

Deck Ledger Data Stands

To the Editor:

The authors of the article on deck ledger connections (3/04) are to be congratulated for their useful contribution to every residential designer's library. I hope they will continue to examine other building assemblies where real-world conditions may not be reflected accurately by code minimums. There was one aspect of the ledger testing procedure, however, that doesn't appear to match up with my field experience.

In any modern house, the rim joist, to which the ledger is attached, is fully constrained along the top edge by the floor sheathing, but the rim joist in the test assembly appears to have been unconstrained. In the photograph in Figure 2 of the article, a failed connection is illustrated, and the rim joist has clearly rolled outward. In my opinion, the rolling action of the rim joist could contribute to a premature failure of the connection and affect the results of the investigation.

David Moore
Original Home Plans
Via e-mail

Frank Woeste, P.E., responds: The fastener spacings reported for the four cases were based on the average ultimate load for each case, divided by 1.6 times 3, or 4.8. The rolled condition of the band joist you noted in Figure 2 occurred at a load equal to 4.8 times the "allowable value," or working load, for the case depicted. When the load reached the allowable value used to create the tables, the simulated band joists had no visible rotation. Thus, in an actual deck and building construction, the lack of floor sheathing in the laboratory tests should have no impact on the validity of our test data.

It is possible that the ultimate test

loads may have been slightly increased by including floor sheathing in the tests, nailed at 6 inches on-center into the band joist, but it is also possible that the sheathing could be inadequately nailed to the band joist in an actual construction. Thus, with respect to the shear capacity of the connection, which was the purpose of the tests, not using sheathing in the testing program was a conservative approach to dealing with uncertainties in the field. It should be noted, however, that inadequate nailing of the floor sheathing to the band joist may adversely impact the lateral stability of the deck structure. For any builder unsure about the connection of the floor sheathing to the band joist, a connector product is now available that ties the floor joists to the deck ledger (Morse Technologies, 301/774-3290, www.mtdecklok.com).

Gutters in Cold Climates

To the Editor:

I am writing in response to Mr. Henri de Marne's response (Q&A, 5/04) pertaining to the elimination of gutters in Northern climates. I am a builder in Maine and totally disagree with the idea of removing gutters. Time and time again I have seen foundations crack the winter following gutter removal. Freezing and thawing are a natural occurrence here in Maine, as is the black fly in spring. When gutters are removed, the additional rain water around the perimeter of the house causes tensile strength against the foundation walls, which is drastically increased when freezing occurs. This pressure can easily crack a foundation. The better the drainage around the foundation (gravel vs. clay), the less risk there will be of cracking, but why take the chance? Foundation cracking and the resulting damage are much more serious problems than correctly installing

gutters. Gutters are a nuisance to builders, as are punchlists, but they must be done.

Stan A. Novak Jr.
Stan Novak Builder, Inc.
Holden, Maine

Henri de Marne responds: If Mr. Novak has found that foundations crack after gutter removal, the houses in question must have poor grading, and that should be corrected regardless of whether or not there are gutters on the house. Obviously, the poor grading problem aggravates the situation once gutters are removed, but installing gutters is not the answer to prevention of frost damage to a foundation. There are plenty of houses that have no gutters and no frost problems, so the gutters are not the solution.

I think Mr. Novak is referring to frost pressure, not tensile strength of the soil. Frost causes heavy soils to expand, exercising pressure which may crack foundation walls, whereas tensile strength is the resistance to pulling forces attempting to tear a material apart — not the case here. It's preferable to backfill a foundation with coarse material and reserve the heavier native soil for final grading as a topping to plant grass in. But it is essential to have the final grade slope away from the foundation and to take other precautions as described in my original answer.

I have 35 years' experience building in North Central and Northern Vermont, and consulting throughout Vermont and adjacent states in a climatic region not unlike that of Maine. Many of these areas have heavy silt and blue clay soils. In my experience, gutters and downspouts are only feasible in extreme cold climates if the house is so energy-efficient that ice dams do not form at the eaves. Otherwise, the gutters are not only a constant source of maintenance but can cause roof leaks from snowmelt backing up behind ice dams.

In Protest

To the Editor:

I read your "Success With Spanish-Speaking Employees" (5/04) piece with some dismay. Do we really believe that the illegal influx of hundreds of these people every day into our society and economy can happen without severe consequences? That scamming their slavelike cheap labor and acquiescent attitude does not feed the problem? That their pervasive dominance of the workplace does not discourage American workers, seeking and deserving a decent wage and lifestyle, from entering the industry?

This issue is essentially internalized job-outsourcing; it is not racist bigotry in any way to protest its impact. America should be more than a cheap business deal.

Maynard Fairfield
Eugene, Ore.

Porter-Cable 100 Still Available

To the Editor:

In the May 2004 issue (Q&A), you reported that the Porter-Cable model 100 router is no longer available. In fact, in late 2002, Porter-Cable began producing the model 100 with a polished aluminum housing, giving it a new model number, 100H. This year, we completed the final production of this limited series and have switched back to the painted aluminum housing, and model number 100. The 100 is very popular among industrial users who need less weight and power (door fabricators, for example). The model 100 also now features a cam lever to release the motor from the base.

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