

A Clean Sweep - Chimney Leak Procedures

We have been working on Chimney Leak Issues for over 30 years. We can promise you that we offer a strategy that involves the best known practices to remedy a leaking chimney. However, it is <u>impossible for us to guarantee no leaks</u>. All we can promise is to address the situation one step at a time.

Even after exhausting the most common possibilities, sometimes we find that the leak is from some other cause most likely a roof or roof drainage issue, unrelated to the chimney. We feel it is our responsibility to be upfront with you the customer so you are aware of the possible outcome. After following all of the known steps and procedures, your chimney still may leak due to a circumstance beyond our control or unrelated to the chimney.

We have put together a list of possible reasons chimneys can leak and have listed them below.

#1 The Simplest Cause of Chimney Leaking: Rain Going Straight In from the Top



Chimneys without covers get a lot of rain falling straight down into them. A chimney cover makes sense to most people. Not only does it keep the rain out, but keeps birds, animals and debris out. The greatest value of the chimney cover is really keeping these elements out because when chimneys get blocked at the bottom, people get sick (or even die) from CO poisoning.

#2 Many Chimney Leaks are from Cracks in the Chimney Crown



The chimney crown is the cement part on top of the chimney. The bricks go up around the tile flue liners, but at the top you need something to stop the rain and snow from just falling in around the tiles. You can see that the very purpose of the chimney crown is to keep rain out. Cracks in the chimney crown can occur from shifting of the structure or from shrinkage. When your crown has

cracks, the water goes right through those cracks.

How to fix a cracked crown depends upon how bad the damage is. Most crowns have small cracks. Even small ones need to be fixed because all big cracks started out as small ones. Water freezes and thaws in the cracks all winter long, year after year, forcing small cracks to eventually become big cracks. There are excellent crown coating materials such as Chimney Saver Crown Coat which cover the masonry and prevent small cracks from becoming a real problem.

Once chimney crown damage is significant, though, the only fix it is to remove and relay the masonry. You can't put a band aid on a gushing wound and you can't coat a structurally ruined chimney crown and expect it to work. Best to coat your crown now with Crown Coat and avoid the big hassle and expense later.

#3 Chimneys Leaking From the Inside Out from Condensation



This was an older house with an unlined brick chimney. In 1900 when it was built that chimney carried wood or coal smoke. Someplace along the way a gas furnace was installed, but the chimney was not lined with a properly sized liner.

Gas fumes are very low temperature and have a lot of moisture in them. These fumes were condensing on the inside of this too-large, too-cold old chimney, literally soaking the bricks and keeping them moist all the time.

#4 Chimney Flashing Causes Leaks



The flashing is what keeps water from going into the place where the brick structure comes through the roof (or otherwise comes close to the roof.) There's a fairly large gap between the bricks and the roof and water will pour through that hole if it's not sealed up. Flashing is often aluminum that goes in between a couple bricks and bends to go on top of the shingles. Some

sort of water proof "stuff" seals those spots. Though it's far from the best choice, the "stuff" is often tar.

In any event, flashing doesn't last forever and the tar lasts even less time. There are better materials for sealing the flashing now. We use a product called Flash Seal.

#5 Chimney Leaks Caused by Leaking Bricks



Bricks and mortar both pass water, and often lots of it. The problem here is the same as with the crown- the freezing and thawing all winter long with the resulting damage which causes leaks in the house. When water is absorbed into a brick or a mortar joint in the summer time, the water probably dries out after a while. The exceptions might be for a surface in the shade or on the side of the house where the sun never shines; those walls just stay wet. That water does

try to escape by "falling" i.e. the water weight (or head pressure) carries it toward the ground where it forces its way out of the bricks either inside or outside of the house. Some bricks actually get soggy, though it's more likely that the water will just seep to the inside of the house. To the point, using silicone based water sealants may trap water and cause more damage than you started with. We use polysiloxane type waterproofing agents, such as Chimney Saver by Saver Systems.

#6 Chimney Leaks Caused by Gutters leaking onto the chimney



Sometimes if your gutters are full, the overflow of water can spill over onto the chimney and saturate the bricks. Many times there will be evidence of this where the chimney shows signs of stains from the overflow. Therefore, make sure your gutters are clear and not spilling over onto your chimney.