

Why Trust Anyone Else?

Orphaned Chimneys



Older Chimneys

Millions of homes have been heating with natural gas or oil venting into an appliance chimney. Based upon years of experience, heating contractors and masons knew what size chimneys worked for what size furnaces. Engineers also had developed formulas for large industrial chimneys and smokestacks.

Many furnaces were considered 60-80% efficient and emptied the warm exhaust gas into the appliance chimney along with the gas water heater. A 60% efficient furnace would allow 40% of the heat to escape up the chimney.



This wasted heat kept the chimney warm, almost hot, between times of peak firing. Furnace technology has now determined how to extract more heat from the combustion process creating much more efficient furnaces. However an 80% efficient furnace still loses 20% of heat through the chimney. Soon the 80% furnace will no longer be available.

The Orphaning Process

High efficiency furnaces, those that deliver 90 percent or more of the combustion heat, are great for your checkbook (fuel savings) but this saved money, and more, is often being spent by many homeowners on chimney repair, plaster, and some repainting costs.

It is a common practice for your gas water heater and furnace to vent into the same chimney. The chimney was originally sized for the furnace (potentially coal) AND your water heater.

The new high efficiency furnaces (termed 90%) often are required to vent to the exterior through PVC pipe. A 90% or higher furnace typically does not even use the chimney. This leaves the water heater by itself...Orphaned!

A Rain Forest in the Chimney!?!

An orphaned water heater in an oversized chimney creates a huge moisture problem. Cold winter air is heavy and is constantly trying to sneak into your house by slipping down the chimney.

When the old furnaces and water heaters were in the same vent, they produced ample heat and draft to combat the heavy cold air.



Orphaned water heaters vent into colder chimneys. The exhaust from the combustion of natural gas contains massive amounts of water vapor. Because of the cold conditions inside the oversized chimney, the water vapor, and some corrosive chemicals, condenses inside the chimney. Soon it is literally "raining" inside your chimney. This water soaks into the brick and begins to make its appearance known by bubbles in paint, efflorescence on blocks or bricks, and stains. In addition cold air can literally overcome the water heater exhaust and push

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carbon monoxide into your basement or utility room. The only real solution is to install a metal liner that reduces the inner diameter of the chimney, or to create a reduced flue size by some other approved means.

Have your orphaned chimney inspected regularly for damage control and your safety.

Honest Home Inspection cares about the safety of you and your family. You are being provided this information because you may have an orphaned chimney and need to understand the meaning. Be Smart! Be Safe!! Educate yourself.

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