

## TOOLS AND MATERIALS NEEDED

Pencil	Wood Chisel
Tape Measure	Knife or Razorblade
Hammer	Jack Plane
Carpenter's Square	Screws
Power Drill with Phillips Drill Bit	Screwdriver
Paint/Stain	
5/0 Sandpaper (180 grit)	
6/0 Sandpaper (220 grit, or finer)	
Paint Brush	
Clean Rags	
Masking Tape	

**SAFETY:** Always use personal protective equipment (safety glasses, gloves, ear protection, etc.). Some door units are heavy and may require two people to lift and install. Use proper lifting techniques and follow safe working practices.

## BEFORE YOU BEGIN

Make sure that the new Feather River door will properly fit into the existing frame opening. To do this, you will need to do the following:

If your existing door fits properly, use it as a template for your new door. If your existing 6'-8" door has only 2 hinges, a third will have to be added exactly in between the 2 existing hinges. 8'-0" door will require 4 hinges. Hinges are to be 3" minimum.

Depending on flooring (carpet, linoleum, laminate, hardwood, etc.), there should be 1/8" to 1/4" clearance between floor and bottom of door. If trimming the door height is necessary, trim up to 1/2" at top and bottom equally.

## HINGE MORTISE

1. Make your new door the exact size and shape of your existing door, including the locations of the hinges and door knob. You may have to use a jack plane to remove excess wood to match the shape of your existing door.
2. With a pencil, mark the exact locations of the hinges on your existing door at the top and bottom part of each hinge leaf and transfer them to your new door.

3. Once the locations are transferred, you will need to mark the exact location of how far each hinge leaf will rest on the mortise of your new door. Locate the hinge backset to match the existing door, as shown in Figure 1a.

With a pencil, trace around the hinge leaf and score with a razorblade. Use a hammer and wood chisel to remove wood by lightly tapping out enough wood to make hinge flush with door edge as shown in Figure 1b. Repeat for each hinge.

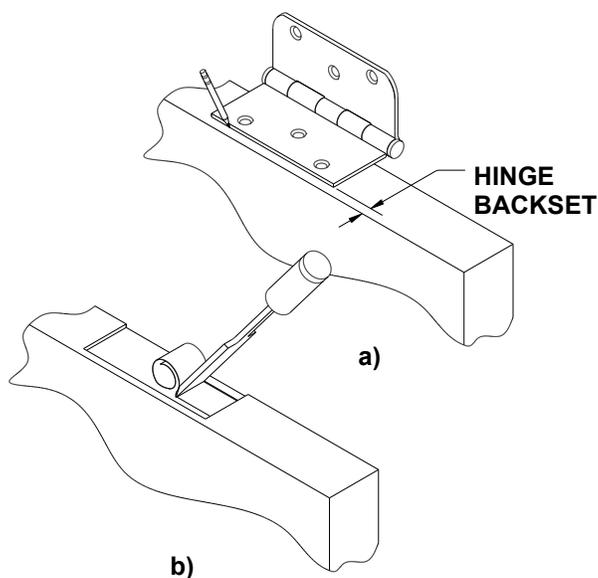


Figure 1

4. If your existing door has a bevel, the same should be made on your new door, as shown in Figure 2. Most doors are beveled approximately 3° to 5° to prohibit door from rubbing or sticking in jamb when closing.

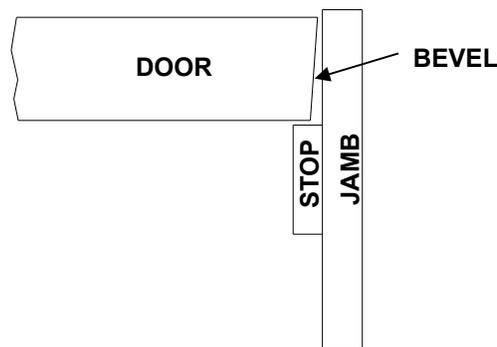


Figure 2

- Attach the door to hinges with #10 x 1" Phillips flathead woodscrews. Make sure that the door opens and closes freely without any binding or rubbing. If there is any rubbing or contact between door and jamb, use plane to remove wood in that area. Keep in mind that wood doors will expand during high humidity. If door binds, you may have to fine tune it by inserting thin wood or cardboard shims between door and hinge leaves.

## LOCK BORE MORTISE

- Door may be removed from hinges to cut out lock bore and mortise more easily. Locate the center of the lock bore and edge bore from your existing door and transfer the measurements to your new door. Use the recommended backset of the new hardware or the existing backset from your existing door. Drill the lock bore and the edge bore as shown in Figure 3.
- Use the face plate as a template and place over the center of the edge bore. Take a pencil and mark all the way around the plate. Score with razor blade and lightly chisel out the wood deep enough so plate will be flush with mortise.

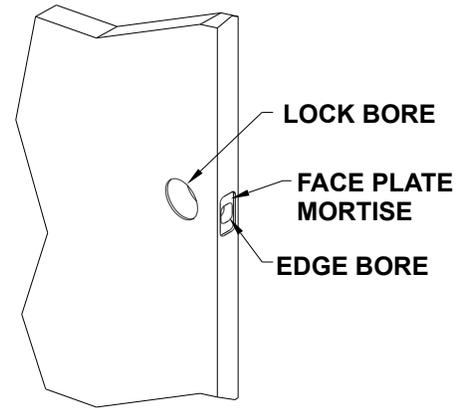


Figure 3

## FINISHING INSTRUCTIONS

### Preparing Your New Door For Finishing

- Mask or remove any hardware (hinges, handles, etc.). Mask glass if applicable before painting or staining.
- Sand the entire surface lightly using 5/0 sandpaper (180 grit) before you apply first coat of finish. Always sand in the direction of the wood grain, see Figure 4.
- Wipe dust and sand grit from the door with clean cloth. Avoid using abrasive or caustic cleaners.

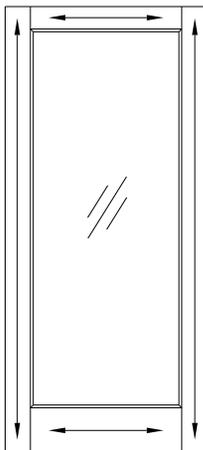


Figure 4

**Note – Always follow the stain manufacturer's instructions.**

### Staining/Finishing Your Wood Door

- Complete steps 1-3 for Preparing Your New Door For Finishing. Apply a base coat of pre-sealer on all six sides of door before staining. This is especially important on pine and maple doors.
- Stain door to desired color following stain manufacturer's instructions. Always stain in the direction of the wood grain, see Figure 4.
- For best results, apply at least two clear top coats over stain, sanding lightly between coats. Use 6/0 (220 grit) or finer sandpaper. Make sure that stain and top coat are compatible materials.

### Painting Primed Door

- Complete steps 1-3 for Preparing Your New Door For Finishing. Although primed door does not require sanding prior to finishing, light sanding (180 grit) will allow for optimum adhesion of paint.
- Finish the door with two coats of latex, oil-base or lacquer paint. Make sure to allow door to completely dry between coats on all six sides of door. Always paint in the direction of the wood grain, see Figure 4.