# LETTERS


## Bootleg Grounds

To the Editor:

My experience with bootleg grounds is just as Rex Cauldwell speculates ("Plug-In Electrical Testers," 12/95): Most of the bootleg grounds I've seen are in older houses where, when a room is changed into a home office, someone wants to give the illusion of a ground in a two-wire system.

What I wonder is, since branch circuit neutrals and grounds are screwed to the same neutral/ground panel buss, can current backfeed from the neutral through the ground to the receptacle cover screw?

Wayne Richard
FootHills Home Inspections
Seneca, S.C.

*Rex Cauldwell responds:*

*In such a situation, the current can most definitely backfeed from the neutral to the cover screw (and metal cover plate, if there is one). If someone touched the cover screw, there would be two current paths in parallel: a low-resistance path via the neutral wire and a high-resistance path via the person touching the screw (assuming he was somehow providing a path to ground). As long as the neutral circuit is intact and remains low-resistance, the path through the screw would normally not be lethal. But it could become so if the person also provided a low-resistance path by putting another hand on a grounded water pipe. The most dangerous situation would occur if the neutral circuit became open or developed high resistance (for instance, if a neutral wire came loose somewhere along the circuit). In that case, the cover screw would be the path of least resistance; if someone touched it, it could be lethal.*

## Ridge Vents Let in Snow

To the Editor:

Regarding your article "Vented vs. Unvented Roofs: The Great Debate" (1/96): I know a builder in Colorado who has vowed to never install a piece of ridge vent again. He had two episodes where ceilings in new houses were damaged to the point of having to be replaced as a result of large quantities of snow being blown in through the vents. The subsequent "meltdown" ruined the insulation as well.

D. Gollsneider
Kila, Mont.

## Laboratory Method?

To the Editor:

I have a few comments regarding Robert Randall's article on building stiff subfloors for ceramic tile (*Practical Engineering*, 1/96). As a tile installer for the last 12 years, I question the success of "laboratory" methods when applied in the field. I just can't feature the framing crew sanding 400 square feet of plywood for a 200-square-foot room, then squeezing out 1/8-inch glue beads on 2-inch centers. Just getting subs to put more than 32 nails per sheet is considered radical.

How about thick-bodied adhesives that are trowelable or gunnable, and alternative fasteners that a framing crew might actually use, like ring-shank gun nails or hammer-driven underlayment nails? We need solutions that work in the field, because we're dealing with sheet goods that may not perform exactly like test strips.

Tom Aldi
Raleigh, N.C.

*Robert Randall responds:*

*Mr. Aldi raises good points. However, the stiff subfloor design is not really a laboratory concept: I have personally done it many times in the field with excellent results. I have also recently noted that some architects in our area have incorporated the design into their "standard details." The result is a lot of satisfied homeowners.*

*As far as sanding all that wood, this is only necessary when the subflooring is allowed to become coated with dirt and debris before installation of the underlayment. The finish on most plywood as received from the lumberyard is fine for glue bonding.*

*While I prefer screws for their ability to pull the underlayment down, I think ring-shank nails would be almost as good except between joists, where nailing won't have much clamping effect. There are actually several trowelable or gunnable epoxy materials that would be superior to woodworking glue for this application, but they are also expensive and require mixing on site. I'm not very confident of most of the commonly available one-part cartridge adhesives.*

## Radiant Floor Caution

To the Editor:

After a lengthy investigation of problems involving a radiant floor heating loop, I wanted to add an important warning to John Siegenthaler's article on how to add a floor heating loop to an existing hydronic system (*Focus on Energy*, 12/95): It's somewhat risky to install subfloor radiant heating systems under hardwood floors. In this case, after repeated problems with cracking oak flooring in a new house, and finger-pointing among the G.C., heating contractor, flooring manufacturer, and the under-floor heating system manufacturer, everyone finally threw up their hands and abandoned the heating loop "solution." They removed the heating loop and installed conventional baseboard.

Dan Friedman
Poughkeepsie, N.Y.

Keep 'em coming! Letters must be signed and include the writer's address. The *Journal of Light Construction* reserves the right to edit for grammar, length, and clarity. Mail letters to *JLC*, RR 2, Box 146, Richmond, VT 05477; or e-mail to 76176.2053@compuserve.com.