## Chapter 9 – Installing Exterior Doors

### Door & Opening Preparation
1. Inspect for damage. Notify SL or CS if damaged. Nail accessories to king stud.
3. Pre-drill 1/8” holes (5,5,3) in brickmold (3” from mitered corners). Angle slightly to hit studs/header.
4. Fold down/staple house wrap to deck in doorway. Install “Threshold Seal” tape, snug to corners.
5. Mark hinge locations on the Jack stud and check for plumb with 6’ level.

### Plumb Hinge Side
6. If PLUMB:
   a. Measure door frame at head jamb and rough opening at top and bottom hinge locations
   b. If difference >5/8” nail combination of 1/8” & ¼” 5”x5” spacers (w/ trim or 8d Paslode nails) at both hinge locations.
   c. Place level against spacer, install spacers/shims at middle until flush with level.
   d. Proceed to Step 8
7. If NOT PLUMB:
   a. Measure door frame at head jamb and rough opening at top and bottom hinge locations
   b. If difference >5/8”, either location, nail combination of 1/8” & ¾” spacers/shims until <5/8” at both locations.
   c. Check for plumb on top/bottom spacers. Add shims at top/bottom as required.
   d. Verify plumb, add shims at middle for uniform contact with 6’ level.

### Shim Strike Side
8. Add layers of 1/8” and/or ¾” spacers/shims to strike side stud at top/bottom hinge locations until difference in opening is less than 3/8”.
9. Place level against spacers and install spacers/shims at middle hinge area until flush with level.

### Install Threshold Sill Pans
10. Install Weathermate™ Straight Flashing Tape in the threshold, covering corners of the decking & foamboard, and 2” up each side of Jack studs.
11. Install sill pans in threshold in manner similar to that of windows:
    a. Run continuous bead of caulk on threshold covering corners of the decking & foamboard, 2” up each side of Jack stud.
    b. Run continuous bead of calk on threshold and 3” up the sides. Apply ½” from outside edge of threshold.
    c. Install Threshold Seal tape snug to corners, flush to outside edge of threshold (not up sill pan section against Jack stud).

### Temporarily Secure the Door
12. Position door tight to foambord and to hinge side stud.
13. Using shims against the head jamb and threshold, wedge door against hinge side with horizontal pressure.
14. Check reveal between top of door and head jamb, left & right corners. Shim hinge or strike jamb up if required to equalize reveals.
15. Tack brickmold tight to foambord w/ 4 16d galvanized finish nails, 2 on each side near top and bottom.

### Permanently Secure the Door
16. With brickmold tight to foambord, secure hinge side jamb with 3” drywall screws at each hinge location, behind weather stripping and through shims. Recheck plumb (on hinges). Adjust shims as required.
17. Replace two top hinge screws with #10 3” brass screw. Adjust for door top reveal.
18. Recheck head jamb reveals are equal at both ends. Adjust strike jamb up/down if needed.
19. If door strike side-jamb, loosen or remove temporary shims against head jamb and/or threshold
20. Check complete door operation. Verify
   a. Uniform contact w/weatherstripping along head and strike jambs. If necessary, move/shim brickmold away from foambord (max 1/8”)
   b. Confirm latch & strike alignment and all reveals. Adjust shims as required.
21. Check reveals at top and bottom of the hinge jamb.
   a. Adjust/reinstall tight shims against the head jamb as required until top reveal equals reveal below top hinge. Remove shims against threshold
   b. Shim bottom of jamb to match the reveal at the top, secure with 3” drywall screw behind weather stripping.
   c. Check reveal top of strike jamb (minimum 1/8”). Split difference as needed.
22. Check reveals at top and bottom of the strike jamb. Shim the bottom of jamb until reveals are equal. Secure with 3” drywall screw behind the weather stripping.
23. Checking reveals, install and screw remaining shims (behind weather stripping) on strike side: across from the top and bottom hinges, above and below dead bolt location
24. Install shims in center of head jamb, adjust for consistent reveal across head jamb. Screw behind weatherstripping.
25. Recheck complete door operation, contact with weather stripping at head jamb and both side jambs, and reveals on top and both sides are consistent. Adjust as required.
26. 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).
27. At all shim locations, nail exterior side of jamb into jack stud about 1½” – 2” from outside edge of each jamb (between doorstop and brickmold) w/16d galvanized casing nails.
28. Nail brickmold in 13 pre-drilled locations with 16d galvanized casing nails
29. Conduct final door operation—contact with weather stripping, reveals. Adjust if needed.
30. Set and caulk all nail holes.
Quality Points

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- Brick mold is tight to foam on both sides
- Weathermate™ Straight Flashing Tape properly installed
- Sill caulked and sill pan and sill seal installed.
- Door opens and closes freely and latches easily and snugly to striker plates
- 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)
- Door latches and deadbolts are easy to engage and disengage
- Special “security” strike plate is installed for deadbolt with long screws provided
- Long screw(s) installed in top hinge
- Uniform reveal at top and sides (especially near lockset or deadbolt)
- Flashing tape is properly installed (shingle style and top flashing tape completely overlaps side flashing tape)
- Threshold support and vinyl toe kick is properly installed
- All nails set and puttied/caulked (cedar board nails NOT caulked)
- All door trim screw hole plugs installed
- 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)
- Oak threshold is protected with 2 layers of masking/painters tape