Quick Reference Guide

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Chapter 5 – Squaring, Sheathing Exterior Long Walls

Preparation	1. Assemble each wall on the deck 2. Align the bottom plate with the chalk line along the entire length and align 5½" mark to short wall chalk line. Use a hammer, toenail through the bottom face of the bottom plate into the deck about every 8' with 8d nails.
Square the Walls	3. Use diagonal measurements to square the wall, moving the top of the wall until both measurements are within 1 /16". (Be sure you have good "corners" when making measurements.) 4. Use a hammer to tack the upper plate to the deck through the top face with 3-4 16d duplex nails so it doesn't go out of square.
Insulate the Corners and Stud Gaps	5. Before attaching OSB, cut four 5¼" x 92⅝" pieces of 1" foamboard **(**or two pieces of 2" foamboard) and insert into each L-corner. Tape in place. 6. Cut additional 5¼"-wide pieces of foamboard to create stud-foamboard-stud "sandwiches" where studs are less than 3" apart.
Install OSB Wind Bracing and Sheathing	7. Check the House Plan to see where OSB wind bracing is to be located and position on studs. a. At the ends of the wall, center on the stud nominally 48" from the end and flush with the bottom plate, but not necessarily flush with the end studs. b. The "reveal" at the wall end should be consistent top to bottom—a sign the wall is square. c. OSB sheets not at the ends should be centered on studs and flush with the bottom plate. Do not position over stove plenum location. If possible, place behind electric service meter base location. 8. If a long wall is the front wall of the house, check with Construction Supervisor if entire wall should be sheathed with OSB. If yes, sheathe the rest of the wall, except above windows and doors. 9. Draw a line on the OSB marking all studs to ensure nails don't miss the studs. Tack OSB in place, check wall for square, then fasten **wind bracing** with 2⅜" collated nails or 8d nails a maximum of 6" spacing, fasten **non-wind-bracing** OSB with 2⅜" collated nails or 8d nails following the Non-Wind Bracing OSB Nailing Pattern. (See figure 5-1.) 10. After all required OSB sheets have been nailed, pull the nails securing the upper plate to the deck.
Attach House Wrap	11. Measure the width of house wrap and subtract 14¾" from the width—e.g., 18"- 14¾" = 3¼". a. Measure up that amount from the bottom of the wall and snap a chalk line the length of the wall. b. Staple the top of the wrap to that line at each stud, extending the wrap 12" past the end of the wall.
Install Foamboard Sheathing	12. Install 1" foamboard between OSB wind bracing, over the house wrap and flush to the bottom of the bottom plate. Position foamboard so the grooved side is butted up against any OSB. If this is not possible, cut off the "tongue" of the foamboard before placing it next to the OSB. Nail with 2" button nails following the Foamboard Nailing Pattern (See figure 5-2). . Nails should be shared between two abutting pieces of foamboard. Nail only into King studs and into the header (2¼" away from opening) around windows and doors. **Do not nail into window sills.** 13. Install ½" foamboard over OSB, flush on all sides. Nail with 1" button nails following the Foamboard Nailing Pattern (See figure 5-2). Tape all seams. **CAUTION:** Install ½" foamboard over wind bracing OSB only if inspection is not required (see Construction Supervisor). 15. Fold bottom of house wrap onto sheathing and tape with air sealing tape every 3'-5'.

Quality Points

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- Bottom of wall aligned with chalk line and 5½" mark
- Wall squared and bottom plate tacked to deck
- Wind bracing and non-wind bracing OSB installed and properly nailed
- House wrap installed over OSB and under foamboard, taped up over sheathing
- Foamboard installed and properly nailed and taped