Letters

Don't Mess with Mother Nature

To the Editor:

I just finished reading the February 1987 issue. As a home inspector and a member of the American Society of Home Inspectors (ASHI), your articles "Wood Basics," "Engineered Lumber," "Rx for Wood Decay & Insects," and "A Rotting Timber Frame" were all excellent and a must reading for other home inspectors.

Some of the problems I see out in the field, especially with newer homes, are caused by engineered lumber and juvenile wood. It's not nice to fool Mother Nature and she will always win out!

The articles on wood decay and rotting timber frames bring to light what ASHI recognizes as the most common problem in residential construction, namely moisture—excessive moisture trapped in homes, and the subsequent damage it does. ASHI even devoted an entire annual conference to this problem.

Keep up the good work. You have an excellent magazine.

Dave Surette
Vice President
ASHI
Indianapolis, Ind.

Thanks for Index

To the Editor:

Now that *New England Builder* has a table of contents, I don't always take—or have, these days—the time to go through each issue page by page, as in the pre-contents days!

However, today, by chance, I was looking over back issues to check out the book-review section for possible additions to our own library, when I came across the "Two-Year Quickie Index" in the January issue. I was not only thrilled to discover the index, but ecstatic over your plans for a comprehensive index to be published this year.

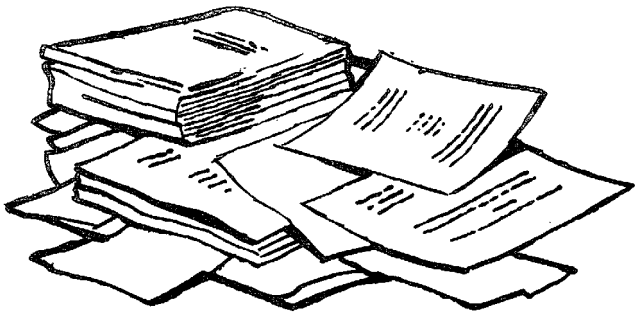
As director of the library at a trade and technical institute that offers—among other programs of study—building construction technology, carpentry, and cabinetmaking, I know that the forthcoming index will turn our back issues of *New England Builder* into a virtual encyclopedia!

Thanks for the quickie index, for the table of contents, for the forthcoming comprehensive index, and for actually taking action on a suggestion sent in by subscribers.

Congratulations on a fine publication.

Esther K. Friedmann
Library Director
Johnson Technical Institute
Scranton, Pa.

Thank you for the kind words. We hope others find the index and table of contents as valuable as you do. But I hope we haven't made it so easy for you and other readers to find info that you just file NEB *away without reading through each issue. Maybe the bad old "pre-contents" days weren't so bad after all.*—Ed.



Putting Stressed-Skin Panels in Perspective

To the Editor:

After working with stressed-skin panels for four years, reading dozens of articles and attending many seminars on them, I find that most of the information presented has been biased and misleading.

For example, in the February issue of *New England Builder*, Alex Wilson reported on expanded polystyrene, and states: "On the downside, EPS has a lower R-value per inch than isocyanurate. Thicker panels are therefore required to achieve comparable insulation levels. EPS has lower density and compressive strength, so it does not offer the same structural properties....In terms of fire safety, isocyanurate-core panels are much safer than EPS-core panels."

Also, in Mr. Wilson's article, the footnote might lead the reader to believe that all the fire tests performed for Amos Winter of Winter Panel Corp. on EPS panels were ASTM tests. Twice I have witnessed a videotape of one of Mr. Winter's "fire tests"—once at the 1986 Timber Framers of North America Guild Conference, and again in 1987 at the University of Vermont Extension Service Contractor's Conference.

The test purported to compare an EPS-core panel and a urethane/isocyanurate-core panel side by side under fire conditions. After a window was installed in each panel, the panels were barraged with flames of high intensity. This test showed the EPS panel burning through, so that the window fell out in approximately 10 to 15 minutes. The urethane/isocyanurate panel burned through about 5 to 10 minutes later. Conclusive proof, according to Mr. Winter, that EPS is not as safe.

After witnessing the videotape of the test at the conference, I asked whether the windows were installed correctly: with a 2x4 or 2x6 nailer inlaid into the rough opening of the panel, with all voids filled with spray foam, and with window casings applied to the interior side of the panel. Mr. Winter's answer was no. Furthermore, the test does not conform to ASTM standards. It was fashioned by Winter.

This type of testing can be equated to determining the safety of gasoline by tossing a lighted match into a gas tank. It is unprofessional, and in the long run it can only harm the industry.

For instance, if a particular timber-framing joint is required to withstand 100 psi in tension in order to comply with code, is it responsible to report that a 600-psi joint is much more structural than a 500-psi joint? Both far surpass the code requirements. The difference is hardly worth mentioning.

Similarly, the facts in the fire testing of the panels are simple. When properly installed and tested in strict compliance with ASTM procedures, both types of panels exceed national code requirements and comply with the BOCA code.

Another long-standing question that has never been definitively answered is loss of R-value in the urethane and isocyanurate foam due to aging. Chlorofluorocarbons (Freon) are gases used as blowing agents in many cellular plastics such as urethane and isocyanurate. This gas gives the foam its high R-value, but as this gas dissipates so does the R-value. Products such as R-Max are foil-faced on both sides to arrest the dissipation of the Freon. But what happens on a panel with no foil facing?

I would love to see this question resolved by qualified third-party testing. Meanwhile, it would be prudent to request a written statement attesting to the stability of the R-value of the foam selected.

Even if this question is resolved satisfactorily, a darker shadow looms over the urethane/isocyanurate industry: the depletion of the earth's ozone layer.

A memo on chlorofluorocarbons (CFC) published by the Society of the Plastics Industry in Washington, D.C., on January 30, 1987, states: "CFC 11 and 12...have such a large potential for destroying upper atmospheric ozone that global concern is warranted. CFC's are used to make many plastic foams....EPA's conclusion [is] that CFC production must be reduced by 85 percent in order to maintain the current level of CFC's in the stratosphere."

BASF, a manufacturer of expandable polystyrene, has issued a written statement that their product Styroper "in the raw, expanded or molded form does not contain CFC's."

It will be interesting to see what effect this environmental concern has on the industry in the future. In the meantime, let your conscience be your guide.

There are other questions that should be addressed when selecting a panel. For example:

1. What is it like to work with the panel?
   a. How easy is it to rout out the foam around rough openings?
   b. Should you use plywood or waferboard on the panels?
   c. Should you use regular or MR Sheetrock on the panels?
   d. Is a type-I bond (waterproof) preferable when choosing a panel?
2. How important is a vented roof when using stressed-skin panels?
3. How are you going to attach baseboards, electrical outlets, and switches?

These questions should be the topics of future articles, articles written in a positive light, with helpful tips on innovative techniques for working with panels. Most important, if negative information must be reported, let's make sure it is based on facts established by independent third-party testing.

No one is served by misinformation and biased sales rhetoric. Foam-core panels are on the verge of becoming a major force in the building industry, not only in the enclosure of post-and-beam frames, but in the development of the structural-panel home.

If consumers are bombarded with negative information, that is all they will remember. If they avoid panels altogether, the panel industry as a whole will suffer.

I think these panels are too important to be used for target practice. My hope is that future articles and seminars will exercise caution and keep panel differences in perspective.

T. Wayne Kondor
Underhill, Vt.

T. Wayne Kondor is president of Kondor Konstruction, which builds timber-frame homes and manufactures EPS stressed-skin panels.—Ed.