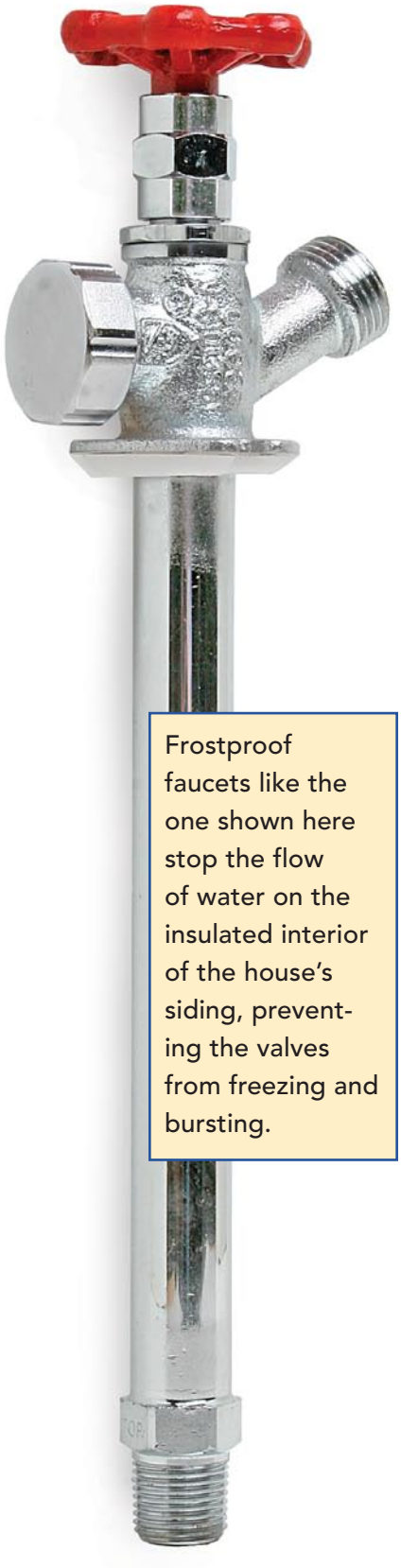


Frostproof faucets like the one shown here stop the flow of water on the insulated interior of the house's siding, preventing the valves from freezing and bursting.

Adding an Outdoor

BY CARL VONNOH III

Whether you're an avid gardener or you'd just like to have an extra outdoor faucet instead of an extra 100 ft. of garden hose, the simplicity of this installation will make you think twice about paying a doctor's wages to a plumber who doesn't dress nearly as well.

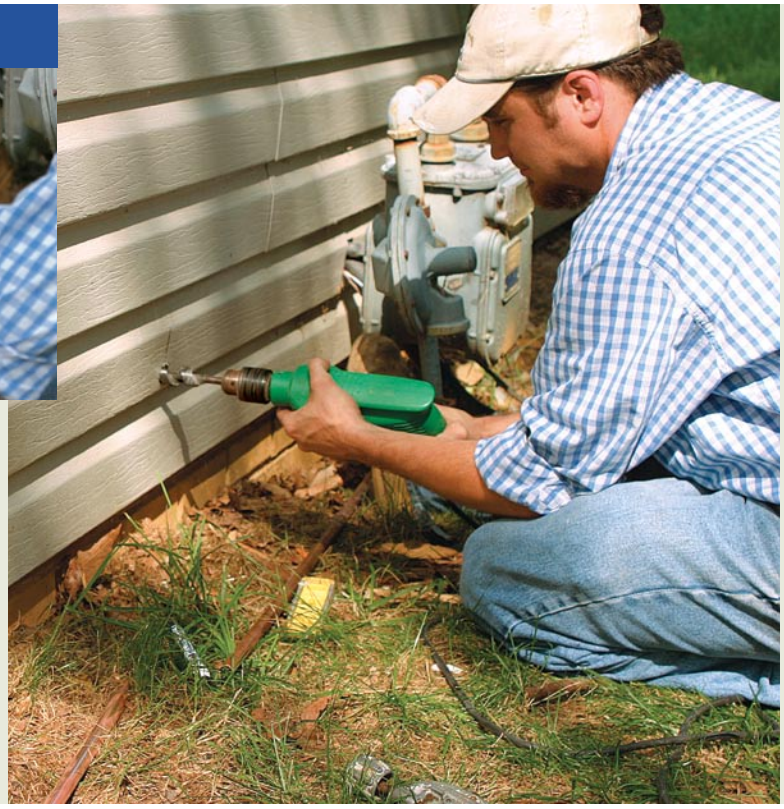
Find a reference point

A new outdoor faucet can go just about anywhere; the location depends on your needs. Once the location is chosen, take careful note of any distinct reference points that can be seen from both inside and outside the house, such as a foundation vent, a gas pipe, a dryer vent, or the edge of a basement window. These reference points simplify the transfer of measurements between interior and exterior walls. For this project, my reference point was an HVAC exhaust pipe.

When I'm planning the layout of new plumbing, I always try to use a single length of pipe to reach the house's existing waterline. One length of pipe means less labor and less chance of future leaks. I also leave myself about 6 in. of extra pipe to be on the safe side; the excess can be cut off when I'm ready to solder the joint.

With all my measurements in hand and with my reference point chosen, I transfer the interior measurements to the exterior wall of the house to locate the exact point where I

Start outside



Transfer measurements to the outside wall. *The indoor measurements are transferred to the outside wall to locate the exact drilling point. For drilling through vinyl or wood siding, use a wood bit, but a masonry bit would be appropriate for drilling through concrete or brick.*

Faucet

Installing a frostproof faucet is easier than dragging a hose around the house

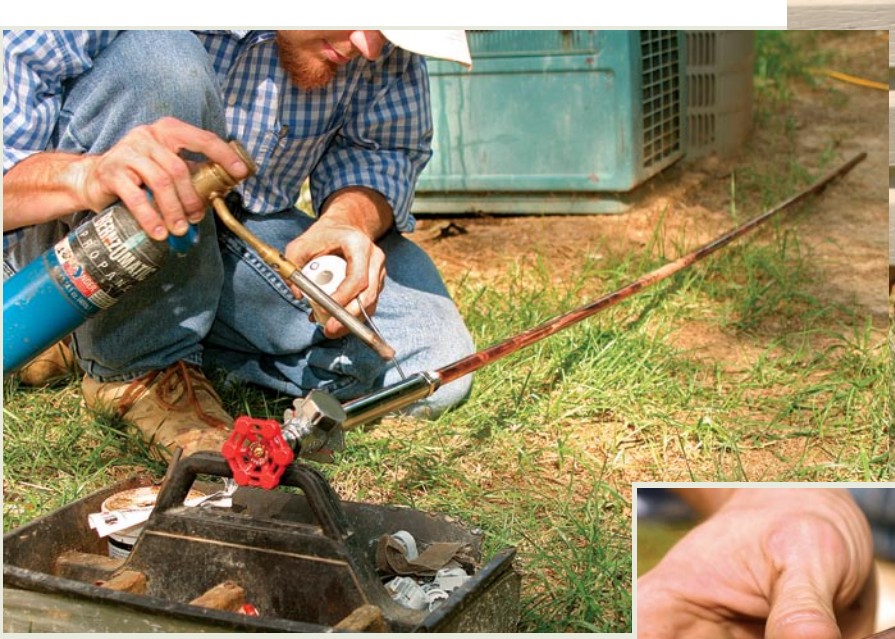
should drill (photos facing page). The siding on this house was vinyl, so I used a 1-in.-dia. wood bit to drill through both the siding and the rim joist behind it. If the siding were brick, I would use a 1-in.-dia. masonry bit, then switch to a wood bit.

Assemble the faucet first

Once the hole is drilled, I'm ready to prepare the faucet. I suggest installing a frostproof, antisiphon faucet long enough to penetrate the siding, the sheathing, and the insulation before it connects to the water supply (see pp. 92-93).

I solder the faucet to the proper length of pipe (photo below) before I slide it through the hole I made in the house. (For more on soldering, see "Building Skills," *FHB* #162, pp. 124, 126, 128.) On this project, I matched the new pipe to the existing ½-in.-dia. copper plumbing.

After installing the angled flange, I mark the faucet's screw holes with a sharp pencil, then



Open the handle, and solder the joint. *Before soldering the faucet to the new copper pipe, turn the handle to prevent the seat from melting.*

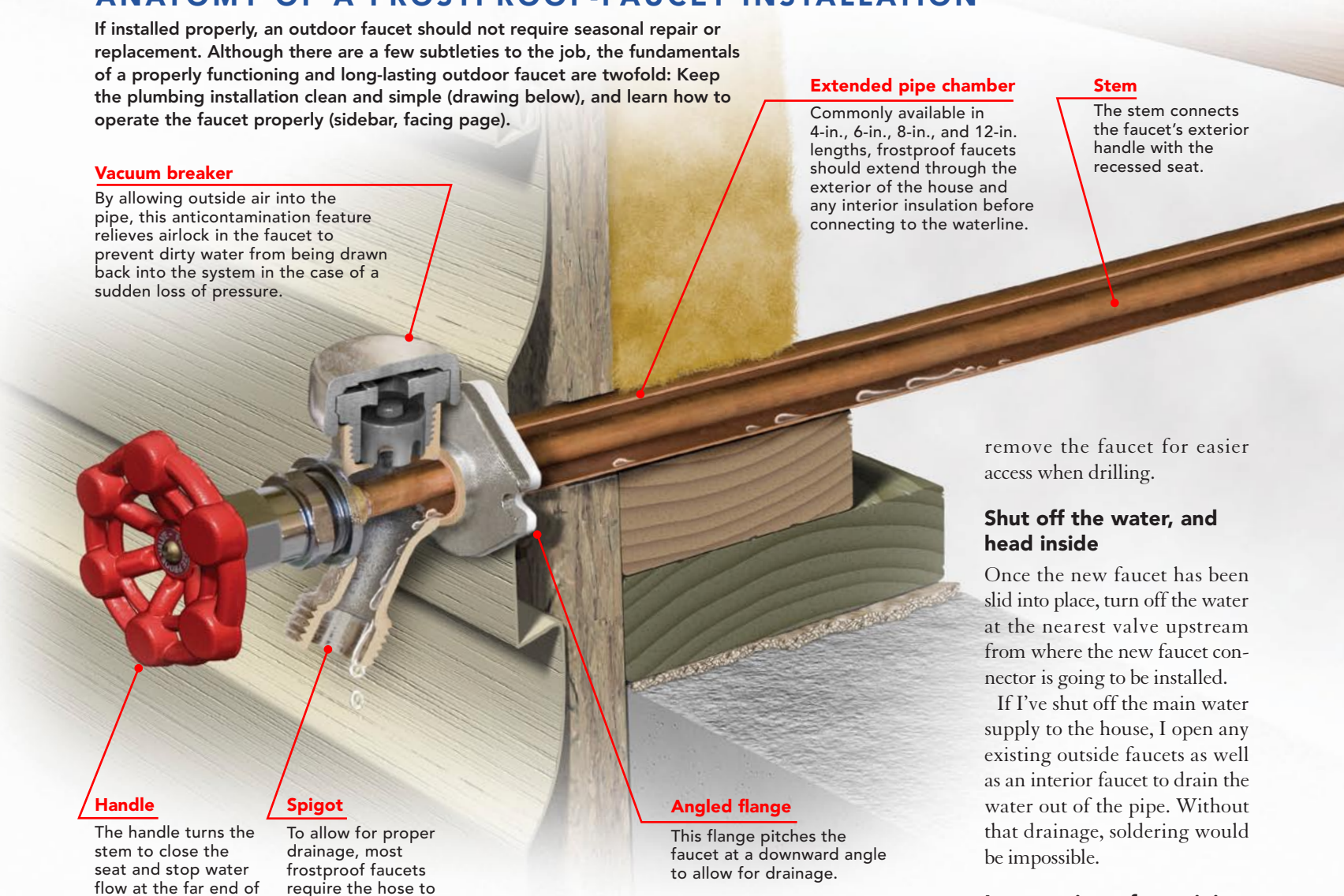
TIP: Keeping it clean. *Use a ½-in. cap to keep dirt and debris out of the pipe as it slides through the wall.*

Cut the existing waterline. *Use a small pipe cutter to open the old pipe to prepare for the new joint. After opening the downstream faucet, pull the existing pipes down slightly to drain the remaining water.*

TIP: A ball of white bread *shoved into the pipe temporarily blocks water flow while the pipe is being soldered. But you need to move fast to solder the joint before the bread dissolves.*

ANATOMY OF A FROSTPROOF-FAUCET INSTALLATION

If installed properly, an outdoor faucet should not require seasonal repair or replacement. Although there are a few subtleties to the job, the fundamentals of a properly functioning and long-lasting outdoor faucet are twofold: Keep the plumbing installation clean and simple (drawing below), and learn how to operate the faucet properly (sidebar, facing page).



remove the faucet for easier access when drilling.

Shut off the water, and head inside

Once the new faucet has been slid into place, turn off the water at the nearest valve upstream from where the new faucet connector is going to be installed.

If I've shut off the main water supply to the house, I open any existing outside faucets as well as an interior faucet to drain the water out of the pipe. Without that drainage, soldering would be impossible.

Longer pipes, fewer joints

Because I used a single long length of copper attached to the

Drawing: Toby Welles. Cutaway faucet provided by Prier Products Inc.

Tie into the existing waterline. *A soldered T-fitting connects the new pipes with the old. Be careful when using a torch near flammable materials.*

T-fitting
Connect the new pipes with the existing plumbing by replacing the 90° elbow with a T-fitting.

Seat
The seat helps to prevent frozen valves by stopping the flow of water on the warm interior side of the house's siding and insulation.

Faucet connection
Most frostproof faucets accept soldered or threaded connections.

Pipe bracing
Securing the new pipe to the floor joists prevents rattling caused by water flow.

faucet, the pipe already should be close to the existing waterline. If the new pipe falls short of the existing waterline, I need to bring it as close as possible by soldering any necessary extensions and connections before cutting the existing pipe.

Any time that you're soldering near flammable materials like floor joists, it's a good idea to keep handy a flame-resistant fabric panel or a spray bottle filled with water to protect the flammable materials from the intense heat of the torch.

When the new pipe is braced against the joists and is close enough to the existing cold-water line to accept a ½-in. T-fitting, cut the existing waterline with a pipe cutter. The pipes should have drained by this time; if they have not, pull them down slightly to allow them to finish draining (center photo, facing page).

The most common way to tie a new length of pipe to the existing plumbing is to use a ½-in. T-fitting, but for this project, I had to extend the existing water pipe to meet the new faucet pipe. Whether you extend the old pipe or not, the best way to find the exact location that the new pipe should connect with the old is simply to overlap them and make a mark.

Check for leaks

After soldering the new piece of pipe to the existing waterline, wait a few moments for the solder to appear dull, which means that it has finished cooling. Once the connection between the pipes has solidified, turn on the water and inspect your work. Next, make sure to shut off any faucets that had been opened prior to soldering, including the new faucet. When the water has refilled the pipes, check to make sure that no joints have leaks. If I find leaks in any of the joints, I shut off the water, drain the system, and then replace the leaky section rather than resolder the joints. □

Carl Vonnoh III is a plumber in Chattanooga, Tenn. Photos by Justin Fink.

HOW TO CARE FOR YOUR NEW FAUCET

I have replaced many high-quality outdoor faucets after only a few years due to misuse. With a little care, the installation will last for a much longer time. Here are some guidelines to follow:

- **Avoid overtightening the handle during shut-off.** Dripping water seen after shut-off is only the water remaining in the chamber. Overtightening soon wears out the seat and renders the faucet useless.
- **Detach the hose for the winter.** Removing the hose ensures complete drainage and prevents freeze damage.