

# Hinged Patio Door Installation

**WARRANTY**

For applicable product warranty and arbitration information, please see product website.

**IMPORTANT NOTICE**

These instructions were developed and tested for use with wall systems designed to manage water. These instructions are not to be used with any other construction methods or window frame types. Installation instructions for use with other construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional. Additional preparation or anchoring may be required to comply with local building code requirements.

**Please read entire instruction completely before beginning.**

**Safety Alert Symbol Reference:** These symbols are intended to alert you to potential injury hazards and information. Obey all safety messages.

<b>COULD</b> Result in:	 <b>WARNING</b> Major Injury/Death	<b>COULD</b> Result in:	 <b>CAUTION</b> Minor Injury
<b>COULD</b> Result in:	 <b>NOTICE</b> Product or Property Damage	<b>COULD</b> Result in:	 <b>IMPORTANT</b> Procedure and Product Info.

 <b>WARNING</b>	 <b>WARNING</b>
Windows and doors can be extremely heavy. To avoid injury, use appropriate lifting techniques and an adequate number of people to carry and install the product. Mechanical lifting assistance may be needed for larger panels and glass. Failure to do so can result in injury or damage to product or property.	To ensure safety and security and help prevent property damage, including possible damage to you window or door, close and lock windows and doors any time they are not being used for venting on a nice day, and particularly during high winds or rain.
 <b>WARNING</b>	 <b>WARNING</b>
This product may contain chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .	Doors and certain windows are glazed with safety glass (tempered or laminated). If broken, glass must be replaced with safety glass in accordance with state and federal laws.
 <b>WARNING</b>	 <b>CAUTION</b>
Special care must be taken with units with protective glass film applied. DO NOT remove protective film near flammable materials. Static charge created when removing the film can ignite flammable materials or cause a shock. DO NOT place suction grips over film seams. Suction grips will not hold if placed over film seam to lift heavy glass or panels.	Many windows and doors in older homes are painted with lead-based paint. Removal of old windows and doors may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities and/or go to <a href="http://www.epa.gov/lead">www.epa.gov/lead</a> for more information.
<b>NOTICE</b>	 <b>CAUTION</b>
Remove plastic wrap and protective packaging. Perform a complete unit inspection, checking for shipping damage, broken glass, or other physical damage.	Always wear appropriate gloves and eye protection for all procedures. Follow manufacturers' instructions for hand and power tools.

## ALUMINUM

# Hinged Patio Door Installation

### **NOTICE** CLEANING INSTRUCTIONS

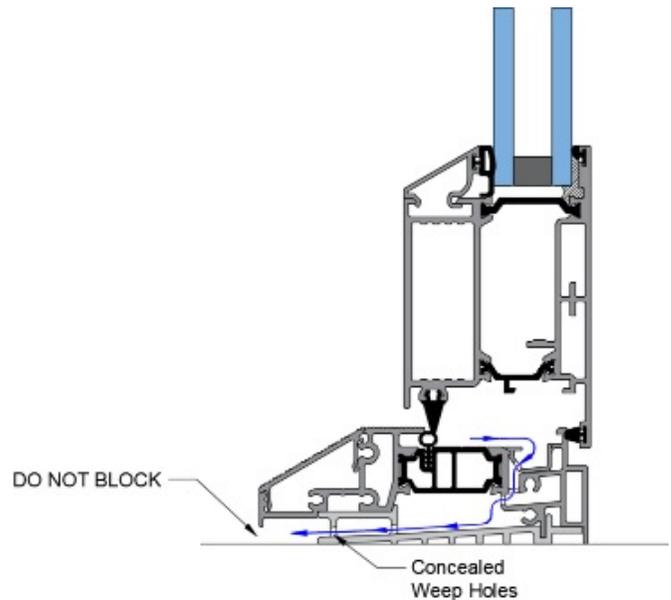
Vinyl, aluminum, steel, and fiberglass may be cleaned with mild soap and water. Hard to remove stains and mineral deposits may be removed with mineral spirits. Factory-applied painted surfaces can be cleaned with mild household detergents and water. Remove any protective film and labels prior to cleaning the glass using a soft, clean, grit-free cloth and mild soap or detergent.

- Do NOT clean any surface with gasoline, diesel fuel, solvent-based, or petroleum-based products.
- Do NOT use abrasive materials or strongly acidic solutions against vinyl, aluminum, glass, steel, fiberglass, or factory-applied finishes.
- Do NOT scrape or use tools that might damage the surface.
- Do NOT paint vinyl or aluminum surfaces.
- Do NOT paint or stain the weatherstrip.
- 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.

### **NOTICE** DO NOT BLOCK WEEPS

Aluminum hinged doors feature an internal drain system at the sill. The exterior facing weep holes are concealed under the outer most sill cover. Do not caulk over or block this area under the sill.



## TOOLS AND MATERIALS NEEDED

### **Tools:**

- Measuring tape
- Level (4' minimum recommended)
- Square
- Hammer
- Phillips Screwdriver
- Power driver
- Utility knife
- J-roller
- Caulk gun
- Pry bar
- Hex Keys (3,4,6 mm)

### **Installation Materials (not included):**

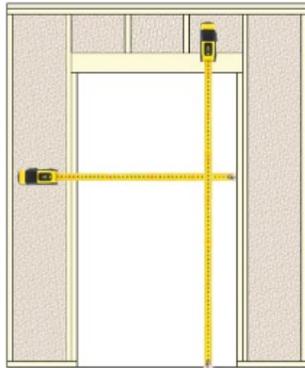
- Flashing tape (4" Minimum)
- Formable self-adhering sill flashing (or rigid pan)
- #8 x 2" head screws
- High-quality sealant
- Shims (moisture-proof)
- Low-expanding foam
- Backer rod

### **Materials Included in the Job Box:**

- Installation Instruction Booklet
- Construction handle set
- Finished handle set
- Hinge, through frame fastener – (3) #10 x 2-1/2"
- U-Shaped Plastic Shims

# Hinged Patio Door Installation

## 1 ROUGH OPENING VERIFICATION

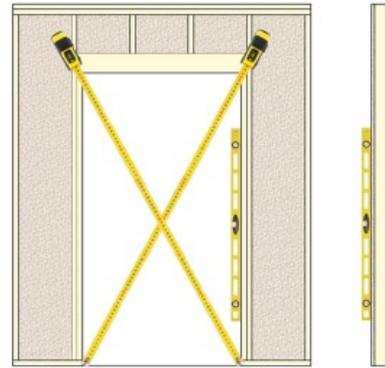


INTERIOR

Measure the rough opening and make sure it is 3/4" larger than the door in width and 1/2" in height.

Measure the width and height in several places to ensure the header or studs are not bowed.

## 2 ROUGH OPENING VERIFICATION

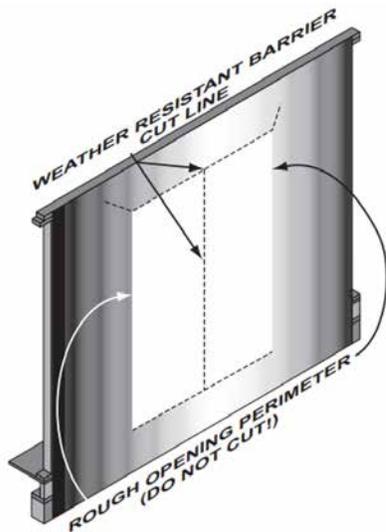


INTERIOR

Check the opening is plumb, level, and square. Diagonal measurements must be within 1/8".

**NOTE:** If conditions in steps 1 & 2 are not met, make corrections before proceeding.

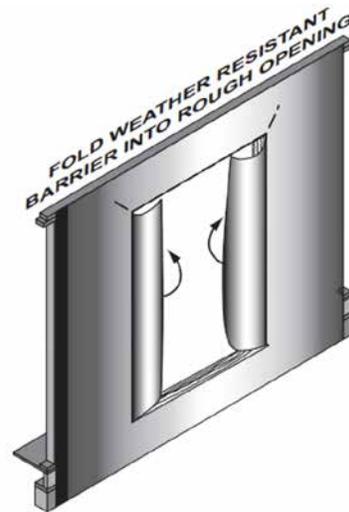
## 3 CUTTING WEATHER RESISTANT BARRIER



EXTERIOR

Cut the house wrap in an "I" pattern, horizontally along the opening head and sill, and down the center. Make two cuts diagonally from each top corner, 6" minimum.

## 4 ROUGH OPENING VERIFICATION

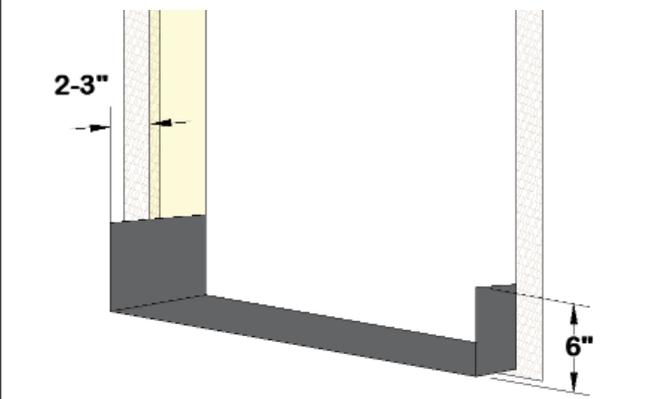


EXTERIOR

Fold the top flap up and temporarily secure it above the opening. Fold the wrap in at each side and secure to the interior of the wall studs. Remove excess, if desired.

# Hinged Patio Door Installation

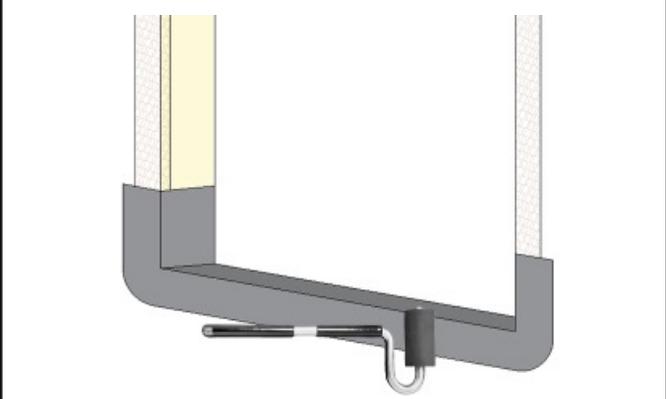
**5** APPLY SILL FLASHING



**EXTERIOR**

Cut flexible sill flashing material so it is long enough to extend up a minimum of 6" up each side jamb (R.O. + 12" min.).

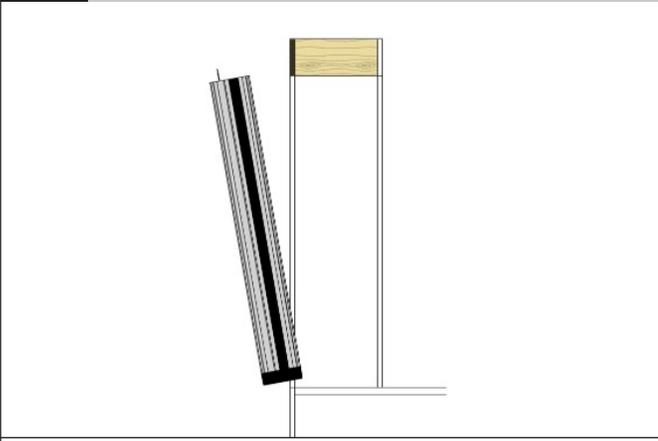
**6** APPLY SILL FLASHING



**EXTERIOR**

Pull the backing from the flashing and apply to the sill allowing the flashing to extend up the side jambs 6". Fold the flashing over the sheathing and WRB. Roll smooth with J-roller to remove air pockets and promote adhesion.

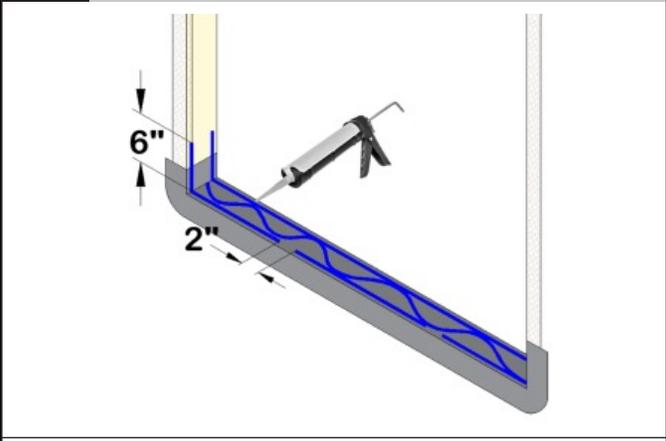
**7** DRY FIT THE DOOR IN THE OPENING



Before permanently installing the door in the opening, dry fit the door in the opening to verify the fit. With the door in the opening, mark a line for the innermost part of the sill. This will help locate the sealant for the next step.

**NOTE:** For step down door openings, it may be necessary to add a support block to the underside of the sill. This will need to be added prior to installing the door permanently into the opening.

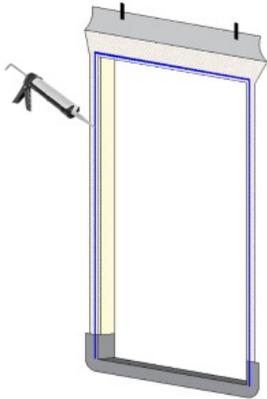
**8** APPLY SEALANT TO THE SILL FLASHING



Apply a continuous 3/8" bead of sealant in line with the innermost part of the door sill continue up the jamb 6". For the outermost part of the sill apply sealant the full width of the door leaving 2" gaps approximately every two feet. Continue the bead 6" up the jamb on each side. In between the sealant rows, add a continuous wavy bead of sealant.

# Hinged Patio Door Installation

## 9 APPLY SEALANT TO FRAMING



EXTERIOR

Apply a continuous 3/8" bead of sealant directly to the sheathing along both side jambs and across the head. Make sure the sealant bead is aligned where it will make full contact with the nailing fin.

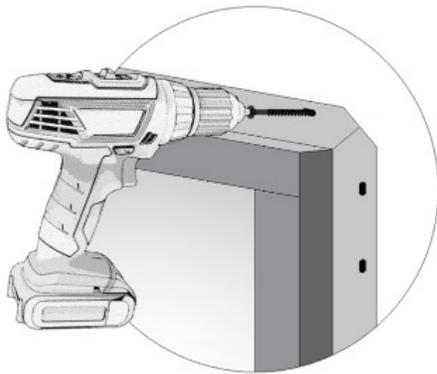
## 10 INSERT THE DOOR IN THE OPENING



EXTERIOR

Immediately after applying sealant, lift and center door in the opening from the exterior setting the sill in first and tipping the door into place.

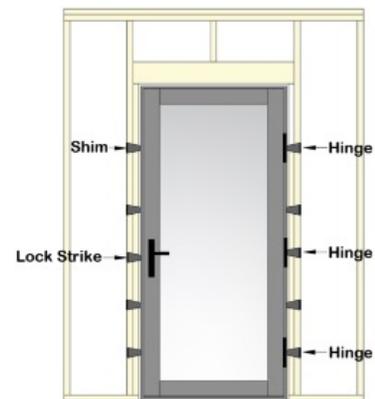
## 11 TEMPORARILY SECURE FRAME



EXTERIOR

Secure one side top corner with either a rust-proof roofing nail or a #8 steel screw. Fasteners must be long enough to penetrate the framing material by at least 1-1/2".

## 12 SHIM JAMBS



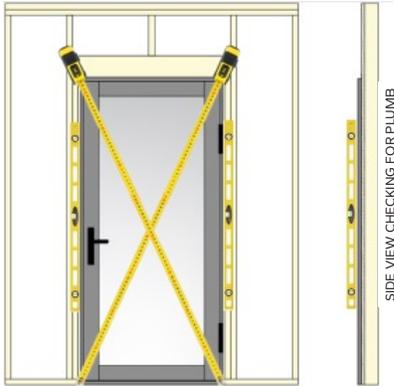
EXTERIOR

Place shims at each hinge location and at the center of the jamb and head strike plates. Place additional shims a maximum of 12" apart as needed to ensure the door is positioned in the opening level, and square.

**NOTICE** Improper placement of shims may result in bowing of the jambs.

# Hinged Patio Door Installation

## 13 VERIFY PLUMB, LEVEL, AND SQUARE



INTERIOR

Check the unit is plumb, level, and square. Diagonal measurements must be within 1/8". Adjust shims as needed.

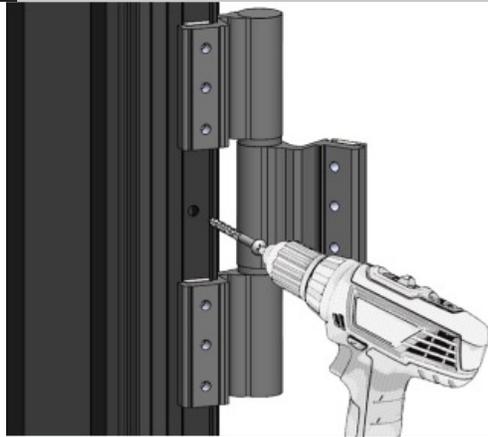
## 14 SECURE DOOR



EXTERIOR

When the door is plumb, level, and square, continue fastening through the nailing fin holes. Place fasteners 4" from each corner and spaced every 4"- 8" on center.

## 15 THROUGH FRAME FASTENERS



For In-Swing doors only, a through-frame fastener will need to be added at the top hinge location. With the door panel open, locate the pre-drilled hole between the hinge tabs. Using the provided #10 x 2-1/2" screw, install the screw through the frame and into the wall stud. Make sure to shim at the fastener location.

## 16 FLASHING THE INSTALLATION



EXTERIOR

Cut two lengths of 4" wide flashing tape equal to the rough opening jamb height plus 5 inches. Remove the backing of the tape and apply over the nailing fin and the house wrap keeping centered on the side jamb.

**NOTICE** Roll all flashing tape smooth with j-roller to remove air pockets and promote adhesion.

# Hinged Patio Door Installation

## 17 FLASHING THE INSTALLATION



EXTERIOR

Cut one piece of 4" wide flashing tape equal to the rough opening width of the window plus 10". Remove the backing of the tape and apply over the head nailing fin extending past the jamb flashing by at least one inch.

**NOTICE** Roll all flashing tape smooth with j-roller to remove air pockets and promote adhesion.

## 18 FLASHING THE INSTALLATION



EXTERIOR

Replace the flap created during the preparation of the weather-resistive barrier and tape the seams with WRB tape or window flashing tape.

**NOTE:** Refer to WRB manufacturer's instructions for recommended integration options for head drip caps, or if taping along the top flap is necessary.

## 19 INSULATE AND SEALING



INTERIOR

Insulate and seal the gap between the rough opening and the door frame using low-expansion polyurethane foam. If a sill pan is not being used, add a back dam of silicone to the sill rough opening gap and continue up the side 3".

**NOTE:** Only fill the void half the depth of the jamb with foam to allow for expansion.

## 20 EXTERIOR SEAL

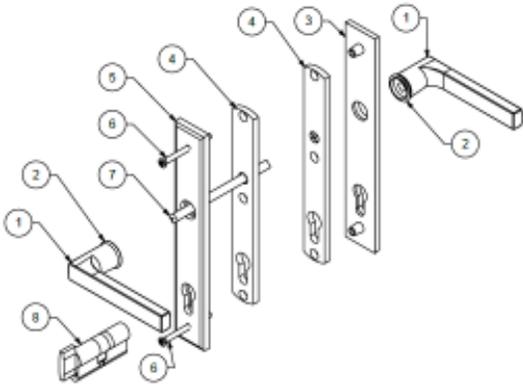


EXTERIOR

After the exterior wall covering has been installed, seal the exterior wall assembly in accordance with that particular exterior wall system's design requirements to provide weather protection.

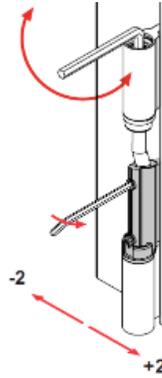
# Hinged Patio Door Installation

## 21 INSTALLING THE HANDLE SET



Install the construction handle or the finish handle per the instruction included with the handle packaging. If panel does not lock properly, adjust panel using the hinge adjustment instruction in **Step 22**.

## 22 HINGE ADJUSTMENT



**See product website for Hinge Adjustment Video**

To make adjustments you will need the following Hex Keys:

- 3mm Hex Key (Set Screws)
- 4mm Hex Key (Horz. / In-out)
- 6mm Hex key (Vertical)

This door is equipped with adjustable hinges. Panel(s) are adjusted from the factory to have even reveals. If the panel(s) need to be adjusted see product website for instructions.