

Fireplace Fundamentals

From flue to grate, sparks to embers: the facts you need to **make sure the home fires are safely burning.**

THE ROMANTIC GLOW, the nimbus of warmth, the satisfying crackle of a blaze well built: Your fireplace does plenty for you each winter, so it's only fair that you return the favor by keeping it in tip-top shape. What exactly does that entail? Not throwing water on those glowing embers at bedtime, for one thing; knowing what kind of wood to burn (hint: not your Christmas tree), for another. Follow the tenets of fireplace maintenance handily compiled in this guide, complete with recommendations for basic tools of the trade, and you'll be in for many softly lit, warm, crackly evenings.

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“There’s the whole world at your feet. And who gets to see it but the birds, the stars, and the chimney sweeps?”

Dick Van Dyke as Bert in *Mary Poppins*

The Proper Tools

Fireplace implements come in many shapes and forms, but ultimately what matters is the material—namely, metal that is sturdy, withstands high heat, and is dark enough to keep a little soot from making you constantly reach for the polish.



TOOL SET

LOOK FOR: Solid construction and a wrought-iron finish. A basic set includes a small broom and a shovel for cleaning out ashes, a poker and tongs for manipulating logs, and a secure stand to hold it all.

SHOWN: Gracious Home twisted-handle tool set, \$140, www.gracioushome.com.

SCREEN

LOOK FOR: A metal one that fits your fireplace. Too small is unsafe; too large can be unwieldy. (Glass screens are fine, but they can scratch or break and require more cleaning than good wrought-iron ones.) Trifold screens can be adjusted to fit a range of dimensions. Handles at the top make it easy to move the screen out of the way without getting your fingers sooty.

SHOWN: Gracious Home trifold black fire screen, \$160, www.gracioushome.com.

GRATE

LOOK FOR: A cast-iron grate with crossbars no more than two inches apart, so logs can't roll out from between them. Always measure your fireplace opening before buying a grate to be sure it fits.

SHOWN: Ace Hardware 27-inch Cast Iron Fireplace Grate, \$20, www.acehardware.com for store locations.

The Burning Questions

Expert advice on some important dos and don'ts for a well-kept fireplace.

Bedtime Story

Here's what to do about your fireplace when it's time to hit the hay.

- **If you can still see flames, don't leave a fire unattended.** Unfortunately, besides scattering logs a bit to make them burn faster, there is nothing you can do to speed things up—you'll just have to wait for the flames to die down.
- **If the fire is virtually extinguished, the safest course is to dispose of hot ashes and embers by shoveling them into a metal container, closing the lid, and placing the bin outside on a noncombustible surface, like concrete or dirt, at least 18 inches from anything flammable, says Ashley Eldridge of the Chimney Safety Institute of America.**
- **If you don't remove still-smoldering ashes, leave the damper open.** Closing it can cause smoke and poisonous gases to build up inside your home, according to the U.S. Consumer Product Safety Commission.
- **Never douse a fire with water.** This can create a dangerous burst of steam and send noxious smoke into the room. It can also dramatically cool and contract the hot surfaces of the firebox, resulting in permanent damage to the masonry and steel components of the fireplace, says James Lake of the National Fire Protection Association.



What should (and shouldn't) you burn in your fireplace?

Soft woods like fir, pine, and cedar ignite easily and burn rapidly, so they are ideal to use as kindling. For staying power, use harder woods, such as oak, maple, and hickory. Freshly cut wood contains a lot of moisture, pitch, and resin and tends to produce creosote, a flammable substance that attaches to chimney walls. So buy seasoned wood, or season your own by keeping it off the ground under a rainproof tarp for at least six months, says the Environmental Protection Agency. (Hit a log against another; if it makes a hollow sound, it's ready.) Never burn chemically treated or painted wood, foil, plastic, or other garbage, all of which produce noxious and sometimes toxic fumes. Christmas trees are a big no-no: "The unseasoned wood and dry needles make them powder kegs, highly combustible," says Roy Marshall, director of the Residential Fire Safety Institute, a national advocacy group. So are ribbons, gift wrap, and other chemically treated paper—lit fragments can ignite creosote on chimney walls or land on your roof, says Ashley Eldridge, education director of the nonprofit Chimney Safety Institute of America.



Does a fire help heat a room or take heat away?

As much as you love it, "your fireplace can be one of your most inefficient heat sources," says Gary R. Schmitz, a public-affairs officer at the National Renewable Energy Laboratory, part of the U.S. Department of Energy (DOE). Here's why: Fire needs oxygen to burn, so it draws warm air in from the room at a rate of up to 300 cubic feet per minute. Then, "as the fire burns, it heats the air around it—and heat rises," Marshall explains. As the warm air escapes through the chimney, cooler air from outside rushes in to fill the void. The net result, says Marshall: "You'll feel warmth from the fire if you are sitting close by, but you're siphoning more heat out of the room than you're creating." A number of accessories claim to improve the equation, but the only ones that make a real difference, according to the DOE, are high-efficiency fireplace inserts. Professionally installed (and pricey), these are typically cast-iron or steel chambers that sit inside the hearth and enclose logs behind glass doors. They work by controlling the flow of air to the fire; many also have blowers to direct heat into the room.

tip If you have a fireplace, you should also have a carbon monoxide detector. Both wood-burning and gas models can produce the colorless, odorless, and deadly gas.

Fireside Chat

■ *Chimney* is one of just a few unrhymeable words in the English language. (Others include *depth*, *month*, *orange*, *pint*, *purple*, *silver*, and *wasp*.)

■ The chimney swift is a soot-colored bird with long claws that nests in unused chimneys. Before the invention of the chimney in the Middle Ages, swifts are thought to have made their homes primarily in caves and hollow trees.

■ There are 28 fireplaces in the White House. (During his presidency, Theodore Roosevelt hung a large moose head above the one in the State Dining Room.)

■ When, in 1895, George Vanderbilt finished construction of the Biltmore House, his 250-room home (still the largest in America) in Asheville, North Carolina, he could kindle a blaze in any of 65 fireplaces.

■ The idea that Santa enters houses through the chimney—an old European Saint Nicholas legend—was popularized in America by Clement Moore's "Twas the Night Before Christmas." The poem was originally published under the title "A Visit From St. Nicholas" in the *Troy* (New York) *Sentinel* on December 23, 1823.



How often should fireplaces and chimneys be cleaned?

All the official sources are in agreement: To avoid chimney fires, hire a professional once a year to inspect yours for cracks, blockages, and creosote buildup and to give it a good cleaning. (To find a certified sweep in your area, go to the Chimney Safety Institute of America's website, www.csia.org.) During the rest of the year, shovel or sweep out ash from your fireplace after every fire for safety: Ash acts as an insulator, so any hot coals buried deep within can stay hot for days. Also, accumulated hot ashes will wear out the grate. And keep an eye out for visible damage. "If you see any cracks around the hearth and flooring or gaps between firebricks, have them inspected right away by a chimney sweep," advises Michael Litchfield, author of *Renovation 3rd Edition* (Taunton Press, \$28). "A spark could get into the breach and cause a fire." If you don't already have a spark arrester, also called a chimney cap, consider asking the sweep to install one, says Eldridge. Generally costing from \$100 to \$300, it will prevent sparks from escaping the chimney and landing on your roof or someone else's, while also keeping debris and critters from getting in.



What are the differences between gas and wood-burning fireplaces?

First of all, you're not going to get the lovely snap, scent, or blazing heat of a wood fire from a gas fireplace—or that whole outdoorsy thing of toting in the logs and getting the kindling going. What you will get is convenience. With the flick of a switch, the propane or natural-gas burner beneath the faux logs (usually made of ceramic or concrete) creates a constant flame that curls around them to mimic a bona fide wood fire. Gas fireplaces are generally more efficient than wood-burning models and give off more heat, says Marshall. Plus, there's zero cleanup. And they're gaining in popularity in U.S. homes—they accounted for two-thirds of the 2.8 million fireplaces sold last year, according to the Hearth, Patio and Barbecue Association, a national trade organization. Gas fireplaces can be vented (with a chimney or a vent to the outside) or unvented (chimneyless), but you may want to stick with vented models. One study suggests that unvented fireplaces contribute significantly to indoor air pollution—a particular concern for those people suffering from respiratory diseases, such as asthma.