

Letters

Forming Foundation Walls

The advice in “Underpinning a Foundation” (1/07) is basically sound, except for the wall forming, as noted by the author.

For a hand-dug footing like that, I might have used a simple trench footing. You can form the wall later or suspend the forms and do it at the same time.

The type of form pictured is only practical for 16- to 24-inch walls; more than that and the force of the concrete is too great. If you're forming a taller wall, there are a few things to keep in mind. The 2x4 braces with one end in the ground are holding all the concrete. That means you may have 5.25 square inches of bearing resisting more than 1,000 pounds of lateral force (depending on the spacing). We always drive 2x4 stakes 16 inches deep behind this type of brace to increase the strength. The braces should be no farther apart than 2 feet. The ties at the top of the form should also be 2 feet on-center, and fastened with lag screws (no drywall screws here).

Even better is to split the outward force in half by using through-ties. For a wall 3 to 4 feet tall, you can add two rows of horizontal 2x4 walers and bolt through the wall with threaded rod and 3-inch washers, using wood spreaders to keep the forms apart until the pour.

Another old-school solution is to use loops of #9 steel wire 16 inches on-center: Wrap the wire around the walers on both sides and use a piece of rebar to twist it tight.

The single-sided pour under an existing footing is also tricky. I've done this using a piece of corrugated steel siding on the inside, supported against $\frac{5}{8}$ -inch rebar stakes driven into the ground every 8 to 12 inches. I loop the #9 wire around the rebar, pass it through the steel, and tie it off on the outside forms as I put them in place. This counters most of the outward force from the wet concrete. After the concrete sets, I strip

my wood forms on the outside, and the corrugated steel on the inside is left in place.

Jim Glover
Pierre, S.D.

Warranty Caution

The item “Higher Calling” (*Toolbox*, 12/06) states that the 500-pound-capacity aluminum pump jacks in Werner's new line are compatible with Alum-A-Pole scaffolding. This reference is extremely misleading. Alum-A-Pole's lifetime warranty specifically states it is void if any other manufacturer's products are used with Alum-A-Pole products.

Carl E. Anderson
Donna E. Anderson
Alum-A-Pole Corp.

Longevity of Tankless Water Heaters

I found your story on tankless water heaters very interesting (“Heating a Home With a Tankless Water Heater,” 2/07). One thing you didn't address is the life span of the heater. I was planning an installation — for domestic hot water only — but three plumbing contractors in my area (upstate New York) said they refused to install these units because they last only a few years compared with the standard tank type, which can last 20 years or longer.

Your readers need to know what the experts have to say about this, because if true, it's more cost-effective to install a conventional water heater.

Keith Gregg
East Chatham, N.Y.

Author Bob Gleason responds: I have no personal experience with the effective life of a tankless water heater — my unit has only been in use for three years. (However, I did once have to replace a conventional tank-type water heater after only three years of use.) The following information may be of some help.

Rinnai's Web site states that its compact wall-mounted units have “a life expectancy of 25 years” and its residential units have “a 10-year warranty on the heat exchanger and 10-year warranty on parts.” Also, in his article “Installing

KEEP 'EM COMING!

Letters must be signed and include the writer's address. JLC reserves the right to edit for grammar, length, and clarity. Mail to JLC, 186 Allen Brook Lane, Williston, VT 05495; or e-mail to jlc-editorial@hanleywood.com.



Letters

On-Demand Water Heaters” (2/06), David Grubb mentions “the security of knowing the equipment will last 20-plus years — much longer than conventional models.” Mr. Grubb has been installing these units for several years.

Checking other tankless manufacturers’ Web sites, I found warranties ranging from five to 12 years for domestic use. Most state that the units have a life expectancy of 20 to 25 years.

In researching tankless units, I too found most plumbers reluctant to install them. I believe the reason is that these units were originally put on the market before all the bugs were worked out. Many plumbers found that they had to be replaced with tank-type units, which resulted in lasting bad publicity.

Properly designed tankless units have

been in the field now for several years. Also, because of problems with faulty installations, several manufacturers now require that their units be installed by a factory-trained mechanic or plumber, or the warranty is void. I have been pleased with the technical support I have received from Rinnai’s engineers — even though I am not a trained installer — and I expect my unit to last a long time.

Flashing Membrane

In the article “Framing the First-Floor Deck” (12/06), Tim Uhler refers several times to a flashing membrane he uses to isolate wood from concrete. What exactly does he use?

Milt Seropan
San Francisco

Tim Uhler responds: We use Nervastral’s concealed flashing membrane, which is available in a variety of thicknesses — we use 20 mil. For more information, go to www.nervastral.com.

Correction

I noticed a small error on page 77 of “Block-Laying Basics” (11/06). The line that reads “this basic 1-to-3 ratio of sand to cementitious materials” should read “... 1-to-3 ratio of cementitious materials to sand.”

Great magazine!

Jeff Leggett
Abilene, Texas

*Thanks for pointing out the mistake! —
The Editors*