

1. Check the rough opening to confirm the frame will fit the opening. With a long string, run the string diagonally from each corner to check alignment of the rough opening. You may need to switch the string over to the other side to ensure that the string is not binding.



6. If the frame is welded together, remove the shipping spreader from frame before setting in the opening. If frame is knock down construction, see manufacturer's instructions for assembly.



2. Check rough opening for square in corners using a framing square.



7. Locate frame in opening.



3. Check rough openings for level and plumb of walls with a 6' level. Both sides and the top need to be verified for level.



8. Install setting spreader bar (set at correct width) at the bottom of the frame using wood spreader bar or PLS tool.



4. Check to confirm rough opening dimensions are correct. This will help determine the amount of shimming needed to install frame. The rough opening shall be no less than 1/4" larger on the width and 3/16" on the height than the overall size of the frame. The maximum rough opening is 3/8" larger than overall size of the frame on the width and 1/4" on the height.



9. Shim bottom of the frame on the lock side to keep hinge side tight to wall. If too many shims are needed, (max 1/4") then divide evenly between the two jambs. Use shims to tighten frame to the spreader bar width, make sure all four rabbets of the frame touch the spreader bar. This prevents twist in the frame.

Note: The installer is responsible for shimming and aligning the frame. Gaps are normally sealed as part of the installation or caulking/painting process. Refer to architectural specifications for the appropriate sealant material to be used at fire or smoke control openings.

Tip: Use tapered shims between anchors and wall (above the holes for bolts) and spreader bar to maintain squareness and alignment of frame, and to maintain door opening sizes.



5. Determine location of frame in opening width. Reference architectural drawings for required placement. Set frame in determined location and snap a chalk line along the door hinge side to help determine the frame location on the face side.

Note: frames are not always centered in the opening.



10. Level the head, if not level shim under bottom of frame. If necessary. Be aware that bottom latch on the strike side has a minimum engagement per hardware manufacturer's instructions, shim accordingly.

(Conversion: 1" = 25.4 mm, e.g., 1-3/4" = 44.45 mm)



11. Align hinge jamb to the chalk line and confirm level and plumb of hinge jamb. Anchor hinge jamb to wall. Drill appropriate size and depth holes (per fastener manufacturer's instructions) for one-piece anchor bolts. We recommend drilling and anchoring each anchor one at a time. Insert anchor bolt into hinge jamb starting with the bottom bolt and tighten securely following bolt manufacturer's recommended torque. Install top bolt in the hinge jamb next, checking frame alignment before installing. Install balance of bolts on the hinge side, checking for frame alignment as each bolt is secured.



14. Plumb and square the strike jamb, and shim if necessary. Shims used should be located immediately above the anchor points.

15. Anchor strike jamb (other hinge jamb on paired application) to wall, install bolts in the same sequence as previous jamb, check center of frame for correct width, before installing center bolts. Shim as necessary to maintain correct opening width.



12. Tape string (tape string to face of frame in opposite corners running diagonally) to check alignment of frame. Keep in mind you may need to move one string from inside to the outside to make sure of correct alignment.

Helpful hint: keep strings on frame until the frame is completely anchored.

16. Check to see if shims are required between head and wall.

17. If frame head is punched for existing wall anchors, anchor in the same way as the jamb(s).

Note: Backer rod or caulking shall be used where gaps occur between frame and wall. See specified caulk manufacturer's instructions for details.



13. Check alignment of frame with cross strings.