Letters

Sizing Circulation Pumps

The article "Hot Water Circulation" (12/10) left me confused. First, it states that pumps must be correctly sized or pipe corrosion might occur — something I have seen firsthand. But then it goes on to state that when using a tankless water heater, you should go to the largest pump available — hence my confusion. Does the tankless system somehow negate the corrosion problem? Also, is corrosion a problem with PEX piping?

Randy Matthews
Dallas

The reason the tankless heater necessitates a larger pump is that the heat exchanger coil in the unit creates lots of friction. Because the pump is working to overcome this head loss, it's unlikely that you would get enough velocity in your supply piping to cause erosion of the pipe walls. According to author Leigh Marymor and his partner Jim Lunt, PEX is resistant to the corrosion and erosion problems that afflict copper, but can be worn away if there is excessive velocity. — The Editors

What You Don't Know

Publishing estimated square-foot completion costs as in the net zero house in Vermont ("Netting Zero in a Cold Climate," 11/10) sets us builders up for disappointed customers when, for various reasons, we may cost more. There is a large price difference between those running a legitimate stand-alone business vs. someone working out of his truck. I think it best to just leave pricing information vague.

Scott Bond
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Energy Star Misleading

To earn the Energy Star designation, a new home must score at least 15 percent better than a home built to the 2006 International Energy Conservation Code. The homeowner gets an energy-efficient home, the builder gets a substantial rebate, and the utilities have to produce less energy. In theory, it sounds great. But in practice, many of these homes actually have *increased* energy costs. Furthermore, many of the homes built to current Energy Star requirements will experience major comfort issues, moisture problems, poor indoor air quality, high radon concentrations, and premature hvac system failure.

My company tests, identifies, and repairs major home defects. And there is nothing harder than reporting bad news to homeowners who in most cases had no idea that their home had serious issues. I find myself getting upset when I witness major issues in homes that we are called in to test, especially new homes that were marketed and sold touting energy-efficient features.

The truth is that many of those at fault don't know any better and are actually trying to do the right thing. However, it's not very comforting to the customers when we have to report that their home has major flaws that will cost thousands if not tens of thousands of dollars to repair.

The EPA admits that current Energy Star standards are too weak and has, in fact, recently released Version 3 of the Energy Star program for rollout next year. Among other improvements, it requires pressure balancing, ventilation, and humidity control, as well as third-party verification for hvac systems. It also requires bringing the entire hvac system into the conditioned space, and documentation for the Manual J and Manual D calculations. Yet many Energy Star builders are already complaining and demanding postponement of the new guidelines. It will be interesting to see which of the builders currently building under the Energy Star label remain in the program and conform to the more stringent guidelines. In the meantime, doing things the right way during construction is by far the best, easiest, and most cost-effective approach for the homeowner.

Todd Witt
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Plumbing Victory

I'm not a full-time contractor, but I do a lot of small jobs in my area of Southern California. A recent job included redoing some old galvanized plumbing in a home built in 1968. As everyone knows, getting those old fittings off can be a challenge, and I was struggling. In this case, the pipe and fittings were in an area where I couldn't get a good purchase with a pair of wrenches, and I didn't want to damage the pipe runs above the plates. So I broke out my 4-inch grinder, put a metal cutting blade on it, and proceeded to cut a slit up the length of the old fitting, being careful not to damage the threads on the pipe. I did this on both sides of the fitting, then slipped a small pry bar into the cuts and twisted. Off it popped. It took me 10 minutes to do what I had spent the previous four hours attempting without success.

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