How To Build A Safe Fire

Make sure the room is well ventilated, the damper open, and the flue

unobstructed before lighting your fire.[[1]](#footnote-1) Poor ventilation will cause

the fireplace to smoke. Avoid burning wet or green wood. Place a

screen in front of your grate to catch any sparks that fly. Keep a

fire extinguisher handy. Keep other combustibles at a distance. Never

use flammable liquids indoors to light your fire.

Dry wood when burned with abundant oxygen produces carbon dioxide,

water, and a small amount of residual ash‑‑all of which are easily

recycled by green plants. Burning green or wet or highly resinous wood

results in increased production of wood tars and several associated

"smoke" products. These tars and the wood extracts may coat the chimney

flue and could cause a chimney fire if ignited.

Some modern homes, especially those with electric heating, are

constructed so air‑tight that an air vent may have to be installed, or

a window opened slightly. When wood or charcoal is burned without

sufficient oxygen, some carbon monoxide will be released.

Glass fireplace doors offer draft control and a possible means of

further reducing the amount of smoke that escapes into the room. If,

however, the chief reason for poor fireplace performance is faulty

construction, the only safe solution is proper rebuilding.

Softwoods produce a brief, vigorous fire without a bed of

long‑lasting coals. Within a short time, when any unburned fuels have

been pushed to the rear of the grate, and when the fireplace opening is

covered with a fine mesh screen, a softwood fire can be presumed safe

enough to leave unattended.

Some resinous woods are best used as stove woods or only with caution

in the fireplace, Hemlock, larch, spruce and juniper all contain

moisture pockets in the wood. Upon heating, trapped gases and water

vapor build pressure in these pockets and "pop" with great vigor. This

is another reason for reducing moisture content as much as possible

before burning any firewood.

With the proper size and kinds of firewood and a little practice at

laying up the fire, you can enjoy the warmth and beauty of your

fireplace all winter long. Sit back and relax, "while the blazing logs

bring back the glow of summer suns of long ago."

1. Author: Should we define the word "flue" here? [↑](#footnote-ref-1)