LETTERS

Reversed Polarity Danger

To the Editor:

I have just read "Plug-In Electrical Testers" (12/95), by Rex Cauldwell. The section that addresses reversed polarity seems to assume that all the plugs that go into a receptacle are polarized. Otherwise, saying that a receptacle is miswired with reversed polarity is irrelevant, because you could simply pull out a plug, twist it 180 degrees, and plug it back in and you would have reversed polarity anyway. So unless the fixture that electrocuted the little girl had a polarized plug, the polarity of the outlet would not be relevant.

Marc Sabransky
Warrensville Hts., Ohio

Rex Cauldwell responds:

You're right: That fixture did have a polarized plug. In fact, most plugs today are polarized. The National Electrical Code now requires that any device controlled by a manually operated single-pole switch must have a polarized plug. (Devices like toasters with open elements have double-pole switches, which open both the hot and the neutral lines at the same time. These are not required to have polarized plugs.)

Your observation really concerns those plugs that are not polarized, and whether it makes any difference. If the manufacturer of a new device provides a nonpolarized plug, you should be able to assume that it makes no difference how you insert the plug. A typical example is a plug-in low-voltage transformer, like the kind that comes with a telephone answering machine. It has a nonpolarized prong because it has no switch and because a transformer doesn't recognize input polarity.

However, there are still plenty of nonpolarized plugs in existence on old appliances. And Edison lamps — lamps with screw-in bulbs — are probably the most unsafe. Even if the receptacle is wired correctly, flipping the plug so that the switch is on the neutral side allows the bulb socket to be hot at all times — even when the switch is off. This is a potentially lethal situation when there is no bulb in the socket, as in the case of the little girl. Anyone with children in the house would be well-advised to replace older nonpolarized plugs with new polarized plugs, and always leave a bulb in the socket.

Importance of Markup

To the Editor:

I am appreciative of the composite income statement that appeared in Les Cunningham's article, "Building by the Numbers" (*Business Forum*, 10/95). Les's figures are helpful in knowing what is happening in the real world. Walt Stoepplewerth has been arguing for years that contractors need to mark up their direct costs by 67% to be able to stay in business, but this has not appeared competitive to me.

After hearing Mr. Stoepplewerth speak, I started marking jobs up by about 45%. I get much more satisfaction from my work, as I feel justly compensated for what I do. Because I don't feel squeezed, I believe I give my clients better work. Most clients are willing to pay more if they believe they are getting more. If the only difference is price, they will choose the least expensive contractor. Who wouldn't? It's up to the contractor to explain how his service or product is different.

Robert Jordan
Eliot, Maine

How Tight Is Too Tight?

To the Editor:

I was amused by the back-to-back articles in your August 1995 issue: "Air-Sealing the Story-and-a-Half" tells you how to seal a house while "Simple Whole-House Ventilation" tells how to ventilate a house. We thought we had solved these problems back in 1953 when we built three experimental houses for Central Maine Power Company using their specifications for insulation and ventilation. You couldn't live in the houses. Fans pulled fireplace smoke down the chimney, you couldn't slam an outside door if you tried, and mildew grew everywhere.

We invented Sick Building Syndrome over 40 years ago and came to the conclusion that less is better. Perhaps we should heed the demand of the Chief Judge of the Foley Square courthouse project in Manhattan when he insisted that the 26-floor building have "operable" windows. He wasn't about to let

Editor's Note

Beginning with the March 1996 issue, *State-of-the-Art Contractor* will no longer appear. When we conceived the column back in 1989, the computer world was much simpler and we could provide reasonably complete coverage in a single monthly article. As our long-term readers know, we used to cover Mac and PC issues in alternating months. Then, about three years ago, we dropped Mac coverage, because at least 70% of our readers use PCs. The Mac readers had (and still have) Craig Savage's *Macintosh Construction Forum* for in-depth coverage.

Now, in 1996, we find it increasingly difficult to address computers adequately in a short monthly article. To replace *State-of-the-Art Contractor*, we're pleased to introduce *Construction Business Computing*, a monthly newsletter dedicated to computer issues for builders and remodelers. Editor Craig Savage will provide the same kind of practical advice and software reviews you have come to expect from the *State-of-the-Art Contractor*, but in much greater depth and detail. For subscription information, see the ad on page 16.

some mechanical air-handler dictate what he was going to breathe.

William K. Millar, Home Inspector
Shore Enterprises
Marblehead, Mass.

Your point is a good one: that tightening a house can cause moisture and air-quality problems (see "Are Your Houses Too Tight?" *8/94). And there's no question that operable windows are a nice feature and a simple way to get fresh air — in the warmer seasons. But moisture problems and the risk of backdrafting are worst in the winter, yet who wants to open the windows then?*

Given the cost of heating fuel and the fact that draft-free houses are more comfortable, retrofit weatherization and tight new-construction practices are here to stay. The answer is not to return to leaky building shells but to find ventilation measures that work.

—The Editors

Radiant Slab Problems

To the Editor:

John Siegenthaler's recent article "Radiant Slab on a Tight Budget" (7/95) struck a chord with me. Several years ago I built a sunroom addition and wanted a hydronic radiant system. Unfortunately, there are few similar installations locally and little experience among local designers or installers. So I chose a nationally known supplier of a gypsum-based product and radiant heating components, mainly based on claims of dimensional stability and performance, and with the belief that I was also purchasing expertise that wasn't readily available locally.

There are several things about the gypsum-based slab that I didn't like. Shrinkage cracks occurred throughout the thin slab, typically over the tubing. The self-leveling claim was also suspect, as there were several locations where the material had high or low spots. The material consistency was erratic with some areas being rock hard and some seemingly soft. Throughout the slab there was considerable dusting and chalkiness, through it hasn't caused any noticeable problem with the directly glued ceramic tile floor.

I am happy with my choice of a radiant system, yet the costs were excessive (about $6 per square foot for the full system). I agree with Mr. Siegenthaler's premise that more residential systems would be used if costs were contained, and I believe his "Youker" concrete mix offers that opportunity. I would only caution that you should be careful about the specification of aggregate in the mix: The reference to #1A might mean different things to different people. In our area, #1 stone is usually taken to mean a Virginia D.O.T grade with 85% of the stone larger than 2 1/2 inches.

Bernard M. Farmer, Jr., P.E.
Williamsburg, Va

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.