



Backdrafting FAQs

Before reading and following any advice that follows, please read and consult your owner's manual.

My wood stove or fireplace seems to create an unusually high amount of smoke into our home. What can be done about this? Was it installed properly?

There can be a number of reasons why smoke is backdrafting into your home. There are four main causes:

- Negative pressure (common in newer homes and basement installations)
- Backdraft (common with outside chimneys, short chimneys or high-wind areas)
- Blocked chimney
- Burn technique / wet wood

In order to recommend solutions to reduce smoke coming into your home, it is important to know what the cause is.

1. Negative Pressure

Negative pressure is essentially the process of heat in your home rising inside and battling the air escaping through your chimney. In other words, heat rises. As the air in your home rises from your basement to your upper floors, your lower floors tries to recoup that air. You may have a negative pressure problem if:

- Your home is airtight around your lower floors (common in newer homes)
- Your wood appliance is in the basement or a lower floor
- Everytime you open the door smoke enters the room even when the stove has been on for a few hours

Possible Remedies

- Open a window near the wood-burning appliance before you open the door. This will provide 'make-up' air for your basement.
- Open the door of your wood appliance very slowly when re-loading it with wood.

2. Backdraft / Cold Chimney

Hot air rises and cold air falls. If your chimney has cold air, smoke may come into your home until the air in the chimney is heated. You may have a cold air chimney problem if:

- You get smoke into your home on light-up
- Your chimney is not much higher than surrounding roof lines or trees

Possible Remedies

- Extend your chimney higher
- If it is an outside chimney, build an insulated chase around it
- Keep the fire burning 24 / 7