

INDOOR AIR QUALITY WITH

Wood Burning Stoves

FACT SHEET 10



SUBJECT BEING ADDRESSED BY THIS FACT SHEET

How do you maximise indoor air quality with wood burning stoves?

WHO IS THE TARGET AUDIENCE FOR THIS FACT SHEET?

Homeowners, stove installers and chimney sweeps.

THE FACTS

The While wood-burning stoves can provide warmth and ambiance to a home, they can also contribute to indoor air pollution if not used properly. For context these emissions are similar to levels obtained by many other household activities such as cooking. However, here are some tips to help maximize indoor air quality when using wood-burning stoves:

1. Use dry wood with a moisture content from 10 to 20% moisture.

Burning dry wood produces less smoke and pollutants as well as more heat than wet wood. Ready to Burn wood is independently verified to confirm a moisture content below 20%. Drying/seasoning wood can take between 12 and 36 months depending on the storage conditions and most importantly species. It is important to store wood for seasoning under cover and promote air circulation to accelerate drying times.

2. Do not burn treated or painted wood:

Treated or painted wood can release harmful chemicals when burned and it can be illegal to do so. It's best to use untreated, natural wood in your wood-burning stove, this will also help protect your chimney or flue.

3. Maintain proper ventilation:

Ensure that your wood-burning stove is properly installed by a Competent Person (e.g. a HETAS or OFTEC approved installer) and vented to the outside. This will help remove and replenish stale air from the indoor environment. Correct ventilation is necessary in any house, but certain appliances will require a little more to ensure correct flue functioning – the appliance installation instructions will contain details on this.

4. Clean your stove and flue regularly:

Regularly clean and maintain your wood-burning stove and flue to prevent the buildup of creosote, which can reduce efficiency and increase the release of pollutants. Follow the manufacturer's instructions for cleaning and maintenance. Good practice would be to clean your chimney twice a year. If in doubt consult your chimney sweep.

5. Correct use:

Use your stove in accordance with the manufacturer's instructions, especially on lighting & refuelling. Lighting or refuelling your stove the wrong way can generate more smoke than necessary. If unsure seek professional advice from a registered HETAS or OFTEC installer or a qualified chimney sweep. Do not slumber the stove.

6. The importance of pressure:

It is important that a wood burning stove operates under negative pressure in the flue. Heat rising up the flue causes buoyancy to extract waste flue gases. However, spillage of smoke and pollutants can occur when the flue has insufficient draw and the stove doors are open. This is why it is important to refuel and operate in accordance with the manufactures instructions.

7. Consider using a HETAS Cleaner Choice or a ClearSkies Certified stove:

The clearSkies label identifies stoves that meet or exceed the current regulations for efficiency & emissions. A clearSkies level 3 stove meets Ecodesign and is smoke exempted. Levels 4 and 5 offer increasingly better efficiencies and lower emissions. Look for stoves with these certifications for better performance.

8. Monitor carbon monoxide levels:

Install a carbon monoxide alarm in the room with your wood-burning stove to ensure early detection of any potential carbon monoxide leaks. Ensure the alarm is permanently affixed in a suitable position.

Next steps for the target audience

While these tips can help improve indoor air quality when using wood-burning stoves, it's always important to follow local regulations and guidelines for proper installation and usage. A HETAS or OFTEC registered installer and a qualified chimney sweep can provide advice on ensuring your installation remains compliant and promotes environmentally responsible burning.