LETTERS

Furnace Inspection

To the Editor:

I consider Richard Trethewey the premier ambassador for our industry. I would add one item to the maintenance checklist in his article "Heating System Tuneups" (2/96): namely, to check for heat exchanger perforations or leaks.

Generally, perforations in boiler heat exchangers show readily. Cracks or holes in furnaces are sneakier and more dangerous but should be searched for on an annual basis. Anyone can check for perforations visually with a light and a mirror. If imperfections are found, a professional should be called. Sometimes these will evidence themselves by a wavering flame, caused by air from the fan side impinging upon the flame.

Whenever we suspect a bad heat exchanger, we'll do a smoke test in addition to the visual inspection, by inserting the probe of a good CO tester in the plenum above the heat exchanger while the unit is operating. All of this is better than a post mortem.

Robert M. Livingston
Registered Master Plumber
Johnstown, Pa.

Truss Uplift

To the Editor:

In responding to a question regarding partition separation (*On the House*, 3/96), Dave Utterback says, "...the primary cause is probably truss uplift." However, past research by the truss industry suggests that trusses are the cause in approximately 20% of the cases of partition separation. This is far from "primary."

Trusses take an extremely bad rap for movement in buildings. Often the only part of the structure that stays exactly in the same place as it was when initially erected is the truss. I have been on two job sites in the last year where truss movement was blamed for cracked partitions. We used a laser level in both cases to determine what was really moving in the building. In both cases, the bottom chord of the truss was still flat. The problem in the first was variable sized floor joists and a poorly constructed basement beam that was deflecting. The problem in the second was foundation settlement. The interior bearing wall had dropped 1/2 to 3/4 inch, causing serious cracking throughout the multifamily building.

Partition separation is a very complex problem, since many building elements are interacting. When movement occurs, it is important to find the exact cause or the solution chosen may not be the correct one. We agree with Dave that the attachment of trusses to nonbearing walls should not be done. The use of floating gypsum corners and gypsum clips is the best method to use to avoid cracking, no matter what in the building is moving.

Kirk Grundahl, P.E.
Executive Director
Wood Truss Council of America
Madison, Wis.

Cathedral Ceiling Detail

To the Editor:

A number of builders in our area use a system that is easier than the one described in the article "A Nearly Perfect Cathedral Ceiling" (2/96). Regardless of framing materials (I-joists, LVL, or conventional 2x10 or 2x12 lumber), batt insulation is installed with the facing removed, making sure it is in full contact with the rafter sides. The roof is vented with ridge and soffit vents and a minimum 1-inch air space above the insulation. Using 8 inches R-30 with 2x10s or 9 inches R-30 with 2x12s eliminates the need for vent baffles. The underside of the ceiling is then sheathed with any thickness of polyisocyanurate foam board, depending on the R factor desired. All joints are then sealed with Tyvek tape. This method also creates a thermal break between the rafters and the finished ceiling, which means no frost lines showing up on the drywall due to cold transfer. I have used this construction for more than 15 years and have never had ice back-ups or any other failure.

Anthony Murad
Lebanon Springs, N.Y.

Eco-Friendly Lumber Not as Simple as It Sounds

To the Editor:

After reading your December 1995 issue, I felt I should weigh in on the article about eco-friendly lumber products (*Eight-Penny News*). While we have nothing against increasing demand for lumber products which come from sustainable operations, your readers should be aware that it may not be as easy as it sounds to determine which companies practice sustainable forestry and which do not.

First, a company that has been certified very likely does practice good forestry. However, it does not follow that those which have not been certified do not practice good forestry. Their forestry practices may be as good or better than those of the certified companies. They just haven't bothered to pay someone else to say so.

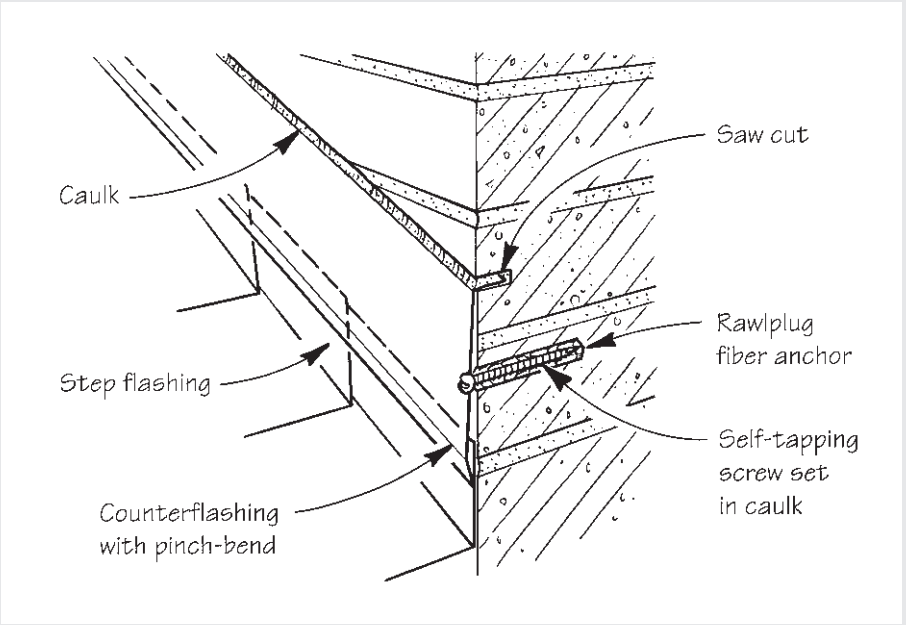
Another issue that must be dealt with before certification can gain widespread acceptance by both producers and purchasers is the lack of understanding reflected by Eco Timber's Eugene Dickey when he says, "If you have to replant, you're doing something wrong." Obviously, Dickey has little understanding of the difference between managing resources and simply living with what nature gives us. Replanting is an

Chimney Flashing Option

To the Editor:

Thanks for the excellent article, "Leakproof Flashings for Masonry Chimneys" (1/96). To add a couple of notes: Urethane caulk is the *only* caulk to use on a masonry detail like this, but significant attention must be paid to cleaning the joint. My experience with brick dust is that the joint needs to be washed out with water and left to dry. As tenacious as urethane caulks are, brick dust seems to be an excellent bond breaker. A couple of chimneys I did a few years back failed from urethane non-adhesion — not on the flashing, but on the reglet (groove). Wire brushing and vacuuming didn't seem to be enough.

The other detail is a little more controversial. Instead of the counterflashing staggering up the side of the chimney with the mortar joints (a detail that can leak along the vertical lines in a high wind), I have been using continuous counterflashings with the same spring-loaded hem lock as shown in the article (see illustration above). I mount a ledger on the side of the chimney and run my circular saw with a dry diamond wheel along the ledger for a nice, straight line. This reglet is at least 1 1/4 inches deep and needs to be thoroughly cleaned. When the flashing gets installed, it goes into a secondary bead of urethane. After this sets up, I run a primary bead on the exposed area. I rough up the copper with 50-grit sandpaper so the urethane sticks well to it.



Since it's chancy to depend on caulk alone, I always use a Rawlplug masonry anchor to hold the continuous counterflashing. This fiber plug has a lead center, which the #10 (minimum) stainless-steel tapping screw threads snugly into. Don't draw the screws down so tight as to flex the counterflashing out of shape. A dab of urethane in the hole in the aluminum or copper before putting the screw in ensures a leakproof detail.

Jody Williams
Lambertville, N.J.

essential part of timber management and without timber management, we could never keep up with the world's growing demand for wood.

Your readers would do well to use their own common sense in making environmental judgments about building materials. Wood is the only such material that comes from a renewable resource, is energy-efficient in both its manufacture and use, is reusable, recyclable and biodegradable. The forests of the Western United States are among the most productive in the world and, if managed, are capable of producing a steady, sustainable supply of timber for products now and forever. These forests also are subject to the strictest environmental laws and regulations anywhere. Adherence to these laws is, by itself, a form of third party certification. And, I'm proud to say, forest products companies in the West have a better than 95% compliance record.

Timm Locke
Western Wood Products Association
Portland, Ore.

Volts x Amps = Watts

To the Editor:

Contrary to the author's statement in "Warm Solutions for a Cold Kitchen" (*Kitchen & Bath*, 4/96), wiring an appliance for 240 volts instead of 120 volts does not reduce the operating cost. The electric meter reads watts — a product of volts x amps. A 240 volt appliance requires half as many amps as it would if it were wired for 120 volts, thus possibly permitting a smaller wire size and circuit breaker. But watts are what you pay for, not amps. A 240-volt circuit gives you more energy potential, but does not reduce the amount used.

David Hildner
River Forest, Ill.

Paper Size

To the Editor:

I enjoyed Carl Hagstrom's article "Presentation Drawings for Design-Build" (2/96). While he gave good advice, there is one mistake: A D-size drawing sheet is 24x36 inches, not 18x24, and an E-size sheet is 30x42 inches, not 24x36.

Keith Cope
Columbia, Mo.

Keep 'em coming! Letters 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 *JLC*, RR 2, Box 146, Richmond, VT 05477; or e-mail to JLC@bginet.com.