Letters

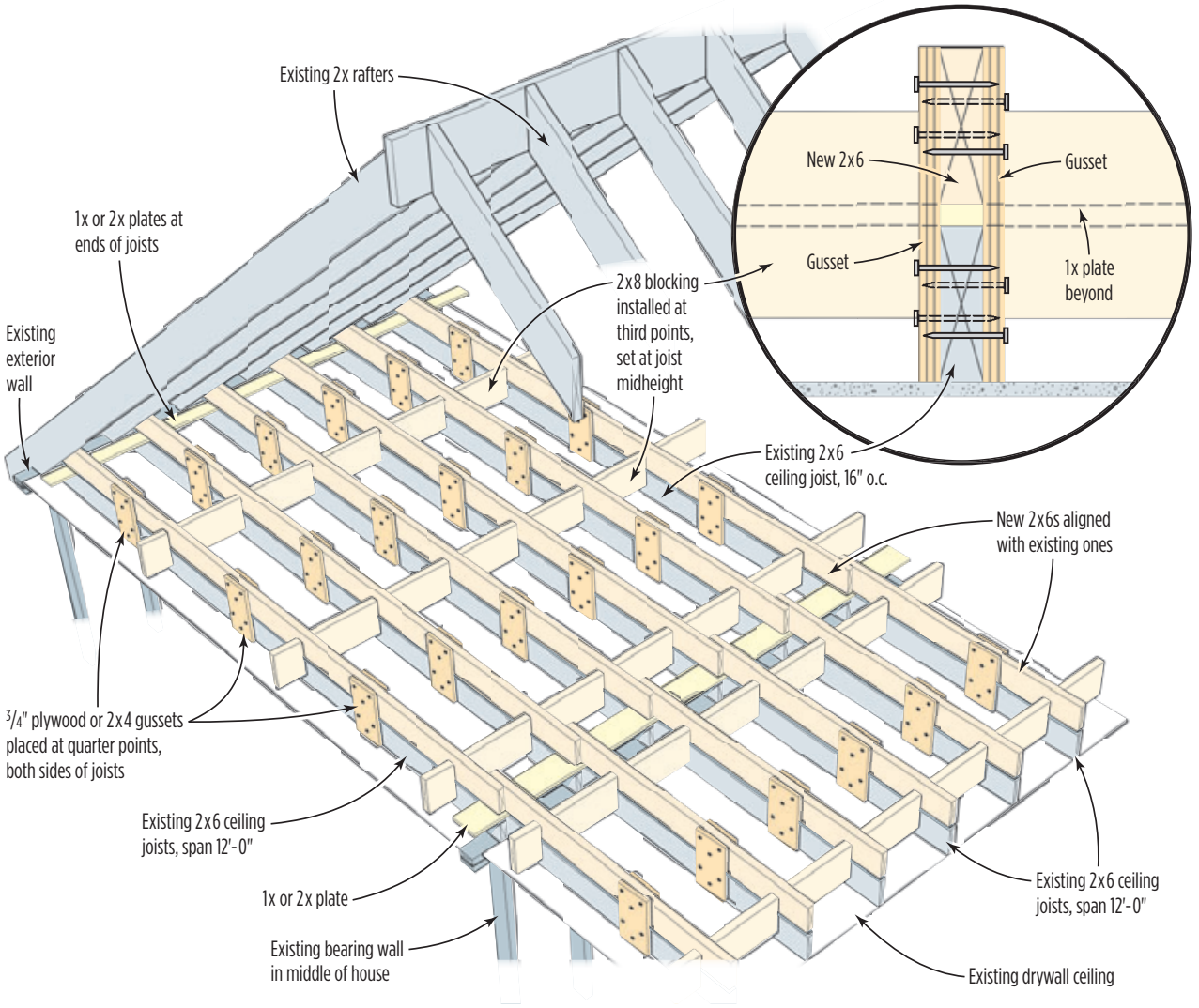
Beefing Up Attic Joists for Storage

Thanks to Chris DeBlois for his article on beefing up attic joists (*Q&A,* 10/11). I am faced with a similar situation and have a couple of follow-up questions. In this case, the owners plan to use the attic space for storage. First, do I need to make changes to the support walls? Second, the existing joists are 2x6s, as in the original article, but the clear span is a more than a foot longer, at 12 feet 7 inches. Can I use the same number of gussets and blocks, or should I add an additional set?

David Staat
The Woodlands, Texas

Author Chris DeBlois responds: The original design was based on achieving a fully occupied room live-load capacity of 40 psf. If in your situation you have 2x6 joists on 16-inch centers in a species and grade equivalent to No. 2 southern pine and add the same on top, you can achieve the same capacity using three sets of gussets at the quarter points, spaced about 3 feet 2 inches on-center. Standard attic "light" storage live load is 20 psf, so you should be fine, but if you have boxes of books, heavy files, or heavy equipment, I'd want to know more about the actual storage live loads.

As for whether you need to reinforce the support walls, I don't have enough information about the original configuration to provide a meaningful answer. Generally speaking, however, if you have platform-framed load-bearing walls with window and door openings no wider than, say, 4 feet and no reason to suspect undersized framing, then you're probably safe.



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Buy Good Quality and Keep Your Bearings

One thing I never seem to read about in comparative tool reviews is the quality of the bearings. The bearings on some brands of tools just seem to last longer, while others wear out quickly. Since there are many grades of bearings manufacturers can install, it might be interesting to try to sort out who uses what.

I'm in the middle of trying to replace the noisy bearings on a fairly new heavy-duty angle drill — a brand common at one of the big-box stores. What a pain! Next time I'll fork out the extra money and get the Milwaukee, like I should have in the first place. But I just didn't imagine that a bearing would go bad so quickly. A few years ago, I also had bad bearings on a reciprocating saw from another maker. At that time I switched to Milwaukee for most of my tools, and have never worn out the bearings in any of the 20 of their tools that I own. I've had good performance with Makita tools as well.

Howard Johnson
Bridgeport Contractor
Bridgeport, Calif.

Door Hanging Clinic

I enjoyed Peter Canavan's article about hanging heavy doors "solo" (10/11). I've spent a fair amount of time doing this kind of work, and rarely do I have a helper nearby. I especially liked Peter's trick of hanging his level with spring clamps.

In articles like this, it seems there is never a mention about plumbing the door when the wall is out of plumb. If the wall is leaning in or out, the door may swing open or closed by itself. On one of my first jobs, we had to hang French doors on a wall that leaned more than an inch over the height of the door opening. It was clear that if we had hung the doors flush with the wall, as shown in this article, they would have swung outward rapidly when opened. As a finish carpenter, I seldom work with perfectly plumb walls. So why not hang the door plumb and use the casing to hide that discrepancy?

Andy Orsini
Andy's Fine Woodworking
Santa Cruz, Calif.

Peter Canavan's article on hanging heavy doors is full of good ideas, but it makes the job of plumbing the jamb more difficult than it needs to be. I was taught years ago that the easiest and most accurate way to do this is with a plumb-bob. It's a five-step process:

1. Center the jamb in the opening.
2. Level the head jamb, shim, and tack.
3. Hang the plumb-bob about 6 inches in from the hinge side.
4. Shim the hinge jamb until it is perfectly parallel with the plumb-line, then tack or screw it in place.
5. Measuring off the hinge jamb, shim the strike side until it is perfectly parallel, then tack or screw it in place.

That's all there is to it. I've had plenty of carpenters over the years think I was nuts until they saw how accurate and fast this method is.

Brian Bross
Omaha, Neb.

Author Peter Canavan responds: These letters address two issues: out-of-plumb walls and how to plumb a jamb in the opening.

In response to Andy, I always advocate installing to the plane of the wall. Yes, there may be extreme situations when I will create tapered shims and apply them to the jambs so the casing lies flat. But in my experience, not keeping the jamb in the same plane as the wall can create a lot of work and seldom results in a better job. The technique described in the article is more about keeping the jambs stable in the opening as I securely fasten them. Given a houseful of doors to install, the method is very fast and means I don't have to pick up my level five or six times during the course of an installation to recheck for plumb after every few nails, or my Speed Square to check for flush. If on occasion I have a door that self opens or closes, I'll slightly bend the middle hinge pin to create some resistance so the door stays put.

In response to Brian: I was told way back when that all that we do as carpenters can be accomplished with a rock, a string, and a knife. Oversimplification? Sure, but I need to remind myself of that from time to time.

Combustibility of Spray Foam

We've been applying spray foam for eight years. The claim that "an open-celled foam" claimed the life of applicator Robert Cowley ("Massachusetts Fire Officials Urge Caution With Spray Foam," *JLC Report,* 10/11) is possibly in error. We apply Demilec's Sealection 500, a ½-pound open-cell foam. It is not combustible upon application in any thickness. This problem is associated with closed-cell foam applied in lifts greater than 2 inches thick without sufficient curing time between lifts. It behooves every applicator to follow his manufacturer's application instructions!

Bob Backman
AirSeal Insulation
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