Unassembled Patio Door Installation Guide

Patio Door Side Lite

50 Series
Project Requirements:

- Failure to follow these instructions may void product warranty.
- Read guide before starting installation. Read all warnings and cautions during installation.
- Due to ongoing product changes, updated test results and/or new industry best practices, this installation procedure may change over time. Visit the manufacturer’s website for current installation instructions.
- Instructions are for typical wood frame wall construction.
- Installation must comply with all applicable building codes.
- Depending on options purchased, this window was manufactured for installation into either a new or existing opening.
- Wall and sill must be structurally sound and weather-resistant barrier must be adequate.
- Window must be installed to be plumb, level and square.
- Window should be approximately 1/2” less in both width and height than the opening.
- Contact local authorities or waste management companies for proper recycling and/or disposal of removed window or patio door.
- Visit the manufacturer’s website for removal instructions, additional installation information and/or guides.
Tools & materials required:

- Safety glasses
- Work gloves
- Tape measure
- Framer's square
- Level
- Minimum expanding foam sealant
- Power driver and bits
- Caulk gun
- Interior and exterior window/door grade sealant
- Shims
- Self-adhesive flexible flashing (Minimum 6” wide depending upon installation)
- Formable self adhering sill flashing (Minimum 6” wide) or Sill pan recommended
- J-roller
<table>
<thead>
<tr>
<th>Warnings and Cautions:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Use caution when working at elevated heights and around unit openings. Follow manufacturers’ instructions for ladders and/or scaffolding. Failure to do so may result in injury or death.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Contains small parts. If swallowed could pose a choking hazard to young children. Remove and dispose of any loose or easily removed parts.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Follow manufacturers’ instructions for hand or power tools. Always wear safety glasses. Failure to do so may result in injury and/or product damage.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
</tr>
<tr>
<td>The use of movable insulating materials such as window coverings, shutters, and other shading devices may damage glass and/or vinyl.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Windows and doors can be heavy. Use safe lifting techniques and a reasonable number of people to move and install window and door products to avoid injury or product damage.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
</tr>
<tr>
<td>Follow instructions of foam, sealant and flashing manufacturer regarding material application and compatibility with this product.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Sill weep doors are small parts and, if swallowed, could pose a choking hazard to young children.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
</tr>
<tr>
<td>Do not overdrive screws or nails. Product damage may result.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Support window in opening while shimming. Failure to do so may result in injury and/or product/property damage.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
</tr>
<tr>
<td>Do not cover weep holes. Property damage may result.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
</tr>
<tr>
<td>Before, during, and after installation, place all tools as well as any casing or window parts on a drop cloth or in a location that will not pose a hazard to installers, customers, or property.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
</tr>
<tr>
<td>When insulating between unit frame and rough opening or between units when joining, <strong>DO NOT</strong> overpack batt insulation or overfill with foam. Bowed jambs will result affecting product performance and/or proper operation of unit.</td>
</tr>
</tbody>
</table>
## Warnings and Cautions:

<table>
<thead>
<tr>
<th>CAUTION</th>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not apply any type of film to glass. Thermal stress conditions resulting in glass damage could occur.</td>
<td>Use masonry screw when fastening directly into masonry or through a buck into masonry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not overfill with low expanding foam or overpack with backer rod to avoid bowed jambs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not drill into or through the sill of the window or product and/or property damage may occur.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weep holes must face the exterior and must be located at the bottom of the window or product and/or property damage may occur.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove or cut ventilation holes in plastic shipping wrap if window is not installed immediately or product damage may occur.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important safety information. Leave this information for the building occupant.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings constructed prior to 1978 may contain lead paint which could be disturbed during replacement. For more information on proper management of lead paint, visit <a href="http://www.epa.gov/lead">www.epa.gov/lead</a></td>
</tr>
</tbody>
</table>
**Fasteners:**

<table>
<thead>
<tr>
<th>Application</th>
<th>Anchor Type</th>
<th>Anchor Size</th>
<th>Minimum Embedment</th>
<th>Minimum Clearance to Masonry Edge</th>
<th>Minimum Clearance to Adjacent Anchor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1X Buck or Masonry Frame</td>
<td>ITW</td>
<td>1/4&quot;</td>
<td>1-1/4&quot;</td>
<td>2-1/2&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>1X Buck or Masonry Frame</td>
<td>ELCO</td>
<td>1/4&quot;</td>
<td>1-1/4&quot;</td>
<td>1&quot;</td>
<td>4&quot;</td>
</tr>
<tr>
<td>2X Buck</td>
<td>Wood Screw</td>
<td>#8</td>
<td>1-1/4&quot;</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

This fastener schedule is provided as an example of fastening requirements. Requirements may vary by product, building type, application and region. Contact your local building code official for requirements in your area.
Finishing, Cleaning and Maintenance Instructions:

- **CAUTION**
  
  Do not stain or paint weatherstrip, vinyl, glass or hardware. Product damage may occur.

- **Read and follow finishing product instructions and warnings on finish material.**

- **CAUTION**
  
  Acid solutions used for cleaning masonry or concrete will damage glass, fasteners, hardware, vinyl and metal flashing.

  Protect unit and follow cleaning product instructions carefully. If acid contacts unit, wash all surfaces with water immediately.

- **CAUTION**
  
  Abrasive cleaners will damage glass and vinyl surfaces.

- **Clean glass using liquid glass cleaner.**

- **Clean exterior frame, sash, and insect screens using mild detergent and water with a soft cloth or brush.**

- **For hard to clean areas use a nonabrasive cleaner, alcohol-and-water or ammonia-and-water.**

- **Do not apply any type of film to insulating glass. Thermal stress and glass damage can result. Shading devices (insulated coverings, shutters, etc.) may also cause thermal stress damage.**

- **For continued weather resistance of sealant joints, follow the sealant manufacturer’s recommendations for periodic maintenance.**
Step 1

Inspect new window and verify opening.

Inspect for proper size and condition and verify that all parts are included. Inspect existing wall and rough opening for structural decay. Repair as needed.

Hardware bags

Depending on individual installation requirements, some parts may not be used.

Clear bag:
- (2) installation flange corner gaskets

Blue bag:
- (16) #10 x 2" Phillips pan head screws
Step 2

**Prepare rough opening.**

Inspect opening for correct size. Opening should be 1/2" larger than window size in width and height.

Check sill plate for level. Sill **must** be level. If sill is not level, correct before continuing.

Check rough opening for plumb and level. If rough opening is **not** plumb or level, correct as necessary.

Check opening for square by measuring diagonally, upper left to lower right and upper right to lower left corner. Measurements must be within 1/8". If rough opening is **not** square, correct as necessary.

---

If using installation flange, continue with Step 3 Installation Flange. If installation flange will not be used, proceed to Step 14 No Installation Flange.
Step 3
Installation Flange

Apply installation flanges.
Place attachable installation flanges into the accessory grooves on both jambs and on the head. Make sure installation flange is positioned toward the exterior of the building.
Step 4
Installation Flange

Apply installation flange corner gaskets.
(Uses clear hardware bag)

Remove adhesive backing from one installation flange corner gasket. Position the installation flange corner gasket onto the installation flange. Fold section 1 upwards, then align corner gasket with front and side edges of the window and apply sections 1 and 2 simultaneously. Fold section 4 upwards, then fold section 3 over installation flange and apply sections 3 and 4 simultaneously to the window.

Repeat process for other corner.
Step 5
Installation Flange

Apply sealant to opening.

Apply two 1/4" beads of exterior window/door grade sealant to sill and 2" up each side of rough opening. The exterior sealant bead should be at the exterior edge of the opening. The beads of sealant should be 2" apart.

NOTE: Leave two small breaks in exterior sealant bead only to allow for water drainage.

*It is strongly recommended that you use a membrane or vinyl-based sill pan for a weathertight seal. Follow the sill pan manufacturer’s installation instructions.*
Step 6
Installation Flange

Apply sealant to window.

Apply 1/4" bead of sealant along the edge of the installation flange on the head and jambs along the interior side where it will contact the opening.

Step 7
Installation Flange

Place window in opening.

Place window into the opening from the exterior. Place sill of frame into place, then tip head into place.

NOTE: The installation flange is closer to the EXTERIOR side of the frame.

NOTE: Be sure the installation flange and sealant are tight against the exterior substrate before attaching the window.
Step 8  
Installation Flange

**Shim window.**

Shim so window is plumb, level and square. Shim at all pre-punched holes inside window.
Step 9
Installation Flange

Fasten window.
(Uses blue hardware bag)

Attach window to opening using (10) or (14) #10 x 2" pan head screws depending on window size in all pre-drilled holes in interior track of head and jambs.

Step 10
Installation Flange

Insulate window.
Insulate around window.

CAUTION

Do not overfill with low expanding foam or overpack with backer rod to avoid bowed jambs.
Step 11
Installation Flange

Seal installation flange to window.

Apply sealant where installation flange connects to window on head and jambs. Make sure installation flange corner gaskets are fully sealed at the corners.
Step 12
Installation Flange

Apply self-adhesive flexible flashing to cover the installation flange.

Apply to the sides first and make sure it extends beyond the top of the window. Then apply to the top, extending beyond the sides.

NOTE: Use J-roller to make sure the self-adhesive flexible flashing bonds properly.

IMPORTANT – To create a weathertight seal, be sure that the flashing fully covers the entire length of the jambs and head of the window around the window opening. Pay special attention to the corners to be sure that there are no gaps in the flashing.
Step 13
Installation Flange

Apply trim.
Apply interior and exterior trim as desired. Apply sealant to the perimeter of interior and exterior at head and jambs for a weathertight seal.

The installation is complete.
Step 14
No Installation Flange

**Apply sealant to opening.**

Apply two 1/4" beads of exterior window/door grade sealant to sill and 2" up each side of rough opening. The exterior sealant bead should be at the exterior edge of the opening. The beads of sealant should be 2" apart.

NOTE: Leave two small breaks in exterior sealant bead only to allow for water drainage.

It is strongly recommended that you use a membrane or vinyl-based sill pan for a weathertight seal. Follow the sill pan manufacturer’s installation instructions.
Step 15
No Installation Flange

**Place window in opening.**
Place window into the opening from the exterior. Place sill of window into place, then tip head into place.

**NOTE:** Be certain glass is on exterior side.

---

Step 16
No Installation Flange

**Shim window.**
Shim so window is plumb, level and square. Shim at all pre-punched holes inside window.
**Step 17**
No Installation Flange

**Fasten window.**
(Uses blue hardware bag)

Attach window to opening using (10) or (14) #10 x 2" pan head screws depending on window size in all pre-drilled holes in interior track of head and jambs.

**Step 18**
No Installation Flange

**Insulate window.**

Insulate around window.

---

**CAUTION**

Do not overfill with low expanding foam or overpack with backer rod to avoid bowed jambs.
Apply trim.

Apply interior and exterior trim as desired. Apply sealant to the perimeter of interior and exterior at head and jambs for a weathertight seal.