

Preventing the Unthinkable Chimney Fire

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Before you light a chimney hearth, give some thought to the condition of your fireplace/woodstove or your enjoyment may be short-lived. Dirty chimneys can cause chimney fires, which damage structures, destroy homes and injure or kill people.

Each year thousands of homes experience chimney fires due to improper fireplace maintenance. The EPA recommends having your woodstove, chimney, and vents professionally inspected and cleaned each year to keep them in safe working order.

Fireplaces are made to safely keep wood-fueled fires, while providing welcoming heat. A chimney's job is to expel the products of combustion. When these products leave the fireplace and flow up into the cooler portion of the chimney, condensation happens. The resulting residue that sticks to the inner walls of the chimney is called creosote. This substance is black or brown and can take on different consistencies. Whatever form it takes, creosote is highly burnable. If creosote builds up, it can catch fire inside the chimney. Things that support build-up of creosote are:

- Restricted air supply – Air supply may be restricted by closed glass doors or by failure to open the damper wide enough to move heated smoke up the chimney rapidly. Conditions for developing creosote increase the longer smoke and heat remain in the flue.
- Unseasoned wood – The energy used to burn off the moisture in the wood keeps the smoke cooler than using dry wood.
- Cooler-than-normal chimney temperatures.

Tips for Preventing Chimney Fires

- Season woods outdoors for at least 6 months before burning it. Properly seasoned wood is darker, has cracks in the end grain, and sounds hollow when smacked against another piece of wood.
- Store wood outdoors, stacked neatly off the ground with the top covered, away from structures.
- Start fires with clean newspaper and dry kindling. Never start a fire with gasoline, kerosene, charcoal starter, or a propane torch.
- Let the fire burn down to coals, then rake the coals toward the air inlet (and woodstove door), creating a mound. Do not spread the coals flat.
- Reload your woodstove by adding at least three pieces of wood each time, on and behind the mound of hot coals. Avoid adding one log at a time.
- Use smaller fires in milder weather.
- Do not burn cardboard boxes, wrapping paper, garbage or Christmas trees.
- Dispose the ashes in a metal air-tight container and store outdoors on a cement or brick slab.
- Keep all flammable household items such as, drapes, furniture, newspapers, and books, far away from the woodstove.
- Don't use logs made from wax and sawdust in your woodstove or fireplace insert, as they are made for open hearth fireplaces. If you use manufactured logs, choose those made from 100 percent compressed sawdust.
- Keep the doors of your woodstove closed unless loading or stoking the live fire.
- Keep an ABC fire extinguisher near your clear exit.

Signs the Chimney Needs Cleaning

- An odor of burned wood coming from the fireplace.
- Drafting or smoking problems with the chimney.
- Creosote covering the damper. You can check this by looking inside the fireplace near the damper. If you see any creosote, which resembles black mold, then it is most likely coating the entire smoke chamber and flue liner.

Signs That a Chimney Fire is happening or has happened

- The roar of a fire in the chimney
- Warping of metal anywhere in or on the chimney
- Creosote flakes and debris found on the ground, roof, or gutters
- Discolored or warped rain cap (at top of chimney)
- Scorching or burns in the roofing material from burning debris falling on the roof
- Visible cracks in the masonry of the chimney
- Smoke escaping through cracks in the chimney
- Smoke in the attic or visible soot build-up in the attic

If You Suspect a Chimney Fire

- Have all members in the home exit to the family meeting place.
- Call 911
- Don't attempt re-entry into the home.

Remember, prevention is key to enjoying your fireplace safely.