

Quick Reference Guide

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Version 21.0

Chapter 9 – Installing Exterior Doors

Door & Opening Preparation	<ol style="list-style-type: none"> 1. Inspect for damage. Notify SL or CS if damaged. Nail accessories to the king stud. 2. Verify correct door and size. Verify hole for deadbolt. Check house plan and verify swing. 3. Pre-drill 1/8" holes (5,5,3) uniformly-spaced in brickmold (<u>3" from mitered corners</u>). Angle slightly to hit studs/headers. 4. If house wrap extends thru doorway, fold down over threshold area and staple to the deck 5. If not already installed, cut and install length of flashing tape sufficient to cover width and up 2" each side of Jack studs Install with about half of width on deck, half on foamboard. Cut corners, fold, attach to outside. 6. Install threshold seal tape snug to corners and flush to outside edge of threshold.
Adjust Hinge Side Jack Stud	<ol style="list-style-type: none"> 7. Mark the location of the hinges on the hinge side Jack stud 8. In all cases, install 3"x5" spacers with 5" dimension vertical (using 1 1/2" white trim nails) 9. Measure width of door frame at head jamb and width of rough opening at top and bottom hinge locations <ol style="list-style-type: none"> a. If difference between door frame and rough opening at <u>either</u> location is LESS THAN OR EQUAL to 5/8", add a 1/8" 3x5 spacer at the top and bottom hinge locations and go to step 10 b. If difference between door frame and rough opening at <u>either</u> location is greater than 5/8", attach combination of 1/8" & 1/4" 3x5 spacers to Jack stud top & bottom locations until difference is less than 5/8" at both locations. (At minimum, each Jack stud hinge location should have a 1/8" spacer.) 10. With 6' level check if Jack stud is plumb. If NOT PLUMB, shim top or bottom hinge locations until it is plumb 11. Keeping 6' level against top & bottom spacers, attach 1/8" and 1/4" 3x5 spacers and/or shims at middle hinge location until flush with the level
Adjust Strike Side Jack Stud	<ol style="list-style-type: none"> 12. Add combination of 1/8" and 1/4" spacers to strike side Jack stud at top/bottom hinge locations until difference < 3/8" at both locations 13. Place level against spacers and install spacers/shims at middle hinge location until flush.
Temporarily Secure the Door	<ol style="list-style-type: none"> 14. Set door in rough opening, <u>tight</u> to foamboard and to hinge side stud. 15. Using shims against the head <u>and threshold</u>, wedge door against hinge side with horizontal pressure. 16. Check reveal between the top of door and head jamb at left & right corners. Shim hinge or strike jamb as needed. 17. Recheck hinge side is still plumb (set level on hinge or hinge plates) 18. Tack brickmold tight to foamboard w/4 16d galvanized finish nails, 2 on each side near top and bottom
Permanently Secure the Door	<ol style="list-style-type: none"> 19. With brickmold <u>tight to foamboard</u>, secure hinge side jamb with 2 1/2" exterior screws at each hinge location, <u>behind weather stripping</u> and through shims. Recheck plumb (on hinges). Adjust shims as required. 20. Replace <u>two</u> top hinge screws with #8 3" brass-colored construction screws. Adjust for door top reveal. 21. Recheck <u>head jamb</u> reveals are equal at both ends. Adjust strike jamb up/down if needed. 22. Check complete door operation. Verify <ol style="list-style-type: none"> a. Uniform contact w/weatherstripping along head and strike jambs. If necessary, move/shim brickmold away from foamboard (max 1/8" gap). Shim behind brickmold to hold in place. b. Confirm latch and strike alignment and all reveals. Adjust shims as required. 23. Check reveals at top and bottom of hinge jamb. <ol style="list-style-type: none"> a. Adjust/reinstall tight shims against the head jamb as required until top reveal equals reveal below top hinge. b. Shim bottom of jamb to match the reveal at the top, secure with 2 1/2" exterior screw behind weather stripping. 24. Check reveals top of strike and hinge jambs (minimum 1/8"). Split difference as needed. 25. Check reveals at the top and bottom of the strike jamb. Shim the bottom of jamb until reveals are equal. 26. Keeping consistent reveals top to bottom, install & screw all remaining shims (behind weather-stripping) on strike side locations: across from top/bottom hinges, above and below dead bolt location 27. Install & screw shims (behind weather-stripping) at center of head jamb. Adjust for consistent reveal. 28. Recheck complete door operation, contact with weather-stripping and reveals at top and both sides are consistent. Adjust as required. 29. Install and secure additional shims between hinge locations to obtain consistent reveals along both side jambs (total 5 each side plus one extra set above the deadbolt. Secure with 2 1/2" exterior screws behind weatherstripping. 30. At all shim locations, nail exterior side of jamb into jack stud about 1 1/2'-2' from outside edge of each jamb (between doorstop and brickmold) w/16d galvanized casing nails. 31. Conduct final verification of complete door operation, uniform contact with weatherstripping. Adjust as needed. 32. Nail brickmold in 13 predrilled holes with 16d galvanized casing nails. 33. Conduct final door operation—contact with weatherstripping and reveals. Adjust if needed. 34. Set and caulk all nails.

Quality Points

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- Flashing Tape and threshold seal tape properly installed
- Brick mold is tight to foam on both sides
- Lockset and Deadbolts are installed, easy to operate, key direction is same for both with notches up, deadbolt strike moves in same direction as deadbolt knob
- Special “security” strike plate is installed for deadbolt with long screws provided
- Door hits weather stripping evenly and no gaps or light show thru door reveals (including installation of “corner seal pads” at bottom of side jambs on weather strip side)
- Long screw(s) installed in top hinge
- Uniform reveal at top and sides (especially near lockset or deadbolt)
- Door opens and closes freely and latches easily and snugly to striker plates
- Brick mold is nailed properly (using 16d galvanized casing nails, 5 on each side and 1 in the center of top being sure to hit jack studs or header)
- Flashing tape is properly installed (shingle style and top flashing tape completely overlaps side flashing tape)
- All nails set and puttied/caulked (cedar board nails NOT caulked)
- All door trim screw hole plugs installed
- Oak threshold is protected with plastic threshold protector or 2-3 layers 2” blue painter’s tape
- Temporary threshold support is installed
- Flashing tape applied to foamboard & side of brickmold, top/sides shingle style
- Bottom corner Seal Pads installed