Editorial

...And More of the Same

When I started working here in mid-July as the new editor of *New England Builder,* I heard two main sentiments from the authors, columnists, and other people I contacted. First, they welcomed and congratulated me. Then they asked, "You're not going to make any big changes, are you?"

I take the latter comments to mean that our writers—and I suspect our readers—like *New England Builder* pretty much the way it is. To me that's good news. It makes my job a lot easier. I don't have to sit back right away and ask the impossible question that all editors must face sooner or later: "What the hell should we put in the magazine to best meet the needs of our readers?"

Here at *NEB,* thanks to the perceptive and dogged efforts of my editorial predecessors, all I have to do to succeed is more of the same. I'll try to make small improvements, of course. More and bigger diagrams and photos, maybe. A little clearer writing, perhaps. But essentially, you can expect more of the same honest, practical, interesting, and entertaining information on how to build a good building and run a successful business.

One change I plan is to start surveying a random group of readers each month to find out what you—our customers—found most valuable in that particular issue. If you receive one of our surveys, do us a favor and fill it out. But don't wait till you get one to let us know what you're thinking (it could be years). Pick up a pen or phone whenever the feeling strikes.

As a former builder, I have some insights into the daily battles faced by the small builder. But still, without your feedback, I'll be shooting in the dark. I look forward to working for you and hearing from you. ■

—Steve Bliss
Editor

Letters

Hungry Ants

To the Editor:

Your February and May 1986 issues included references to the destruction of polystyrene insulation by ants.

Architects and builders have been combatting attacks by a multitude of varmints for years, and without great success: termites and roaches in the South; silverfish in the Midwest; squirrels, chipmunks and raccoons in rural suburban areas; miscellaneous rodents in urban areas. Entrapped colonies of bees have been known to chew their way through gypsum-board interior finishes. And for as long as man has sought shelter, ants have penetrated that shelter.

These critters seek comfort, warmth and food. Any insulation material provides comfort and warmth for nesting. Cellulosic and paper-faced, resin-bonded, glass-fiber insulations provide nourishment. Polystyrene insulations, on the other hand, offer no nutritive value and do not sag with time to provide channels of penetration.

If ants elect to enter a structure, which wall system offers the most resistance to penetration—lap siding with fiberboard sheathing on studs, or a solid polystyrene panel with waferboard, plywood or oriented-strand board adhered to both faces? Panels are probably second only to monolithic, poured-in-place concrete.

The ant problem will never be licked, but it can be lessened. Improved flashing details, adequate caulking, elimination of organic wood-chip-type ground covers in landscaping adjacent to structures, and periodic insecticide applications at the foundation line will help.

Charles Wopperer
Vice President
Thermal Foams, Inc.
Buffalo, N.Y.

The large, black ants that munch on our handiwork are called carpenter ants. Like carpenters, they work with wood but don't eat it.

According to Terry Amburgey, an insect and decay expert with the Mississippi State University Department of Forest Products, the ants are hollowing out a warm, safe nest to raise their young, and prefer soft material such as moist, decaying wood. The rotting wood is easy to carve away, and the moisture quenches their thirst. They also will burrow into other available materials, however, such as foam insulation and solid wood. In fact, says Amburgey, they even can burrow into CCA-treated wood with impunity because they are not ingesting the material. (He keeps a piece of chewed-up, pressure-treated pine on his desk to prove the point.)

As for barriers to penetration, Amburgey says they help—but we all know about the industriousness and perseverance of the little critters. And we can't say whether ants prefer standard walls over foam panels: either seems to meet their needs. —Ed.

Dowsers Take a Dowsing

To the Editor:

I am heartbroken that my favorite periodical has cast all reason aside and run a big article on dowsing for water. Over the years, you have printed scores of superb articles, all based on reasoned and demonstrable facts. But now you have run an article that presents as fact a superstition that has been debunked and damned by engineers for more than half a century.

Dowsing has been "proved" in the same way that snake-oil cures and black magic have been "proved": by anecdote, lucky coincidences and wishful thinking. Please tell me you were joking!

Decades ago, the Australian government did a long and expensive investigation into dowsing for water. Pipes were buried in the ground, and professional dowsers were asked to locate them. Some pipes contained still water, some contained running water, and some contained no water. The dowsers could not tell one pipe from another, could not get the same results twice, and could not agree among themselves. The conclusion? Dowsing made no contribution whatever.

If dowsing had real merit—if there really were something to it—wouldn't the dowsing experts have concluded by now what is the best material for the dowsing device (wood, steel or plastic) and the best dimensions, the type of people who are most successful (old or young, men or women), the best time of day to dowse (before breakfast or after a hearty dinner), the best weather conditions?...

If there were something to it, wouldn't some corporation have perfected a dowsing device and put it on sale, with a guarantee? Wouldn't some engineering professor have written a book showing how to optimize the equipment and the procedure?...

It's a shame that an article in the July 1986 *New England Builder* extols dowsing.

William A. Shurcliff
Cambridge, Mass.

To The Editor:

It was nice to see the article on well drilling by our John Voytek in the July issue. It was not so nice to see the article on water witching. However, it's obvious you cater to all audiences and desire to stay neutral on controversial disputes. With that attitude I propose, therefore, that you run additional articles by the Flat Earth Society or some stories on Ouija boards or the latest in tea-leaf reading, all of which make every bit as much sense as dowsing.

Why would you seriously want to proliferate such hogwash in the 20th century when advanced technology's understanding of the nature of groundwater occurrence and movement has proved beyond a doubt that water witching is without a shred of scientific support?

Jay H. Lehr, Ph.D.
Executive Director
National Water Well Assn.
Dublin, Ohio

The Backfill page is like an after-dinner mint, intended to sweeten the palate after the "meat and potatoes" have been consumed. It is a place for the offbeat, the amusing, the unusual, and, occasionally, the off-the-wall. In that spirit, we felt that a dowser's view of the world was right on target in an issue devoted to water. At any rate, we're glad so many readers made it all the way to the back page and were still paying attention. —Ed.

How Foams Age

To the Editor:

In your recent article [June 1986] concerning the aging of foam insulation, there were several misquotes of what I told your reporter over the telephone. There are two independent processes going on: diffusion of air into closed-cell foam, and diffusion of freon out of the foam. Both reduce R-values. Air diffusion into a one-inch-thick urethane board unprotected by suitable facings should take a few years, depending on the temperature that the board is subjected to. The R-value should approach an intermediate value between new conditions and the final, fully aged value. That latter value does not occur until the freon has diffused out, a process that can take 10 years or more.

Our preliminary research has shown that phenolics age much more slowly; preliminary measurements on one gas, carbon dioxide, indicate that phenolics may age 20 (or more) times slower than urethanes. Diffusion rates for other air components and for freon have not been measured for phenolics. If the preliminary results hold for the other gases, phenolics may never reach the R-value of fully aged conditions.

Better facings and attachment methods of the facings to the foam can cause both urethanes and phenolics to age much more slowly. In some systems, urethane foam has been found not to age appreciably over 10 years or more.

I have received no information from builders concerning the mechanical properties of phenolic foams when they are handled in the field. My only observation has been that phenolics in the laboratory tend to "dust" more when their edges are rubbed.

Leon R. Glicksman
Senior Research Scientist
Massachusetts Institute of Technology
Department of Mechanical Engineering
Cambridge, Mass.

Underground Feedback

To the Editor:

Two comments on Alex Wilson's basement-insulation recommendations in the April issue.

First, I don't believe that insulating under a slab floor will increase the comfort level significantly. Concrete is a good conductor of heat, and the slab will always be quite a few degrees below the temperature of your feet, even if it's insulated below. So you're likely to feel the heat loss in either case. And if the room in question is living space (as opposed to utility use), a rug will probably provide as much or more comfort. I'd rather put any extra money where it would do more good above grade—perhaps in low-E windows or infiltration control.

Second, I agree with the concept of reducing the thickness of insulation on basement walls as you go deeper below grade, but as John Rahill noted at a recent Northeast Solar Energy Association conference, this creates little "lips" at each change in thickness that could provide a handle for frost to grab. Beveling the edge of the boards at the joints might be a solution, but perhaps it's not a real problem.

Paul Hanke
Plainfield, Vt.

Technology Can Help Builders

To the Editor:

[I am writing in regard to your editorial in the June issue]....I believe that you read things into Robert Halle's Nation's *Building News* article that did not exist....I felt that Mr. Halle was *lamenting* the fate of builders, not *condemning* them....

Traditionally, builders have built structures whether they make money or not.... [I am speaking here of those] skilled, experienced and dedicated builders who...ride the ups and downs [of the economy]—the *real* backbone of our industry—[not those who leave their fields of training to jump into building only when the housing market is up.]...

When the market is slow, builders fortunately have to work very hard just to make a living, yet when the market is good, they have all they can do to try to get their share before the market goes sour again. With cycles such as these, they never will have time for all the hassles [inherent in] Mr. Halle's proposed new system....[Building-materials suppliers] are aware only of what they must do to sell their own products. Those few (such as Arco, with its "Wallframe Building System") that have taken one step toward innovation have been slapped back, primarily because large companies...cannot be innovative....Oh, they might make some minor changes, but minor advances? Never! And after what has happened (i.e., bankruptcy and shame) to those few corporate innovators that have tried to change things, can you really blame them?

As for the government, anyone who has tried to work with any part of Big Brother's confusion network, even such (supposedly) trade-oriented programs as the Bureau of Standard's Energy Grant Program or the Small Business Administration, knows how inane such thoughts are.

The *only* real change that occurs in American industry is through innovators and entrepreneurs who work on their own and who are able to transcend the obstacles through luck, patience, drive and at least a touch of idiocy....

No, I am not agreeing with you in spite of appearances; I am agreeing with what I think Mr. Halle is saying: that there needs to be more productivity on the part of builders. But does that mean he is casting stones at those laboring in our industry? Not necessarily so!...Those most benefiting from change are unable to make it happen. Let's analyze why, in spite of this impossibility, it *must* happen—and happen soon.

Can you see the cost of building materials dropping drastically—ever? Can you see anyone in our industry accepting lower wages for their endeavors—ever? Given these scenarios, can you see the cost of a home built with current technologies drop significantly—ever? The standard scapegoat answer has *always* been: "It's the fault of the banks and mortgage companies, not us. If only the mortgage rate would drop to 9 percent, *everybody* would be able to afford *a* home!" As Utopian as that may appear, can you really see that happening—ever?

Supposedly, if mortgage rates drop to 9 percent, 50 percent of those who desire homes will be able to afford them ....Every time the cost of a house is lowered 10 percent, it is the same as dropping the mortgage rate by 1 percent; for every 1 percent drop in interest, *Time* magazine estimates that another 2.5 million buyers can afford to enter the market. The key to Mr. Halle's premise is that all we have to do is lower the cost of a house by 20 to 30 percent, and the American Dream will, once again, become a reality.

Of course, the American Public will not accept too many "innovations" ...they want traditional houses with a capital "T." In fact, [surveys indicate that a mere 5 percent of American home buyers would consider] esoteric, exotic, model houses, such as the infamous "House of the Future" depicted in the various trade and consumer magazines. Add to this the historically poor quality and mundane designs produced by the manufactured-housing industry (except, perhaps, for those that [cost twice as much as even *conventional* houses), combined with] the builder's need and desire to build, which precludes many of them from ever using manufactured housing, [and you can see why we are, indeed, in a rut].....

So how can we design something that is traditional yet new—something that will meet the needs of our future energy problems yet cost substantially less than anything currently on the market? Something that will allow builders to design and build a structure they can be proud of, yet that will allow them to compete with the builder down the street and with the Japanese, Swedish and Danish companies encroaching on our shores? [How can we do all of this while still opening the] market even further so we can expand and, possibly, bring our children into the business?

How? Design a new building *system* that allows the builder to construct virtually any traditional or contemporary design using current crews and equipment. Make it simple enough to erect so that overall labor costs are kept down, yet make it "high tech" enough so that it is stronger and better insulated than anything else available....

Unijoint International has been working on such a solution for the past 10 years and is finally in the process of setting up the facilities to manufacture—and make available to builders—the solution. [Our prototype house,] applauded for its simplicity, [makes use of the latest building technologies,] yet comes in at less than $40 per square foot (excluding land, well, septic and profit)....[Our experience indicates that] it *is* possible....

Robert J. Rydeen
Unijoint International
Fremont, N.H.

Postscript

Our June article on scaffolding failed to mention pump jacks—an issue brought to our attention by the Alum-A-Pole Corporation, which makes a heavy-duty pump jack with aluminum poles. Alum-A-Pole can be contacted at P.O. Box 66, Staten Island, N.Y. 10303; 718/447-2608.

In addition, our July article on waterproofing choices, which reviewed the waterproofing products on the market and gave a list of suppliers, overlooked the "Eljen Drainage System," which, according to company president Joseph Glasser, was the first synthetic subsurface drainage system on the market. It differs from "Enkadrain" and "Miradrain" in that it is prefabricated, and the fabric completely covers the core, eliminating the need to overlap the core and/or fabric on site.

For more information, contact the Eljen Corporation, 15 Westwood Rd., Storrs, Conn. 06268; 203/429-9486. ■

An Accurate Article

To the Editor:

I want to thank Paul Hanke for his excellent article on waterproofing products in the July issue. I especially appreciate that Mr. Hanke has accurately represented Owens-Corning "Tuff-N-Dri" and "Warm-N-Dri." I first learned of these products from an article Mr. Hanke wrote in the August 1985 issue. Since then, I have become a certified contractor for Owens-Corning.

Other writers and even convention speakers have inaccurately represented Warm-N-Dri, stating that it can be used alone as a waterproofing product. No one who truly understands waterproofing and the realities of the construction industry would recommend this application. Owens-Corning sells and warrants Warm-N-Dri only when it is applied in conjunction with the Tuff-N-Dri membrane.

Thank you for a responsible, accurate, well-researched article.

Alfred Bredenberg
Bredenberg Waterproofing
Brattleboro, Vt.

Keep 'em coming....We welcome letters, but they must be signed and include the writer's address. *New England Builder* reserves the right to edit for grammar, length and clarity. Mail letters to *NEB*, P.O. Box 5059, Burlington, Vt. 05402.