

Choosing woodfuel – things to consider

Burning wood for heat is becoming an increasingly attractive option with rising prices and an increasing emphasis on reducing carbon dioxide emissions. Often grant aid is available which reduces the capital costs of conversion to woodfuel or to develop a brand new system. However there are important considerations surrounding the choice of woodfuel which will have a bearing on how successful your project is both in the short and longer term, these are discussed further below.

Building type

Does the building you're involved with have a wet heating system in place already? If not then installing a new woodfuel system will have to include installing a whole new heat distribution system consisting more commonly of either underfloor heating or radiators. How easy will that be to do in the building concerned?

Does the building have space for woodfuel storage? Chip systems for example will require a place to put a woodchip store like an underground or "in the ground" bunker or a hopper that allows easy loading. Pellets will need a place to put a purpose built pellet store and logs will need to be kept dry so with any system above approximately 10kW, fuel storage is going to be an important consideration.

Fuel supply

How close is the nearest fuel supplier? If you're considering woodchip you should ideally be within 30km of your supplier to make it cost effective. Do you know whether the supplier can produce chip to G50 (internationally recognised) standard? If not the inconsistency in chip size is likely to cause you problems with fuel feed blockages and boiler down time. Woodpellets are generally a much more consistent fuel but are more expensive. Additionally they are more fragile than chip and if mistreated can break up and turn to dust. If the system is large enough to warrant a blown delivery (pellets transported and delivered by blower lorries) how close can the lorry get to your store as the longer distance the pellets are blown the more likely they are to break up? Distances below 15m are ideal. If you're considering logs have they been stored and dried (seasoned) sufficiently? Have you seen where they are being stored and is it outside open to the elements or under cover? Will the logs be the right size for your boiler or will you have to cut or split them down further?

Time and capacity available

All woodfuel systems these days offer a degree of convenience. But the level depends both on the fuel chosen and the sophistication of the system chosen. In general terms pellet systems offer the most convenience and log systems the least. A log based system therefore will require some manual input from your committee. Even if the fuel is dry, split and well presented to meet the

requirements of your boiler it will still require someone to load the boiler and depending on whether it is summer or Winter or whether your system includes a thermal store this could be daily or every three days. Do you have someone who stays close to the building who can/is willing to stoke the boiler, occasionally empty ash and order the fuel when it gets low?



Castehill Heritage Centre log boiler and accumulator (thermal store). Space is an important consideration with such systems

See for yourself

Castlehill Heritage Centre, Castletown (log based system)

Timespan Heritage Centre Helmsdale (woodchip system)

Fountain Road Hall, Golspie (woodpellet system)