

# Letters



## Shower-Pan Showdown

To the Editor:

Thank you for the recent article "Leakproof shower Pans," (JLC, 11/89). As the manufacturers of Chloraloy – the original CPE shower pan liner – we want to offer the following comments.

The article contains a great deal of good information in its comparison of plastic liners versus the more traditional metal and hot-mop pans. It does, however, contain some misinformation or misstatement of facts in its comparisons within the group of plastic liners, CPE and PVC.

The article's author, Mr. Duncan, states the CPE has two principal disadvantages to PVC: price and workability. He suggests that because CPE is stiffer it is more difficult to work with. In fact, because CPE is stiffer, it folds more sharply and holds creases longer. This is an essential property, which ensures that the corners of the shower are sharp and true. (Not having good corners can make the entire installation of the pan more difficult.)

On the issue of price, there is no question that PVC is cheaper than CPE. We do not dispute this and never have; however, we contend that for the difference in a typical installation (about \$10) it is not worth taking a chance on the less expensive material. Our belief is based on the fact that CPE does not contain plasticizers, and ingredient in PVC necessary to make it flexible.

No one can say when, but at some point the plasticizers in PVC will migrate out, most likely, where the material is stressed: at folded corners, drain clamping ring, [and where it is] stapled to the framing. When this occurs, the pan will no longer be flexible and is susceptible to cracking. CPE is an inherently flexible elastomeric which requires no plasticizers, and it will remain flexible indefinitely. As Mr. Duncan states, we warrant Chloraloy for 50 years; some PVC manufacturers will warrant their product for only 30 days.

T.C. "Toby" Eckhardt  
vice president  
The Noble Company  
Grand Haven, Mich.

### Scott Duncan Responds:

*For me, the flexibility of PVC membrane makes it much easier to work with. I have never had a problem folding it, while I have had considerable problems folding CPE, especially in cold weather. In fact, in temperatures around freezing, I don't even attempt to install a CPE pan unless I've been able to preheat it. I've also noticed, over the years, more accidental punctures in CPE membranes than PVC. Possibly this is due to the difference in plasticity.*

*With regard to price, if you use Mr. Eckhardt's example of an additional \$10 per pan, a medium-sized tile company doing 20 shower pans per month could save over \$2,000 a year by using PVC*

*over CPE. It adds up fast.*

*As far as longevity goes, I've been using PVC shower pans for over 10 years and have never seen or heard of a failure due to deterioration. The PVC membrane I use most carries a guarantee that runs for the life of the installation. Both membranes are approved by all model building codes and tile trade associations.*

## Foundation Insulation Cons

To the Editor:

As a home inspector and moisture consultant I have witnessed some important drawbacks to both the outside and inside foundation insulation discussed in Focus On Energy, 11/89. These drawbacks were not mentioned along with Mr. Brennan's and Mr. Silver's "cons" and need to be stated.

I have often seen rigid foam come away from the foundation. Viscous backfills such as clay or loam can bond to the foam. When the soil dries and shrinks, it can actually pull the foam with it. Water inevitably seeps behind the insulation and creates a thermal short circuit. A porous, well-draining backfill without clay, silt, and other moisture-holding material is an absolute must. In addition, perimeter drainage tiles that lead away to a low lying area should be provided along the footing.

While Mr. Brennan and Mr. Silver did mention insect problems with exterior insulation, I have also witnessed similar problems on the interior. Termites have a fondness for stud-wall shoe plates. I recommend all wood in contact with the concrete slab or wall be CCA-treated lumber (preferably pressure-treated at 0.4 or 0.6 pounds per cubic foot, not just surface treated).

Also, I have found that interior foundation stud walls are often built several inches, or even feet, away from the foundation wall. And, while the frame wall may get well-insulated, the joist bay section just above the space between the interior frame and the foundation wall is often neglected. This break makes any foundation insulation in the stud wall useless.

Any foundation insulation, interior or exterior, must connect or even overlap with the insulation in the rest of the house to create an uninterrupted thermal envelope.

Paul Cove  
Dedham, Mass.

## Realistic Roof Support

To the Editor:

In On The House, 12/89, Henry Spies answered a question about cathedral ceilings. The writer was concerned about outward thrust on the walls if there were no collar ties. He correctly stated that a massive

ridge beam would support the roof.

However, I believe there is another solution. It is evident that the only way that the top of the wall can bow out is if the roof plane itself is deformed or torn loose from the gables. The rafters, indeed, would push out as envisioned if they were not sheathed. But once the sheathing is applied, the roof planes become rigid and would have to bend in order for the roof to collapse or sag.

I therefore contend that after the roof is sheathed, the collar ties and/or ridge beam could be removed and the success of the roof would depend only on the integrity of the construction.

Of course, the larger and lower pitched the roof gets, the stronger it must be to resist deforming. To further enhance its integrity, diagonal bracing could be added beneath the rafters.

Dan Mohar  
Sheboygan, Wis.

### Henry Spies Responds:

*If all the rafters and all joints at the ridge and the wall were absolutely rigid, and the roof sheathing made of perfectly flat sheets with no deflection, and none of the materials were subject to dimensional change due to moisture and creep under load, the roof plan could support the roof loads. However, since we are working with wood, not a theoretical material, it does not work. As it dries, the wood shrinks away from nails and toothed plates, so the joints are not rigid. The roof sheathing expands and contracts with changes in moisture, accompanied by buckling between rafters. Wood creeps under load, so deflection gets greater with age. The walls do bow out, and the ridge does sag in too many instances. Therefore, the load-bearing ridge beam is the only practical means of supporting the rafters in cathedral ceilings.*

## The Dog Ate It

To the Editor:

I loved Ed Foote's illustration on your January 1990 cover.

On the workbench, behind the blueprints and the sandwich, there was a copy of the Contractors' Excuse Book. Unfortunately, when I went down to the local bookstore, they couldn't seem to find it listed in "Books in Print."

I have always relied on "the dog ate it" (or recently, "the computer ate it"). I could use some variety, though. Please help me!

Dennis Kolva  
programmer and builder  
Turtle Creek Software  
Spencer, N.Y.

### To the Editor:

On the cover of the January 1990 issue, you will note a red book on the "construction desk" of plywood with the title Contractors' Excuse Book. Are you sure that the implications

that this instills in readers' minds (e.g., a prewritten list of half-truths or lies to cover uncomfortable situations) is consistent with the general image we professional contractors are trying to project to our clients and community?

Edward J. Bodnar Jr.  
Willmette, Ill.

*A few readers have commented that they were offended by our light-hearted treatment of the harried contractor syndrome – and a few more said they were delighted to see their plight captured in a cartoon and wanted a clean copy to frame for their office walls. Sometimes laughter is the best defense. In our defense, we can only say that all parties – contractor, subs, codes official, owner, and workers – got an even ribbing. The artist, by the way, works full-time on a construction crew, and in his boss's view, "the cover turned out great!"*

–The Editors

## Wanted: Your Job Site Tips

How do you rack your lumber on the job site? How do you keep nails, screws, and other fasteners well organized? What kind of benches and platforms do you work on and what kind of material pick-ups do you have with your saws? Or how do you arrange your drill box, for example, to keep your bits organized? And what kind of jigs and templates do you use to increase the efficiency or quality of your work? Everyone "keeps house" on site a little differently. The Journal of Light Construction would like to know how you keep your job site running efficiently and safely.

We invite you to send us a brief description and a quick drawing or photograph of your solutions to these and other job-site predicaments. JLS editors will pick the best ideas to feature in an upcoming issue. If you idea is selected we'll send you \$25 for your efforts, plus a free year's subscription to JLC. Please include your address and phone number. Write to: Rigs and Jigs, The Journal of Light Construction, RR#2, Box 146, Richmond, VT 05477 ■



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