Letters

An Old Debate: Cutting Trusses

To the Editor:

We at the Wood Truss Council of America (WTCA) would like to respond to the recent article "Retrofitting a Skylight in a Truss Roof" (2/02) by Les Deal. As a trade association representing the metal-plate-connected wood truss industry, we believe that this article did not cover some very important safety considerations with regard to altering trusses.

This article goes against one of the fundamental accepted practices in our industry: Never cut, drill, or alter truss lumber or plates. Any field modification that involves the cutting, drilling, or relocation of any structural truss member or connector plate shall not be done without the approval of the truss manufacturer or a licensed design professional.

In the article, Les provides the reader with a "cookbook" method of altering trusses. Unfortunately for the reader, there is no special documentation available to guide in developing repair details for field modified or damaged trusses. The reason is that design conditions and the extent of damage vary considerably from job to job. Without proper engineered repair detail drawings, repairs or alteration should not be attempted.

How can Les state that he could "safely" reframe the side of the roof that was receiving the skylight by simply adding OSB gusset plates? It is true that most truss repairs that are generated during the construction phase involve lumber scabs over broken webs and chords or plywood (or OSB) gussets over damaged plates or joints. These are generated following the design principles outlined in AF&PA's *National Design Specification (NDS) for Wood Construction*.

By altering the roof trusses, Les has changed the bearing location of the trusses. The article does not state much in the way of checking to see if the non-bearing partition wall could handle the additional loading that the modified trusses provide. While the trusses could be modified to provide the required skylight well, it should not be assumed that readers of this article could modify them on their own. In 1995, the WTCA Engineering Review Committee in cooperation with the Truss Plate Institute developed WTCA 1-1995. This industry-accepted standard defines the responsibilities of the individuals and organizations involved in the preparation, submittal, review, and approval of drawings utilized by truss manufacturers. WTCA 1-1995 specifically states that any party who cuts or damages a truss shall be responsible for securing the engineering required for the repair and the subsequent costs.

Ryan Dexter, Staff Engineer
Wood Truss Council of America
Madison, Wisc.

Les Deal, a remodeler in Cedar Rapids, Iowa, responds: The example I used was such a simple truss alteration that I have trouble believing that your objection is really with the article. It seems that the real concern is with the "what ifs" had the example been something more bizarre, or perhaps the fear that a contractor would irresponsibly create problems altering trusses. I think JLC *readers understand that the article is not an instruction book — "Everything You Need to Know to Alter Trusses."*

Although I didn't address them in this article, I have also made other types of modifications. I chose a relatively safe example, where the load paths were obvious to an experienced builder, to illustrate the point that truss roofs are not inalterable.

As a remodeler for the past 30 years, I've witnessed innumerable instances where trusses were in the way of what

THE JOURNAL OF LIGHT CONSTRUCTION

A Hanley-Wood Publication
www.jlconline.com

Editor Don Jackson
Senior Editor Ted Cushman
Associate Editors Dave Holbrook
Jon Vara
Assistant Editor Patrick McCombe
Managing Editor Jill Mason
Illustrator Tim Healey
Contributing Editors Michael Byrne
Ted Cushman
Henri de Marne
Don Dunkley
Paul Fisette
David Frane
Carl Hagstrom
Joe Stoddard
Quenda Behler Story
Senior Web Developer Braddock Bull
Special Projects Editor Ursula Jones

Production Director Theresa A. Emerson
Art Director Barbara Nevins
Graphic Designer Annie Clark

Circulation Director Paul Ruess
Customer Service Manager Angela Packard
Marketing Associate Amy Barcomb

General Manager Steven Bliss
Operations Manager Donna Kaynor
Office Manager George Carpenter

Group Publisher Rick Strachan
Publisher Neil Rouda

President, Magazine Division Peter M. Goldstone
Director, Magazine Operations Ron Kraft

Published by Hanley-Wood, LLC

JLC LIVE's RESIDENTIAL CONSTRUCTION SHOW
Show Director Rick McConnell
Show Manager Donna Ladd
Major Account Manager Tami Svarfvar
Marketing Manager Kevin Spaulding
Conference Manager Sherry Daniels
Construction Events Manager Don Dunkley
Operations Katina Billado
Account Executives Don Alter
Sandi McMullen
Registration Manager Vila Snider

CORPORATE
Chief Executive Officer Michael M. Wood
President Frank Anton
Executive Vice President Jack Brannigan
Chief Financial Officer James D. Zielinski
Chief Operating Officer Fred Moses
V.P., Finance John Dovi
V.P., Circulation & Database Dev. Nick Cavnar
V.P., Human Resources Jeff Fix
V.P., Production Joanne Harap
V.P., Marketing Ann Seltz
Business Systems Manager Kari Christianson
Director, Information Technology Aaron Packard

BPA INTERNATIONAL

JLC Information Directory

www.jlconline.com

Mailing Address:
The Journal of Light Construction
186 Allen Brook Lane
Williston, VT 05495
802/879-3335

Editorial: We welcome letters and article submissions from readers. Keep copies of all original materials. Contact us by mail at the address above, Attn: *JLC* Editorial Dept, or via e-mail at ***jlc-editorial@hanley-wood.com***.

Subscriptions: To order a new or renewal subscription, call 800/375-5981 or visit our website at ***www.jlconline.com***. For assistance with your current subscription, e-mail us at ***jlc-cs@hanley-wood.com***, call us at 800/375-5981, or write us at The Journal of Light Construction, P.O. Box 420234, Palm Coast, FL 32137. Subscription rates for qualified readers in construction trades: $39.95/1 year, $64.95/2 years. Non-qualified readers: $59.95 per year. Sales tax required on subscriptions to DC (5.75%), GA (4%), VT (5%). Group rates available on request.

Single back issues and articles: Available for $4.95 each, plus $5.00 shipping/handling per order; call 802/879-3335, ext 143. Articles are also available for purchase online at www.jlconline.com.

Reprints: For custom reprints (quantities of 500 or more), call Carla Gitlin at PARS International Corp., 212/221-9595 ext. 321, carla@parsintl.com.

JLC* Bookstore:** Visit our bookstore online at ***www.jlcbooks.com. You can order from our secure website, call us at 800/859-3669, or order by mail to Hanley-Wood Bookstore, P.O. Box 5000, Forrester Center, WV 25438.

JLC* LIVE:** For information about attending the *JLC* LIVE conference or expo, contact us online at ***www.jlclive.com or call 800/261-7769; for exhibitor or sponsor information, call Tami Svarfvar at 802/479-9526 (ext. 184). To request a press pass, call Kevin Spaulding at 802/879-3335 (ext. 133).

JLC*-Update:** Subscribe to our monthly e-mail newsletter for residential and light commercial contractors. It's free to *JLC* readers, and each issue contains industry news and the latest tips on materials, techniques, tools, and technology. Subscribe online at ***www.jlc-update.com/subscribe.

Letters

needed to be done. I learned early on that truss manufacturers did not want to be of help. I've also seen many inferior remodel jobs where the flaw could be traced to the contractor's "belief" that trusses couldn't be altered — therefore, he didn't try. Therein lies the problem. Your industry is building a product that you do not intend to be adaptable to future needs. Yet that adaptability — the ability for the home to change to meet future needs — can be important in maintaining its resale value.

The truss industry needs to switch its position and use its knowledge to be of aid. Make yourselves available to contractors and provide them with help, regardless of who manufactured the trusses.

Given the availability of engineered lumber, virtually any span can be raftered in nonobtrusive ways. As for gussets, 40 years ago we built our own trusses using plywood gussets. The houses are still doing fine. If your problem is that you want alterations to be made using metal gussets, then make available a portable metal gusset clamp for contractors to use on the job. Work with us, not against us.

Getting the Most From Foil-Faced Foam

To the Editor:

Concerning Paul Fisette's response to the question of putting vinyl siding over foil-faced foams (*On the House*, 3/02): I've questioned several foil-faced foam makers in the past to find out more about the product, but they didn't give me a lot of detailed information. I did find a study indicating that the application of any clapboard-style siding directly over foil-faced foams greatly reduces the additional R-value associated with using foil-faced foams. It went on to say that if you're planning on using a foil-faced foam for its additional R-value, you must allow an unrestricted air space between the foil and the siding (by using furring strips, for example).

Rick Lappin
via e-mail

Paul Fisette responds: The R-value of a typical foil-faced rigid foam panel is determined as conductive resistance. Installing clapboards right against the panel will not lessen that rated R-value. However, what Rick says makes perfect sense. If you want to get the full benefit of the reflective surface (typically, an additional R-2 maximum), you need to leave an air space between the face of the reflective surface and the wall covering. This is the same principle that controls the effectiveness of radiant barriers.

Better Frost-Free Post Detail

To the Editor:

While the logic of placing pergola posts into concrete-filled Sonotubes (*On the House*, 2/02) appears unassailable, I have made the following observation of many such embedded posts. Over time, water flows down the gaps between the posts and the concrete footings, where it freezes and expands, causing unsightly (and sometimes structurally significant) footing cracks. I'd rather see a positive connection made between the base of the wooden post and the top of the footing, such as with a proper metal bracket, to resist the wind uplift that was mentioned.

Wayne Cobb
Home Inspections Plus, Inc.
Portland, Maine

Let It Drain

To the Editor:

I would like to offer some thoughts on the Q&A item on preventing frost action on posts (*On the House*, 2/02). As a landscape architect in Massachusetts, I could not agree more with Ron Hamilton about the need for the Sonotube in the post-setting detail. But the detail shows the concrete tooled flat at the top of the footing. This will allow water to stand on the footing surface and give it a chance to seep into the inside of the post and concrete. Because this water has nowhere to drain, it can cause the bottom of the

post to rot upwards. So I prefer to set the post all the way down onto a good base of well-draining material, then fill the Sonotube with concrete around the post for stability.

Vincent F. Difini, Jr.
via e-mail

Unshielded Twisted Pair

To the Editor:

I enjoyed the article "Connecting to the Future" (3/02) by Joe Stoddard. However, the article defines UTP as "uniform twisted pair;" in fact, it is actually "unshielded twisted pair," in contrast to "shielded twisted pair."

UTP is the most common form of data cabling today in commercial applications because of its relatively low cost and ease of handling. Commonly available grades range from Categories 3, 5, and 5e (recommended) to potential future standards like Categories 6 and 7. Shielded twisted pair was more common in the past but has largely fallen by the wayside in commercial application because of its higher cost and lower ease of handling.

The section "The Future" at the end of the article was also interesting. It might be worth looking at the emerging 802.11 wireless standards in a later article, as wireless is experiencing rapid growth in the data communications industry.

Les Poltrack
LP Construction
Mountain View, Calif.

Safety Reminder

To the Editor:

On the cover of the February issue, two carpenters are assembling a frame wall with a pneumatic nail gun. The placement of the one carpenter's hand, in close proximity to the nail gun, is a sure accident waiting to happen. The other carpenter, holding the stud, is looking directly where the nail is to be shot and is not wearing safety glasses. This is another potential for injury.

In the constant struggle to keep Worker's Comp rates low, we in the industry continue to be our own worst enemies, by inattention to very basic safety issues. *We* are the professionals who can change the accident trends, thus reducing insurance rates for all of us, by following basic commonsense safety guidelines on the job site, everyday.

Douglas Kiracofe, Builder
Winchester, Va.

ERVs vs. HRVs

To the Editor:

In response to the article "Installing a Heat-Recovery Ventilator" (1/02), I would agree that an HRV would make more sense than an ERV where an indoor pool or spa is involved. In most cases, however, an ERV will reduce excess moisture (in cold-weather states in winter) without drying out the house (tempering the extremes of humidity). Elimination of all moisture is not desirable. With an HRV, a humidifier is often added to the furnace to reinstate moisture to the house that the HRV was taking out! Tens of thousands of homes in the cold-weather states of New England, Minnesota, and Wisconsin have used ERVs successfully for 20 years.

Duane Amundson
Residential Products Manager
RenewAire LLC

Join the *JLC* Board

To help *JLC* stay in touch with our readers and thereby serve you better in the years ahead, we are assembling a reader advisory board — a panel of subscribers who are willing to share with us one hour three times a year to fill in a survey of no more than a few pages. Topics will range from business management practices to product and material usage to tool preferences. Survey results will be published in *JLC* for the benefit of all readers.

If you are a *JLC* subscriber and a professional builder or remodeler and are interested in serving on the *JLC* reader panel — the *JLC* Board — please respond by e-mail to djackson@hanley-wood.com or fax to 802/879-9384. Be sure to include "*JLC* Board" as part of the message header. Or you may mail a response to The *JLC* Board, 186 Allen Brook Lane, Williston, VT 05495. Include your name, address, business name (letterhead where possible), and an e-mail address and fax number if available. The list of *JLC* Board members will be held in confidence by the *JLC* Editorial Department and will not be shared with any other group. We look forward to hearing from you.

Don Jackson
JLC Editor