



# THE JOURNAL OF LIGHT CONSTRUCTION

A Builderburg Group Publication

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JLC's

# Letters

## Starting Out Level

To the Editor:

The article "Building Rake Walls" by Eric Dickerson (4/98) was a well-written and informative piece. After 18 years of being in the building industry, my company's techniques are amazingly similar to those prescribed by Mr. Dickerson. I would like to add one important point, however.

Mr. Dickerson refers to sheathing the walls before they are stood. We do the same, but pay special attention to the subfloor as far as level tolerances are concerned. When a wall is squared and sheathed, it obviously has no ability to rack. If the floor is out of level, even a small amount, the wall will be out of plumb. The taller the wall, the bigger the problem.

To eliminate this potential problem, we shoot in our rim joists with a transit, and shim the joists or notch the sill as required to maintain a perfectly level floor. It takes a little extra time, but it really pays off when you get to the interior trim, tile, and cabinet installation phase of the job.

Mark Carlson  
 Mountain Builders Inc.  
 Telluride, Colo.

## No Back-Priming With Rain Screen Siding

To the Editor:

It's great that you included the article on rain screen siding ("Rain Screen Siding Retrofit," 4/98). I would like to clarify some points. The primary

advantage of this design is to let the siding dry to the back. If the siding is to be painted (paint or solid color stain) you may be tempted to back-prime with paint. Back-priming with paint stops water vapor from leaving the wood, and our research indicates that back-priming with paint may have more negative effects than positive (at least with the substrates we have tested). A water repellent will permit drying (water vapor) and also reduce wetting (liquid water). A water repellent is what you really want to put on the back of the siding. It also helps to put it on the front. Best of all, dip the siding in a paintable water repellent preservative before installation (re-dip cut ends), then prime and topcoat.

Technically, the "rain screen" design doesn't have the bottom venting, just weep holes; what you are describing is ventilated siding. We have not tested ventilated vs. rain screen designs, but we believe each system has advantages. Currently we feel that ventilation as described in the article is the best method.

Mark T. Knaebe, Chemist  
 Forest Products Laboratory  
 USDA Forest Service  
 Madison, Wis.

## Charge What Market Allows

To the Editor:

I would like to take exception to Jim Zisa's article, "Turning A Profit" (3/98). Although Jim Zisa's point that a business must cover its costs and show a profit is well taken, his advice to Dan, a young man starting out on his own in the trade, would spell disaster to Dan's new business. What Dan can charge is determined by his expe-

### JLC E-MAIL FORUM

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rience and what the market will bear. If Dan were to charge \$43/hr for handyman work, he would probably kill his business, because he would price himself out of the market. If Dan keeps his rates low, limits his overhead to an absolute minimum, and strives for 100% customer satisfaction, he could build a self-sustaining customer base and in time raise his rates to the point where he could earn a reasonable profit from his efforts.

When I started out in this trade, I took jobs for \$4 per hour just to gain experience or to meet a new customer. Now, 20 years later, 100% of my customers come from referrals and I sell 90% of the work that I choose to bid on. I now only take jobs that I can make a profit on.

The reality is that what we charge for our services must meet what the market will bear. To survive in business today and be competitive, we must be efficient and keep overhead costs in line with what we can charge for our services.

Michael Prey  
MAP Construction  
Seabeck, Wash.

### Readers Speak Out on Safety

To the Editor:

The written material in the article "Engineered Lumber Update" (3/98) was fine. What shocked us was the lack of safety precautions in the photograph on page 47, especially the carpenter's lack of safety glasses.

Jim Butterfield  
Construction Manager  
Housing Authority  
City of Boulder, Colo.

To the Editor:

When are you going to get it! In your March 1998 issue, you have two photos of people using nail guns without eye protection. Two weeks ago I walked onto one of my job sites and saw one of my apprentices using a nailer without eye protection, and promptly decided that it was time for a "special" safety meeting that was going to make clear to everyone who

worked for me just how serious they should take using the eye protection provided: Use a nailer without eye protection and receive one full day off without pay! I believe they "got it."

I still wonder why it has taken this measure to get everyone to put on the glasses. Why didn't the safety discussions about eyesight protection work? Why didn't the stories from their friends and other construction workers work? I don't know, but then I'm only a contractor and not a full-time psychologist!

So now the question is when are you going to do all of the contractors and tradespeople who read your publication the courtesy of stressing safety by stretching your editing muscles? We deserve your best efforts to promote safety.

Robert Van Peer  
Van Peer Construction  
Fort Bragg, Calif.

To the Editor:

In the February issue of JLC, on pages 13 and 16, there are photos of students and construction craftsmen working in hardhat areas. The craftsmen are in compliance with general safety practices, and are wearing hardhats. Yet in each photo, at least one of the students is not wearing a hardhat. Aren't you sending the wrong message? Technical skills are in second place when compared to safety skills.

L. F. Osborne  
Montross, Va.

### HELP WANTED

*The Journal of Light Construction* has a job opening for an assistant editor to write and edit features and departments. Candidates should have broad experience in residential construction plus strong writing skills and an inquisitive mind. Send resume and writing sample to JLC-EDIT, 932 West Main Street, Richmond, VT 05477.

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## Team Bidding

To The Editor:

In response to the bidding debate letters in the February 1998 issue of JLC, I think it's important not to lose sight of the valid points that both Mr. Eldrenkamp and Mr. Mezoff have made. It is important to work as a team from the beginning. My firm uses a concept known as "bid teaming." We use the same group of subcontractors for each project. During the bidding process, we bring in our team of bidders, sit at the same table with a set of drawings and specifications, and discuss scope of work and schedule with each of the subs.

By keeping the architect involved, the owners are assured that the original intent of the design remains, and that certain important details are not missed. By involving the contractor at an early point in the design process, the owner can be assured that more efficient and practical methods of construction will be incorporated into the drawings. If the architect and contractor work as a team, the construction documents should contain the appropriate amount of detail required to produce the desired outcome efficiently.

Christian G. Donovan  
Doylestown, Pa.

## Layout With a Calculator

To the Editor:

Thank you for the article "Framing Rake Walls" (4/98). It provided a clear illustration of how to use a calculator on the job. I have been instructing residential construction for the past 20 years, and have watched the evolution of the calculator within the construction field. What Eric Dickerson referred to as a "cheap" calculator is in fact a very powerful tool and shouldn't be underrated because of its low cost. I can remember buying my first calculator for \$400 and being thrilled by its power. Yet it couldn't perform half the functions of the current cheap calculators now available on the market.

There are, however, a few items in the article that prompted my letter. The first is a typo: In the example on page 29, the hypotenuse length is calculated as 1.118, yet the accompanying illustration gives this distance incorrectly as 1.18.

My second point involves the use of terms. Right under the same illustration, the text reads: "To find the plate length in decimals, first round off 1.118 to 1.12, then multiply by the span..." This should be "run." The span of the building would be the full measurement from the front of the building to the back of the building, where the half distance would be the run. The run is used to find the rise of the rake wall using the slope formula:  $\text{Slope} = \text{Rise} \div \text{Run}$ .

Then there's the term "pitch." Pitch is defined as the  $\text{Rise} \div \text{Span}$ , and is generally expressed in fractional form; for example, 1/4 pitch, 1/3 pitch, and so on. Unfortunately, this term has been misused to the point where it is a source of confusion. In fact, one of the "expensive" calculators, the Construction Master series, has decided to assign the name pitch to the button that gives the slope of the roof.

The example cited, the width of the building is given as 26'-6". This would be the span of the building. The half distance, 13'-3", would be the run. The slope of the wall is 6/12. Therefore the slope = .5. To find the slope angle, you would take the ArcTangent of this value to come up with 26.565°. Depending on the calculator used, this may be "Inverse Tangent," "2nd Function Tangent," "Shift Tangent," or if it's an algebraic calculator, "Shift Tangent 6 ÷ 12 Enter."

Most "cheap" calculators have a built-in constant function. The constant is activated by pressing one of the operator keys twice in succession. If, for instance, you would like to add a number continuously to get consecutive measurements from a single starting point, you press the "+" but-

ton twice. As an example, say you would like to get the consecutive multiples of 16 inches:

Performing this calculation on a Casio fx 300: Enter 16, then +, then =, and the display reads 32. Now press = and the display reads 48; press = again and the display reads 64, and so on.

With this strategy, we can use the secant of the slope to find the 16-inch layout marks along the top of the rake wall:  $\text{Shift Tan } (6 \div 12) = 26.565^\circ$ ,  $\text{Cos} \Rightarrow .894$ ,  $1/x \Rightarrow 1.118$ ,  $x \times x \Rightarrow k$  ("k" in the display indicates that 1.118 is now the constant multiplier). Enter 16  $\Rightarrow$  17.89, enter 32  $\Rightarrow$  35.78, enter 48  $\Rightarrow$  53.67, and so on.

Plot these distances down on a scrap of wood and you've greatly sped up the task of laying out studs on a sloping top plate.

The students in my program are encouraged to use their calculators for every aspect of a construction project. We frequently encounter remodel projects where the roof has bastard slopes that can't be found on the framing square tables. The trig functions on the calculator supply the needed information quickly and accurately.

Once again, thank you for the article. It has given validity to what we've been teaching here at Olympic Community College.

Grant E. Newman  
Professor, Residential Construction  
Olympic College  
Bremerton, Wash.

## Unacceptable Image

To the Editor:

In response to your article "Flashing a Leakproof Valley" (3/98), I am appalled that your fine publication would print such an unacceptable image. The roof in the picture shown is not aligned and appears to be an amateurish attempt to perform a professional job. A real professional would be able to keep the tab/keys straight, especially a 15-year union roofer who is a "valley expert."

William Hussey, G.C.  
Sea Cliff, N.Y.

## QuickBooks Problem

To the Editor:

Recently I had a problem with QuickBooks Pro 5.0. Eventually, I had to call Intuit for help. Two questions they asked were, "Are you running QuickBooks in a Windows environment? If so, do you have any other applications running with it?" I answered yes to both questions, and was told I may have corrupted my data. The technician went on to say it is not a good practice to run ACT!, MS Word, or MS Excel simultaneously with QuickBooks. Since these are software applications most PC users run, I wanted to see if you have any more information along this line. Thanks in advance.

Patrick W. Dundon, President  
Dundon Insulation  
Windsor, N.Y.

*Craig Savage responds:*

*Your question is baffling. Ever since the introduction of the Mac II and Windows 3.1 (and Unix before that), operating systems have been able to perform multiple tasks and run multiple programs at the same time. For more than, six years, I've been able to run ACT, Excel, and Quicken (or QBP) simultaneously. And aside from the occasional crash, I've never had any trouble — certainly none that corrupted my data. In Intuit's defense, by telling you to run QuickBooks Pro by itself, they are protecting themselves and you from crashing because of "out of memory" problems. And they are creating a controlled environment that eliminates the other programs as the culprit if, indeed, you do suffer a data loss. Personally, I'd keep on multi-tasking, being sure to back up my accounting data every session.*

**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, 932 West Main St., Richmond, VT 05477; or e-mail to [76176.2053@compuserve.com](mailto:76176.2053@compuserve.com).

