



Low-Risk Laundry Room

Some of the greatest potential for flood and fire comes from your washer and dryer. Here's how to cut the odds

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Left unattended, a burst washing-machine hose can spill hundreds of gallons of water an hour. Likewise, a dryer can erupt in flame if lint is allowed to build up inside the machine or its ducts. In 1999 (the most recent data available), dryers caused 14,600 fires, 20 deaths, and \$86.8 million in property damage in the United States.

Preventing such mishaps is as easy as replacing a washer's old rubber hoses, ideally with steel-jacketed ones that can't split open. Or discarding the dryer's flimsy—and flammable—vinyl duct and putting a metal one in its place. (Regular lint-trap cleaning, while necessary, won't keep lint from collecting in the duct.) Once you've made those two major upgrades, as shown on the following pages, get in the habit of checking hoses and cleaning ducts every six months or so. Hoses should be replaced every five years; tag them with the date you installed them so you won't forget. Your appliances will last longer, run better, and use less energy. And you'll reduce the threat of flood and fire. On the following pages, Richie Isaacson of Affordable Appliance, in Randolph, Massachusetts, shows how to keep a washer and dryer running safely and efficiently.

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REPLACING A WASHING MACHINE HOSE

Any rubber hose that is cracked, blistered, soft, or has corroded fittings needs to be replaced. Here's how to install a new one that has a braided stainless steel jacket, as well as add a drip pan to stop small leaks from doing major harm.



1. REMOVE THE OLD HOSES

Turn off the hot and cold water valves, unplug the washer's power cord, and remove the drain hose from the drain. (If the drain hose has cracks, replace it with the same type of hose.) Put a towel or tarp under the supply hoses to catch any water, then remove the hoses with a pair of grooved-joint adjustable pliers.



2. CLEAN THE FILTER SCREENS

Debris and sediment will slow the flow of water into the machine. Check the filters, and clean out any buildup with a bristle brush.



3. INSTALL NEW, BRAIDED HOSES

Use your fingers to screw the hose fittings onto the machine's threaded nipples, then tighten gently with pliers. Make sure the hose is long enough to allow you to move the machine if necessary; 60 inches is convenient for most installations.



4. HOOK UP THE WATER SUPPLY

Connect the other ends of the braided hoses to the water-supply bibs as in Step 3. Make sure to match the hot hose with the hot-water supply and the cold with the cold supply. Open the valves and check for leaks. Reconnect the drain hose to the drain. But if you're installing a drip pan (Step 5), reconnect the drain hose after the pan is in place.



5. ADD A DRIP PAN

A drip pan under the washer will catch any leaks (and is required in second-floor laundry rooms). Look in plumbing-supply stores or home centers for a pan with a drain so any water that collects can be diverted to a floor drain. You'll need a helper and perhaps a dolly to lift the washer gently onto the pan so as not to crack it. Then, each time you run a load, make sure no water has leaked out.

FLOOD STOPPER

Leaving a washing machine's valves open all the time greatly increases the chance of a catastrophic hose burst. That's why manufacturers and insurance companies plead with homeowners to close the valves when a machine is not being used. But most people don't bother. Fortunately, there are devices that will do it for you. The **Intelliflow** (about \$150), above, senses when the washer is turned on and automatically opens the water-supply valves. At the end of the cycle, it shuts them down. A floor-mounted sensor also closes the valves if it detects water pooling at the washer's base.



CLEANING DRYER DUCTS

Before working on your dryer, unplug it or trip its circuit breaker; if it's a gas-fired unit, shut off the gas valve. You'll need aluminum tape, a snorkel brush, a vent brush, and, if the vent duct needs replacing, new 4-inch round steel ducting.



1. CLEAN THE LINT TRAP

Pull out the lint screen and push a snorkel brush straight down into the trap. Twirl the brush to fish out any globs of lint at the bottom of the trap. (A long crevice tool on a shop vac also works.) Shine a flashlight down the trap to make sure it's clean.



2. CLEAN THE DUCTWORK

Disconnect the ductwork from the dryer exhaust and from the exterior vent. If the duct is plastic or ribbed metal, toss it out. If the duct is smooth-wall metal, as shown here, take it outside and clean all the parts with a round dryer-vent brush.



3. CLEAN THE OUTSIDE VENT

Working from inside, spin the vent brush a few inches into the duct leading outside, then pull it back and clean off the bristles. Repeat until the bristles reach as far as the exhaust hood on the outside wall. (Don't try to shove the lint out with the brush; you may create a clog.) Then go outside and make sure the vent hood isn't plugged. If need be, remove the hood, clean it out, and then put it back.



4. REATTACH THE DUCT

Reassemble the metal ductwork and seal the joints with aluminum tape. (Don't connect the sections with screws, which snag lint.) The ends of the ductwork should fit snugly onto the dryer's exhaust and vent hood; no tape or hose clamps needed.

For help with all your home-maintenance projects, go to www.thisoldhouse.com or America Online Keyword: This Old House and select Repair & Maintenance in the Know-how section.

GET YOUR DUCTS IN A ROW

You can't be too careful about how you vent a dryer. Flexible vinyl ducting (below) is flammable, traps lint, restricts airflow, and no longer meets building codes. Ducts made out of shiny aluminized Mylar are more fire-resistant but just as likely to catch lint. And flexible ribbed aluminum ducts, while fire-proof, are also notorious lint traps.

Four-inch round steel ducts are the best way to go. The ducts' smooth walls won't collect lint as quickly, they're easier to clean, and they can't burn. When installing rigid duct, keep the runs as straight and short as possible. According to Richie Isaacson, the overall length with two elbows should not exceed 20 feet. (Each 90-degree bend is equivalent to 5 feet of straight duct.)

Venting to the outside is the only correct way to exhaust a dryer, says Isaacson. Products that allow electric dryers to vent inside a house pump out gallons of excess moisture, which can lead to sweating windows, peeling paint, mold growth, and wood decay. "That type of trap doesn't collect all the lint anyway," Isaacson says. "You'll end up breathing it in."

