

Woodfuel, What Are the Options: Logs

Logs are one of the oldest and most versatile forms of wood for heating. Logs can fuel open fires, stoves and modern 'batch' boilers of all sizes.

Questions to Ask your Supplier

In Wiltshire as with the rest of the UK the firewood market has grown dramatically in the last few years, this has inevitably seen many less experienced suppliers entering the market. When buying your logs you should ask a supplier:

- How they deliver - do you want them dumped at the gate; left in a returnable 'dumpy bag' or do you want them stacked into your log store? Remember to ask about delivery charges, bag deposits and stacking costs.
- Are the logs green or seasoned? It is usually cheaper to buy green logs and dry them yourself, but you will then need to consider how much space they will take up. (Kiln dried logs, however, are likely to have used considerable energy in production.)
- Are you buying by weight or volume? Most log suppliers supply by the 'load'; what does this mean for your individual supplier?
- Where are the logs from? Is the woodland sustainably managed, and reasonably nearby?
- Make sure you have a suitable storage area. Logs stored outside need to be raised off the ground in a well ventilated area protected from rain, ideally close to the house and convenient for delivery. Check that the logs delivered are suitable in terms of size for your stove or boiler. A standard log length is about 25cm.



Things to Remember when Purchasing Logs

Understand what you are buying. Logs are sold by the load: in tonnes, loose cubic metres, stacked cubic metres or in small bags. If you buy by the 'load', always ask what volume the load contains.

Where possible always buy logs by volume and not by weight. Volume does not take into account any possible moisture content, purchasing by weight means you might be just buying a lot of water if the wood is green or has been poorly stored prior to delivery.

When buying by cubic metre, check if it's a loose or stacked cubic metre. A loose cubic metre (e.g. where logs are piled randomly in the back of a pickup truck) contains approximately third less wood than a stacked cubic metre (see picture above).

Logs are ideally cut prior to purchase, for many domestic users 25-30 cm is the optimum. Ideally they should be split if greater than 10 cm diameter to assist with further drying prior to use.

Unseasoned Logs and Moisture Testing

A fresh green log of about average moisture content (25% MC) has only around half the energy content of a well seasoned equivalent. While this higher moisture content should make them cheaper you will require space to stack and dry before use.

If you try and use wet wood any water present as to boil away before the wood will burn, therefore reducing the net energy released as useful heat. Once lit, logs that aren't dry will result in a fire that smoulders and creates lots of tars and smoke. These tars can be corrosive, potentially damaging the lining of the flue and increasing the danger of a chimney fire. Wet logs will tend to blacken glass in stoves even if the stove is designed to keep the glass clean.

The moisture content of a piece of wood is a measure of the relative weight of water and weight of solid wood. This can be expressed as either 'dry basis' or 'wet basis'. Most fuel suppliers use a wet basis measurement, (MC).

When using a moisture meter, always test the fresh surface of a newly split log – the difference between the inside and outside can be as much as 15%. The average moisture content across the log should be no more than 25%.

As rule of thumb, Radial cracks and bark that come off easily suggests well seasoned wood.

What to do with the Ash

The quality and composition of ash will often increase with a change in feedstock moisture level or the presence of higher bark content.

Wood ash from biomass boilers is a great soil improver. When used sparingly on the garden or compost heap it is great for a little extra nourishment. As a rule of thumb add 1 cup of fine powdery wood ash for every 4.2 m³ of compost/organic potting mix.

It is particularly effective to aid tomato growth since they enjoy a slightly alkaline pH. Here's how: before planting, pour ¼ cup of wood ashes in the hole where you will plant the tomatoes and plant as normal. If you have already planted the tomatoes (without adding ash first), sprinkle ¼ cup of ashes around the base of each plant and gently work into the soil with a garden rake.

Do keep in mind that wood ashes raise the soil's level of alkalinity so avoid using wood ash around acid-loving plants, including: potatoes, hydrangeas, rhododendrons, azaleas, tulips, and junipers. Always rinse hands and gardening tools thoroughly after handling wood ashes.

Other compounds in wood ash are naturally repellent to slugs and snails, making ash a great tool for keeping your garden pest-free. This can be done by spreading ashes evenly around the edges of garden rows.