Letters

Hats Off to Energy-Efficient Builders

A poll last year found that most builders are in business not only to make money, but because they like to build. That's good news and not too surprising. Assuming it's true, I think I can safely extrapolate and also assume that people who build energy-efficient homes do so, in part, because they like to save energy. Why?

Some builders and designers I know make houses energy-efficient to keep their clients' energy costs low and protect them against future energy crises. Some like to do so because they believe that saving energy is good for the country — giving us greater energy independence and cleaner air. Some like to do so because they think it's good for the whole world--helping reduce global warming due to the "greenhouse effect." In general, all these builders take pride in their work and consider energy efficiency one mark of a quality home.

Building highly energy-efficient homes is not without its risks. New technologies often turn up new, unanticipated problems. Builders and their customers often end up acting as guinea pigs for new products and techniques. Some invariably get burned.

Moreover, for these energy-minded builders, an open question has always been, Can I build homes the way I think they ought to be built--and make a decent living? Can I profit on the few thousand extra dollars I put into my homes or at least recoup my investment? For most, the answer has been a guarded yes. Yes, because in survey after survey, energy efficiency remains a high priority among home buyers, particularly move-up buyers who are fully aware of the impact of high fuel bills on the family budget.

But to capture this market, most builders discover that they need to pay attention to marketing as well as to technology. After all, a handsome kitchen might sell a home, but a perfectly installed vapor barrier will most likely go unnoticed, unless you can make its benefits to the client clear. Buyers value cost savings and comfort, not technology and theory.

In Sweden, most builders exceed the national energy code giving the industry an overall favorable image at home and abroad. Similarly, U.S. builders who build to high standards help advance the industry here: both the image and the reality. Furthermore, those who pioneer new technologies make it safer for the rest of us when we are ready to follow. They deserve our congratulations.

–Editor

You Must Be Joking

To the Editor:

Okay, it's about that lightning protection article, May '89. Sure it has some funny stuff in it. Like those positive charges that flash out to meet the negative charges--what are they? Electrons that hate their mothers? Heavy metal atoms on steroids?

But it wasn't that funny, and it wasn't tongue-in-cheek, so I was trying to figure out what the story was. I think it's a false story you put in to see if everybody's b.s. detectors were tuned and operating. If you're giving away a free subscription to the first 100 letters or so, please note my address below.

There was one cute paragraph about how ". . . only lightning currents of small magnitude will confine themselves to. . ." etc. Like, if it's a big one, guys, just lie back and think of phlogiston.

R.S. Campbell
Berkeley Springs, W. Va.

Does lightning protection work or doesn't it? According to the article's author, Marvin Frydenlund, of the Lightning Protection Institute (LPI), lightning protection got a bad rap because, back in the old days, many barns with lightning rods burned to the ground. They burned, says Frydenlund, due to the fact that manure from livestock had corroded the copper downconductors, rendering the systems useless. Snake-oil salesmen offering to recharge lightning rods for a fee probably didn't help much either.

The need to maintain these systems in good working order is echoed by Richard Bielen, fire-protection engineer at the National Fire Protection Agency (NFPA). NFPA has published a lightning-protection code (NFPA 78) since 1904. Lightning protection is a "viable science," says Bielen, who oversees NFPA 78. While the code clearly specifies how to protect against structural and fire damage, says Bielen, he admits it needs further work on how to protect electronic equipment within buildings.

As for certifying installed systems, Underwriters Laboratories (UL) offers this service, as does LPI.

All a pile of manure, you say? Maybe. But I'd think twice before casting aspersions on lightning rods during a thunderstorm, while lounging in my hot tub and watching The Ten Commandments on my VCR.--Editor

Masonry Cements Not Perfect

To the Editor:

In reference to Carl Hagstrom's piece ("Demystifying Mortar": 4/89) Masonry cements are not recommended for engineered masonry projects since they usually contain portland cement, plasticizers, and air-entraining additives. Since the manufacturers don't reveal the ingredients of their trade products, you can't be sure of what's in there.

Keith N. Knowles, P.E.
Consulting Structural Engineer
Holliston, Mass.

Eye Protection Missing

To the Editor:

As a remodeler who uses air tools as a regular part of his workday, I was greatly distressed by the picture on April's cover. Here you portray a typical worker using a very powerful framing tool, which happens to be extremely dangerous, especially to the eyes. Every manufacturer issues warnings about safety and about using the proper eye protection. Duofast even provides a free pair of glasses when you purchase any gun. Yet, on your cover you put a picture of a laborer with no protection. You are not providing your readers with a good example to follow. No wonder our Workers' Compensation bills are so high. Contractors have only themselves to blame by following your lead. My workers are not permitted to handle any air tool without first donning their glasses and checking for hazards beyond their firing range. If they fail to comply they are stopped, immediately.

I would suggest that you try to portray individuals who are thinking about safety in future presentations. We have too many eye, hand, and back injuries in our ranks not to be concerned. There are just too few people who take notice and only regret not being cautious after something catastrophic has happened.

Safety glasses don't have to be unsightly, either. Try the Cricket from Kenco Safety Products, in Woodstock, N.Y. They are the best I've found. I buy ten pair at a time and hand them out to all employees the first day on the job. If they want to use any power tool, they are required to put them on. After a period of adjustment, they become a habit, like seatbelts. Unfortunately, we know we can't educate everyone. We can only hope to provide examples by which others can learn.

George K. Christiansen
Fairfield, Conn.

Thanks for pointing out the lapse in safety displayed on our April cover. We avoid showing work situations on the cover that we feel are patently unsafe and have rejected some photos on those grounds. In hindsight, we probably should have rejected this one as well. On the other hand, it's our interest to show on the cover examples of real construction work in progress — not staged examples of exemplary work sites. Unfortunately we rarely come upon cover-worthy photos of building sites that follow all the recommended safety precautions. So we often show sites that are good, but not perfect--that's the reality of the business. Incidentally, we welcome photos from readers for use on the cover. Contact us for details.–Editor

Software Certification Expensive

To the Editor:

I'd like to thank you for the review of MacNail and Hyper-Estimator in The Journal's January issue. There is a real information vacuum out there when it comes to computer software for builders, and you are one of the few magazines trying to fill it.

We've had several people ask us why Turtle Creek Software hasn't gotten NAHB certification, and I thought I'd pass along my opinion of the NAHB Software Review Program. Its main fault is the filing fee: $10,000. This seems to us to be too much like a purchased recommendation, and so far we have refused to submit our software because of it.

Computer programming itself is starting to become very "friendly," and now that builders like myself can actually turn out decent software without wading through Fortran for years, there ought to be a lot of innovative stuff being produced.

Dennis Kolva
Turtle Creek Software
Spencer, N.Y.

Uniform Codes Recommended

To the Editor:

In the March '89 issue of The Journal, the article, "Elderly K&B Design," stated that the 1986 ANSI Standards 117.1 is the most recent recommendations for state and local codes.

I am a construction cost analyst at

the U.S. DHUD, along with others, and we now recommend the Uniform Federal Accessibility Standards.

Morris L. Levine
U.S. DHUD
Baltimore, Md.

A Peak at More Cathedral Ceilings

To the Editor:

I write in response to Gordon Tully's "Cathedral Ceiling Solutions" (JLC, Building With Style, 4/89). Here is a cathedral ceiling solution I've used a couple of times with great success. With the great wind, snow, and heat loss factors for this area of over 9,000-foot elevation, I use a modified scissors truss that will accept 12 inches of fiberglass batts over the plate. My own home has knotty pine paneling fastened to the underside of the truss with distressed fir 4x6 decorative (non load-bearing) beams at the ridge and at the center line of each side parallel to the ridge. I think I have the best of both worlds this way.

Ruth Bennett
Bennett Builders
Black Hawk, Colo.

Gordon Tully Responds:

Your scissors truss solution is a common one; undoubtedly it is practical and cost-effective. I guess my dislike of covered scissors trusses is personal: It bothers me that you see a different pitch inside and outside the room. Also, I am prejudiced against decorative beams that look as if they were carrying the load. Exposed scissors trusses can be very elegant, but they have all the problems of any exposed truss. A carpenter asked me why I didn't mention an easy way to build a planked cathedral ceiling, one he had used several times. Install exposed structural plank over exposed beams, and cover it all with Bituthene, which forms an excellent vapor retarder and waterproof working surface. Then set 2x "rafters"--really blocking--on top of the planking at about 24 inches on-center. As you set the 2x's, lay rigid insulation tight between the rafters, so that the insulation completely fills the rafter cavities (the insulation sets the rafter spacing). Cover with plywood roof sheathing. You can use whatever thickness of rigid insulation you wish. While this system is obviously not cheap, he reports that it goes up fast and easily.

Mass. Licensing May Be Required

To the Editor:

I write to inform your readers that the Massachusetts Construction Supervisors License is for construction supervisors whose projects do not exceed 35,000 cubic feet. Qualified candidates must pass a written exam and pay a $150 initial licensing fee. The license renewal fee is $100 every two years.

Sherri Oken
Builders Association of Greater Boston
Braintree, Mass.

Employee Benefits Taxable

To the Editor:

Gail Hermann (JLC, In Business, 8/88) suggests filing bonuses to employees on 1099 forms. None of the various 1099 forms seems appropriate. Everything I read indicates such payments are subject to income tax withholding and social security. Clarification?

William L. Briggs
Storrs, Conn.

Gail Hermann Responds:

Our company has since changed its policy, and we now take taxes out of bonuses at the time they are given. In the event that you want to report receiving a bonus on a 1099 form, report it as a salesperson would report income. In our case, the bonuses were given in exchange for referrals, and the employee who gave the referral was acting as a salesperson.

Pumps Fail, Not Tubing

To the Editor:

In Alex Wilson's article on radiant floors in the October '88 issue, he notes that Vanguard has increased the limited warranty on its polybutylene tube to 25 years, but it is not the tubing that is going to fail when oxygen diffusion starts. Rather it is the iron and steel components in the system that will corrode, which has happened within the first year in some cases in Europe. Cross-linked polyethylene (such as Wirsbo) is one solution. Another is to spec boilers, pumps, etc. with corrosion-resistant parts (i.e., stainless steel). Or it might be cheaper to replace corroded parts periodically, but it's impossible to say how often that might be. As in so many cases, it's a matter of balancing first costs against long-term performance and quality.

Paul R. Hanke
Warren, Vt.

Refined Rules of Thumb

To the Editor:

I enjoyed Harris Hyman's article "Secrets of Structural Engineering" in the April issue. I, too, agree that *Simplified Engineering for Architects and Builders* is one of the best references available for the builder who wants to understand structural mechanics.

At the end of his article, he gives a rule of thumb I was taught many years ago for sizing floor joists: half the span plus two. Rating a floor system "acceptably stiff" is a subjective rating, and I've had better results using the actual depth of joists and not their nominal depth. I have also found that once the span exceeds 15 to 16 feet, I need to decrease joist spacing and glue to the subfloor to satisfy my own "stiffness rating."

I have found another rule of thumb to be very helpful, that covers simple timber beams that are uniformly loaded. Quoted directly from Harry Parker's *Simplified Engineering for Architects and Builders*, "The limiting span in feet for a simple beam uniformly loaded is equal to 1.1 times the depth of the beam." For example, a beam 10 inches in depth has a limiting span of 11 feet.

Carl Hagstrom
Montrose, Pa.

ASHI Unfair to Newcomers

To the Editor:

Regarding the letters from Richard Wolcott and Lon Grossman of ASHI, I agree that we in the home inspection business should uphold strict professional and ethical standards. However, the letters give the impression that anyone who is competent and ethical can become a member of ASHI; this is far from the case. As the owner and chief inspector of a small local home inspection company, I contacted ASHI regarding membership when I started my company two years ago. After all, I thought ASHI was the mark of professionalism in the industry, and I wanted my clients to know that I was a professional worthy of their trust. Unfortunately, ASHI requires candidates to have already performed 750 home inspections before they can be considered for membership, with some credit given for education or experience. Even at my most optimistic projections, that will take five to seven years to achieve.

An organization which professes to set the standards for a profession should be open to all who are qualified, regardless of how long they've been in the business. Imagine requiring lawyers to try 750 cases before being allowed to take the bar exam. In my opinion, ASHI is a protectionist organization designed to keep newcomers to the field from taking significant amounts of business from the "old boys" by designating non-ASHI inspectors as "unprofessional." In fact, ASHI members can hire inspectors with less experience than me, and still use the ASHI logo in their advertising, while I am denied admission to this "professional" organization.

I applaud ASHI's educational programs, and their insistence on ethical standards, but until they open their doors to all who are qualified, their claim to be the representatives of this industry is misleading and self-serving, and their implication that all non-ASHI firms are unprofessional is unethical.

Edward Leafe, Chief Inspector
Thoro Home Inspections, Inc.
Hackensack, N.J.

Keep 'em coming... We welcome letters, but

they 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 *The Journal*, P.O. Box 3129, Easton, PA 18043-3129.