

**Chapter 5 – Squaring, Sheathing Exterior Long Walls**

Preparation	<ol style="list-style-type: none"> <li>1. Assemble each wall on the deck and erect in one complete section.</li> <li>2. After the wall is assembled, align the bottom plate flush with the chalk line along the entire length of the wall. Using a hammer, toenail through the <u>bottom face</u> of the bottom plate into the deck about every 8' with 8d nails.</li> </ol>
Square the Walls	<ol style="list-style-type: none"> <li>3. Use diagonal measurements to square the wall, moving the top of the wall <u>until both measurements are exactly the same (within 1 /16")</u>. (Be sure you have good "corners" when making measurements.)</li> <li>4. Using a hammer, tack the upper plate to the deck through the <u>top face</u> with 3-4 16d duplex nails so it doesn't go out of square.</li> </ol>
Insulate the Corners and Stud Gaps	<ol style="list-style-type: none"> <li>5. <u>Before attaching OSB</u>, cut four 5¼" x 92½" pieces of 1" foamboard (or two pieces of 2" foamboard) and insert into each L-corner. Tape in place.</li> <li>6. Cut additional 5¼"-wide pieces of foamboard to create stud-foamboard-stud "sandwiches" where studs are less than 3" apart.</li> </ol>
Install OSB Wind Bracing and Sheathing	<ol style="list-style-type: none"> <li>7. Check the House Plan to see where OSB wind bracing is to be located and position on studs.               <ol style="list-style-type: none"> <li>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.</li> <li>b. The "reveal" at the wall end should be consistent top to bottom—a sign the wall is square.</li> <li>c. OSB sheets not at the ends should be centered on studs and flush with the bottom plate.</li> </ol> </li> <li>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.</li> <li>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 <b>wind bracing</b> with 2¾" collated nails or 8d nails a maximum of 6" spacing, fasten <b>non-wind-bracing</b> OSB with 2¾" collated nails or 8d nails every 12".</li> <li>10. After all required OSB sheets have been nailed, pull the nails securing the upper plate to the deck.</li> </ol>
Attach House Wrap	<ol style="list-style-type: none"> <li>11. Measure the width of house wrap and subtract 14¾" from the width—e.g., 18" - 14¾" = 3¼".               <ol style="list-style-type: none"> <li>a. Measure up that amount from the bottom of the wall and snap a chalk line the length of the wall.</li> <li>b. Staple the top of the wrap to that line at each stud, extending the wrap 12" past the end of the wall.</li> </ol> </li> </ol>
Install Foamboard Sheathing	<ol style="list-style-type: none"> <li>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, equally spacing seven in each stud at the edges of the foamboard, five in the <b>middle</b> stud, and two between each stud in the upper and bottom plates. Around windows and doors, nail only into King studs and into the header (2¼" away from opening). Do not nail into window sills.</li> <li>13. Install ½" foamboard over OSB, flush on all sides. Nail with 1" button nails, equally spacing seven in each stud at the edges of the foamboard, five in the <b>middle</b> stud, and two between each stud in the upper and bottom plates. Tape all seams.               <p style="margin-left: 20px;"><b>CAUTION:</b> Install ½" foamboard over wind bracing OSB <u>only</u> if inspection is not required (see Construction Supervisor).</p> </li> <li>15. Fold bottom of house wrap onto sheathing and tape with air sealing tape every 3'-5'.</li> </ol>

## Quality Points

### Chapter 5 – Squaring, Sheathing Exterior Long Walls

- 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