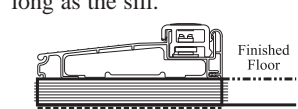
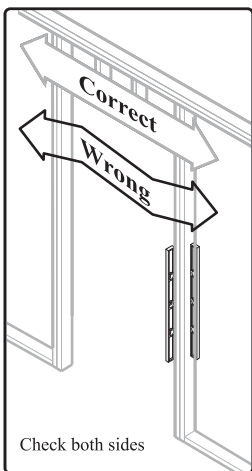


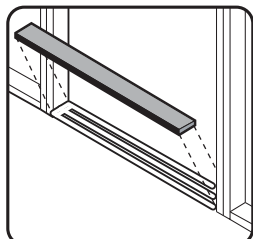
## 1. Preparing the Rough Opening

Are the walls straight?  
Are the uprights level?  
Is the subfloor clean,  
dry, level and solid?

If you are using a height plate to bring the sill up to the level of the finished floor covering: be sure that it is at least as wide and long as the sill.

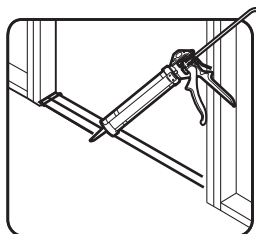


Be sure to caulk thoroughly under and around the height plate.

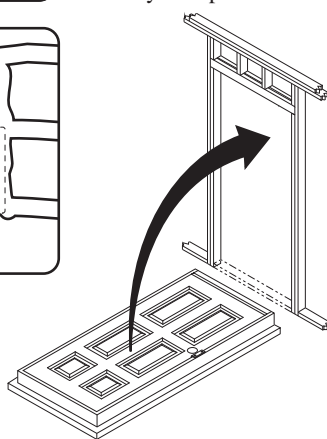
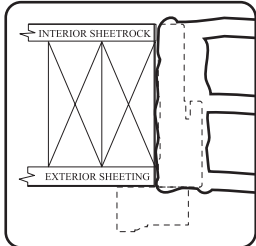


Check both sides

## 2. Pre-Caulking Subfloor for Sill

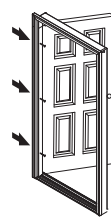


Put three heavy beads (1/2") of non-hardening caulk on the subfloor or height plate as shown. Put enough caulk at the sides to completely cover the bottom of the side jamb. Rock door unit directly into position.

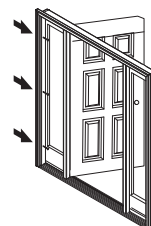


## 3. Position Unit in Rough Opening

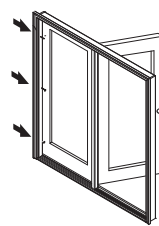
Put fasteners in jambs as shown, just above the hinge positions on the hinge jamb. Leave fasteners sticking out a little.



Single Units:  
Fasten hinge jamb

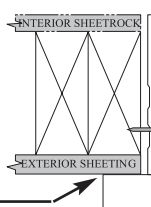


Sidelite Units:  
Fasten sidelite jamb to hinge jamb



Patio Units:  
Fasten jamb on fixed or passive side of door

Assure that back side of brickmould is up against exterior sheathing.



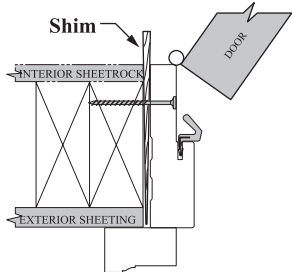
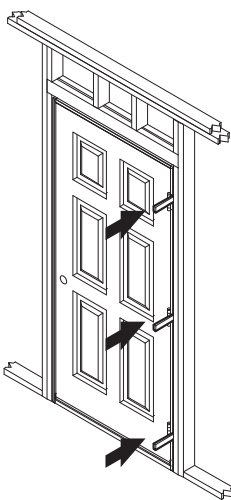
Leave the fasteners sticking out a little for final adjustment.

## 4. Shim and Secure Hinge Jamb

On hinge jamb only:  
Place one shim behind each hinge between the hinge jamb and the wall stud.

Check hinge jamb for plumb and true with a 6-foot level.

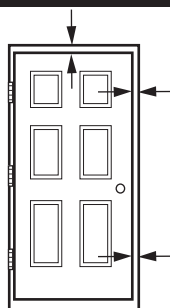
Drive a fastener through each shim and remove excess shim.



## 5. Ensure Consistent Margins

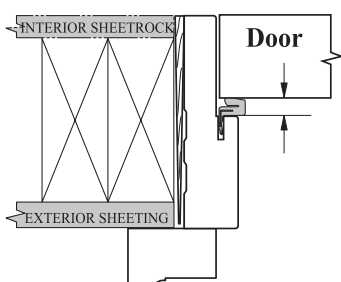
Shim between the strike side jamb and wall stud near the top and bottom of the jamb, across from the top and bottom hinge locations.

Adjust the frame so it is flush with the face of the door.



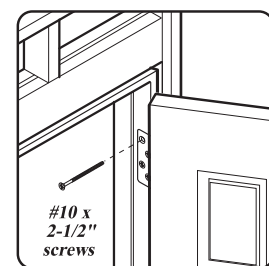
Check the weather-strip margins and contact for good compression all around the door.

Drive fasteners through jambs at locations of top and bottom shims and remove excess shims.



## 6. Applying Hinge and Lockset Hardware

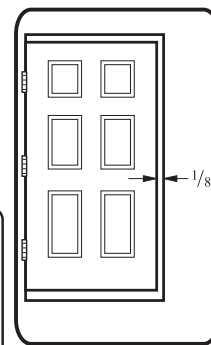
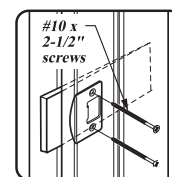
Remove the top screw from the jamb side of each hinge and replace with a #10 x 2-1/2" screw (single doors only, one screw per hinge). These screws will run through the hinge jamb and into the wall stud, preventing door sag.



Install lockset hardware.

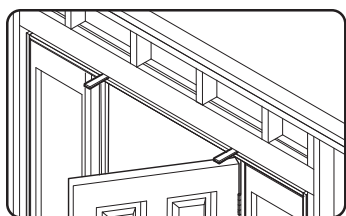
With door closed, shim behind latch area. Properly shim so the slab is hung square in the frame with proper equal margins.

Attach the strike plate with two #10 x 2-1/2" screws through the shim and into the wall stud.

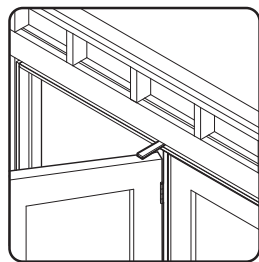


## 7. Applying Hinge and Lockset Hardware

Single Door Units and Door Units with Sidelites:  
Shim close to the mullions on the door side. Fasten through the thin part of the header, through the shim, into the overhead stud. Remove excess shim.

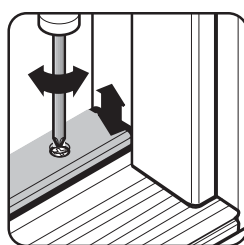
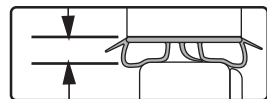


Patio Doors:  
Shim to the active door side of the mullion. Fasten through the thin part of the header, through the shim, into the overhead stud. Remove excess shim.



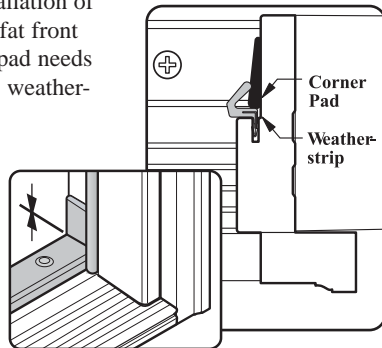
## 8. Adjust Sill and Check Corner Pads

Adjust either the sill cap or the door sweep as applicable to ensure proper contact between sweep and cap.



Verify proper installation of corner pads. The fat front end of the corner pad needs to be up under the weather-strip as shown.

The corner pad should also contact the top surface of the sill cap.

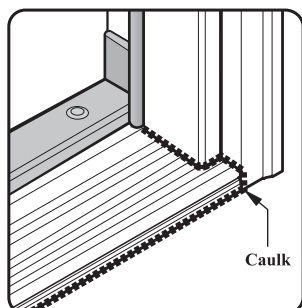


## 9. Caulking Sill

Caulk should be applied to the intersection of the aluminum sill extrusion and the jamb.

Seal front bottom edge of sill.

Check on the outside and sides of the door. There should be caulk along the joint between the door and the sweep.

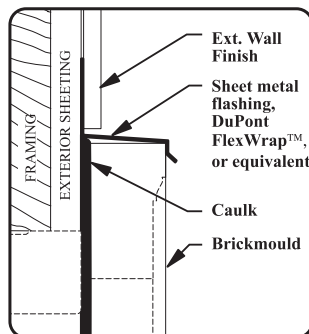
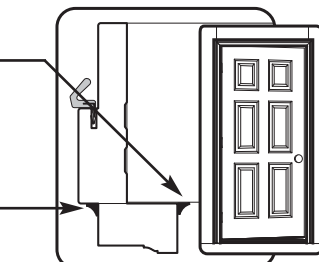


## 10. Weatherproofing

Caulk around the entire unit on weather-exposed side between brickmould and siding or sheathing.

Caulk at joint of brickmould and jamb.

Install sheet metal flashing, DuPont FlexWrap™ NF, or equivalent moisture barrier, above the brickmould on the exterior of the house.

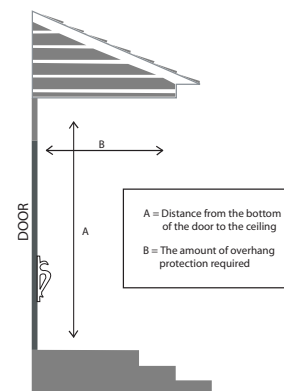


## 11. Maintaining your Stile & Rail Door

While your OrePac door has been constructed for a long, trouble-free life, periodic maintenance is required to keep it looking its best and to maintain your warranty. This maintenance may include, but is not limited to, upkeep on the exterior finish of the wood, trimming any swelling of wood products, as well as oiling and polishing the hardware. The amount of required maintenance depends on environmental conditions and degree of exposure to the environment. You can limit the amount of exposure to the environment by providing the required overhang for your area and door location.

To determine if your door has adequate overhang, measure up from the bottom of the door to the ceiling and divide that distance by two. The resulting number will be the minimum allowable overhang. If you have a western or southern exposure, you may still receive direct sunlight on the door and a larger overhang will be required.

The following diagram shows how to determine the proper overhang for your door.



### Finish Maintenance

Periodic maintenance of the finish, including waxing with a high quality furniture wax, prolongs the beauty and life of your door. Regularly inspect your door for signs that it needs maintenance:

- Hairline cracks in the top of the finish
- Changes in the color of the finish
- Changes in the texture of the finish, such as flaking or scaling
- Dullness or chalkiness in the finish

**How to Start**

Doors can be stained either hanging in the opening or removed from the frame (recommended). Should you remove the door, take care to protect it from damage. Sidelites will need to be finished vertically. Remove all door hardware.

**Preparing the door surface**

**IMPORTANT:** Dust, debris and other surface contaminants can accumulate on the surface of the door. Therefore, to achieve best results and maximum coating adhesion, wipe/clean all surfaces of the door panel(s) and sidelite(s) thoroughly.

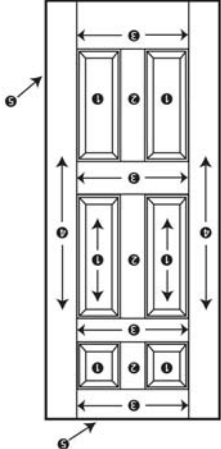
**Staining the door**

Use a high quality, heavily pigmented oil-based stain (recommended). Gel stains can also be used. Before starting, and occasionally throughout the project, stir the stain until the texture is creamy. We recommend that before starting, you try staining a small inconspicuous area of the door to achieve the desired color.

One coat of stain is required with the recommended dry time needed between sides (per manufacturer's instructions). The stain should be applied in the following order working on one small section of the door at a time.

**Finishing Order:**


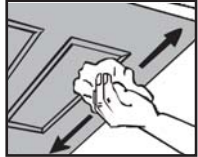
- #1 Panels and sticking (moulding profiles)
- #2 Vertical center areas (mullions)
- #3 Horizontal center areas (rails)
- #4 Outside vertical areas (stiles)
- #5 Edge of door or stiles



**Staining**

- Put on gloves and prepare your materials.
- Stir stain thoroughly using smooth strokes, avoid creating bubbles and do not shake the stain container.
- Working in the specified order and individual section, dip the foam brush into the stain then use the rim of the container to release any excess. Use the foam brush to apply the stain onto the section. Using a cloth, rub the stain into the wood ensuring complete and even coverage. Stop between sections to tidy up the perimeter with a rag and mineral spirits. Clean edges will help define the individual components of the door.

If preferred, the subtle color variation found in wood can be replicated by selective removal of the stain. Using a rag or cheese cloth, gently rub the surface removing very small amounts of stain. Apply varying levels of pressure and work in the direction of the grain. Excessive pressure will remove too much stain.

- Once the door has been completely stained, check for any drips.
- Let the first stained surface dry, per the stain manufacturer's recommended drying time, before proceeding to the second side.
- If you prefer a darker appearance, repeat staining steps one through five only after first coat is completely dry. Do not sand between staining coats.

While the stain is still wet, lightly brush the entire surface of the door with a china bristle brush. Use long strokes and work in the direction of the grain to even out color and achieve consistency.

**Sealing or applying the top-coat**


The top-coat or sealant for your door is very important and required for weatherability. It protects the stained door from the elements and makes the door surface washable. Be sure that the stain coating is completely dry and then apply a high quality UV stabilized clear exterior polyurethane coating (satin or low gloss) - used for any normal exterior wood application.

- Stir top coat thoroughly using smooth strokes, avoid creating bubbles and do not shake the container.
- Do not overload the brush. Dip the end of the brush into the coating and gently slide the flat side of the brush against the edge of the container to remove the excess.

Note: We recommend that all 6 sides (front and back faces plus all four edges) be sealed to eliminate moisture absorption. The bottom of your door panel(s) may contain a factory installed weather stripping (sweep) which is sealed prior to installation. Failure to observe this recommendation can void the warranty.

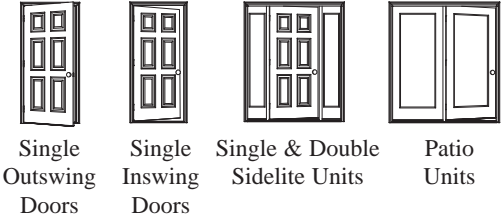
- Apply with even gentle strokes. Press hard enough to flex the bristles just a little and then pull the brush gently along the door's surface.
- As you apply the sealant, pull the brush quickly along the area two or three times lightly to even out the brush strokes.
- Allow the first coat to dry completely (follow manufacturer's recommendations) and apply at least one more coat using the same steps as above. A minimum of two coats is required for complete protection and the door should be resealed annually to ensure lasting protection of the finish.
- After both sides of the door have been top-coated (twice) and are completely dry, remove the paper and tape from the glass and protected surfaces.
- Clean the glass with window cleaner and remove any finishing materials from the glass with a safety razor.
- Replace the door back into the frame.

# Installation



*Installation & Finishing Instructions for Exterior Wood Door Systems*

These instructions apply to the following:



Single Outswing Doors    Single Inswing Doors    Single & Double Sidelite Units    Patio Units

The following steps should be taken to ensure a successful installation of your exterior door.

- Preparing the Rough Opening
- Pre-Caulking Subfloor for Sill
- Position Unit in Rough Opening
- Shim and Secure Hinge Jamb
- Ensure Consistent Margins
- Applying Hinge and Lockset Hardware
- Adjust Sill and Check Corner Pads
- Caulking Sill
- Weatherproofing
- Finishing

## Recommendations

**Painting Recommendations:**

Use a quality solvent-based primer, followed by three coats of a good exterior paint recommended by the paint manufacturer to be compatible with the primer. When finishing glazed doors (doors with glass) apply top coats generously to bridge wood and glass. To protect against moisture, lap paint onto glass 1/16 of an inch.

Find a well-lit painting location that is dust free, well ventilated and within the climate conditions recommended by the paint coat manufacturer. Avoid dark colored paint if the door is exposed to direct sunlight to reduce the chance of warping, veneer cracking or fading.

You will need the following:

**Coatings and Accessories:**

- One pair of rubber gloves
- Lint-free rags or cheese cloth
- Stir sticks
- 2" wide foam brush
- Masking tape
- Safety razor blades
- Stain
  - ~ High quality opaque (non-transparent) heavily pigmented oil-based stain (recommended).
  - ~ Gel stains can also be used.
  - ~ Semi-transparent stains are not recommended.
- High quality exterior grade UV stabilized polyurethane sealant (satin or low gloss).
- 2-1/2" wide china bristle brush.

**Tools:**

- Hammer
- Center punch
- Phillips screwdriver
- Pliers
- Safety glasses