



## IMPORTANT! READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

Follow your local building codes, customs and building practices for additional installation requirements. The manufacturer will accept no responsibility for air or water leakage above, under, or around the window unit. For questions, contact **American Craftsman Windows & Doors at 888-504-0005.**

### BEFORE WINDOW INSTALLATION

- (Required)** The rough opening should be level, plumb and square. Dimensionally, it should be 1/2" taller and 1" wider than the frame dimension of the window or window combination (3/4" taller on casement combinations), excluding the nailing fins (**Figure 1**). Note that horizontal mulls add 1" to the vertical dimension, and vertical mulls add 1" to the horizontal dimension of the individual units combined.

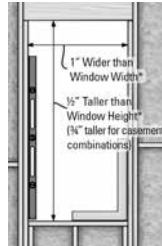


Figure 1

- For Florida Building Code Compliance:** The rough opening must have a maximum gap of 1/4" on any given side, instead of using the dimensions shown in **Figure 1**. Refer to the FL code for more information.

- (Recommended)** If a weather-resistant barrier is used, follow the barrier manufacturer's recommendations for treatment of window openings.
- (Recommended)** If pan flashing is used, it should be installed at this time. Follow the pan flashing manufacturer's recommendations, making sure that the product provides an adequate sill dam height to the interior. Also when using pan flashing, do not seal the lower sill nailing fin so as to provide adequate drainage.

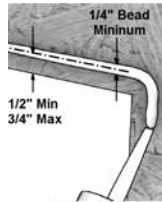


Figure 2

### SINGLE UNIT INSTALLATION

- (Required)** Apply a generous (at least 1/4" diameter), continuous bead of sealant to the exterior of the rough opening to ensure an adequate seal between the back of the nailing fin and the exterior surface of the rough opening (**Figure 2**).
- (Required)** With the window closed and locked, place it in the rough opening. If the sill of the rough opening is not level and true, place a shim near each end of the sill. Otherwise, place the window unit directly on the sill (**Figure 3**). Center it from side to side. With an approved fastener (listed above), fasten the window through the nailing fin through a hole nearest the top center.
- (Required)** Square the window side to side, shimming as necessary to maintain square and level jambs (**Figure 4**). Check and adjust the shims so that the window sill and head are level and are not crowned. To maintain plumb and straightness, use a straight edge and level to check the sides of the window frame as you proceed to install fasteners. A properly installed window will measure the same across the top, middle and bottom, and the diagonal measurements will be the same.
- (Required)** After checking the operation of the window, complete the fastening by placing fasteners in the provided nailing fin holes, spaced a maximum of 12" apart and 2" from the ends (**Figure 5**).
- (Required)** After fastening the window unit, apply sealant to the mitered corners of the nailing fin (**Figure 6**). Apply it all the way into the corner of the unit.
- (Recommended)** Following the flashing manufacturers' recommendations, apply flashing to the nailing fins and surrounding wall surface starting with the bottom, then the sides, and then the top, creating a shingle effect (**Figure 7**).



Figure 3

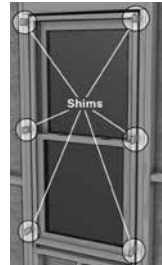


Figure 4

- (Painting Requirements)** Ensure unit is clean, dry and free of dirt, grass and dust before applying finish. Unprimed: Apply one coat of latex primer and two coats of acrylic latex paint. Primed: Paint within four weeks after installation. Apply two coats of acrylic latex paint. If primer shows wear, wash unit with a trisodium phosphate cleaner and reprime. Follow instructions for unprimed unit.

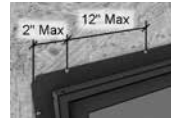


Figure 5

- Note:** Where pan flashing is present, do not use flashing that will impede proper drainage of the pan on the bottom. See **Precautionary Notes** below.

### MULLED COMBINATION INSTALLATION

- (Required)** Follow the instructions from steps 1 through 5 above. On step 4, a 3/8" sealant bead diameter is recommended to ensure a full seal around the gusset plates.
- (Required)** For combinations with vertical mullions, place shims in the lower outer corners (**Figure 3**) to compensate for the mull bracket in the center. It is recommended that you use a string line across the sill to verify where the low spots are, and shim accordingly. This will help assure that all the units operate properly.
- (Required)** Follow steps 6 through 10 above (step 9 is recommended). For fastening the mull gusset plates, see **Recommended Tools & Accessories**. Six screws are required on each gusset plate to ensure performance as labelled (**Figure 8**).
- (Required)** On the exterior, do not seal the mull caps or double hung weep holes at the outer edge when siding or flashing is applied (**Figure 8**).



Figure 6

### PRECAUTIONARY NOTES:

- If exterior is brick or masonry, you must leave a 3/8" gap between the bottom sill of the window and the masonry to avoid brick binding.
- Follow the siding manufacturer's requirements for sealing between the siding and window frames.
- Drilling through the frame of the window could cause a leakage problem, which would not be covered by the warranty.
- Use of low-expansion foam insulation is allowed but any binding or damage of any type caused by the insulation will not be covered under warranty (see manufacturer's requirements).
- Use of high-expansion foam insulation voids the warranty of the window unit.
- Altering the exterior color of these window units may void the warranty.

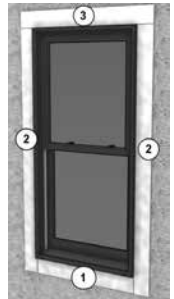


Figure 7



Figure 8

### RECOMMENDED TOOLS & ACCESSORIES

- Tape Measure
- Level (2' or longer)
- Hammer
- Power Screwdriver
- Shims
- Sealant
- Flashing (recommended)
- Chalk Line (recommended)

### APPROVED FASTENERS

All fasteners must be corrosion-resistant for the window nailing fin.

#### WOOD FRAMED CONSTRUCTION:

#8 pan head screw, which penetrates framing member at least 1-1/2", or nail with 3/8" minimum head diameter, which penetrates framing member at least 2".

#### STEEL CONSTRUCTION:

#8 sheet metal screw, which penetrates the framing member at least 3 threads.

### FOR THE MULL GUSSET PLATES.

#### WOOD FRAMED CONSTRUCTION:

#8 pan head wood screws, which penetrate the framing member at least 2"

#### STEEL CONSTRUCTION:

#8 sheet metal screw, which penetrates the framing member at least 3 threads.