BY GREG AND SUSAN BURNET

Basic Wall Framing

In May, we discussed snapping and squaring layout lines for walls. This *Training the Trades* segment focuses on laying out and building basic stud walls. We'll cover how to frame window and door openings in the next segment.

Once we've snapped lines on the deck or slab for all the walls, I note which walls extend the full width of the building. We call these "through walls" (in some regions, they're called "by walls"). Walls that intersect with through walls are called "butt walls." Typically, the longer exterior walls are through walls, and the shorter exterior walls—often gable walls—are butt walls. Inside the house, hallway walls and the longer walls in primary rooms are usually through walls, while closets and other typically shorter partitions are generally butt walls.

We frame and raise through walls first, so that their corners can accept the butt walls. Butt walls get nailed to the corners of the through walls when the walls are raised. But the process begins with laying out the wall plates. As with every step in the framing process, precise layout is a must for straight and square walls.

Greg and Sue Burnet are co-owners of Toolbelt Productions (toolbeltproductions.com), an education and training firm for the building industry.

Top and bottom plates. First cut the plates to length: Put the top and bottom pieces together and cut through both **(1)**. Using the saw kerf as a guide, finish the cut through the second plate. For a 16-inch-on-center layout, hook the tape at the end of the plates and mark the plate 3/4 inch below the 16-inch mark, at 15 1/4 **(2)**. This lets the sheathing break in the middle of a stud (see photo 9). Continue marking each stud—at 31 1/4, 47 1/4, 63 1/4, and so on—to the end of the plate **(3)**.

Photos by Sue Burnet


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Corners, intersections, and double top plate. For attaching abutting walls at the corners, nail studs together in an L, and for attaching intersecting walls, nail short scraps between two studs to make a ladder **(4)**. Separate the top and bottom plates and distribute all the parts (corner studs, ladders, and regular studs) between the plates on a flat surface **(5)**. Nail through the plates to secure each stud. Attach a second top plate (note that this is 3 1/2 inches short on the right to accept the top plate of the intersecting wall) **(6)**.


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Add the sheathing. Before sheathing the wall, stretch a tape diagonally from the corners to make sure that the frame is square **(7)**. In many parts of the country, sheathing is installed vertically, with the long side of the sheathing running parallel to the studs. To install the sheathing horizontally, as we do here, measure up 48 inches at either end and snap a line to guide the sheathing placement. Drive a nail beside the line to butt the sheathing against **(8)**. Stagger the seams of the sheathing on the second course, leaving the nails in place temporarily as spacers to allow expansion between panels **(9)**. Some sheathing comes with lines inked at 16-inch intervals on the panels, to follow when you're nailing.

For a more detailed discussion on framing walls, go to **www.jlconline.com/training-the-trades/basic-wall-framing**.