

# TILT-WASH DOUBLE-HUNG INSERT WINDOWS

**CUSTOM SIZING**  
in 1/8" (3) increments



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Dimensions in parentheses are in millimeters.



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# TILT-WASH DOUBLE-HUNG INSERT WINDOWS

## FEATURES

### Frame

**A** Fibrex® material exterior protects the frame – beautifully. Best of all, it's low-maintenance and never needs painting.\*

**B** For exceptionally long-lasting\* performance, sill members are constructed with a wood core and a Fibrex® material exterior. Sill ends are protected and sealed with weather-resistant covers.

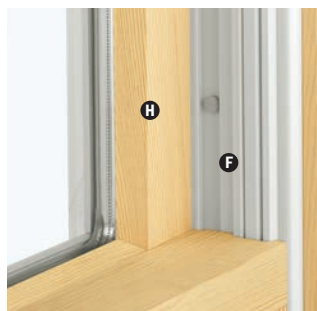
**C** Natural wood stops are available in pine and prefinished White.

**D** Weatherstripping throughout the unit provides a long-lasting,\* energy-efficient, weather-resistant seal. For the top and bottom rails, an encased foam material is used. The head jamb liner and sill have a rigid vinyl rib that the weatherstripping material compresses against. At the check rail, compressible vinyl bulb material is used. Side jamb liners use leaf-type weatherstripping with foam inserts.

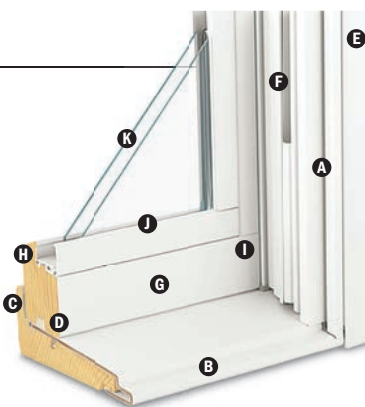
**E** Exterior stop covers are specially designed to allow easy application of high-quality sealant.

3 1/4" (83) "pocket window" jamb depth allows convenient replacement without disturbing interior window trim for most double-hung replacement situations.

**F** Jamb liners available in white or gray and must be specified when ordering. Contact your Andersen supplier for details.



Unique block-and-tackle balancers feature sized-to-the-unit, rust-resistant springs that require no adjustment. Glass-reinforced nylon balancer shoes provide smooth, reliable sash operation. They automatically lock the balancer into position when sash are tilted into wash mode.



### Sash

Slide wash assists make it easy to tilt the sash into wash mode.

**G** A polyester-stabilized coat with a Flexacron® finish is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous finish.

**H** Wood sash members are treated with a water-repellent preservative for long-lasting\* protection and performance. Interior surfaces are unfinished pine. Low-maintenance prefinished White interiors are also available.

**I** Sash joints simulate the look of traditional mortise-and-tenon construction inside and out.

### Glass

**J** Silicone bed glazing provides superior weathertightness and durability.

**K** High-performance glass options include:

- Low-E4® glass®
- Low-E4® HeatLock™ glass
- Low-E4® Sun glass
- Low-E4® SmartSun™ glass
- Low-E4® SmartSun™ HeatLock™ glass

Tempered glass and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction and simplifies finishing at the jobsite.

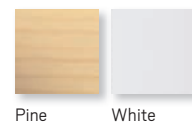
### Patterned Glass

Patterned glass options are available. See page 10 for more details.

## EXTERIOR

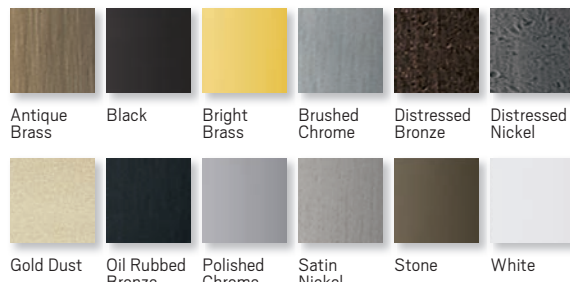


## INTERIOR



Naturally occurring variations in grain, color and texture of wood make each window one-of-a-kind. All wood interiors are unfinished unless prefinished White is specified.

## HARDWARE FINISHES



Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

## DOUBLE-HUNG HARDWARE

### STANDARD Lock & Keeper



Black | Gold Dust  
**Stone** | White

### ESTATE™ Lock & Keeper



Antique Brass | Bright Brass  
Brushed Chrome | Distressed Bronze  
Distressed Nickel | Oil Rubbed Bronze  
Polished Chrome | **Satin Nickel**

Stone is standard with natural interior units. White finish comes with prefinished White interiors. Other finishes optional.

Optional Estate lock & keeper reduces the clear opening height by 1/4" (14). Check with local building code officials to determine compliance with egress requirements.

## OPTIONAL DOUBLE-HUNG LIFT HARDWARE\*\*

### ESTATE™

Hand Lift

Finger Lifts



Antique Brass | Bright Brass | Brushed Chrome | Distressed Bronze  
Distressed Nickel | Oil Rubbed Bronze | Polished Chrome | **Satin Nickel**

### TRADITIONAL

Hand Lift

Finger Lifts

Bar Lift



Antique Brass | Bright Brass | Brushed Chrome | **Oil Rubbed Bronze**  
Polished Chrome | Satin Nickel | Stone | White

### CLASSIC SERIES™

Hand Lift

Finger Lifts

Sash Lift



Stone | **White**

*Bold name denotes finish shown.*

\* Visit [andersenwindows.com/warranty](http://andersenwindows.com/warranty) or see your Andersen supplier for details on the 400 Series Limited Warranty.

\*\* Hardware sold separately.

Dimensions in parentheses are in millimeters.

"Flexacron" is a registered trademark of PPG Industries, Inc.

Printing limitations prevent exact duplication of colors and finishes. See your Andersen supplier for actual color and finish samples.

## Exterior Stop Cover



An exterior stop cover provides a clean transition from new window to the existing window casing.

## Sill Angles

Three sill angles are available — 0°, 8° and 14° — to closely match the existing sill in window replacement applications. See page 99 for more details.



0° Sill Angle



8° Sill Angle



14° Sill Angle

## Included Installation Materials



Flat, self-hanging shims, backer rod, installation screws and complete instructions are included with each insert window. Measurement guide and worksheet at [andersenwindows.com/measure](http://andersenwindows.com/measure).

## Sash Options\*



Cottage Style

Reverse Cottage Style

## ACCESSORIES Sold Separately

### Sash

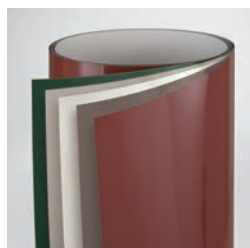
#### Window Opening Control Device Kit



A Window Opening Control Device Kit is available, which limits sash travel to less than 4" (102) when the window is first opened. Available in Stone and White. Device shown on a 400 Series Tilt-Wash Double-Hung window.

### Installation

#### Coil Stock



Andersen® aluminum coil stock can be ordered to match any of our 11 trim colors. Made from .019-gauge aluminum, Andersen coil stock is available in 24" (610) x 50' (15,240) rolls. Color-matched stainless steel trim nails 1 1/4" (32) long are also available and can be ordered in 1 lb. or 454 gram boxes.

### Glass

#### Andersen® Art Glass

Available for tilt-wash transom and picture units. Andersen art glass panels come in a variety of original patterns, including four *Frank Lloyd Wright® Series* designs. See pages 213-214 for details on Andersen art glass. Visit [andersenwindows.com/artglass](http://andersenwindows.com/artglass) for details and pattern information.

### Insect Screens

#### Insect Screen Frames



Choose full insect screen or half insect screen. Half insect screen (shown above) allows ventilation without affecting the view through the upper sash. Frames are available in colors to match product exteriors.

#### TruScene® Insect Screen

Exclusive Andersen® TruScene® insect screens provide over 50% more clarity than our conventional insect screens for a beautiful unobstructed view. They allow more fresh air and sunlight in, while doing a better job of keeping out small insects.

#### Conventional Insect Screen

Conventional insect screens have charcoal powder-coated aluminum screen mesh.

### Grilles

Grilles are available in a variety of configurations and widths. For double-hung grille patterns see page 100.

#### CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-base or latex paint. Submit color samples to Andersen for approval when painting Terratone any color darker than Terratone.
- Do not paint 400 Series windows with White, Canvas, Sandtone, Forest Green, Dark Bronze or Black exterior colors.
- Creosote-based stains should not come in contact with Andersen products.
- Do not paint weatherstripping.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces.

For more information about **glass, patterned glass, art glass, grilles and TruScene® insect screen** see pages 10-17.

For more information about **product performance, installation accessories and warranty** see pages 269-291 or visit

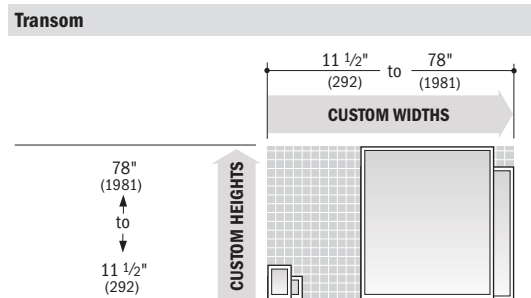
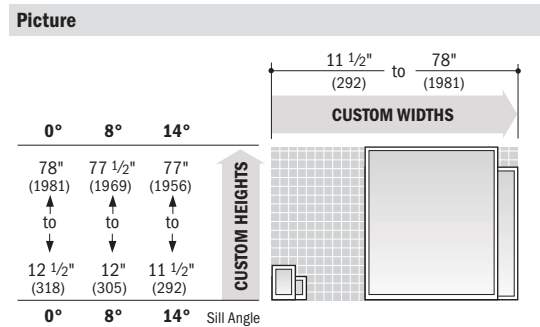
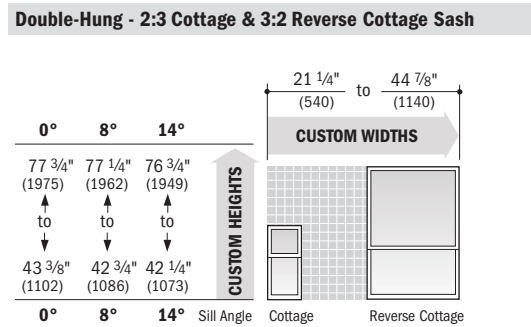
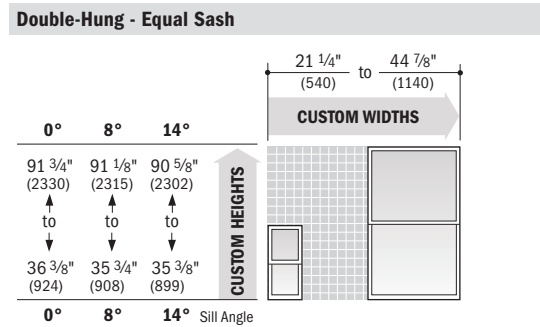
\* Shown on 400 Series Tilt-Wash double-hung full-frame windows.

Dimensions in parentheses are in millimeters.

"Frank Lloyd Wright" is a registered trademark of the Frank Lloyd Wright Foundation.

# TILT-WASH DOUBLE-HUNG INSERT WINDOWS

## Tilt-Wash Double-Hung Insert Window Sizes



Available in 1/8" (3) increments between minimum and maximum widths and heights. Height limits for double-hung and picture insert windows depend on new insert window sill angle.

For picture and transom insert windows, either height or width must be 68" (1727) or less and height plus width cannot be less than 28" (711).

Measurement guide for custom sized windows can be found at [andersenwindows.com/measure](http://andersenwindows.com/measure). Grille patterns shown on page 100.

## Tilt-Wash Double-Hung Insert Window Specification Formulas

	<b>Vent Opening</b>	Width = window width - 3.798" (96)				
		Height = Depends on sash ratio and specific sill angle of insert window, see below.				
		<b>sash ratio</b>	<b>clear opening height</b>	<b>sill angle deduction</b>		
				14°	8°	0°
		1:1 Equal	= (window height ÷ 2) - sill angle deduction	3.602" (91)	3.836" (97)	4.138" (105)
	<b>Unobstr. Glass</b>	2:3 Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.879" (73)	3.066" (78)	3.308" (84)
		3:2 Reverse Cottage	= (window height x 2) ÷ 5 - sill angle deduction	2.083" (53)	2.270" (58)	2.512" (64)
		Width = window width - 6.219" (158)				
		Height = Depends on sash ratio and specific sill angle of insert window, see below.				
		<b>sash</b>	<b>unobstructed glass height</b>	<b>sill angle deduction</b>		
				14°	8°	0°
		Equal - Upper and Lower Sash	= (window height ÷ 2) - sill angle deduction	3.625 (92)	3.844" (98)	4.156" (106)
		Cottage - Upper Sash or Reverse Cottage - Lower Sash	= (window height x 2) ÷ 5 - sill angle deduction	2.891" (73)	3.078" (78)	3.328" (85)
		Cottage - Lower Sash or Reverse Cottage - Upper Sash	= (window height x 2) ÷ 5 - sill angle deduction	4.344" (110)	4.625" (117)	4.984" (127)

Optional Estate™ hardware will reduce vent opening height by 7/32" (6).

For clear opening specifications, contact your Andersen supplier.

## Tilt-Wash Picture and Transom Insert Window Specifications

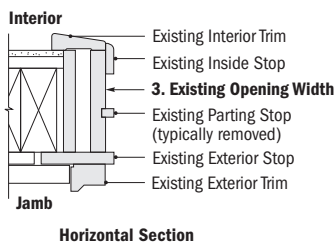
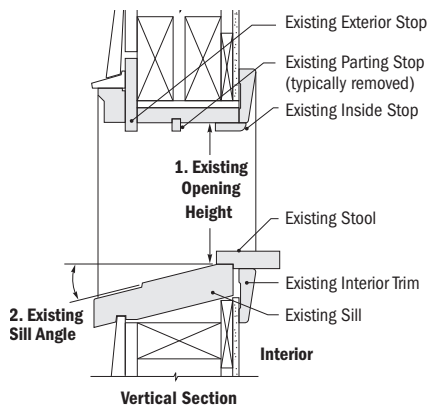
	<b>Unobstr. Glass</b>	<b>Picture Insert</b>				
		Width = window width - 6.0" (152)				
		Height = Depends on sash ratio and specific sill angle of insert window, see below.				
		<b>unobstructed glass height</b>	<b>sill angle deductions</b>			
			14°	8°	0°	
		= window height - sill angle deduction	5.816" (148)	6.285" (160)	6.890" (175)	
		<b>Transom Insert</b>				
		Width = window width - 6.0" (152)				
		Height = window width - 6.0" (152)				

- Dimensions in parentheses are in millimeters.
- **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air.
- **Unobstr. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.
- Refer to [andersenwindows.com/measure](http://andersenwindows.com/measure) for detailed instructions on how to properly measure for insert windows.

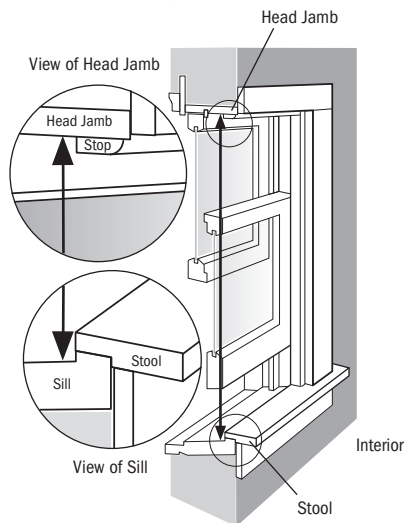
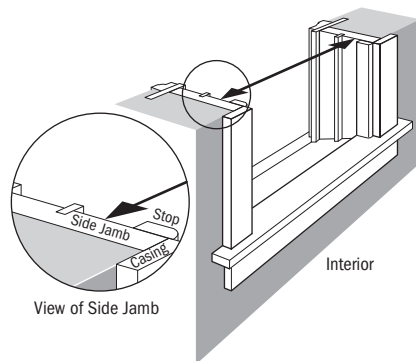
## Existing Window Measurements

Required measurements:

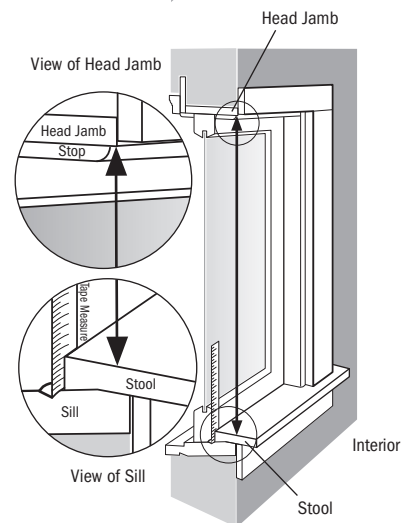
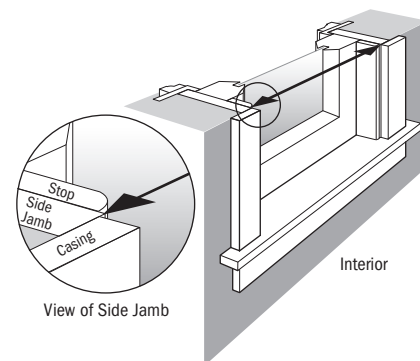
1. Existing Opening Height
2. Existing Sill Angle
3. Existing Opening Width



### Existing Double-Hung Window



### Existing Picture Window

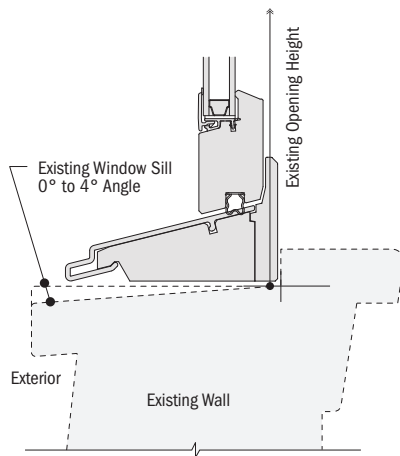


## Sill Angle Details

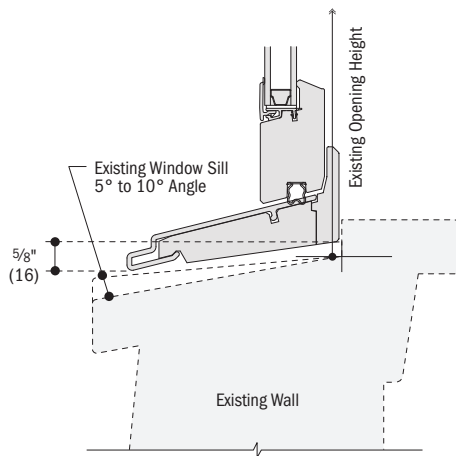
Scale 3" (76) = 1'-0" (305) – 1:4

Select a sill angle that most closely matches your existing sill angle.

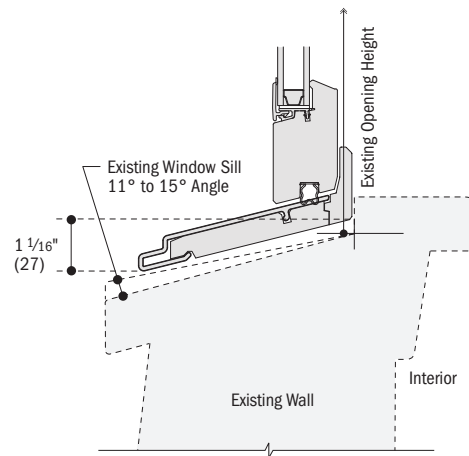
Windows with a smaller sill angle will have a larger maximum height.



**0° Sill Detail**



**8° Sill Detail**











**14° Sill Detail**

- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.
- Refer to [andersenwindows.com/measure](http://andersenwindows.com/measure) for detailed instructions on how to properly measure for insert windows.

# TILT-WASH DOUBLE-HUNG INSERT WINDOWS

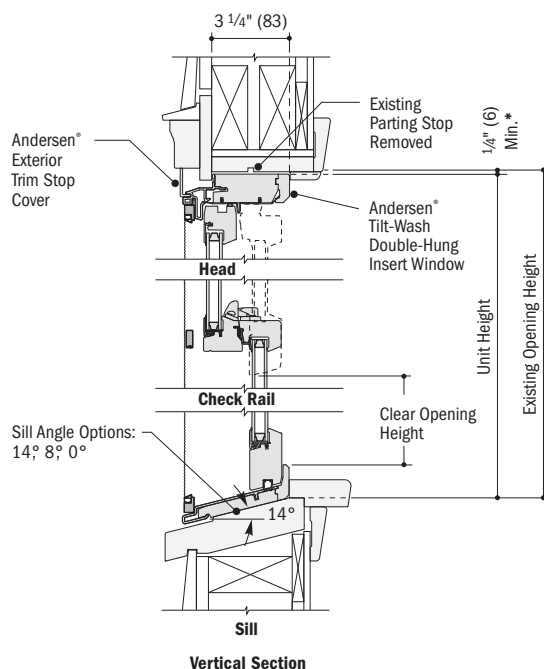
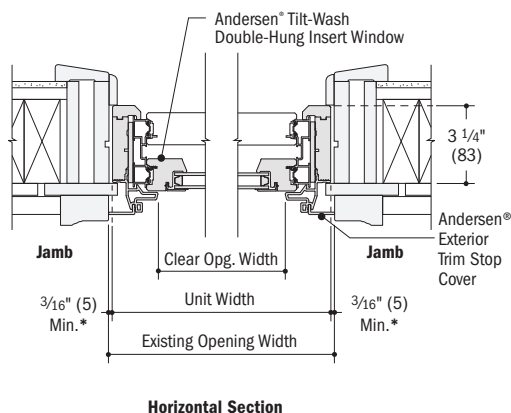
## Grille Patterns

	Prairie A Specified Equal Light					Prairie A Specified Equal Light	
Tilt-Wash Double-Hung Insert					Tilt-Wash Transom Insert		
	Equal Sash	Cottage Sash	Equal Sash	Cottage Sash			
Tilt-Wash Picture Insert					Tilt-Wash Picture Insert		
	Equal Sash	Cottage Sash	Equal Sash	Cottage Sash			

Double-hung window patterns are also available in Upper Sash Only (USO) configurations. For picture window patterns that require alignment with double-hung patterns, identify the sash style (equal, cottage, reverse cottage) when ordering. **Number of lights and overall pattern varies with window size. Patterns are not available in all configurations.** For more information on divided light see page 11 or visit [andersenwindows.com/grilles](http://andersenwindows.com/grilles).

## Tilt-Wash Double-Hung Insert Window Details

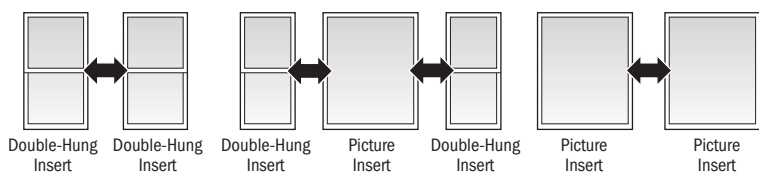
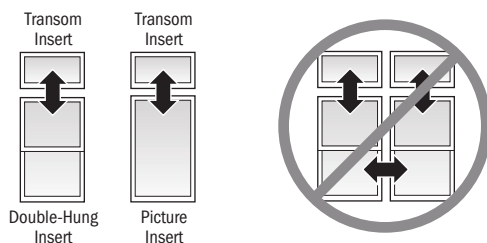
Scale 1 1/2" (38) = 1'-0" (305) – 1:8



## Joining Combinations

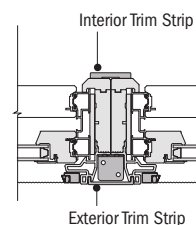
Join insert windows in 1-way combinations horizontally or vertically.

Do not join insert windows in 2-way combinations.



## Vertical (ribbon) Joining Detail

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



### Horizontal Section

Tilt-Wash Double-Hung Insert to Tilt-Wash Double-Hung Insert

For more joining information see the combination designs section starting on page 255.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation guides at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.
- Refer to [andersenwindows.com/measure](http://andersenwindows.com/measure) for detailed instructions on how to properly measure for insert windows.