LETTERS

Plumbing the Depths of Water Pressure

To the Editor:

I have a couple of suggestions concerning Rex Cauldwell's "When the Pressure's Off" (*Kitchen & Bath*, 3/94). He recommends a backflow preventer and a pressure regulator as the first step to mitigate erratic city water pressure, and then a pump and storage tank if that isn't satisfactory. I'd suggest an intermediate step: Try adding just the pressure tank without the pump. It may moderate pressure swings enough to make them acceptably unnoticeable, saving considerable expense both up front and in electricity.

If a pump is necessary, he recommends an additional pressure regulator after the pressure tank, but I'd suggest either removing the first regulator, or setting it above the pump's cut-out pressure. There's no need to limit the pressure into the pump, and it's unnecessary and wasteful to repressurize water that entered the system with enough pressure.

John Bernstein
Brattleboro, Vt.

Rex Cauldwell responds:

You're right: There's no need for the first regulator except for some code requirements and perhaps as a cautionary measure. Most codes forbid incoming pressure above 80 psi. If the pressure exceeds this, the homeowner is required to have a regulator to limit or lower the pressure. Many houses already have these in place, so I decided to include it in the drawing.

Also, since utilities can add booster pumps or even a water tower, you can never really know what the pressure is going to be. In one case that I know of, after a new water tower was installed, the pressure relief valves on the water heaters of nearby houses kicked off from high pressure. Yet the utility wasn't technically responsible because the homeowners were required to have regulators — even though they may never have needed them before.

Also, if city water pressure increases unexpectedly, the higher pressure will go through the pump and into the house and perhaps damage the plumbing. As a plumbing contractor I have to think of these things, because I'll be blamed for future problems even though they are not really my fault. So in the city, I prefer to install a pressure regulator just in case. I think of the pump system as a portable system that could be taken out at any time and the first regulator as a permanent part of the house. However, as you have correctly observed, since the system will normally work without the first regulator, it is not always installed — especially on low-bid jobs.

The backflow preventer wasn't meant to have anything to do with pressure regulation. Most codes require it to prevent you from contaminating the utility's water supply.

Having a pressure tank by itself wouldn't do any good since the tank pressure would simply follow the utility's water pressure. But if what you mean is to use a tank and a backflow preventer, you may be right in part. The tank will retain the increased pressure even after the utility's pressure drops since the backflow preventer is acting as a check valve (a one-way valve). But this would only work until the stored water was drawn away and then you would get a complaint.

To summarize, the first regulator protects against a harmful upward pressure swing and the booster pump system protects against a loss of pressure. Keep in mind that I only install this system where there are dramatic pressure swings in the supply. There may be a less expensive way to do it, but I don't think it's as reliable.

Safe Nailgun Operation

To the Editor:

I enjoyed the article "Working Safely with Air Nailers" (6/94). This is an important message that can't be repeated enough.

There is one error, however, that should be corrected. You stated, "Use the correct air pressure for the tool, and never exceed 220 psi." That should read *120* psi.

Jim Charters
Service Parts Manager
ITW Paslode
Buffalo Grove, Ill.

Tread On Me

To the Editor:

In "Laying Wide Pine Floors" (7/94), the author recommends wide pine floors for low to moderate traffic areas — "the wood is soft and dents easily," he says.

This used to be my belief, too, until I observed the floor at the main entrance to my own house. This wide pine floor, installed 15 years ago and simply stained and polyurethaned, shows some wear but the finish has yet to break through. And although this area gets more-than-average abuse, the floor still looks nice. Seeing this has convinced me that a pine floor does not need to be walked on only with slippers — one reason that many builders use hardwoods. Pine has a nice grain, especially in the wider boards, and takes stains well. It's also less expensive to buy and install.

When talking to customers about pine floors, I often use the common advice about silverware: If you use it only for special guests, it will always look scratched. But if you use it every day, it always looks great.

Rob Dwelley
Westport Housesmiths
Westport, Mass.

Speed and Safety Both Important

To the Editor:

Thank you for taking the time to review my book, *Rough Framing Carpentry* (*Builder's Library*, 3/94). I enjoyed your review and feel it was very even-handed. I agree that safety practices must be brought more and more

into our everyday lives. I have been on both sides of the issue — as an employee who had a beam fall on my head and was given a few crumbs to survive on for the rest of my life, and also as an employer who had to creatively devise a way to work safely and still move fast enough to make the bids work after workmans comp robbed the profits. Nonetheless, the bottom line is that safe working practices are under the magnifying glass and I will stress this more in my future writings.

The only part of your review that lost me was the sentence, "Technique is governed by speed." Realizing that I may be getting a little too philosophical, let me insist that I never consciously tried to make that point. If anything, I would insist that "Speed is governed by technique." How much gets done on any job is directly related to how fast the system you designed operates — your speed. Your system is nothing more than a handful of moves or tricks — your technique. Like Felix the Cat, the more tricks you've got, the fewer steps you take and the faster the work gets done. Therefore, the job either flies or sinks depending on the crew's collective learned tricks.

This is the golden rule of production framing: Take the thinking out of the game so that the hired guns can get down to their tricks (technique); then, the whole job will just fly together, hopefully.

Mark Currie
Santa Fe., N.M.

Weatherization Saves Millions

To the Editor:

I appreciated the short article on the DOE Weatherization Assistance Program (*Eight-Penny News*, 5/94).

Insulating in crawlspaces and attics isn't glorious or pleasant, but weatherization workers do get satisfaction by saving families money on their utility bills, as well as by helping our national balance of trade (saving millions of barrels of oil annually).

Glenn Richards
Human Resources Development Council
Lewistown, Mont.

Regarding the Rumford

To the Editor:

I have a question concerning the article "Reviving the Rumford" (3/94): Good practice dictates for a fireplace to use outside air for combustion instead of interior conditioned air. Does this interfere with the "laminar" flow of a Rumford?

Dean Hatjiouannou, AIA
Charlotte, N.C.

Jim Buckley responds:

Good question. The answer is that providing outside combustion air does not affect the laminar flow of an open fireplace. Have you ever watched water drain out of a bathtub? The water in the tub is virtually motionless everywhere except very near the drain. An inch or two from the drain, the water starts to pick up speed and then rapidly accelerates into the drain. Fireplaces work the same way. The air in the room is still except for the air near the top of the fireplace opening, which slowly moves horizontally toward the opening and then rapidly accelerates into the opening. The trick of the Rumford design is that this air keeps flowing smoothly as it passes over the streamlined, rounded throat and turns up to go into the chimney.

Now, add the outside combustion air. Whether you add it in the firebox or, as I prefer, somewhere outside the firebox, this outside air simply helps replace the room air flowing into the fireplace. It would be like pouring water into the bathtub while it was draining. Unless you pour the water directly into the drain (i.e., placed your outside air within an inch or two of the top of the fireplace opening), the flow near the drain (fireplace throat) will be unaffected.

Build It Right

To the Editor:

From reading your June article "Brick Veneer Basics" (6/94), it's apparent that Mr. Swanson and company are concerned not only about the appearance of their work, but also its durability. By following the advice of the Brick Institute of America regarding flashing, weepholes, the use of a housewrap or equivalent, etc., they are providing an attractive, noncombustible, and weather-resistant surface that will endure for generations.

Because many of these details are not visible upon completion, they are often the first things "sacrificed" in an effort to speed the job, lower the cost, or get the crew to the next house more quickly. Hats off to Rob Swanson: I'd trust him on my home.

Steve Thomas
Columbus Coal & Lime Co.
Columbus, Ohio

Watchful Eyes

To the Editor:

In the article "Earthquake Aftermath: On-Site Report" (*Eight-Penny News*, 4/94), one of the photo captions states that a "steel column … contained no concrete" while the text states that "steel columns … had been wrapped with stucco, giving the illusion of more substantial strength."

Apparently, in some areas the practice is to fill columns with concrete; in this area, that is not standard practice. The purpose of the stucco wrap is typically for appearance and fire protection. I have never met anyone who asked for a stucco wrap to make a column look stronger, and I certainly can't figure out how a contractor could use stucco to get past the watchful eyes of the building inspector, the owner, the architect, and the insurance company.

Steel columns (or any structural component) should be fabricated and installed in accordance with drawings and other specifications. If those specs had required the column in the photo to be filled with concrete, your observation would be of value. But without knowing the supporting engineering calculations, the true loading limitations can't be known.

Robert Dorazio
Avila Beach, Calif.

Keep 'em coming! We welcome letters, but they 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*, RR 2, Box 146, Richmond, VT 05477.