

## Nails as Brick Ties?

To the Editor:

In the article "Water-Managed Wall Systems" (3/03), the brick veneer cavity wall detail lacks an important component to ensure proper drainage through weep holes in the bottom course of brick. The product called Mortar Net ensures that no mortar droppings will fall down to weep hole level during construction, thus blocking water from escaping through the designed weep holes at the bottom of the cavity.

Also, galvanized or stainless-steel nails do not have the same dimensional area that galvanized corrugated or adjustable masonry anchors do. This detail will create a weaker veneer system.

Charles Rozzi  
via e-mail

*Joe Lstiburek responds: Keeping the weep opening open is necessary, and Mortar Net is an excellent product for this purpose. A more traditional way to accomplish the same thing is to leave bricks out of the assembly at the bottom to clean out the mortar droppings. The bricks are mortared in place at the bottom after the cavity is cleaned. Sand is placed over the flashing or brick ledge prior to laying the bricks to act as a bond-break to allow easy cleaning of the mortar droppings out of the bottom of the cavity.*

*Some builders like to place pea-gravel at the bottom of the opening to prevent the weep openings from being plugged. This is a bad idea. When the mortar falls on top of the pea gravel, we get something called "concrete."*

*With respect to the nails as brick ties, they are not meant to replace engineered brick ties in commercial applications. They are meant to replace the galvanized corrugated ties commonly used in residential construction. These corrugated ties are nailed in place with —*

*you guessed it — nails, and the strongest connection is the nail into the stud. The weakest link is the tie itself. These corrugated ties are not good in tension and they are not good in compression. During suction wind loads, they pull out of the mortar joint like a hot knife out of butter — just ask FEMA about this problem. The head of the galvanized or stainless-steel nail acts as an anchor in the mortar bead to prevent this. Plus, the nail is great in compression, because it's round, not flat. The geometry of the section is more important than the dimensional area. (If you doubt this, pick up a flat brick tie and try driving it into a stud, like a nail, with a hammer.)*

*In the real world, the mortar droppings we mentioned above end up being structural: They transfer the compressive wind load to the wall, since the useless corrugated ties fold like a cheap suit.*

## Questions Brick Ties

To the Editor:

Thanks for the great article by Joe Lstiburek ("Water-Managed Wall Systems," 3/03). I wondered, though, why the brick veneer wall was illustrated with nails as wall ties. Wall ties give lateral support to a thin masonry wall but have to be flexible enough to allow the wood frame to shrink slightly within its masonry shell as the wood gradually dries out and the house settles. The lower courses of masonry wouldn't be affected, but higher in the wall the nails would begin to bend as they are pulled down by the shrinking frame and held firm in the brickwork by the weight of the masonry above. The wall ties highest in the wall, while in a position of leverage to give the most effective support to the brick wall, are also the most affected by the total shrinkage of the frame. With relatively little weight from the wall above to hold them

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## Letters

secure in the brick, rigid connections like nails could crack the masonry horizontally near the top of the wall as the frame settles, even slightly.

Bill Thibadeau  
Norcross, Ga.

### Rainscreen Siding Details

To the Editor:

I read Joseph Lstiburek's "Water-Managed Wall Systems" with great interest. His comment that today's #15 and #30 felts do not perform as the old-style asphalt-impregnated felts did is a condemnation of the constant search for manufacturing things more cheaply. Several years ago, we had a similar situation with fiberglass roof shingles cracking all over the country because the industry skimmed on the amount of asphalt needed to stabilize the fiberglass mats.

To prevent the problems Lstiburek describes in his article, I have specified the rainscreen (referred to by Lstiburek as "water-managed wall systems") on several houses, including my own, over the last 15 years. The results appear to be very satisfactory: no more peeling paint, rotting walls, and splitting, curling clapboards.

I found one thing missing from Lstiburek's article: There is no mention of the need to screen the drainage spaces to keep out insects and rodents. For this, I have used GAF's Cobra Fascia Vent, a spun plastic material similar to that used for some ridge vents. It seems to be the perfect material for this application: It is 3 inches wide by 1 inch thick. It fits well between 1-by furring strips, compressing easily to fit the depth of the furring. It comes in 50-foot coils, two coils per pack. You can special-order it from building material suppliers handling GAF ventilation and roofing materials.

I wish all builders and remodelers

would get on the bandwagon and install all sidings on furring strips as I see done on Canadian modular units shipped to Vermont. It's an inexpensive insurance policy that eliminates most siding callbacks and can only lead to satisfied customers.

Henri de Marne  
Waitsfield, Vt.

### What To Do With Vermiculite Insulation

To the Editor:

After reading your article "Vermiculite Insulation: Asbestos Threat?" (*In the News*, 3/03), I looked at a job renovating an attic and noticed that the previous builder had used vermiculite insulation. I was wondering what steps I should take to dispose of this. Also, I was wondering if there was somewhere I could send a sample to determine if it contains tremolite. Should this insulation be removed, or would covering it with fiberglass insulation be a safe alternative?

Bill Harrington  
Battenkill Builders  
Bennington, Vt.

*Jon Vara responds: According to EPA project manager Jim Christiansen, who is in charge of a federal cleanup of vermiculite-containing attics in Libby, Mont., carefully covering the vermiculite with fiberglass without disturbing it will probably not raise enough dust to cause much of a hazard, but it won't make the problem go away, either. If you're going to venture into the attic, wear a well-fitted respirator equipped with a HEPA cartridge and a disposable Tyvek suit; the homeowner should take similar precautions before going into the attic.*

*The only way to eliminate the problem is to have a qualified asbestos-abatement contractor come in and remove the vermiculite and confirm that the area and the living space are free of fibers. There are well-established*

*methods for doing that, but it's not going to be cheap. Don't try to remove the material yourself, or you're likely to spread asbestos fibers throughout the living space.*

*To add to the confusion, there's a serious inconsistency between law and science with regard to vermiculite. Under EPA regulations, only substances that contain more than 1% asbestos are regulated as asbestos-containing materials. Jim Christiansen notes that although an individual sample of vermiculite may contain anywhere from a nondetectable amount of asbestos up to 5% or so, a reading at or near the bottom of that range definitely does not mean that the material is safe. "The 1 percent standard was developed for things like pipe wrap, where you're talking about a solid material," he says. "The asbestos in vermiculite is so friable and becomes airborne so easily that it's hazardous even at very low levels."*

### Safety First, Please

To the Editor:

How many times do we safety-conscious contractors need to write in to tell you that you have a hazard on your front cover (3/03)? Safety glasses on the saw stand, not on his face! And tell me he is not making a cut with his left arm on the right side of the blade.

We pay more than \$30 per hundred paid on carpenters making less than \$22 per hour for workers' compensation. Do we really want to start using your magazine as a safety test — "What is wrong in this picture"? I would hate to not be able to attend *JLCLive* this year because of higher work comp rates. Your careless approach to safety affects everyone from you to the builder, costing more to the end consumer. Enough said.

I'm a Pissed-Off, Accident-Free, Safety-First General Contractor who will continue to read your magazine

## Letters

even though it's getting harder to afford paying \$50,000-plus in workers' comp per year, because of other carpenters, builders, and publications not caring about safety.

Jeff DeBernardi  
DeBernardi Development  
Pleasanton, Calif.

### Bathroom Design by Magic

To the Editor:

In the article "When a Double Vanity Just Won't Fit" (*Kitchen & Bath*, 3/03), you solve a vanity problem in the way we all wish we could, by bending the laws of physics. Look closely at the two vanity drawings on page 109 and you'll see that the scale magically changes from one to the next, despite the sink bowls remaining the same. In the top figure, even the measurements of 30 and 15 inches add up to being shorter than the 36 inches marked in the lower figure.

Dan Travers  
Seattle, Wash.

### Post Haste

To the Editor:

Regarding "Fitting Post to Stone, Teriyaki Style" (*Backfill*, 3/03), were I the building inspector or owner's representative, I'd reject this work. There is no provision to adequately resist vertical lift due to frost heave in the soil. The grouted rod can't begin to match the forces of frost-heaving soil.

Robert J. Randall  
Randall Engineering  
Mohegan Lake, N.Y.

*Thanks for the comment. Given the soil type — sand — and all that gravel placed around the sonotube-BigFoot combination, frost heave seems unlikely, in our opinion.*

— The Editors

### Swelling of OSB Roof Panels

To the Editor:

The writer who has trouble with OSB swelling (*Q&A*, 4/03) failed to mention whether he spaces the OSB as per manufacturer recommendations. It has been our experience that when the recommended 1/8-inch space is left at all panel edges, the OSB has room to expand and contract, which seems to eliminate, or at least minimize, the edge swelling that the article describes. Unfortunately, information from APA indicates that this is only a recommendation, not a requirement, meaning that the contractor makes the decision whether to go "the extra 1/8 inch."

Van Thornton  
Niles Township Building Department  
Niles, Mich.

### 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*, 186 Allen Brook Ln., Williston, VT 05495; or e-mail to [jlc-editorial@hanley-wood.com](mailto:jlc-editorial@hanley-wood.com).

