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Certified Home Inspections of Northern Indiana LLC

Chimney Fires: Know When To Hire A Professional Chimney Sweep

In 2003, there were 25,600 residential fires in the United States originating in chimneys, fireplaces and solid fuel appliances, according to the United States Consumer Products Safety Commission. These fires resulted in 50 deaths, 80 personal injuries, and \$142.9 million in property damage.

The purpose of the chimney is to exhaust caustic flue gases upward into the atmosphere. The condition of the firebox, smoke chamber, and flue are crucial to ensuring the safety of your home.

You may have a problem and need to hire a professional chimney sweep if you are experiencing any of the following.

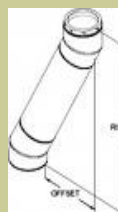
“One way to know if you’ve had a fire inside the flue liner is if a magnet sticks to it. Stainless steel that has reached extreme temperatures and has had its metal composition changed does attract.”

UNLINED CHIMNEY It is recommended that all chimneys be lined. Masonry chimneys were tested in the 1980’s by the National Bureau of Standards. Testing found that when wood touched the unlined chimney it caught fire within 3.5 hours. Make sure your chimney is lined!

MISSING/CRACKED CHIMNEY CAPS Chimney caps that allow rain or snow can cause extreme temperature changes in the liner which can lead to poor drafting, creosote build-up, racking of tiles and rusting of metal. All of these conditions are guaranteed to flue failure and lead to chimney fires.

CRACKED TILES Any signs of cracked tiles when viewing the chimney from the rooftop or the firebox is not good. Tiles crack from extreme temperature changes and can be caused from either the chimney cap issue mentioned above or there already have been previous chimney fires in the flue and you weren’t aware of it. If you don’t feel comfortable evaluating the tiles yourself or if your view is inhibited, chimney sweeps often have hi-tech cameras that can see every inch of the inside.

Chimneys that are offset cannot be inspected during a whole house inspection. Offset means that the flue is not straight up and down. An offset flue has an angle and requires a professional with a chimney scope (camera) for a thorough inspection (see diagram).



This chimney cap has a large amount of soot as well as creosote build-up and should be cleaned by a professional.

MISSING/DETERIORATED MORTAR (for brick and concrete block chimneys with clay liners) If mortar joints are missing or the mortar is deteriorated, then you know you have a serious fire hazard. Areas to look at are the roof, the smoke chamber (above the firebox) and the attic. An easy solution is to just install a metal liner inside the clay liner.

PREVIOUS CHIMNEY FIRES IN STAINLESS STEEL LINERS You may have had a chimney fire and you weren’t even aware of it. Fires inside metal liners heat the metal beyond temperatures the metal was designed for. Once those temperatures are reached one time the liner will not function properly thereafter. If a chimney fire occurs the entire flue lining needs to be replaced immediately for safety. One way to know if you’ve had a fire inside the flue liner is if a magnet sticks to it. Stainless steel does not attract magnets. Stainless steel that has reached extreme temperatures and has had its metal composition changed does attract.

SIGNS THAT YOU’RE AT HIGH RISK FOR A CHIMNEY FIRE:

- Your face gets covered in soot when opening the damper
- Mortar falls out like sand when touching it with your pinky finger
- If you can pull bricks out above the roofline and realign them like legos
- You see charred wood in the attic touching the chimney

The home inspector has your best interest in mind when inspecting the chimney. Our goal is to provide you with the most thorough information possible. Please note that sometimes inspections can be limited. A professional chimney sweep is recommended for cleaning and further evaluation when the chimney liner shows signs of creosote build-up inhibiting the inspection or the view was obstructed by an offset chimney liner.



Tuck pointing is needed to prevent further deterioration.

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Certified Home Inspections is a locally owned, multi-inspector firm serving the Michiana area. Our home inspectors are licensed in the state of Indiana and regularly attend continuing education courses. We do this as part of our commitment to provide the most thorough home inspection possible. Our office staff is there to support our clients and realtors with administrative needs such as scheduling and issuing reports. It is our pleasure to help make the home buying and selling experience go as smooth as possible. We look forward to serv-

Online home inspection blog!

AskTheInspector.info

Email your inspection questions to:
theinspector@asktheinspector.info

The EPA named January “National Radon Action Month”

At CHI we believe that real estate professionals are the TRUE HEROES in saving lives when it comes to radon induced lung cancer. Here's why...

- RADON AWARENESS IS LOW
- MOST RADON TESTING IS DONE DURING THE REAL ESTATE TRANSACTION
- MOST HOMES TESTING HIGH FOR RADON DURING THE REAL ESTATE TRANSACTION ARE MITIGATED
- REDUCING DANGEROUS LEVELS OF RADON IN HOMES PREVENTS RADON INDUCED LUNG CANCER

REAL ESTATE PROFESSIONALS ARE SAVING LIVES!

YOU ARE making a difference in the lives of your clients, so remember to...

- EDUCATE CLIENTS
- ENCOURAGE TESTING
- PREVENT RADON INDUCED LUNG CANCER

SOME IMPORTANT FACTS ABOUT RADON

- Radon is a colorless, odorless, naturally occurring radioactive gas that threatens the health of every household
- Radon is the second leading cause of lung cancer deaths in the United States and the number one cause among non-smokers
- 1 in 15 houses across the U.S. have elevated radon levels and in Michiana the numbers are about 25%
- Any home, new or old, basement or slab, may have elevated radon levels
- The only way to know your home's radon level is to test
- Testing can be performed by the homeowner inexpensively by purchasing a kit from the county Health Department or hardware store
- Testing during a real estate transaction must be done by a licensed professional
- Fixing high levels of radon can cost an average of around \$1,000
- Mitigation companies must be licensed and give a warranty along with including a post mitigation test by an independent company to ensure the system is working properly
- The EPA encourages Americans to test their homes every two years, mitigate levels if high, and to build new homes with radon-resistant materials and features
- Installing a mitigation system at the time of new construction is less expensive than installing a system in an existing home

