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# Installation Guidelines

Brighton™ Series  
In-swing / Out-swing / Sliding Patio Door

Quaker Window Products  
Freiburg, MO  
www.quakerwindows.com

#39508A 6/2012

# Installation Guidelines for Brighton™ Series Wood Clad Patio Doors

## Installer

- Read instructions completely before attempting installation. Failure to follow these guidelines could void the warranty coverage, written or implied.
- Always provide a copy of these instructions to the homeowner.
- These instructions are consistent with ASTM 2112 "Standard Practice for Installation of Exterior Windows, Doors and Skylights" into common wall constructions. Contact your authorized Quaker dealer for installation into other building designs or construction methods.
- Local building codes and environmental conditions may require installation that is different from these guidelines. It is your responsibility to ensure that these codes and ordinances are followed.

## Warning!

- ⚠ Always wear proper eye and hearing protection when installing or adjusting products.
- ⚠ To avoid personal injury, always follow manufacturers' instructions for safe operation of power tools.
- ⚠ Working at elevated levels can be hazardous. Always use ladders and scaffolding properly. Consult manufacturers' guidelines for safe use of these types of equipment.

## Important

- Manufacturer reserves the right to change the information contained in these guidelines without notice.
- Maintain a minimum of 1/4" between the door frame and any trim, siding or masonry.
- Steel fasteners will corrode when used with ACQ pressure treated lumber. Use corrosion-resistant fasteners (such as stainless steel) when installing windows in or around these types of materials.
- Door nailing flanges and drip caps (integral or applied) do not take the place of window flashing. All windows and doors must be properly flashed and sealed around the perimeter.

## Handling and Storage

- Store all patio doors inside. During construction stage, do not expose wood interior to moisture, soiling, direct sunlight, temperature extremes or dramatic changes in humidity. Manufacturer assumes no responsibility for defacing, warping, splitting or de-lamination caused by failure to finish properly or faulty installation.
- Stand patio doors as straight as possible to avoid bowing. Do not lay flat.
- Do not drill through patio doors sill to install alarm wires.
- If using muriatic acid or brick wash cleaning solutions, please follow the manufacturer's instructions found on the product label or on the manufacturer's website.

**Special Note:** Unless specified otherwise, your Quaker wood clad patio door will contain standard glass package, which is Tempered (Safety), Dual-pane Insulated Glass 3/4" overall thickness. 1/8" pane thickness. Before installing, Quaker recommends consulting local building codes for more definitive information. Safety glass can be broken. If broken glass can fragment causing injury.

- See attached handling info
- Failure to follow these instructions renders all warranties as null and void
- Go to [www.quakerwindows.com](http://www.quakerwindows.com) for full warranty details

### Tools Needed

- Safety Glasses
- Utility Knife
- Hammer (or nail gun)
- Caulk Gun
- Level
- Ladder / Scaffolding
- Square
- Tape Measure
- Stapler



### Materials Needed

- Backer Rod
  - 1/4"-1/2" diameter closed cell foam
- Insulation
  - Minimally expanding low pressure polyurethane window and door foam
- Shims
  - Made of cedar or synthetic material
- Roofing Nails
  - 2" Galvanized (16D)
- Silicone Sealant
  - 100% Silicone
- Flashing
  - Self-adhesive flexible flashing that complies with ASTM-D779

## Step 1: Inspect Unit

### Before Installation:

- Remove all shipping packaging material (blocks, pads, protectors, stretch wrap).
- Inspect unit for any damage or defects.
- Verify that the door unit is the correct size and configuration.
- Contact your nearest distributor if there are any problems.

## Step 2: Prepare Rough Opening

- Measure and verify the size of the rough opening. The rough opening should be 3/4" larger in width and 1/2" larger in height than the frame size.
- For doors with clad exterior casings, additional nailer studs may be required around the perimeter of the rough opening.
- Verify the rough opening is flat, plumb, level and square. (Fig. 1)
- Take diagonal measurements to check for square. (Fig. 1)
- Make sure the bottom sill area of the rough opening is flat and level. Correct rough opening if sloped towards the interior, out of level or humped. (Fig. 1)
- Cut the weather-resistant barrier (WRB) in a "Modified I" pattern. (Fig. 2)
- Fold back the WRB on the sides toward the interior and staple into place. (Fig. 3)
- From the exterior, cut the top of the WRB as shown to form a flap. (Fig. 4)
- Temporarily tape this top flap up. (Fig. 4)

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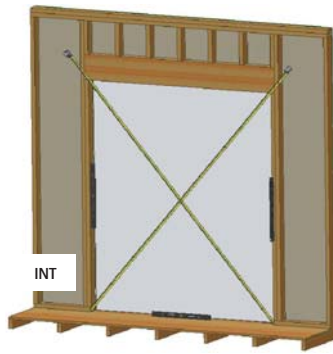


FIG. 1

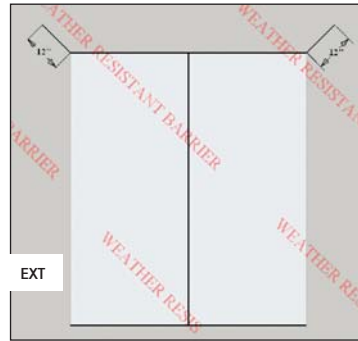


FIG. 2

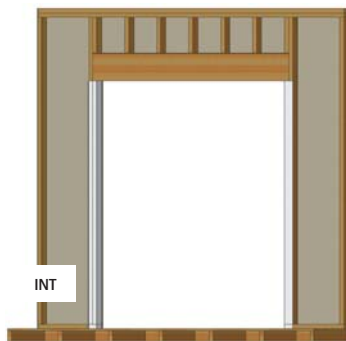


FIG. 3

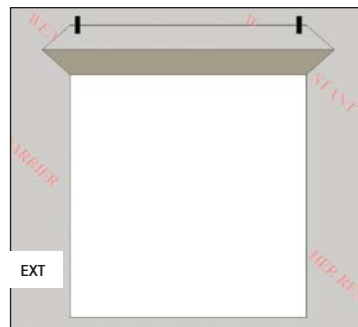


FIG. 4

### Step 3: Flashing the Sill

- A) **IMPORTANT!**
  - a. Use flashing that is 6" minimum in width.
  - b. Flashing must meet ASTM-D779 performance requirements.
- B) Measure the width of the rough opening. Cut a length of flashing that is 12" wider than the rough opening. This will allow you to run the flashing 6" up each side.
- C) Cut 1-1/2" slits at each end of the flashing as shown below. (Fig. 5)



FIG. 5

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- D) Apply sill flashing to the rough opening as shown below. (Fig. 6)
- E) Flashing tape must cover the entire sill. If needed, apply an additional flashing piece over the first one (start from the exterior and work towards the interior). Maintain a minimum 1" overlap. (Fig. 7)

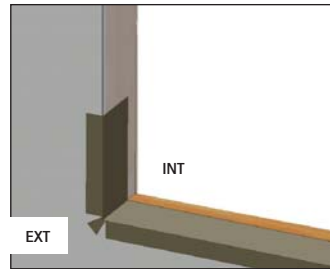


FIG. 6

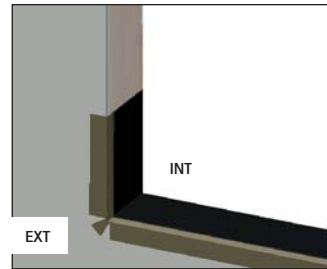


FIG. 7

#### Step 4: Door Installation

- A) Remove all packaging material (blocks, pads, protectors, stretch wrap).
- B) Inspect and verify the following:
  - a. The door unit is the correct size and configuration.
  - b. The unit is free from any damage or defects.
- C) Contact your nearest distributor if there are any problems with step B above.
- D) Apply sealant to the head and side nailing fin. Apply a 1/4" continuous bead of silicone in line with and completely covering the nailing flange holes. (Fig. 8)



FIG. 8

- E) Apply sealant to sill rough opening (Skip "Step E" for the handicap sill option):
  - a. Apply three 1/4" continuous beads of silicone across the entire width of the rough opening. Note that the locations are different for each door type. Figure 10 shows the silicone location for a 4-9/16" and 6-9/16" in-swing door. The bead location will be different for other jamb sizes. (Fig. 9, 10 & 11)
  - b. Apply a 1/4" continuous bead of silicone 1/2" from each side of the rough opening. The bead will run the entire depth of the jamb starting at the face of the wall. (Fig. 12)

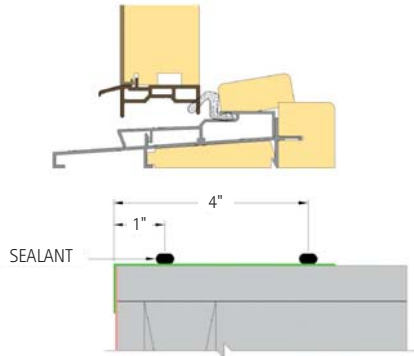


FIG. 9: OUT-SWING PATIO DOOR SILL

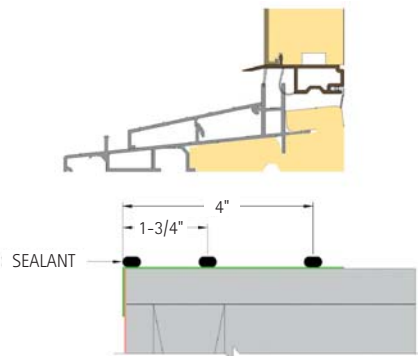


FIG. 10: 4-9/16" & 6-9/16" IN-SWING PATIO DOOR SILL

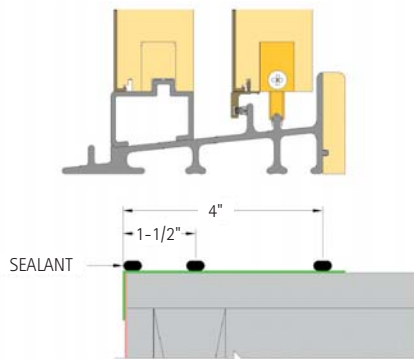


FIG. 11: SLIDING PATIO DOOR SILL

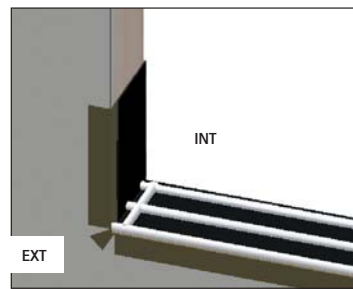


FIG. 12

- F) Set the door into the rough opening. Center the unit in the opening, making sure there are equal gaps on both sides of the door.
- G) Temporarily tack the door in place using 2" galvanized roofing nails through the pre-punched holes at both top corners of the nailing flange. Do not drive the nails in fully.
- H) Start with a shim at each corner no more than 1" from the jamb corner. Add additional shims spaced evenly from the center of the unit. Make sure shims are spaced no more than 16" apart. Note to use flat shims or pairs of triangle shims to ensure the jamb does not twist. (Fig. 13)
- I) Additional shims are required at each lock point, head shootbolt and hinge location for all operating doors. (Fig. 13)

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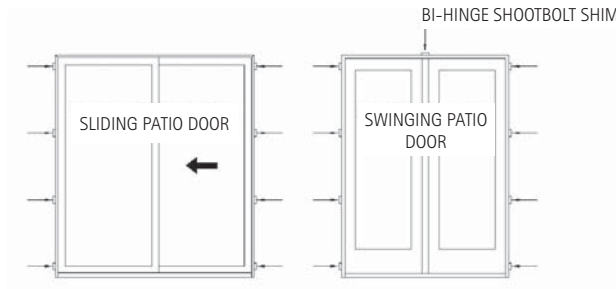


FIG. 13

- J) Nail all four corners in place through the pre-punched holes in the nailing flange.
- K) Finish nailing the door to the rough opening. Use a nail at each nailing fin hole, 8"-10" apart.

**SWINGING PATIO DOORS**

- L) Apply the supplied #12 x 2-1/4" screws through each hinge, securing the hinges and frame to the rough opening. Additional shims are required behind each hinge. (Fig. 14)

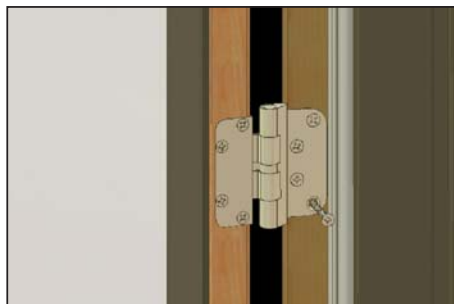


FIG. 14

**Step 5: Verify Operation**

- A) Verify the operation of the door is correct. By doing so you will verify that the door either swings or slides without binding on another member of the door and by remaining motionless throughout the operation when left in a static position.
- B) If the operation of the door is not correct, first verify that the rough opening is flat, plumb, level and square. Second, verify that the door is shimmed and fastened properly as stated in these instructions. Third, verify that the rollers and hinges are adjusted to the optimal position.

## Step 6: Completing the Sill

### A) **IMPORTANT!**

- a. Below the nailing fin at both bottom corners, apply a generous amount of silicone to seal the void between the rough opening and the sill. If the gap is too large, insert backer material in the void prior to sealing. (Fig. 15)

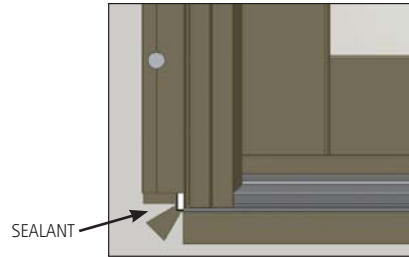


FIG. 15

- B) Attach a sill support block beneath the sill. Apply a bead of sealant at the nose of the sill and support block. (Fig. 16 & 17)

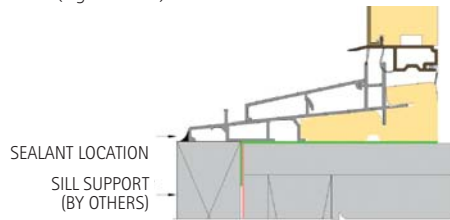


FIG. 16: STANDARD DOOR SILL

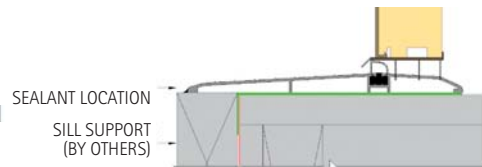


FIG. 17: HANDICAP DOOR SILL

- C) For in-swing and out-swing patio doors: Apply silicone to seal each end of the sill cavity that protrudes from the rough opening, including handicap sill. (Fig. 18 & 19)

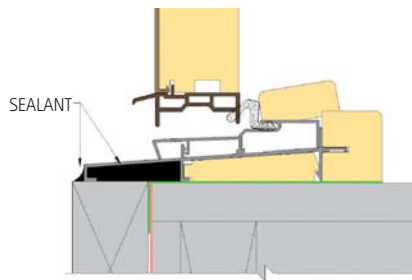


FIG. 18: OUT-SWING SILL

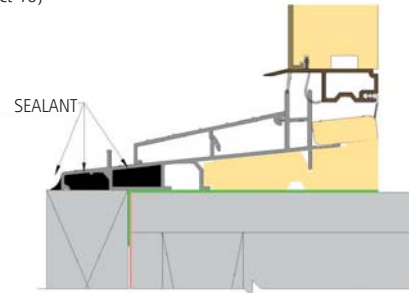


FIG. 19: IN-SWING SILL

## Step 7: Complete Flashing

- A) Cut and apply side flashing. Side flashing should run from the bottom of the sill flashing to 4" above the rough opening. (Fig. 20)
- B) If non-adhesive flashing is used, make sure all staple holes are sealed with silicone.

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- C) Cut and apply head flashing. The head flashing should run slightly past the edge of the side flashing as shown. (Fig. 21)
- D) Flip down the top flap of the WRB. (Fig. 22)
- E) Tape the cut seams of the WRB. (Fig. 23)



FIG. 20

FIG. 21

FIG. 22

FIG. 23

### Step 8: Seal the Exterior

- A) After siding or wall exterior is complete, apply backer rod and sealant between the door frame and siding material on both sides. (Fig. 24, 25 & 26)
- B) **WARNING:** Maintain a minimum of 1/4" between the window frame and any trim, siding or masonry. Failure to do so will forfeit all warranties (written or implied).

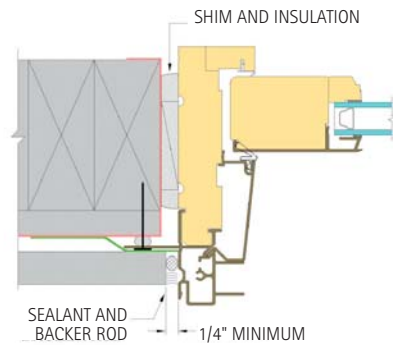


FIG. 24: SIDE JAMB

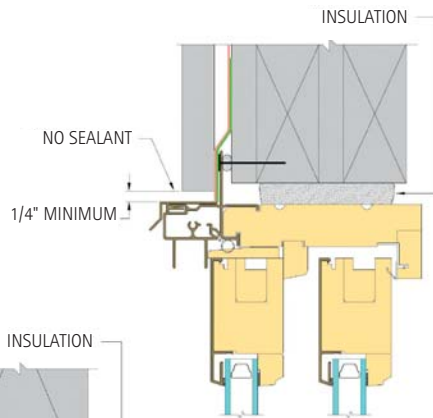


FIG. 25: SLIDING HEAD JAMB

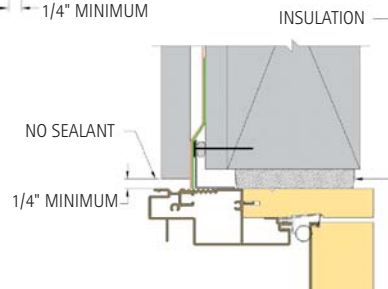


FIG. 26: IN-SWING HEAD JAMB

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### Step 9: Completing the Installation

- A) Remove all labels or shipping materials.
- B) Various hardware adjustments may be required after installation.
- C) Sliding patio doors: After the operating panel and keeper are adjusted to the optimal position, apply the supplied #10 x 1-1/4" screws through the top and bottom holes of the keeper. Pre-drill the holes using a 1/8" bit prior to assembly. (Fig. 27)
- D) Insulate between the door frame and the rough opening using minimally expanding window and door spray foam insulation. Use caution to not overfill the gap, causing the jambs to bow. It is not recommended to apply trim to the unit until the foam has cured to allow the excess to escape. (Fig. 24, 25 & 26)
- E) Operate door unit to ensure proper operation. The panel will not operate correctly if the door is out of square, over-shimmed or over-insulated.
- F) Properly finish all interior wood components within 60 days of installation.
- G) IMPORTANT: Do not stain or paint any hardware or vinyl components.
- H) Apply the handle set as appropriate per the manufacturer's recommendations. Complete final adjustments as necessary.
- I) Sliding and swinging doors are to remain closed and locked during construction to prevent site conditions from damaging and/or warping panels and frames. Allow 10-12 weeks from project completion for building temperature and humidity levels to stabilize and door panels to acclimate.



FIG. 27