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BPA INTERNATIONAL

JLC's

Letters

Controlling Crawlspace Humidity

To the Editor:

I liked the article "Curing Crawlspace Moisture Problems" (11/97). I also have found draining the soil beneath the poly to work well. I am a bit confused about the recommendation to vent the foundation using a fan controlled by a humidistat and a dehumidistat. The article says that the fan is activated when the outside air contains about 10% less humidity than the crawlspace air. I am not sure how you could determine that with a humidistat and dehumidistat. In my experience, these controls sense relative humidity, not the amount of moisture in the air. If they are set up so that the fan is activated when there is a 10% difference between crawlspace and outdoor relative humidity, then there will be a large amount of time when the fan is *humidifying* the crawlspace with outdoor air, not dehumidifying it.

For instance, if the crawlspace air is 70°F and 65% RH, and the outdoor air is 80°F and 47% RH, the outdoor air contains slightly more moisture than the crawlspace air (0.00996 lb. H_2O per lb. of dry air in the crawlspace vs. .01006 lb. H_2O per lb. of dry air outside). Under these conditions, the fan will run continuously, *increasing* the crawlspace humidity until night comes and the outdoor relative humidity rises, causing the fan to turn off.

Terry Brennan
Camroden Assoc.
Westmoreland, N.Y.

To the Editor:

I agree with the structural recommendations in the article "Curing Crawlspace Moisture Problems" (11/97). With regard to the ventilation control strategy, the difference in relative humidity doesn't always work to determine when to operate a ventilation fan. I suggest a large energy-efficient dehumidifier to control crawlspace humidity and assist with humidity control of the entire home. This is a sure way to eliminate the mold, odor, and health problems that damp crawlspaces can cause.

Ken Gehring, President
Therma-Stor Products
Madison, Wisc.

Unvented Gas Fireplaces

To the Editor:

Your recent article on unvented fireplaces ("Vent-Free Gas Heaters — How Safe?" 7/97) listed those states that do not allow unvented fireplaces. In general, Wisconsin should be added to the list, in that it prohibits these units in one- and two-family dwellings built since June 1, 1980, and in all commercial or multifamily dwellings.

Tom Kasper
Division of Safety & Buildings
State of Wisconsin

Likes Steel Framing

To the Editor:

I am writing in regard to the letter "On Using a Single Top Plate" (11/97). As a former construction manager for a home builder in the Chicago area who has built over 500 homes with single top plates, I've never heard any carpenter complain about difficulty in building a wall with a single top plate or

about straightness. Many of those homes were $500K and up, with very picky clients, and again, no complaints.

From a structural perspective, a double top plate is only needed when studs and joists do not line up within 1 1/2 inches on-center of each other. Thermally, the double top plate also makes no sense. (The builder I mentioned above is also the premier energy-efficient builder in the area.)

But my favorite solution is to use steel studs with a polyisocyanurate structural foam sheathing or structural fiberglass sheathing and blown-in insulation. Steel eliminates waste (no rejected studs due to twisting and warping), and what waste there is can be recycled, reducing dumping costs. Steel also eliminates nail pops and the subsequent service costs. Steel cuts down labor costs as well: One person can carry 20 to 50 studs at a time, there's less time spent straightening walls, and most of the details and construction methods are easier than with wood framing. Steel also adds the advantage of being inherently more earthquake resistant and, if properly strapped, is more resistant to wind damage.

Daniel Phipps
Chicago, Ill.

Figuring Second-Story Loads

To the Editor:

Regarding the article "Calculating Loads on Beams & Headers" (*Practical Engineering,* 11/97), I am sure that I will not be the only one to tell you that the drawing at the upper right corner on page 70 has the labels for the ridge beam and the center girder reversed. It would have also been helpful to label the upper floor level as the "second floor" in this example, perhaps showing kneewalls to help with the picture.

The load example is also incorrect, as the 30-psf second-floor live load would only be applicable where the clear height from floor to ceiling is a minimum of 42 inches (BOCA 1606.2.2, 1996). That same code section, as well as section 1606.2.3, which concerns an attic built with trusses, has some additional requirements for loading. In either type of construction, the second-floor live load would not extend all the way across the floor to the outside walls as depicted in the illustration.

Stuart Jacobson, S.E.
Stuart K. Jacobson & Assoc.
Northbrook, Ill.

15-Gauge vs. 16-Gauge Nailers

To the Editor:

I was surprised and disappointed to read the article "New 15-Gauge Finish Nailers" (12/97) — surprised because two of the finish nailers mentioned were introduced three years ago and are nothing new, and disappointed in the article's bias toward 15-gauge fasteners.

Almost half of all finish carpenters prefer 16-gauge fasteners, due to the quality expected of a finish carpenter's work. Because of their smaller head and shank diameter, 16-gauge nails are more aesthetically pleasing. They also do not split the wood as easily as 15-gauge fasteners, a major concern for fine finish work. Finally, 16-gauge fasteners are generally more affordable.

Paslode does not manufacture a 15-gauge finish nailer, but does make a popular 16-gauge pneumatic nailer (Model 3250-F16) and the world's only cordless 16-gauge finish nailer, the innovative Impulse IM250 II.

Lew Klein, Manager
Marketing Communications
Paslode
Vernon Hills, Ill.

Bidding Debate Not About to Abate

To the Editor:

In Mr. Eldrenkamp's continuing complaint about the burden of competitive bidding ("Architects for Hire," *Letters,* 12/97), he may be losing sight of three points.

1. When an architect asks for price proposals, he is not spending his own money. In awarding a project on behalf of an owner, the architect has a fiduciary responsibility to obtain the best proposal available. It is rare that bids come in virtually identical. More commonly, there may be significant differences among bids from several equally well-qualified contractors, particularly on complicated projects. A difference of, say $50,000 on a half-million-dollar project would never come to light if bids were not taken. From the point of view of the owner, this would be a lot of money to throw away.

2. Mr. Eldrenkamp's satirical analogy suggesting that architects should also be required to go through an extended proposal procedure is not as funny as he may think. To select an architect, most public clients (and many larger private clients) use an arduous, competitive selection process, involving a seemingly endless series of interviews, elaborate presentations, and submission of complicated qualification forms and other documentation. This ordeal can eat up days of time with only a small probability of success.

3. Finally, there is more than an order-of-magnitude difference between the architect's design fee and the construction contract sum received by the contractor. Since the architect's fee is a small fraction of the project cost, differences in fees between equally well-qualified architects are relatively less important to the owner than the same percentage difference in the contractor's price. For instance, a 10% difference in a $20,000 fee ($2,000) would be far less important to the owner than a 10% difference in a corresponding $500,000 project cost ($50,000). For this reason, it is much more important to the owner to get cost proposals from contractors than from architects.

Carl Mezoff, AIA
Stamford, Conn.

Paul Eldrenkamp responds:

Mr. Mezoff offers three reasons I should stop complaining about competitive bidding and just accept it. I'll paraphrase and respond to them in order:

Reason #1: It's the architect who's awarding me the project, not the

client, and I should help the architect meet his own interpretation of "fiduciary responsibility" by agreeing to bid. *In my line of work — residential remodeling — it's the client who's hiring me, not the architect. The idea that it's the architect who hires the contractor "on behalf of the owner" seems to assume that the honorable, professional architect inevitably needs to protect the owner from the wily, unscrupulous contractor. In my experience, the architect needs to protect the owner from the contractor no more often than the contractor needs to protect the owner from the architect.*

Reason #2: Since architects are subject to "ordeals" that "can eat up days of time," contractors should also be willing to subject themselves to such ordeals. *Can't we work together as related professions to demand the respect for our time that we all deserve? Architects and contractors alike should be able to expect that their time is valued by others. Competitive bidding puts an extremely high value on an owner's potential (and often illusory) opportunity to save some money; it puts absolutely zero value on a contractor's time. This is not a great way to start what needs to be a trusting, mutually beneficial, long-term relationship.*

Reason #3: Because the design part of a project costs less than the construction part of a project, it's not important to bid out design but it's still important to bid out construction. *I'm curious about Mr. Mezoff's math. Is he saying that he'd charge $20,000 in design fees for a project with a construction budget of $500,000? If so, he's charging only 4% of the construction budget in design fees, which suggests to me that his documentation might be pretty thin. If this is the case (and I don't know that it is), I'd be even more worried that he's encouraging his clients to shop on price. Competitive bids coupled with weak documentation put an owner in a dangerous position. In a team-based negotiated contract, however, documentation can be noticeably leaner without putting the owner at risk.*

The most discouraging thing to me about Mr. Mezoff's reasoning is that it fails to address my central thesis: As a contractor I can provide my absolute best service and overall value if I am brought in early on as part of a team. To me, traditional competitive bidding is not so much a "burden" as a failure to take full advantage of my potential expertise in both construction and customer service.

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