

Pacific Energy Alderlea Blog

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The Pacific Energy Alderlea wood heaters is like buying 3 heaters in one.

Working from the outside-in here are the features you will love about this heater.

The outside skin is 120kg of cast iron, this has multiple benefits, including additional thermal mass.

The additional 120+kg of cast iron skin absorbs the heat, and then release over an extended period of time.

You get a softer, and more consistent heat. Also the top of the Alderlea heater hinges out to provide additional cooking.

This unique feature you will not find on any other wood heater : movable trivets.

Under the cast skin is a steel constructed wood heater : the benefit of steel wood heaters is they heat up fast.

Together, the steel body heats up fast , while at the same time, the outer cast iron skin is absorbing the heat to release later, this way your heater will heat your home fast, and keep heating hours after the fire has gone out.

Inside the firebox is the latest in technology in high efficiency wood heating.

Pacific Energy specialty is this, making heaters perform like no other : the fully firebrick lining, the stainless baffle, the ash dump for ease of cleaning, the extended burn technology, all this is just a sample of the heaters features

Its the after-burn that all Pacific Energy Wood Heater have : this is the way the baffle plate is used to heat the air used for the secondary burn.

All wood heaters today need to have a secondary burn, this is what we call re-igniting the smoke your fire makes to reduce emissions and increase efficiency.

Most wood heaters use a 25mm round tube inside the firebox to bring in additional air, as the air goes through this tube, its heated by the fire, and through small holes, the hot air is released into the smoke : the temperature of this air (approx 250+oC) re-ignites the smoke to create an secondary burn

Not in the Pacific Energy wood heaters, they don't use a small tube, they use the entire baffle. The increased surface area is 900% more than these traditional round tubes which increases the temperature of this secondary air to over 800+oC.

The higher temperature has a dramatic, and immediate effect on the smoke, it ignites it with an intensity.

With this additional secondary air temperature at this increased level, visually you can see the smoke ignite, and its impressive to watch

The floating fire that seems to be coming out of the baffle is just that, more fire inside your heater : its not burning any more wood, its now burning the smoke.

This intern gives you more heat and increases the efficiency, giving you more heat from the wood you are using intern makes you burn less wood

Scientifically, you get 36,000but's from very 10kG of wood you burn (at 20% moisture); but that's calculated on a secondary burn (thats re-burning the smoke the fire produces) at 250+oC

Increase the secondary burn to 800+oC and you increase the energy the total fuel load (actual kG of mass + released carbon) to over 50,000btu.

This means you get more heat from the wood you burn, but the most exciting thing about this fact is you don't loose your burn time

Most wood heaters increase the air flow to the heaters to get this additional temperature required to reduce emissions : The Pacific Energy heaters with the baffle super hot, the added benefit is the baffle is doing the work , so you can still turn the heater down and get long burn times, up to 15+ hours on a full load of wood

Additional to this, your are reducing the emissions (smoke the heater produces to the atmosphere), making all Pacific Energy wood heaters cleaner burning and better for the environment.