece. Sill trim fits between the two side pieces and is cut flat at both ends **(FIGURE 8)**.
7. Use a padded wood block and hammer to ensure all trim pieces are fully seated in the accessory groove.
8. Complete the trim installation by caulking any remaining gaps between the trim and siding or brickmould **(FIGURE 9)**.

FIGURE 9



Recommended Finishing Instructions

⚠ WARNING

Always follow chemical manufacturers' safety instructions when using chemicals to avoid injury or illness.

Vinyl and aluminum may be cleaned with mild soap and water. Hard to remove stains and mineral deposits may be removed with mineral spirits. Factory-applied painted surfaces can be cleaned with mild household detergents and water.

- **Do NOT** clean any surface with gasoline, diesel fuel, solvent based, or petroleum based products.
- **Do NOT** use abrasive materials or strong acidic solutions against vinyl, aluminum, glass, or factory-applied finishes.
- **Do NOT** scrape or use tools that might damage the surface.
- **Do NOT** paint vinyl or aluminum surfaces.
- **Do NOT** use mastic-type tapes such as Duct Tape®.

NOTE: If masking tape is used on any surface to aid in painting or staining, remove tape as soon as possible after use. Tape must be removed within 24 hours of application.

For long term use, such as stucco applications; use tape that will release, even when exposed to high temperatures for an extended period of time. (Examples include 3M #2080 and #2090 tapes.)

For Bare Wood Surfaces

For best results, wood should be sealed immediately upon installation or upon receipt, especially if unit is being stored for ANY length of time.

1. Remove all construction and adhesive label residue with mineral spirits before finishing.
2. Lightly sand surfaces being finished with 180 grit or finer sandpaper. Be careful not to scratch the glass.
3. After sanding, clean-off sanding dust using lacquer thinner applied to a cloth so the cloth is slightly damp. Let surface dry completely.

-If a painted surface is desired:

- If a wood unit is delivered with factory-applied primer paint, it may be painted without repriming, providing the finish paint coat is applied within six (6) months of unit installation.
- If a factory-primed wood unit requires repriming contact your customer service representative for help in selecting a primer compatible with the factory applied material.
- Factory-applied AccentialsTM color system finishes in standard, designer or custom colors do not require additional painting. For "touch up" paint specifications contact your customer service representative.

1. An unprimed wood unit requires priming. Use only oil-based primer. Use compatible oil or water-based finish coats. Refer to the primer and paint manufacturers' instructions.
2. When priming bare wood or repriming, cover all exposed wood surfaces. Priming all exposed surfaces helps prevent end splitting, warping and/or checking.
3. Once primed, apply two (2) coats of paint (again on all exposed sides) to each item.

Continued on next page.

Recommended Finishing Instructions (cont.)

-If a stained surface is desired:

CAUTION If no sealer is applied over stain, the wood will weather very rapidly and defects will occur. Apply at least two (2) coats of sealer.

1. Use only oil-based stain. A gel stain is easier to apply as it does not easily run or drip. The clear top coats may be oil or water-based. Apply at least two top coats of sealer or varnish.

• A pre-stain wood conditioner, applied before staining, will help softer woods like pine absorb stain more evenly. Apply both wood conditioner and desired stain according to the manufacturers' instructions.

2. Apply one (1) coat of sealer to the stained surface and let dry. Using a spar (marine) varnish as a sealer provides extra protection against sunlight and moisture. Let sealer dry completely.
3. Before applying the next finish coat, make sure the previous coat is completely dry. Then lightly sand previous finish coat with 180 grit or finer sandpaper. Clean off all sanding dust and wipe surfaces with a tack cloth.
4. Apply next coat of desired finish to surface and let dry. Apply only one coat at a time.
5. For any additional coats of finish, repeat steps 3 and 4.

-For a clear (natural) finish: Follow Steps 1, 2, and 3 under "Bare Wood" and Steps 2, 3, 4, and 5 under "stained surface".

IMPORTANT: Remove sash for finishing. Apply your choice of sealer (paint or varnish) to all exposed wood components. Do not get sealer on weather strip, vinyl, or into mechanical components (sash lock, tilt latches or sash glide bearing). Ensure bottom and top of sash are also sealed (FIGURE 1).

WARNING Sealer (paint or varnish) applied to sash MUST DRY COMPLETELY before reinstalling sash. If not dry, sash may stick in jamb liners. Also weatherstrip and jamb liners may be damaged.

Notes

Notes