

This pictorial is designed to give those with little or no experience in building a general idea of the process they might be involved in. The supervisor for the day will give more detailed instruction. Terms that may be unfamiliar are highlighted in **blue**. Links to other pictorial walkthroughs of a Habitat build can be found at www.lakeshorehabitat.org and clicking under "Current Schedule."

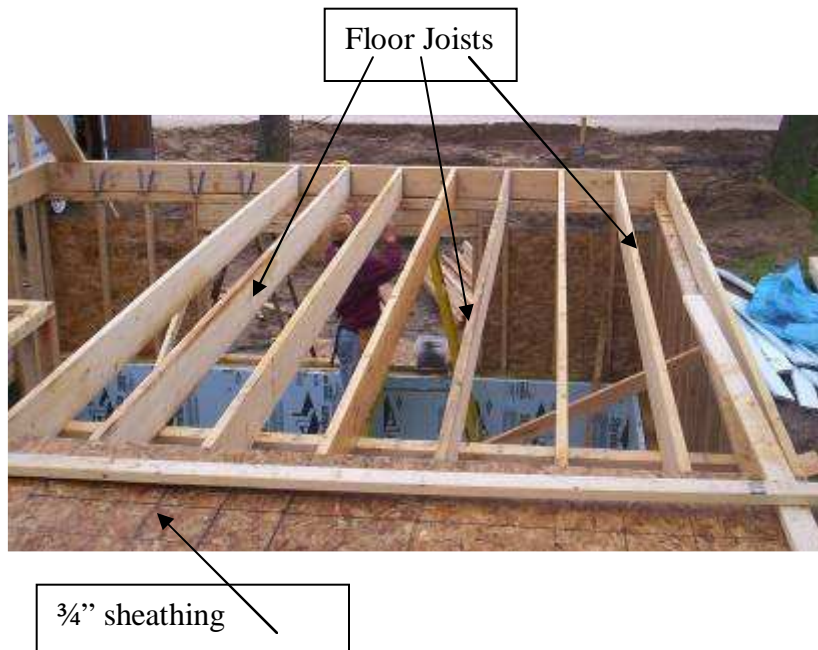
Framing Part II

When framing in a Bi-level home, before the second floor can be begun to be built, **sheathing** must first be applied to the exterior walls. This gives the proper support for the next level to be built.

Another layer of lumber, the **top plate**, must also be fastened to the tops of the walls.



After the sheathing is on the exterior walls and the top plate is nailed, the second floor can be built: first laying down the **floor joists**, then covering them with sheathing. The joists are nailed to the top plate of the walls and to the outside frame of the floor. Glue is applied to the tops of the joists, and sheathing is nailed down.



Sheathing (pronounced 'sheeting'): a type of engineered wood, the most common dimension is a 4'x8' rectangle. We sheath the outside of exterior walls, the floors, and roof. Available in a variety of thicknesses, we use 7/16" board for our walls and roofs, and 3/4" for our floors. Sheathing is fastened to the framing using 8-penny nails (see Framing Part I).

Top Plate: This is 2x4 or 2x6 (depending upon the size lumber used in constructing the wall) nailed atop of a standing wall. The top plate is attached over the seam of two joined walls. This ties the two walls together. See the volunteer front and center in the first picture? Her hands are putting the top plate in place. No wall, interior or exterior, is complete without a top plate.

Floor Joists: Floor joists support the floor in the same way that studs support walls.

After the floor has been built, the walls for the second floor can be built the same way they were built for the first floor.



Continuing the process, the walls of the second floor are sheathed. Here is what a fully framed, fully sheathed Bi-level home looks like.

Notice how the windows and door spaces have been cut out.

The roof needs to be framed and sheathed, but the walls can be prepped for the next step before or after the roof goes on.



Before windows, doors, or siding are installed, the house must first be wrapped in house wrap, and then insulated with blue-board.

House wrap is a material that allows air to breathe out, but resists moisture from coming in.

Blue-board is a 4'x8' piece of Styrofoam insulation applied to the outside of the house (as opposed to the pink fiberglass insulation applied to the inside).