

# How to get the most from your stove or open fire

## A guide to buying, storing and seasoning wood

Burning wood can be a great source of heating for some rural homes. To get the most out of your wood fuel it needs to be dried and ready to burn. This will help you to:

- Get the most heat out of your stove or open fire
- Maximise efficiency, meaning you will burn less fuel
- Reduce the risk of chimney fires
- Reduce air pollution which is harmful to you and your neighbours

Most modern stoves are efficient, well designed pieces of equipment. The fire box and air flow controls are designed to get the most out of woodfuel with a moisture content of up to and including 20%.

Unseasoned or wet wood can:

- Be difficult to light or keep alight
- Damage your grate or stove, tarring the inside and blackening the glass
- Allow more tar and soot to accumulate in your chimney increasing maintenance costs and risk of chimney fire
- Create a lot of smoke
- Produce less heat



Green or freshly felled logs are not suitable for burning in a domestic stove or open fire until they have been dried to 20% moisture content or less.





# Terms Used to Describe Firewood

#### Kiln dried

Kiln drying can quickly convert unseasoned wood to ready to burn wood in a matter of days. Kiln dried wood should have a moisture content of 20% or less and if stored and packaged correctly will be ready to use on the day of purchase.

#### Seasoned wood

There is no set standard or method for 'seasoned' firewood. The term can be applied to any wood that is stored for a period of time to naturally reduce the moisture content between processing and burning.

Firewood that has been air dried and stored under cover for at least 12 months (or 2 summers) can be dried down to around 20% moisture content (depending upon species, climate and storage) and may be suitable for burning on the day purchased.

TO BURI

The Ready to Burn logo means that the supplier has demonstrated by independent testing that their firewood has a moisture content of up to and including 20%.

For any wood fuel purchased make sure the wood is stored under cover and in the dry before you burn it.

#### Part seasoned wood

Wood seasoned for just a few months may be much drier than freshly felled wood but will still require further seasoning before it is ready for use. Store the wood under cover with good air circulation and check that the moisture is up to and including 20% from a random number of samples of split logs with a moisture meter before burning.

#### **Cord wood**

Is the term used to describe longer, un-split logs usually straight from the woodland. It is cheaper to buy but will require a lot of work to cross cut and split into pieces of firewood suitable for use in a stove or fire place. Firewood produced at home from cord wood will require seasoning under cover before use.

Which Wood is Good to Burn

Wood fuel can be from hardwood or softwood tree species (or mixed).

**Hardwoods** - deciduous, broadleaved tree species, such as Oak, Ash, Birch – are generally better as firewood as they tend to be denser and burn for a long period of time.

**Softwoods** - evergreen, coniferous species such as Spruce – tend to light more easily and can be good for kindling but are less dense so will burn faster and compared to a similar sized hardwood log will provide less heat.

A tonne of dry hardwood logs will occupy a smaller space than a tonne of dry softwood logs.

Different logs will require different amounts of time to get fully seasoned and ready for burning.

Wood felled in the summer contains more sap so will take longer to dry.



DO NOT burn treated waste wood (eg old furniture, pallets or fence panels) or household rubbish

Treated waste wood and household rubbish can emit harmful fumes and toxic pollutants, such are arsenic, into your home when burnt.

### What to look for when **Buying Fire** Wood

How to **Naturally** Season Logs

Information

**Further** 

**Smoke Control** 

If you don't have a moisture meter you can often get an indication of whether logs are newly felled, partly seasoned or ready to burn by:

- Weight when comparing logs of similar size and the same species; wet wood is heavier
- Sound a hollow sound when tapping indicates dry logs
- Cracked ends can indicate dry wood logs
- Bark the looser the bark the drier the log
- Colour dry wood can be light in colour
- Price wet wood is cheaper as it needs further drying before burning

When drying timber it should be stacked on bearers (off the ground) in a sunny, windy location, under a waterproof cover with open sides. The stack should be well aired and ideally the prevailing wind should blow through the stack.

- If possible, cross cut logs should be split to less than 10cm diameter. This allows moisture to move from the centre of the log to the surface more easily.
- Natural seasoning is likely to take two summers or more. Sound – a hollow sound when tapping indicates dry logs



Remember: If you are in a Smoke Control Area you can only legally burn wood on a Defra Exempt Stove.

You could face a fine of up to £1,000 if you break the law.

#### For more information visit:

https://www.readytoburn.org/

https://www.which.co.uk/reviews/wood-burning-stoves/article/guides

https://www.which.co.uk/news/2017/12/why-you-might-not-be-using-thebest-fuel-for-wood-your-burning-stove/

http://woodsure.co.uk/firewood-ready-to-burn/

http://www.stoveindustryalliance.com/ecodesign-ready-stoves-and-airquality/

#### Videos to watch:

To see how wet and dry wood burns differently, you can watch a Woodsure video at: https://youtu.be/LqMhkL0YduM

To learn more about how to burn correctly, watch the Burnright video at:

https://burnright.co.uk/

