



Thank you for selecting ODL products. Attached are the recommended installation instructions for Vinyl Patio Doors with nailing fin. Any local building code requirements supersede the recommended installation instructions. Read these instructions thoroughly before beginning. They are designed to work in most existing applications however; existing conditions may require changes to these instructions. If changes are needed, they are made at the installer's risk. For installations other than indicated in these instructions, contact a building professional.

Newer construction methods have led to an increase in air and water tightness in buildings. This frequently leads to negative air pressure inside the home, which can draw water through very small openings. Our installation method seals the patio door to the weather barrier (typically building wrap) and uses a sill pan to capture and drain incidental storm water from under the patio door.

IMPORTANT INFORMATION & GLOSSARY

Please Note! Any patio door installation such that the sill is higher than 35 feet above ground level or into a wall condition not specifically addressed in these instructions must be designed by an architect or structural engineer. Failure to install square, level and plumb and on a flat surface (without peak and valleys) could result in denial of warranty claims for operational or performance problems.

Note to Installer: Provide a copy of these instructions to the building owner. By installing this product, you acknowledge the terms and conditions of the limited warranty as part of the terms of the sale.

GLOSSARY

Backer Rod (backing material)

A material (e.g. foam rod), placed into a joint primarily to control the depth of the sealant.

Mulled Unit

Two or more door units structurally joined together.

Pilot Hole

A drilled hole that is no larger than the body of the screw (minus the threads).


Shiplap

The layering method in which each layer overlaps the layer below it so that water runs down the outside.

Weep Hole (weep channel)

The visible exit or entry part of a water drainage system used to drain water out of a door.

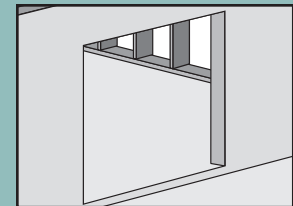
Estimated Install Time for New Construction	<input type="text"/>	First Time: 1.5 hr
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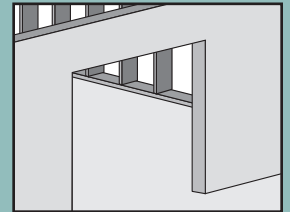
LANDINGS

These instructions cover two patio door sill conditions: the *step-down landing* and the *continuous slab landing*. The installation methods vary slightly between landing types.

Step-Down Landing



Continuous Slab Landing

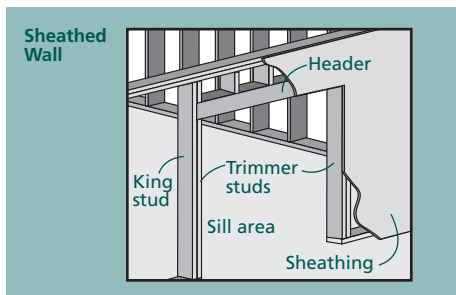


ROUGH OPENINGS

This installation guide specifically addresses sheathed wall and open-stud construction.

FULLY SHEATHED WALL CONSTRUCTION

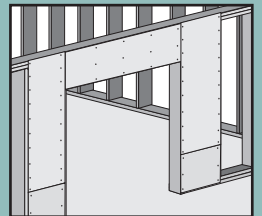
The wall framing is covered by sheathing and the door will be mounted with the nailing fin flush against the sheathing.



OPEN-STUD CONSTRUCTION

The wall framing needs to be covered by backing support before the patio door can be installed. The door will be mounted with the nailing fin flush against the applied backing support.

Open-Stud with Backing



This backing support should be a non water-degradable, thin (max. 1/8" thick) sheet material such as vinyl sheeting. Completely surround the rough opening with the backing support as shown. Backing support must be applied before building wrap.

SAFETY & HANDLING

SAFETY

- Read and fully understand ALL manufacturers' instructions before beginning.
- Do not work alone. Two or more people are required. Use safe lifting techniques.
- Use caution when handling glass. Broken or cracked glass can cause serious injury.
- Wear protective gear (e.g. safety glasses, gloves, ear protection, etc.).
- Operate hand/power tools safely and follow manufacturer's operating instructions.
- Use caution when working at elevated heights.

MATERIALS AND PATIO DOOR HANDLING

- Make sure the operating panel is secured prior to installation.
- Heed material manufacturers' handling and application instructions.
- Protect adhesive surfaces from dirt, moisture, direct sunlight and folding over onto themselves.
- Handle in vertical position; do not drag on floor.
- Do not put stress on joints, corners or frames.
- Store patio door in dry, well-ventilated area in vertical, leaning position to allow air circulation; do not stack horizontally.
- Protect from exposure to direct sunlight during storage.
- Install only into vertical walls and when conditions and sheathing are dry.
- Never use solvent-based sealants on vinyl products.

IF INJURY OCCURS, IMMEDIATELY SEEK MEDICAL ATTENTION!

NEEDED MATERIALS & TOOLS

MATERIALS

- 1 3/4" galvanized roofing nails; nails must penetrate at least 1" into framing
- Non-compressible or water degradable shims
- 6" wide self-adhesive flashing (9" if required by local code)
- Protecto Wrap Safseal Systems 5500 spray adhesive/primer (or as recommended by the self-adhesive flashing manufacturer)
- Sealant (polyurethane if painted, 100% silicone if left exposed) and backer rod
- Plastic drain screen with crisscross or woven pattern (sold in 6" widths to protect rain gutters) for step-down landings
- Sheet metal flashing or bendable vinyl sheeting for sill pan (4" wide for 2" x 4" wall)
- 3/8" staples for step-down landings

Note! Follow all material manufacturers' instructions for proper use and compatibility.

TOOLS

- | | |
|-------------------------------------|------------------------|
| • Cutting shears (sill pan) | • J-roller |
| • Tape measure | • Caulking gun |
| • Utility knife | • Drill |
| • Level (4 ft. minimum recommended) | • Construction stapler |

1

REMOVE PACKAGING & INSPECT PATIO DOOR

REMOVE PACKAGING

Remove shipping materials such as corner covers, shipping blocks or pads.

INSPECT PATIO DOOR

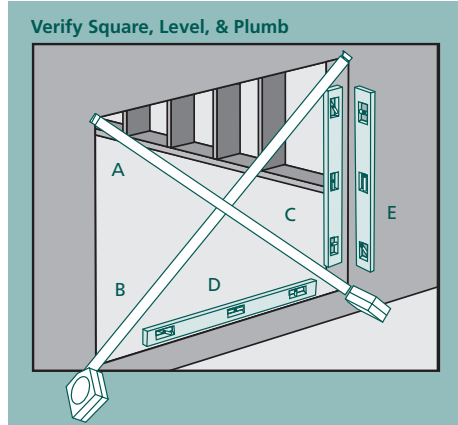
- Cosmetic damage
- Product squareness (diagonal measurements must be within 1/4" difference)
- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.)

- Splits, cracks, holes, missing sections or other damage to the nailing fin longer than 6" and/or within 1/2" of patio door frame
- For side-by-side mulled units, a drip cap that extends the length of the frame plus 1/8" overhang on each end is required

If any of the above conditions represent a concern, or if you expect environmental conditions to exceed the patio door's performance rating, do not install the patio door. Contact your dealer or distributor for recommendations.

2 INSPECT ROUGH OPENING

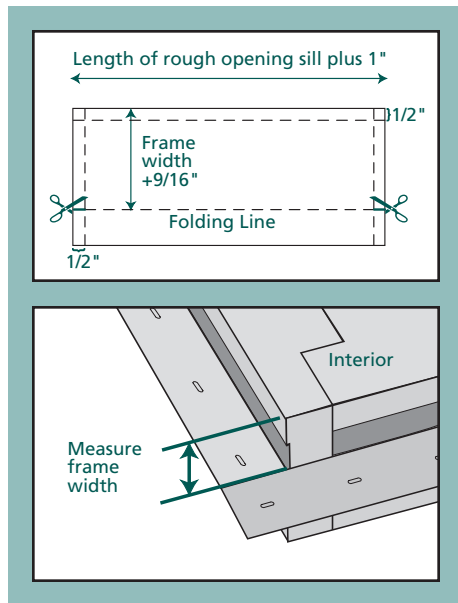
- Verify the width and height of the patio door are each 1/2" - 3/4" smaller than the rough opening width/height. Muller units should be 3/4" smaller.
- Verify the rough opening is square. The (A) and (B) measurements should be the same. Maximum allowable deviation from square is 1/4".



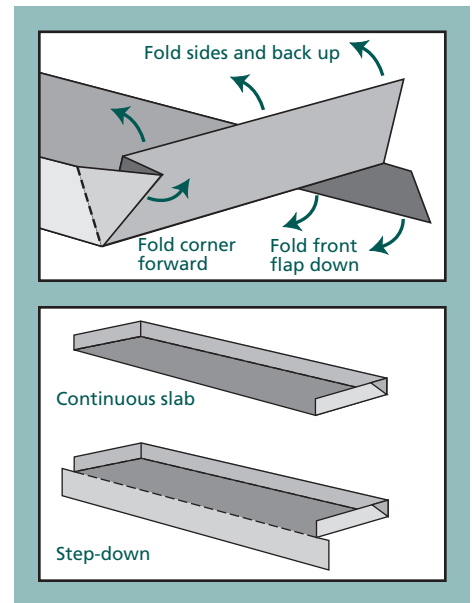
- Verify the rough opening is level and plumb (C). The maximum allowable deviation is 1/8".
- The rough opening sill must not be crowned or sagged (D).
- The exterior face of the rough opening must be in a single plane (E) with less than 1/8" twist from corner to corner.
- Minimum double studs should be used at all rough openings.
- The header must be supported by trimmer studs.

3 PREPARE SILL PAN

1. Cut a piece of sheet material to the length shown.
2. Lightly crease folding lines 1/2" in from the two short sides and one long side.
3. Measure the distance from the nailing fin to the interior edge of the frame and add 9/16".
4. Take this distance from the back edge and lightly crease a folding line across the sheet material.
5. For step-down landings, cut 1/2" in at this line on both sides of the sheet material.



6. For continuous slab, cut across the folding line.
7. Fold the three back sides up to make a 3-sided box, and, for step-down landings, fold the front flap down.



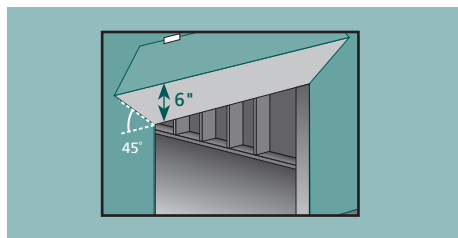
4 PREPARE ROUGH OPENING

FOR RETROFIT INSTALLATIONS

After removing the old patio door, remove sufficient siding to expose at least 9" of intact building wrap. If damaged, apply new building wrap in a shiplap manner. Verify trimmer studs and header are structurally sound. Continue with the instructions.

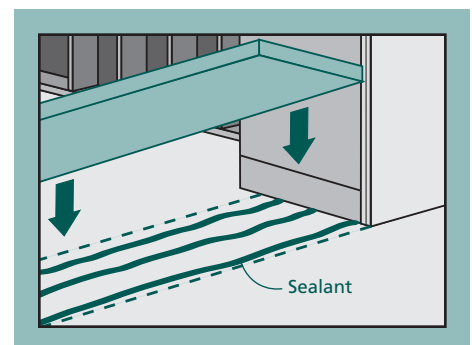
PREPARE BUILDING WRAP

1. Trim building wrap flush with the edges of the rough opening. Verify this does not void manufacturer's warranty.
2. At the head, slit building wrap 6" at 45°. Tape up as shown.



PREPARE SILL (CONTINUOUS SLAB ONLY)

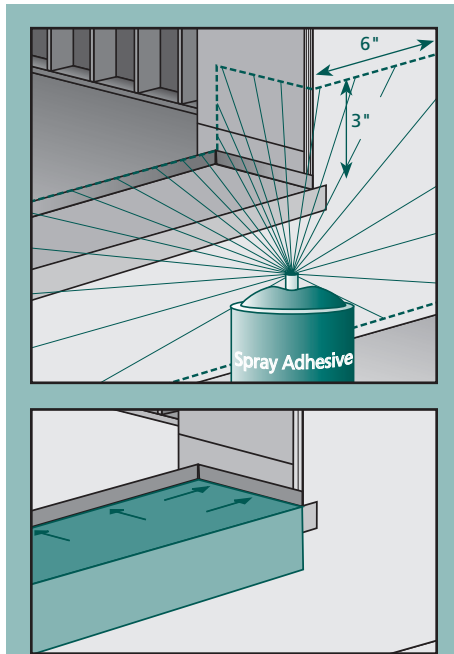
Mark a line in the rough opening across the front and back of the sill pan as shown. Remove sill pan and apply three beads of sealant between the marked lines.



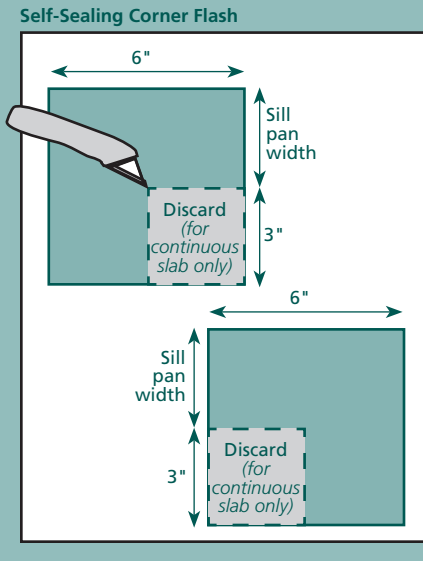
4 PREPARE ROUGH OPENING - CONTINUED

INSTALL SILL PAN

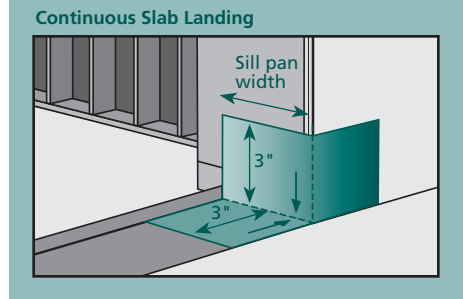
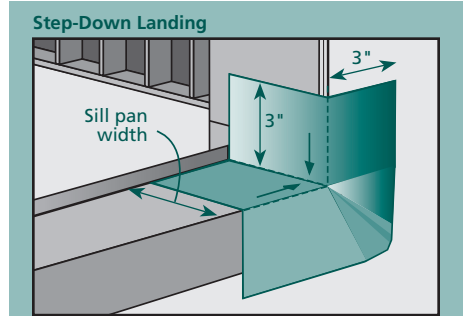
1. Place the sill pan in the rough opening.
2. Apply spray adhesive/primer to the sill area. Follow manufacturer's instructions for application methods.
3. Cut a piece of self-adhesive flashing the length of the sill and apply over the sill pan as shown. The bottom of the sill pan should be completely covered by the self-adhesive flashing.



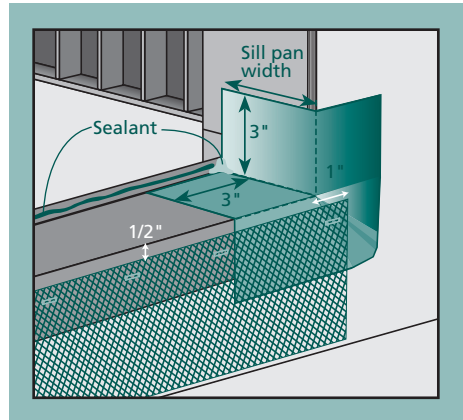
4. Cut two pieces of self-adhesive flashing 6" wide and the sill pan width + 3" long.
 - a. For continuous slab landings only, cut out the inside corner.



- b. Adhere the pieces of flashing to the inside corners.
5. Smooth gaps or bubbles beneath self-adhesive flashing with a J-roller (remove and replace if necessary).



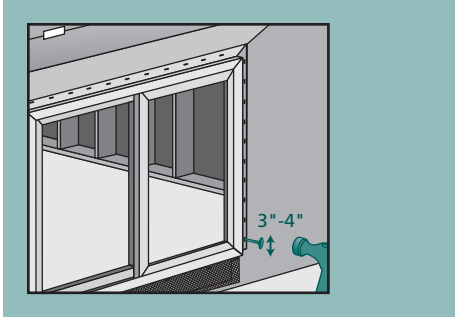
6. Seal back corners of sill pan with sealant.
7. For step-down landings only, cut plastic drain screen to length of sill + 2" and staple 1/2" below sill edge. The drain screen provides a path for air to dry any incidental moisture in the rough opening.
8. For continuous slab landings only, remove nailing fin at sill.
9. Apply a 3/8" continuous bead of sealant across the sill pan back dam.
10. Tilt patio door into the rough opening. Make sure the back of the door makes solid contact with the sealant. Adequately support the door until fully installed.



5 INSTALL PATIO DOOR

Warning! To avoid injury, use at least two people to install.

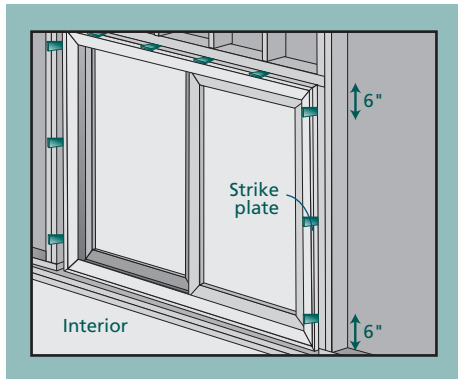
Fasten patio door with a galvanized roofing nail between 3" and 4" from one lower corner.



SHIM THE JAMBS

Note! Secure all shims with sealant.

1. From the interior, shim the operating panel side jamb 6" from the corners and at the strike plate. Align shims so that strike plate screws (installed later) will each penetrate a shim.

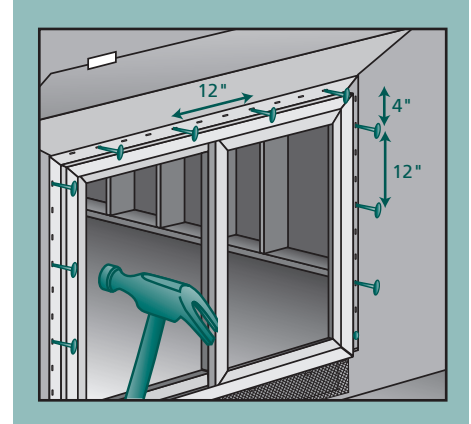


2. Shim the stationary panel side jamb 6" from the corners and at center.
3. Shim the head jamb 6" from the corners of each panel.
4. Inspect the patio door for square, level, and plumb. Test for proper operation (remove and reinstall if necessary).

SECURE PATIO DOOR

Note! Fastener heads must be flush. Do not dent nailing fin. Always use pre-punched holes or pre-drill with a 3/16" bit.

Fasten patio door through nailing fin holes 4" from the corners and 12" apart all the way around the patio door.



6 FLASH PATIO DOOR

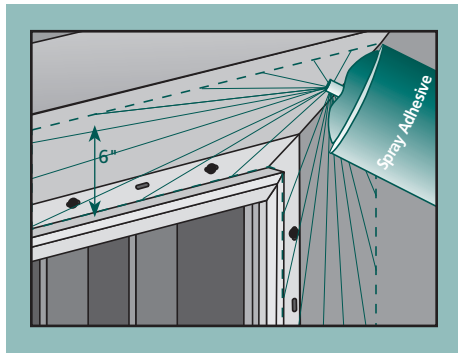
PREPARE FLASHING

Cut pieces of self-adhesive flashing to length as follows:

- One header piece 14" longer than the header
- Two side pieces: for continuous slab landings, 5" longer than the sides, or for step-down landings, 5" + the height of the step
- For step-down landings only, one sill piece 10" longer than the sill and 1" narrower than the height of the step

SPRAY ADHESIVE/PRIMER

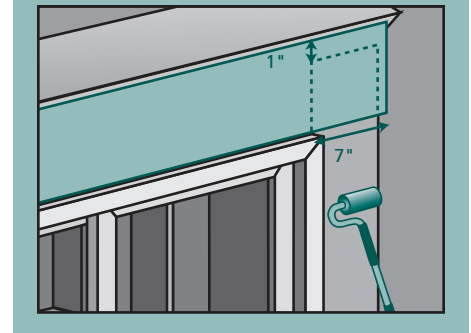
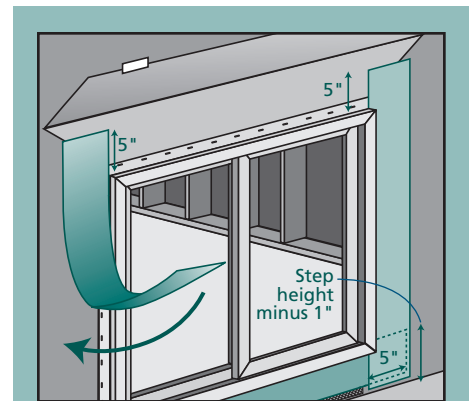
Apply spray adhesive per manufacturer's instructions (protect door from overspray) to nailing fin, sheathing, and building wrap around the patio door as shown.



APPLY THE SELF-ADHESIVE FLASHING

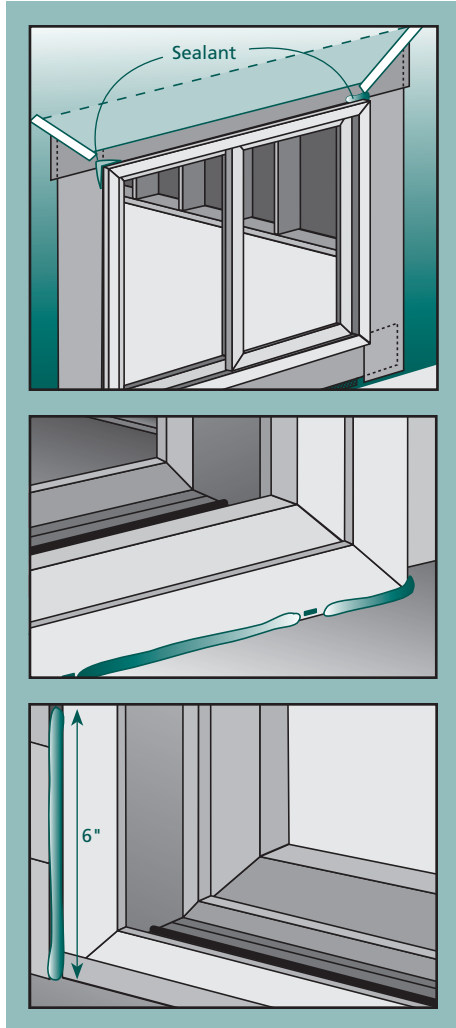
Note! Keep the edge of the self-adhesive flashing as close to the patio door frame as possible.

1. If applicable, center and apply the sill piece underneath the sill (bottom 1/2" of the drain screen must remain visible).
2. Apply the side pieces starting 5" above the header.
3. Center and apply the header piece above the header.
4. Press the flashing down with a J-roller.
5. Do not allow gaps or bubbles beneath self-adhesive flashing (remove and replace if necessary).



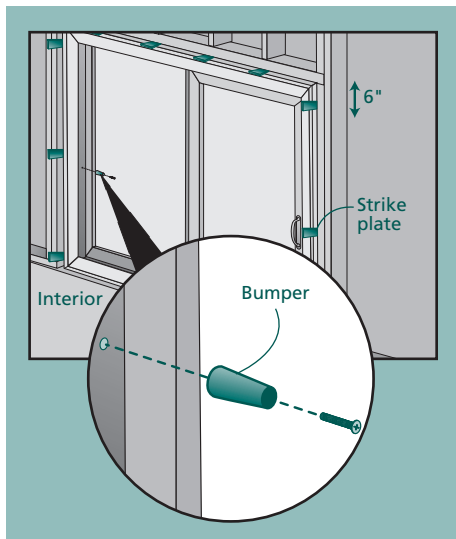
7 COMPLETE INSTALLATION

1. Seal the upper corners of the patio door with a 1/4" bead of sealant. Tool into a fillet shape.
2. Release the building wrap from above the header (previously taped up) and overlap the header flashing. Seal the ends with self-adhesive flashing or building wrap tape.
3. On the interior, seal the lower 6" of gap between the rough opening and door jamb with backer rod and sealant on both sides of the patio door.
4. For continuous slab landings, apply a 1/4" bead of sealant around the sill where it meets the slab. Leave gaps at the weep holes as shown.
5. Ensure sealant on back dam of the sill pan fully seals to the inside face of the sill. Apply more sealant as necessary.



INSTALL BUMPER

Install the bumper in the stationary panel side jamb at vertical center using the 1" self-tapping screw provided.



SUPPORT TRIM (STEP-DOWN LANDING ONLY)

On the exterior, install support trim underneath the sill where it extends past the landing. Position trim snugly against the bottom of the sill toe.

PATIO DOOR ADJUSTMENT

Roller Adjustment

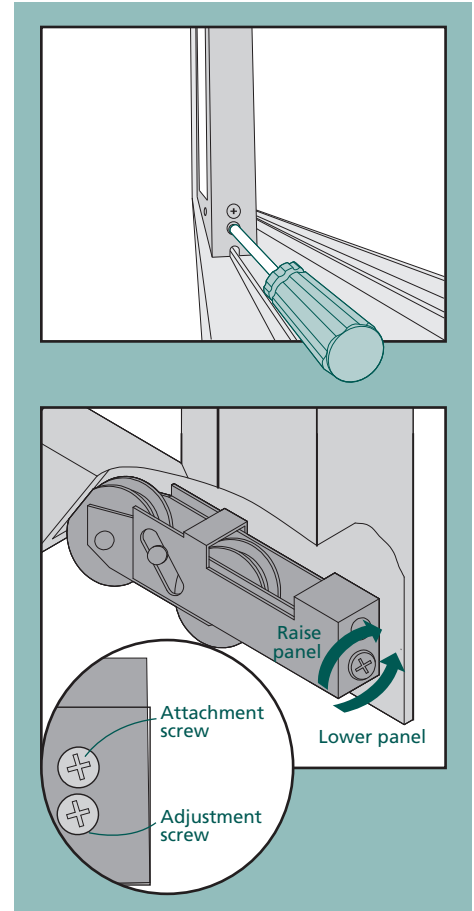
Note! Adjusting door too high may allow water and air leakage. Adjust rollers just high enough to clear sill track.

1. Doors have an adjustment screw on each lower end of the operating panel(s). Remove small vinyl plugs from each hole (if present).
2. Open operating panel enough to compare with frame jamb.

Note! Roller adjustment screws are in close proximity to the attachment screw. Adjust only the lower screw (as shown); loosening the attachment screw will detach the roller from the operating panel.

3. Using a #2 Phillips head screwdriver, turn the adjustment screw clockwise to raise the panel, and counterclockwise to lower the panel.

4. Adjust as needed until interlocks, grid patterns, and jambs line up.
5. Test the operating panel for proper operation.
6. Re-apply the small vinyl caps over the roller adjustment screw holes if applicable.



7 COMPLETE INSTALLATION - CONTINUED

Lock Adjustment

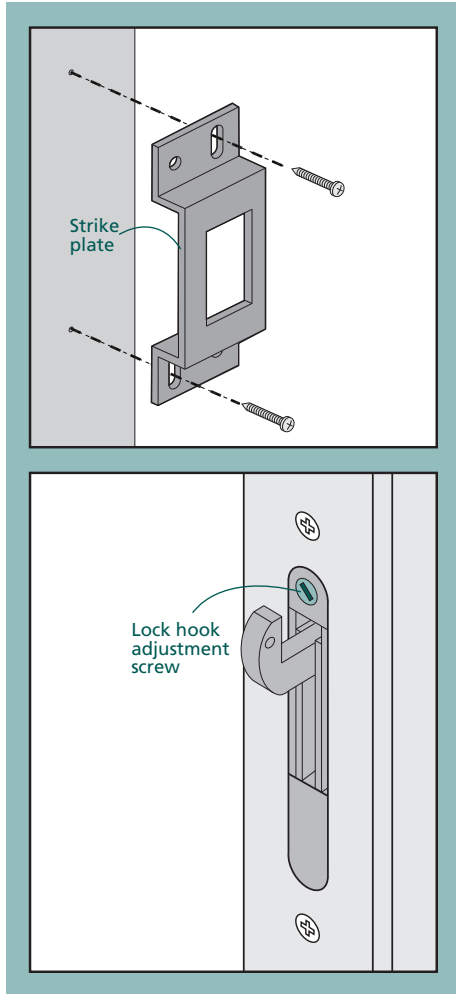
Note! If the strike plate was not previously installed, line up the screw holes with the dimples in the operating panel side jamb and drive screws through the two slotted screw holes.

1a. If the lock does not properly engage the strike plate:

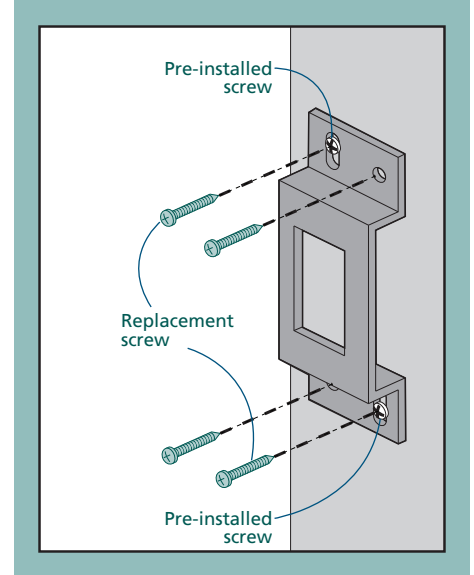
- Loosen the strike plate screws and move up or down until the latch engages properly.

1b. If the door does not lock or is loose when locked:

- Turn the latch adjustment screw(s) in 1/2 turn increments: clockwise to loosen or counterclockwise to tighten.



2. Drive two #10 x 2.5" screws through the open screw holes in the strike plate (included in hardware pack).
3. Remove the pre-installed screws from the strike plate and replace them with the remaining #10 x 2.5" screws from the hardware pack. This will secure the patio door to the structure.



AFTER INSTALLATION

1. Install exterior wall surface within seven days of patio door installation.
2. Seal any gaps or openings at end of horizontal mull joints with sealant.
3. Maintain gap of 1/4"-3/8" between door frame and final exterior wall surface (siding, stucco, etc.).
4. Seal this gap on the sides with backer rod and sealant. For step-down landings, also seal under the patio door sill. Do not apply sealant on top of the drip cap.
5. On the interior, insulate the void between the rough opening and the door frame with backer rod and sealant or low expansion foam.
6. Protect recently installed units from damage from plaster, paint, etc. by covering the unit with plastic.

ODL offers a limited 10 year warranty, one year labor. Please visit www.odl.com or call us at 1-800-253-3900 for complete warranty or product information.

Thank you for choosing

