

Facts about firewood

The importance of dry wood

Wood fired pizza ovens rely on dry fuel to perform at their best and this fact cannot be over emphasized. It is that critical.

Green or wet firewood is bound to lead to disappointment.

We have electronically measured the moisture content (wetness) of our wood and the result is indicated in the following table: -

Moisture Content	Comments
Below 12%	Wood very dry and may burn too fast
12% - 14%	Wood burns efficiently and economically
24% - 27%	Wood burns, but less efficiently than drier wood
Above 27%	Wood too wet to burn safely and efficiently

A well installed wood fired pizza oven burning Australian hardwoods with a moisture range of 12% to 24% will burn more cleanly and efficiently. When ran properly there will be a minimum buildup of flue soot.

If you fuel the same wood fired pizza oven with wet or green wood with moisture content exceeding 27% things will start to go wrong immediately. The fire will need more air to stay alight and the heat output will drop dramatically. Soot will build up quickly in the flue and when the door is wet wood will cause creosote to condense in the flue and on the glass. This black liquid will run into the fire and build up towards the top end of the flue, eventually blocking it.

How to avoid wet wood

The two most common reasons why people find themselves stuck with wet or green wood are that the wood is obtained at the wrong time of the year and or it is not stored under suitable cover.

Ideally firewood should be organised in the spring and be under cover by mid-autumn.

It is preferable to obtain seasoned wood in spring, which will only improve by winter if kept dry. Bear in mind that it is virtually impossible for a wood merchant to deliver you guaranteed seasoned dry firewood in the middle of a wet winter.

Major Aust. firewood	% Heat per unit vol.	Splitting	Coals
Grey box	100	Difficult	Many
Red Iron Bark	97	Difficult	Excellent
Red Box	91	Difficult	Excellent
Yellow Box	91	Difficult	Excellent
Red Gum	80	Difficult	Excellent
Blue Gum	80	Fair	Good
Stringy Bark	72	Good	Good
Narrow Leaf	72	Good	Good
Peppermint	68	Good	Good
Pinus Radiata	45	Fair	Poor

Wood Selection

A few things affect the performance of your wood fired pizza oven as much as the fuel you burn. Take note of the following.

What not to burn

- Softwood (except kindling)
- Wet or unseasoned wood
- Treated or painted timber
- Saltwater wood
- Coal or charcoal
- Garbage, plastic etc
- Any solvents, kerosene, petrol or any flammable liquid.

What to burn

Quite simply, dry seasoned hardwood.

From when wood is first cut down, it takes up to 12 months of dry storage for the wood to season properly. The seasoning process is underway when cracks begin to appear at the ends of cut timber.

Use of moist or unseasoned wood will result in excessive smoke, longer start up times, a lazy flame that requires more air to stay alight, creosote build up in the flue and on the door glass and a much less powerful fire. The reason is simple, heat that would normally be going into the room is wasted boiling water that is trapped inside the wood. This poor performance costs you money in wasted fuel and increased maintenance.

It is difficult to determine if wood is dry just by looking at it. If you can hear the wood sizzle and hiss, or can see moisture bubbling from the wood surface, then your wood is too wet. In practice, the best thing you can do is to be sure of the source. Buy your wood from reputable wood merchants. Make sure you store the wood correctly.

Wood storage

It is important that wood be stored under cover. Even wood that is years old will absorb large quantities of moisture if exposed to the elements.

It is advisable that wood is stacked to allow some air flow in and around the logs/ This will help keep the wood dry.

Wood splitting

It is best to have on hand a good range of wood sizes to help control the fire. The rule of thumb is the hotter the fire, the bigger the log you can put in.

- You need very small pieces of kindling to get the fire started efficiently.
- Small pieces up to about 50mm thick are good when the fire is still being established or when you want to revive a fire that has burnt low.
- Larger logs are excellent for long burns once the fire is well established.