



The Two-Stud Corner and Other Tricks

These simple modifications in framing add insulation and reduce costs.

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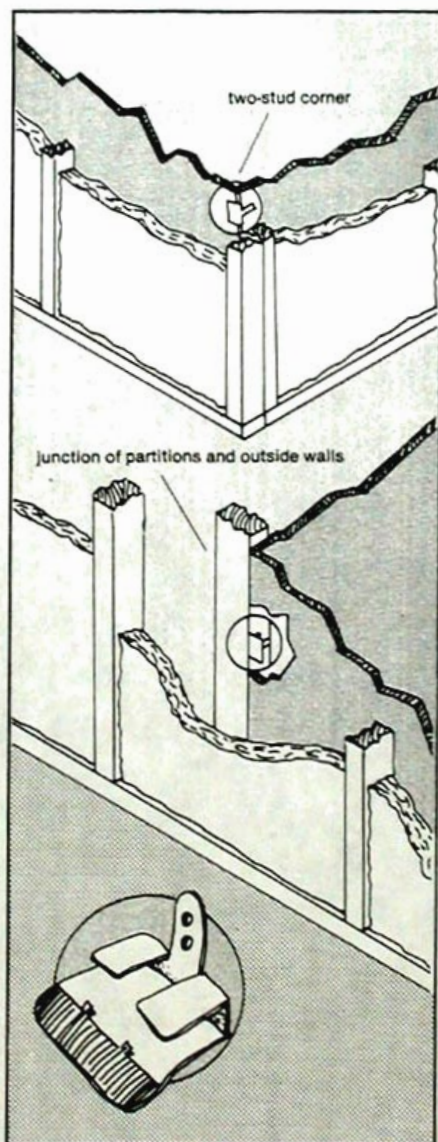
There are many approaches to obtaining a thermally sound building shell. Some are straightforward and economical. Others can be headaches. The modest variations suggested here—the two-stud corner and plywood-box headers—should fall in the former camp. Building researchers originally developed these details to cut construction costs, not to save energy. So, at worst, they shouldn't cost you anything.

The two-stud corner (shown below) permits full insulation to be installed at the building corner. The three-stud corner post typically used here creates a thermal short circuit to the outdoors since softwood, at R-1.25 per inch, is a mediocre insulator at best. The spaces between the blocking in a corner post are usually left uninsulated, making the detail even colder. Structurally, three studs are not necessary here, since the load on an end stud equals half the load on a regular stud, and this is usually reduced further by the endwall. According to Donald F. Luebs, director of building systems of the National Association of Home Builders Research Foundation, Inc., which developed this detail, the greater structural load is along the rest of the wall, not at the corner.

The only problem created by eliminating the third stud is the loss of an interior nailer. When you go to nail up the drywall, one edge at the corner will be floating in space. Not to worry. You can add a section of 1x3 or plywood blocking to the inside stud to catch the floating edge, or easier still, you can use handy little steel drywall clips, manufactured for this use. These clips slip on to the edge of the drywall and have small predrilled tabs for nailing to the inside stud. (If you can't find these clips locally, call Prest-on Company at (800) 323-1813 for information.) Letting the inside piece of drywall float at a corner is recommended practice anyway, since it allows for movement in the framing with less chance of cracking the finish seam.

This same detail can be used where interior partitions meet exterior walls. Just nail a single piece of 2x blocking, the flat way, halfway up the outside wall where the partition joins. This provides a nailer for the end

stud of the partition—to keep it straight. If the partition lands on a stud in the outside wall, so much the better. No need to double up the



The two-stud corner (top) provides adequate structural support, saves wood, and allows easy and full insulation at building corners. Using drywall clips or a partial 1x3 backer allows one edge of drywall to float at the building corner, minimizing cracks here. A similar detail (above) will work at the junction of partitions and outside walls.

Steve Bliss is an associate editor at Solar Age.