

# USING WOOD FUELS FOR A SUSTAINABLE FUTURE

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 CO<sub>2</sub> production, so heating with wood significantly reduces our reliance on fossil fuels whilst reducing CO<sub>2</sub> 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). 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 byproduct from industrial manufacturing

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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. Briquettes are dense and this reduces the amount of storage space required. They are 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 out of 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 specification (EN 14961-4) 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 14961-2) 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 HETAS LOGO WHEN BUYING YOUR WOOD FUEL







## **QUESTIONS TO ASK A WOOD FUEL SUPPLIER**

HETAS certify producers for their consistency of producing a good product with 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?
- 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 01242 681270



### **QUALITY ASSURED FUEL**



HETAS certify producers that meet high standards in production of firewood, briquettes, wood chip and pellets.

Find your nearest Quality Assured Fuel producer by calling us on **01242 681270** or visit our web site

www.hetas.co.uk/find-fuels/



### **MORE INFORMATION**

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

www.woodsure.co.uk



## **HETAS - THE OFFICIAL BODY FOR SOLID FUEL, WOOD AND BIOMASS HEATING SYSTEMS, FUELS AND SERVICES**



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