# Winchester Industries Installation, Measuring, and Ordering Guide for Replacement Windows

# **Professionalism is Required:**

Proper, professional installation is as important to the total performance of a window as is the manufacturing process and materials used. **Installers should be professional. Show your customer that you are a professional by always extending courtesy and respect.** 



The quality control measures taken in the manufacturing plant, which ensures a high quality window that meets or exceeds current performance standards, can be nullified if any step in the installation process is performed improperly. Poor installation not only can effect the window's thermal performance, but also the safe, smooth operation of the window.

The following methods were collected from, top window installation professionals. The recommended installation methods should not be construed as the only correct way of installing replacement windows. Actual field conditions and construction characteristics will determine installation methods.



# The "Musts" of Window Installation:

- The window must support only its own weight for structural integrity.
- There must be an airtight seal around the window.
- There must be continuous and unbroken thermal insulation between the frame of the window and the wall.
- There must be some allowance for differential movement between the window and the wall opening.
- The installation must serve to maximize the performance and the energy-efficient features of the window.

## Installation, Measuring, and Ordering Guide for Replacement Windows

# I. Installation Tips:

Proper installation means that all sash and mainframe components meet and create the sealing features the windows were designed with. This also allows for top performance of the unit.

#### Inspecting New Window Prior To Removal of Old Unit

Prior to taking out the existing window unwrap and thoroughly inspect the new window. Check the measurements of the new unit to the opening it will fill. Check for any shipping or material damage.

After visually inspecting the window, shut and lock it until the old window is removed. This will allow the seals, locks, interlocks and weatherstripping to engage and seal. This will also make locking the unit easier after installation.

#### Shims

The first step is to use shims under the sill, if necessary, to make it as horizontally level as possible. Generally the shims used under the sill are placed at approximately 16" intervals.



Recommended tapered shims should be approximately 2" wide. Place two shims at each shimming point, one from the inside and one from the outside for level support across the entire 3-1/4" depth of the frame.

Shims on the jamb sides should be placed near the top and bottom with one in the middle of the jamb. They should be placed every 24" or as needed.

In most cases shims should not be used at the head, or along the top of the frame this may affect the proper operation of the window.

If shims are needed, be sure to maintain a straight and true sight line along sashes and frame.

#### Caulk

Silicone is somewhat flexible therefore it is recommended. The silicone caulk must be a neutral base silicone. Silicone that releases an acetic acid during cure does not adhere well to vinyl.

## Installation, Measuring, and Ordering Guide for Replacement Windows

# I. Installation Tips (con't):

#### Caulking:

The replacement window gains strength from the surrounding wall structure. This is obtained from proper sizing, support and installation techniques. The windows should remain shut and locked while caulking occurs. If not possible, shut and lock the window carefully as not to fracture the caulk seal. Make any final adjustments if needed before caulking sets.

#### **Cleaning Windows**



It is important to explain to the homeowner the following:

Standard glass cleaners are fine for cleaning glass surfaces. It is important to use a non-abrasive spray cleaner for cleaning vinyl frames. Do not use any petroleum-based materials or solvents on glass or vinyl surfaces.

Proper cleaning will keep the window units operating for many years to come.

#### **INSTALLATION ACCESSORIES**

Available through Winchester Industries: (See Window Price Book)

Extra Head Expanders H-Mullion Stacking Mull Coil Roll of Screen

Winchester Industries does NOT include any of these items with window purchases. They must be ordered separately, or specified on your order.

Additional items required: (Not Available through Winchester Industries)

Blind StopStarter StripVinyl Angle (L-Angle)Foam TapeLiquid PVC, Assorted ColorsCaulk, Assorted Colors

#### TOOLS AND SUPPLIES: (Installation basics we recommend.)

Hand Tools; Bits, Blades, Snips Power Miter Box Router (for making new stops) Sheet Metal Brake (optional) Cordless Drill and Screw Gun Nail Gun Sawsall Ladder

## Installation, Measuring, and Ordering Guide for Replacement Windows

# 1. Installation Tips (con't):

SUPPLIES:Extra Casement Screw Plugs: All Colors<br/>Assortment of Sheetrock Drywall Screws: 1-1/4" to 4-1/2" long<br/>Caulking - as needed<br/>Blind Stop<br/>Assortment of NailsCoil Stock in Window Colors<br/>Foam Tape and/ or Fiberglass Insulation

## II. <u>Measuring</u> Measure (A typical opening):



- i) <u>Width</u>: Measure between the jambs at 3 different points top, middle and bottom. Use the smallest of the 3 measurements. Note: Normal cutback on width is 3/8".
- ii) <u>Height</u>: Measure from back side of the sill stool to the top of the window casing on the left, right and middle. Use the smallest measurement. Cut back the dimensions to allow for squaring and leveling the window frame in the opening, and, insert insulation between the opening and the mainframe. Note: Normal cutback on height is 1/4".

EXAMPLE: Opening size 32" x 45-1/2" Ordering manufactured exact size is 31-5/8" x 45-1/4".

#### Measure (A buck frame - complete tearout):

- 1) Measure the 3 width points from the plaster or drywall return.
- 2) Measure the 3 height points from the marble or formica sill to the header drywall return.

To meaure the window for such an application, use the following formula:

- 1) Drywall return size less 1-1/2" for the wood buck = the buck frame opening size.
- 2) Deduct 3/8" on the width and 1/4" on the height for the exact window size:

Order manufactured exact size	34-1/4 x	46-1/4
Less 3/8 width, 1/4 height	- 3/8	<u> </u>
Wood buck opening size	34-5/8 x	46-1/2
Wood buck	-1-1/2	-1-1/2
Drywall return size	36-1/8 x	48

## III. Ordering

EXAMPLE.

Winchester recommends all windows be ordered "exact size".

Double hungs can be ordered in 1/8" width increments and 1/4" height increments.

## Installation, Measuring, and Ordering Guide for Replacement Windows

# III. Ordering (conn't)

Sliders must be ordered on 1/4" width increments and 1/8" height increments.

Single casement/awnings and picture windows must be ordered on 1/8" width and height increments.

# IV. Recommended Window Installation



#### Coil Stock & Sill Angle

If the sill is to be covered with coil stock, apply coil stock prior to setting window unit into opening. Extend coil stock approximately 1" under window unit and nail so that nails will be covered with the window once it is in place. Always pitch coil stock so water will run off, and not puddle against the window unit.

For installation into an opening with a sloping sill, a sill angle to accommodate up to 15° of slope is provided. The double hung sill angle is incorporated as part of the sill. It has score lines that can be trimmed to adjust for varying degrees of slope. For the slider, apply the sill angle in the groove behind the screen track, which is behind the exterior leg of the unit's masterframe. As with the double hung, extend the coil stock approximately 1" under the sill angle.



Alignment Clip

# Double Hung

Insulate the replacement unit window sill and header expander cavities prior to setting the masterframe in place. The header expander is provided to ensure a tight fit in the height, along with leveling during installation.

Level the sill as close as possible. Square the jambs of the unit to the sill. Adjust alignment clip/jamb adjuster as needed. Fasten the unit into the opening with screws supplied through the predrilled screw holes in the jamb behind the sash stops and adjust as needed. If necessary, shim the jambs to insure adequate seal.

# NOTE: Do not remove banding from unit until after unit is placed in opening.

Insulate the cavities between jambs of the window and the opening.

NOTE: Do not over stuff insulation as it may interfere with proper operation. Make sure that the finseal of the masterframe jamb sections and sashes make full contact with each other.

## Installation, Measuring, and Ordering Guide for Replacement Windows

#### IV. <u>Recommended Window Installation(con't)</u>:

Operate and tilt both sashes prior to replacing the trim to be sure that both function properly and that all adjustments are complete. Reinstall the existing or new interior trim. Caulk the interior, and exterior perimeters of the window unit. It is very important to caulk thoroughly and smoothly to ensure an air tight and quality installation.



#### **Slider Window**

As with double hungs, slider windows achieve maximum performance from installation methods that dictate a precise installation with straight, tight lines between sash and masterframe.

Proper support and leveling of the masterframe sill is critical. The sill should be level from side to side and interior to exterior. There are two jamb adjusters/alignment clips located in the header. Loosening and tightening of the screws will help adjust the frame of the unit.



#### **Casement and Awning Windows**

With the casement and awning windows, similar installation techniques apply to ensure that the window unit is installed plumb, level and square.

The pre-drilled holes in the jambs of the masterframe are for installation screws. Plugs supplied are to cover the screw holes.

#### Installation, Measuring, and Ordering Guide for Replacement Windows

#### V. Identification Sticker

The identification sticker on each window contains pertinent information about your Winchester manufactured window. In the event that future warranty information is needed it is extremely important that the label is in the window frame. The information contained on the label includes:

- <u>A. Order Number</u>: A specific 6 digit number is assigned to each order of windows. The order number is kept in our files and must be referred to when ordering service parts.
- <u>B. Manufacturing Size:</u> This is the exact, tip-to-tip, size of the window Winchester manufactured.
- <u>C. Model/Component:</u> This is the specific model of a window. Example: Model 490 is a 2 glass hopper window.
- D. Customer No.: This is the number assigned to the Dealer who sells the product.
- <u>E. Job Identification:</u> Is the job name this can be the homeowner's name or a specific Dealer Job ID or a combination of both.
- <u>F. Window Location:</u> This designates which room or opening the specific window belongs in. For example: Bedroom #1 or Powder Room etc..

WINDOW	5. S.		WORK ORDER	MANUFACTURING SIZE		
WORK ORDER NO.		ORDER NO.	ITEM NO,	WIDTH	HEIGHT	
		A		В	В	
MODEL/ COMPONENT	С	JOB IDENTIFICA	JOB IDENTIFICATION			
CUSTOMER NO.	D				F	