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Letters

Lighting Kitchen Countertops To the Editor:

Regarding the article "Lighting the Kitchen" (Kitchen & Bath, 12/97), Mr. DeLuca has many good ideas for effective lighting, but Figure 2 is nuts. The countertop is lit but the kitchen is not, because he has ignored the aesthetic need for brightest light at eye level. The most expensive item in a kitchen is the cabinet front. Yet the wall cabinet in the figure is not within the lighting cone.

This design will also cause anyone working at the countertop to cast their own shadow on their work. The undercounter light is a patch up for this problem because these lights illuminate all the stuff pushed to the back of the countertop and also shine in the eyes of anyone sitting down near the kitchen. The whole problem in Figure 2 can be fixed by eliminating the undercounter lights and locating the recessed lights at least 21 to 24 inches from the back wall. Never mind the scallops. Nobody cares except the lighting designers, and they are not using the kitchen.

The important dimension in the other direction is to find the wall cabinet centerline and locate the recessed light there. These criteria have worked for me and my clients for 15 years.

> Theodore P. Streibert, AIA Newtonville, Mass.

Michael De Luca responds:

I always appreciate feedback on lighting issues. My recommendations are from my own experience and aesthetic preferences. First off, I have ignored nothing. There is an area of light outside the main cone of light known as spill light. This light very adequately illuminates the face of the wall cabinets without producing the unsightly scallop. And yes, I do care. Scallops create a visual chop across the face of the wall cabinets, diminishing their beauty and seeming

to reduce the apparent volume of the room. This spill light is less bright, but the cabinet fronts are closer to the light source, which offsets the problem.

As to counter lighting, there is a need for greater illumination on the task surface than for general lighting. There is no way one lamp, regardless of placement, can provide both levels. Placing a ceiling lamp closer to the wall cabinet fronts also increases the shadow under the wall cabinets, creating a dark hole. If the undercounter lighting is placed behind a light rail, it provides the increased illumination, fills any shadows created, and is hidden from the view of diners seated in the kitchen.

Placing general lighting fixtures based on a wall cabinet centerline doesn't work because windows, tall cabinets, and openings to other rooms interrupt the wall cabinet symmetry. I would recommend looking at the overall space when considering lighting placement and intensity.

Lead Carpenter Weighs In To the Editor:

In response to the article "Working Smarter With Lead Carpenters" (12/97), I have to speak on behalf of the lead carpenter. I can't say that I agree entirely with the system, though it is a good way for a lead man to understand the business aspects of the trade. However, this inevitably distributes the stress load as well. As far as molding an individual to that position in a small remodeling company, he or she should be compensated. I know that in white collar employment, the more the responsibilities, the greater the benefits.

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In addition, the contractor must take account of the fact that the lead carpenter has become the lead man because of the amount and the quality of the work that he produces. So adding all these extra duties to your lead carpenter's day will also decrease his or her productivity. In a three-man company, this is critical. I believe that if a contractor in such a small company has to promote his lead man to this level, he's bitten off more than he can chew.

As a lead man for 12 years now, I've inherited more and more responsibilities. But if my boss were to adapt the system that is described in your article, I might just as well work for myself.

Donald D. Martin Manchester, N. H.

Tim Faller responds:

You raise several issues. First, I agree that a lead carpenter that assumes more responsibility should be compensated appropriately. In fact, this increase in pay for increased stress should be one way that leads can increase their earning power.

Second, you're right that an increase in responsibility will require more management time and will decrease the time spent in hands-on production. This may look like decreased efficiency; done well, however, the lead carpenter system will increase overall efficiency.

Third, the lead carpenter system is not a monolith. It should be adapted to each company as needed. The people involved and the size of the company will dictate the amount of responsibility given to the leads. It sounds like the size of your company and your own desires would lend themselves to a scaled-down version of what I talked about in the article.

Finally, working for yourself is always an option, but you will find that there is more to it than simply producing a job. The need to sell work, plan company growth, collect and pay the bills, and try to have some fun while producing high-quality work will clearly demonstrate the need for you to hire a lead carpenter.

You Get What You Pay For To the Editor:

I enjoyed reading the article "Home

Improvement It Ain't" (Notebook, 12/97). When you build a \$48 million house, it would seem that a \$776,000 mistake would be like small potatoes. But the fact of the matter is, this happens all over America every day people trying to save money by going the cheaper route. Having been involved in the construction industry for more than 54 years, I've seen my share of short cuts gone sour. But the cliché "You get what you pay for" holds true every time. If the Spellings can afford \$48 million, they should have had a better planned roofing system and used the best products.

> Manuel Pereira Hubert, N.C.

Are Code Design Standards Safe? To the Editor:

As an architect and engineer for over 30 years who specializes in structural failures and collapses, I could not recommend the design load standards discussed in recent Practical Engineering articles (11/97, 12/97). Codes are guidelines and not to be considered as minimum standards. Often, I have found codes and trade and manufacturers' standards to be inadequate and at times to be even negligent. As the saying goes: "If a house is built exactly to code, don't live in it." I have experienced situations where the designs supposedly complied with the code but still have killed people.

Here are some of the difficulties I have with the articles' design load conditions. Interior space is not just plain open space. Partitions are relocated, removed, and added. It is good practice to add at least 20 psf dead load for partitions. Also, I have found that 30 psf is inadequate for second-floor living space. The articles suppose that the second floor is only used for sleeping space. There are also baths, closets, corridors, studies, utility rooms, and libraries. On roofs, a second and sometimes a third layer of shingles are installed. A dead load for the roof of 20 psf rather than 10 psf is appropriate.

The articles appear to imply that the structural elements of a home can

be designed by non-professionals. I have encountered the greatest amount of structural problems when the non-professional supplants the architect or engineer. Additionally, such involvement by an unlicensed person may be illegal.

It is my viewpoint that if anyone used the prescription shown in these articles, it would produce an inadequate design and the structure would be susceptible to problems and possibly failure.

> Stan Lacz, President AEP Assoc. Little Falls, N.J.

Paul Fisette responds:

I agree with many of the points that you raise in your letter. Certainly anyone buying a home built to your standards will have a structurally superior home.

The articles were intended to provide a basic understanding of how the structural elements in a simple building can be sized. Not every design requires the services of a structural engineer and not every budget supports the 10% fee that most architects charge. I do encourage builders to hire a professional designer to size all but the most basic structural elements. However, it is clear from the hundreds of questions that I get that builders want to know how to size a basic header or beam. They want to know how costs of different materials compare. The goal of these articles is to describe this process.

Using a live load of 40 psf in a bedroom is a perfectly good idea. In this article, the room was clearly used as sleeping quarters and because of that fact, I think that a 30-pound live load is fine. Consider this: At 30 psf, the 20x24-foot bedroom shown will support 14, 400 pounds. This floor will hold a major sleepover!

I disagree with your assertion that homes built according to building codes and/or manufacturers' standards are unsafe and inadequate. In fact, I find this view preposterous. I too have more than 25 years experience as a builder, project manager, designer, and researcher. I investigate many building failures and I can say without hesitation that I have never seen a roof or floor system in a home collapse when it was built accord-

ing to one of the model codes. The thousands of engineers, architects, and designers who have distilled their understanding and expertise into the recommendations provided in our existing model building codes have provided us with safe minimum standards.

Precast Panel Home To the Editor:

Your article on the precast foundations made by Superior Wall Systems (7/97) was very good. They build a lot of basements around here, and it's the strongest, driest basement available. These precast walls can also be used for the first floor of houses built on slabs. I did this four years ago for my own house and have been very happy.

The first floor has eighteen windows, up to 5x5-feet in size; the openings were all precast.

I ordered 10-foot-high panels and set them on a rubble trench foundation. We built up the floor area with 8 inches of gravel, leaving the 2 feet next to the walls clear. We put down rigid foam insulation next to the walls, then poured the slab. The slab was 4 inches over most of the floor, but a foot thick near the walls. The concrete flowed in between the concrete studs in the wall and up to the wall's foam insulation, tying everything together. This left me with a ceiling height of nearly nine feet. Running wires was easy because wiring holes are cast into the studs.

Made of 5,000-psi. concrete, the walls are waterproof, but not attractive enough to be left unfinished. However, they are rough enough to accept stucco well. They are also extremely solid and silent.

Ed Christian Hamburg, Pa.

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.