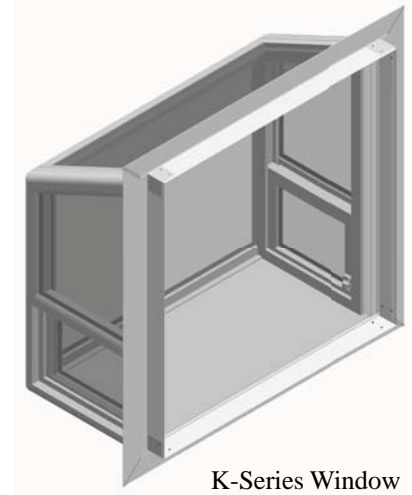




TRU-FRAME®
A name you can build on.

Retrofit Garden Window K-Series Installation Instructions



K-Series Window

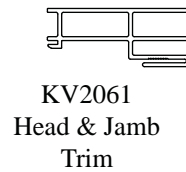
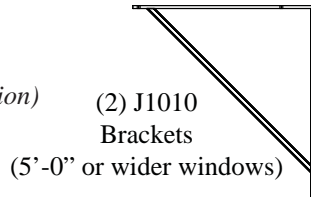
IMPORTANT:
REVIEW ALL INSTRUCTIONS
THOROUGHLY
BEFORE STARTING STEP 1

TOOLS REQUIRED:

- Tape Measure
- Standard Screwdriver
- Phillips Head Screwdriver
- Drill Motor & 3/16" Drill Bit
- Caulking Gun
- Hack or Chop Saw
- Framing Square
- Level
- Countersink
- Stud Finder
- Caulk

PARTS INCLUDED:

- 1/4" x 3" Lag Bolts
(For Bracket Installation)



Step 1

Verify the Window Dimensions

The window width should be 1/8" smaller than the opening width. The window height should be 1/8" less than the opening height. (Figures 1 and 2)

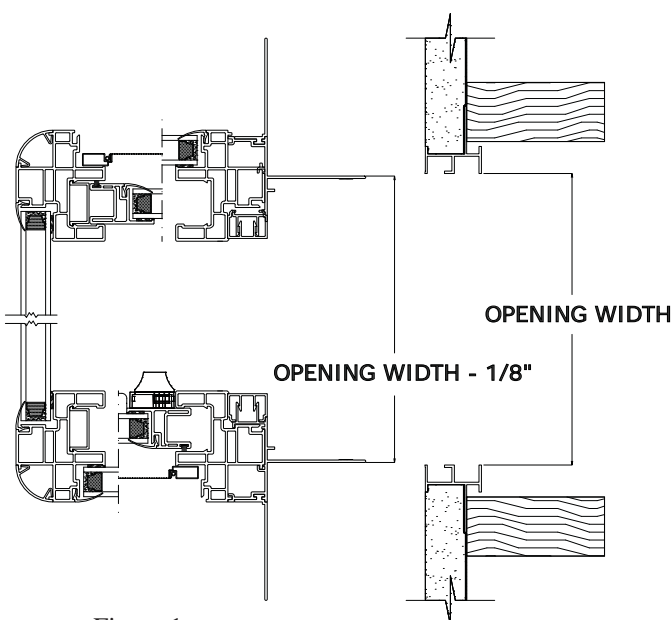


Figure 1

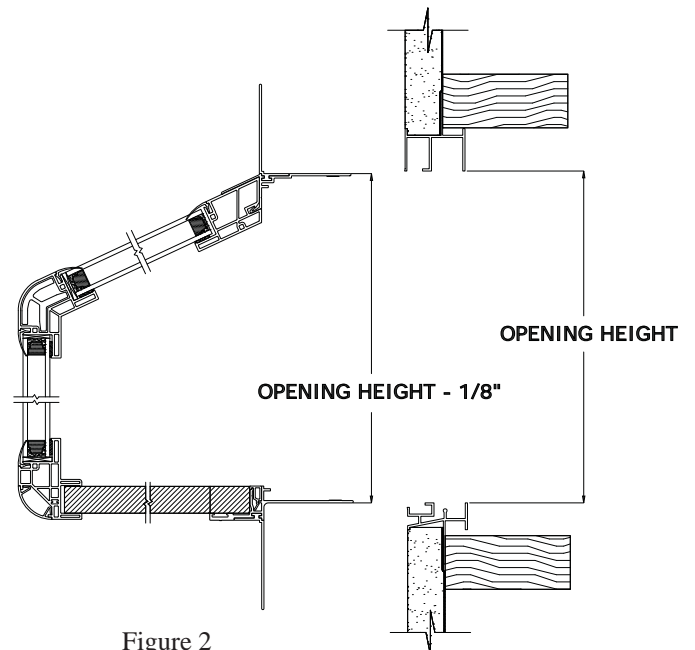


Figure 2

Step 2 Prepare the Opening

Remove the existing sash and meeting rail. Insure the opening is clear of any obstructions. Clean the exterior surface where the radial flange will touch. The radial flange will extend approximately 2 1/2" beyond the opening.

Step 3 Determine Screw Location and Size

Measure in from the face of the opening to a point you are sure your screws will engage the framing around the existing window. It may be necessary to go through the existing frame. It is recommended that you select screws at least #10 in diameter and long enough to penetrate the framing by at least one inch.

Step 4 Predrill the Flange

Using the dimension obtained in step 3, on 12 inch centers, drill clearance holes for your screws around the complete perimeter of the horizontal flange. Countersink the holes so that the screw heads are flush with the surface of the horizontal flange. See Figure 4 (page 3) for approximate screw locations.

Step 5 Caulk the Flange

Liberaly apply caulking in at least 3/16" diameter bead to the radial flange, paying particular attention to the corners where the flanges come together. Make sure all the joints are covered. (Figure 3)

NOTE: The weatherability of the installation is the responsibility of the installer. R. Lang Company will NOT be liable for damages related to a poor or incorrect installation.

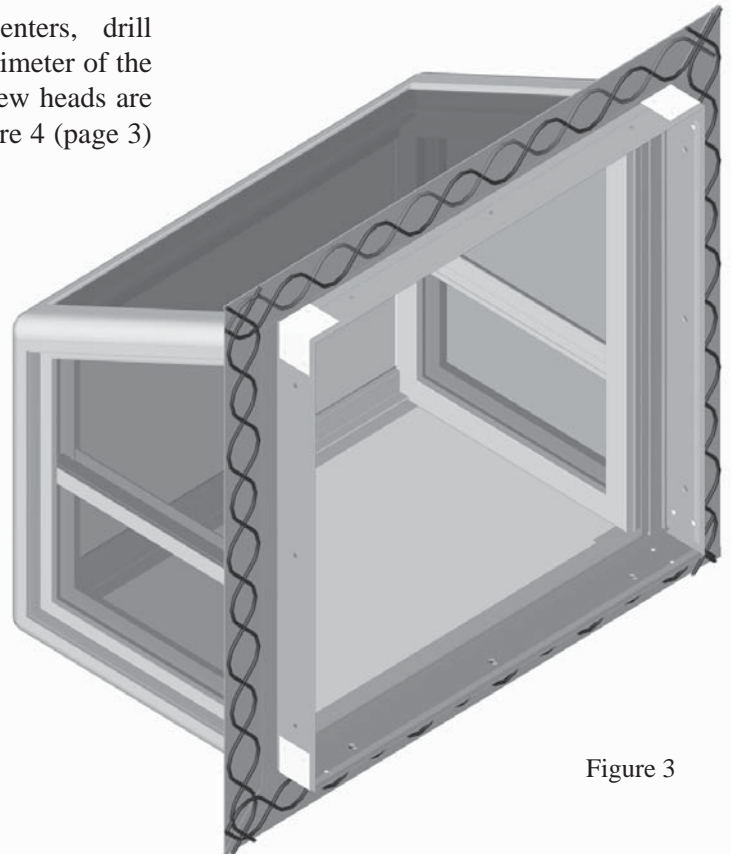


Figure 3



TRU-FRAME®
A name you can build on.

Step 6

Install Window in Opening

Note: This operation will require at least three people.

Two people lift the window into the opening, and the third screws the window into place, insuring the window is plumb, level, and square. It is important to tighten the screws only enough to hold the window in place. Do not tighten so much that the flange becomes distorted. (Figure 4)

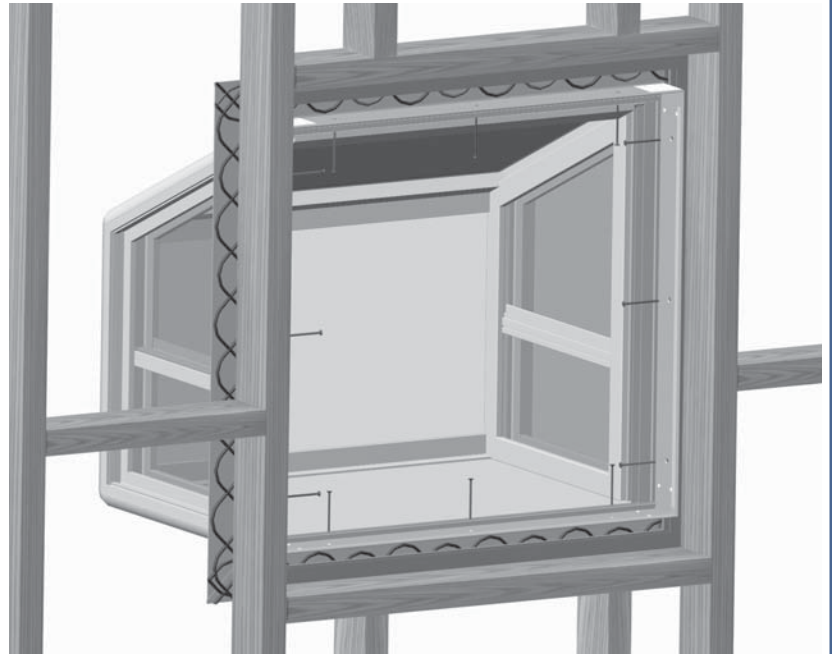


Figure 4

Note: Interior/Exterior walls have been removed for clarity.

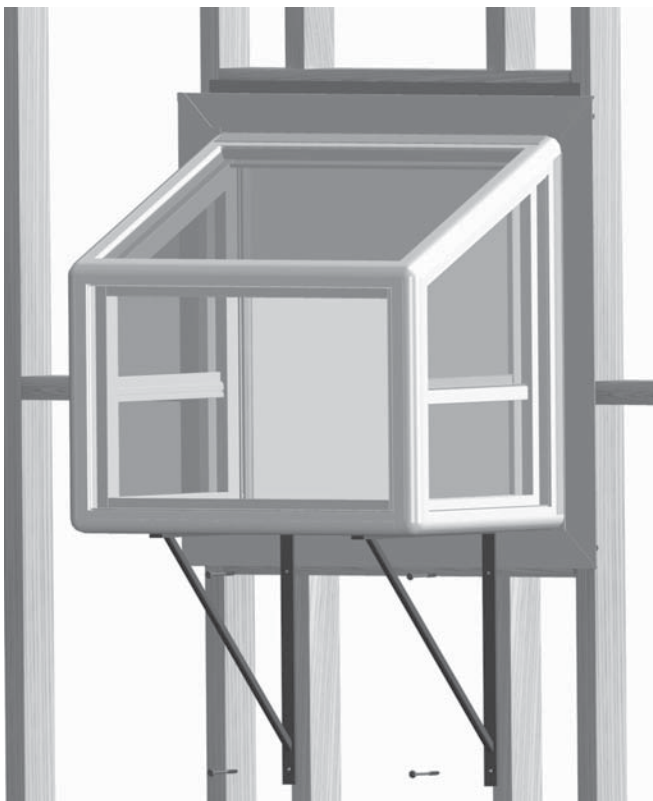


Figure 5

Step 7

Install Support Brackets

Using the stud finder or other method, locate studs as close to the outside edges of the window as possible. Butt the horizontal leg of the bracket against the underside of the window, and mark the locations of the mounting holes, at the wall stud.

Drill pilot holes at these locations, and install the support brackets using the 1/4" x 3" lag bolts. (Figure 5)

When fastening to the underside of the greenhouse window, bracket mounting screws must not exceed 3/4" in length. Pre-drilling pilot holes must also not exceed 3/4" to avoid penetration to the inside of the window bottom pan.

Note: 5'-0" to 6'-0" wide greenhouse windows, support bracing is required on each end of the window (Warranty will be void without proper support).



TRU-FRAME®
A name you can build on.

Step 8

OPTIONAL - Install Trim Strips

Note: The Trim Strips are provided for your convenience. You may wish to finish out the interior opening in another manner.

The following are guidelines for Trim Strip installation. Custom fit and trimming will be required. Please locate proper trim pieces and plan the installation prior to cutting or notching the material.

KV2061
Head & Jamb Trim

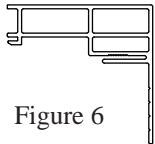


Figure 6

KV2060
Sill Trim

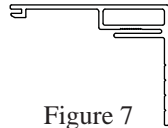


Figure 7

KV2071
Flat Trim



Figure 8

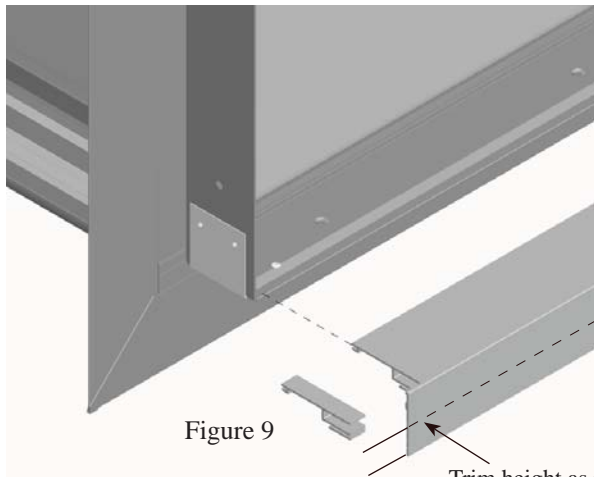


Figure 9

Trim height as necessary.

The KV2061 Head/Jamb Trim should be installed in the same manner as the KV2060 Sill Trim. (Note: the KV2060 Sill Trim and KV2061 Head Trim are supplied at the same length.)

The KV2061 Jamb Trim will now be installed in the vertical jamb locations. Measure each vertical side from the sill to the Head Trim and cut to that size. The Jam Trim will also require side trimming to fit the interior opening.

The KV2071 Flat Trim is used to provide a finished exterior trim over the radial flange, if necessary.

The KV2060 Sill Trim should be installed first. Cut the Sill Trim to the same width as the interior opening (Figure 10). Notch both ends to clear the vertical window fins. The Sill Trim will also need trimming on the height for proper fit on the interior sill (Figure 9). Measure the opening before cutting the trim.

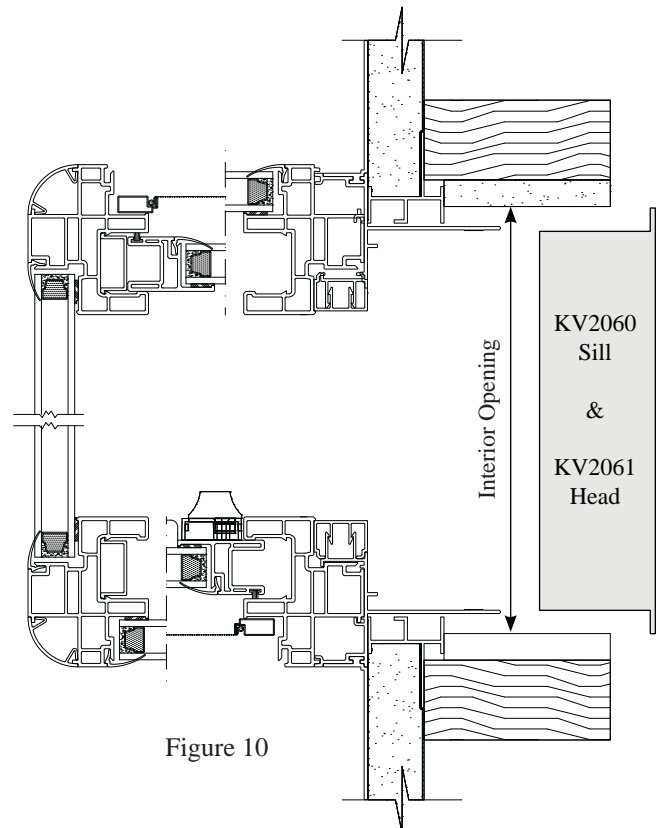


Figure 10

DO NOT USE Petroleum, Aromatic, Aliphatic, Acetone, or Ammonia based cleaners or solvents on any surface of the **Tru-Frame®** Vinyl Greenhouse Window. The use of these cleaners on any surface will void the warranty on the window and materials. The factory **recommends** the use of warm soapy water to clean vinyl surfaces.

This window is covered under one or more of the following U.S. Patents:

D320,952 or 6,588,146.

The Retro-Fin System is patent pending.