



Residential wood fuelled heaters

Residential wood fuelled heaters typically use solid wood fuel or wood pellets. Each type has different characteristics and different attributes.

Old style open fireplaces are no longer acceptable when building new homes and regulations in a number of regions across New Zealand are requiring homeowners to replace open fires with latest design low emission wood burners or pellet heaters. The key reason for this change relates to efforts to reduce emissions of CO₂ and particulates to the air. Only those wood fuelled heating plant that meets the air emission standards set by the Ministry of Environment are acceptable. A full list of acceptable residential wood fuelled heaters is available on the Ministry for the Environment website.





Solid Wood Fuelled Heater

A solid wood fuelled heater has no moving parts and takes firewood logs.

For efficient combustion the moisture content of the wood should be less than 15%.

When buying firewood it's important to check its dryness or dry it prior to use.

Modern heating appliances are able to cope with a wide range of fuel quality. Such appliances mean that the operational fuel costs can be relatively low.

Wood Pellet Fuelled Heater

Wood pellet fuelled heaters use wood pellets which are readily available from a wide range of retail outlets or directly from the producers¹. Check <u>here</u> for retail outlets near you.

Wood pellets heaters have moving parts operated by electricity and must be maintained to ensure optimal and efficient operation. A maintenance service check of the pellet heater tuning should be checked annually to ensure optimal performance. Talk to your heater retailer on the service frequency recommended for your heater.

Key advantages of wood pellet heaters include:

- fully controllable
- 100% consistent specification fuel²
- the fuel comes in easy lift-able bags
- very low emissions
- easy handling
- continuous and consistent heater performance
- very low ash to dispose of.

¹ Fuel purchased should be produced by an <u>Accredited Wood Fuel Supplier</u>

² Fuel must be produced to the <u>international standard ISO 17225</u>

Permitting

In some regions, because wood pellet heaters are a controlled heating source, permitted uses so require no air emission consent application, they will however still require a building consent specific to each installation.

Wood fuel specification

Pellets for use in residential heaters are manufactured to the standard <u>ISO 17225</u>. To ensure that the fuel is consistently manufactured to that standard the Bioenergy Association has an <u>Accredited Wood Fuel Supplier Scheme</u> for independent monitoring of their production.

Wood pellet heater users should ensure that they are using the grade of wood pellet recommended by the manufacturer for their model of heater in order to meet heater manufacturer warranty conditions. For residential heaters this will generally be a premium grade wood pellet manufactured to the ISO 17225 standard.

Some pellet manufacturers also have DIN plus or <u>ENplus</u> certification which are international quality assurance schemes.

Solid wood fuel specification

Installation

with all appliances the Bioenergy Association recommends the use of a trained and accredited installer. Installers may also be able to assist with securing a fuel supply and with arranging a maintenance contract.

Note that under consumer law your contract is with the seller of the heater and not the installer. If in a rare case something goes wrong you should go directly to the seller. If you and not the seller arrange installation then it makes it very difficult to pin down who may be responsible for the problem. For a list of pellet heater retailers contact here.