

USING WOOD FUELS FOR A SUSTAINABLE FUTURE

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Wood is a major source of renewable heat energy and if burned efficiently produces virtually no smoke.

Compared to fossil fuels, using sustainably managed wood reduces net CO₂ production, so heating with wood significantly reduces our reliance on fossil fuels whilst reducing CO₂ emissions.

Select a fuel type that matches your appliance's instructions and warranty for a long, reliable and safe service.

Log burners can use dry hardwood or softwood logs - less than 25% moisture content is usual and preferable.

When possible, use locally produced wood, as it not only improves fuel security, reduces our carbon footprint, but also brings economic benefits to your local community.



THINGS TO KNOW WHEN YOU BUY LOGS

Moisture Content

Dry wood (well seasoned) burns better than wet wood (green logs). Wet wood is much less efficient and if you can get them to light at all, logs that are not dry provide 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. When trying to burn wet wood, the fire has to boil off the water before any heat is provided to the room. Well seasoned logs can have twice the heating value of green logs.

Only burn dry wood, either by buying it dry, or by seasoning green logs. Dry in a sunny, well aired space for one or two summers, keeping rain off in the winter. Radial cracks and bark that comes off easily suggest well-seasoned wood; better still, check with a moisture meter. First calibrate the meter and then measure a freshly split surface to get the best reading.

Wood Density

When buying logs, the seller should advise whether they are from hardwood or softwood tree species (or mixed) and if they meet the European standard EN ISO 17225-5 for graded firewood.

The general difference is that hardwoods tend to be denser than softwoods. This means that a tonne of hardwood logs would occupy a smaller space than a tonne of softwood logs.

Denser wood tends to burn for a longer period of time meaning fewer 'top ups' are required to keep a log stove burning for a given length of time. Since the heating value is approximately proportional to the weight of the wood (for the same moisture content), hardwood logs are typically priced as more expensive than softwoods when bought by volume.

Contamination

Ensure that your firewood is not contaminated, e.g. with paint or preservatives. Treated wood should never be used in a stove because it can produce harmful gas emissions which may affect your health. Burning contaminated wood is also more likely to corrode flue linings and damage the chimney as well.



ALL ABOUT OTHER WOOD BASED FUELS

Briquettes

Typically made from sawdust, a by-product from industrial manufacturing



processes. The sawdust is compressed and the lignin contained in the wood can be softened, allowing it to act as a natural binder, producing a reformed log size product which should conform to European standard EN ISO 17225-3. Briquettes are dense which reduces the amount of storage space required and they're also clean to handle and easy to take home in 'ready to burn' retail packs.

Usually, they can be used as an alternative to firewood, although the burning characteristics are different and the settings on a stove may need to be adjusted to get the best from the fuel. Start by using less briquette fuel than you would firewood, as a briquette can produce more heat. They can usually be broken into smaller pieces to suit requirements.

Wood Chip

Good quality chip should be processed to the European standard

EN ISO 17225-4 which has guidance on both particle size and moisture content. Adherence to this means that the chips



will help the appliance (especially domestic sized boilers) work at their optimum efficiency and reliability. Typical wood chip from a tree surgeon is too wet and variable in chip size for most appliances.

Wood Pellets

Typically made from the same raw materials as a Briquette, pellets are much smaller, with the European standard EN ISO 17225-2 providing diameter options of 6mm or 8mm. Pellets are widely used for biomass



boilers, however pellet stoves are becoming increasingly more commonplace in the domestic market.

Poor quality pellets that have too much dust are prone to crumbling, whilst over-long pellets will clog the feed mechanism.

ALWAYS LOOK FOR THE WOODSURE LOGO WHEN BUYING YOUR WOOD FUEL



QUESTIONS TO ASK A WOOD FUEL SUPPLIER

The Woodsure Quality Assurance Scheme certifies producers for their consistency of producing a quality product with a suitable description. When purchasing, it's a good idea to check out the following things:

- Is the fuel the right type and size for your stove?
- If you are claiming the RHI, is the fuel listed on the Biomass Suppliers List?
- Is the fuel being supplied suitably accredited to Woodsure standards?
- For firewood users
 - Are the logs green or seasoned?
 - Is there a specified moisture content?
 - Consider how much space you need if drying your logs.
 - You'll need space to store at least one winter's supply, preferably two.
- Some log suppliers supply by the 'load' - what does this mean in each case?
Ask for a volume measurement in cubic metres.
- Where is the wood fuel coming from?
Is the woodland sustainably managed, and reasonably nearby?
Has the fuel been imported?
- Are the logs Hardwood or softwood?
- Does the supplier offer a stacking service?

FINDING A WOOD FUEL SUPPLIER

To find your nearest Quality Assured Fuel producer, please visit www.hetas.co.uk/find-fuels/ or call us on **01684 278170**

QUALITY ASSURED FUEL



The **Woodsure Quality Assurance Scheme** provides a recognised quality standard for wood fuel products and is certified by HETAS. Wood fuel carrying the Woodsure mark has been tested and proven to fulfil the required standards for optimum operational efficiency of biomass boilers.

Furthermore, it certifies that the timber is not only from a sustainable source, but that the emissions generated by the production and distribution process do not outweigh the carbon savings made from not using a fossil fuel.

www.woodsurre.co.uk

MORE INFORMATION

ENplus is the Europe-wide quality standard benchmark for wood pellets and stands for low emissions and trouble-free heating with high energy values. HETAS certifies ENplus in the United Kingdom.

www.enplus-pellets.eu



The **Biomass Suppliers List** is a public register of fuels meeting the RHI fuel sustainability standards.

<http://biomass-suppliers-list.service.gov.uk>



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