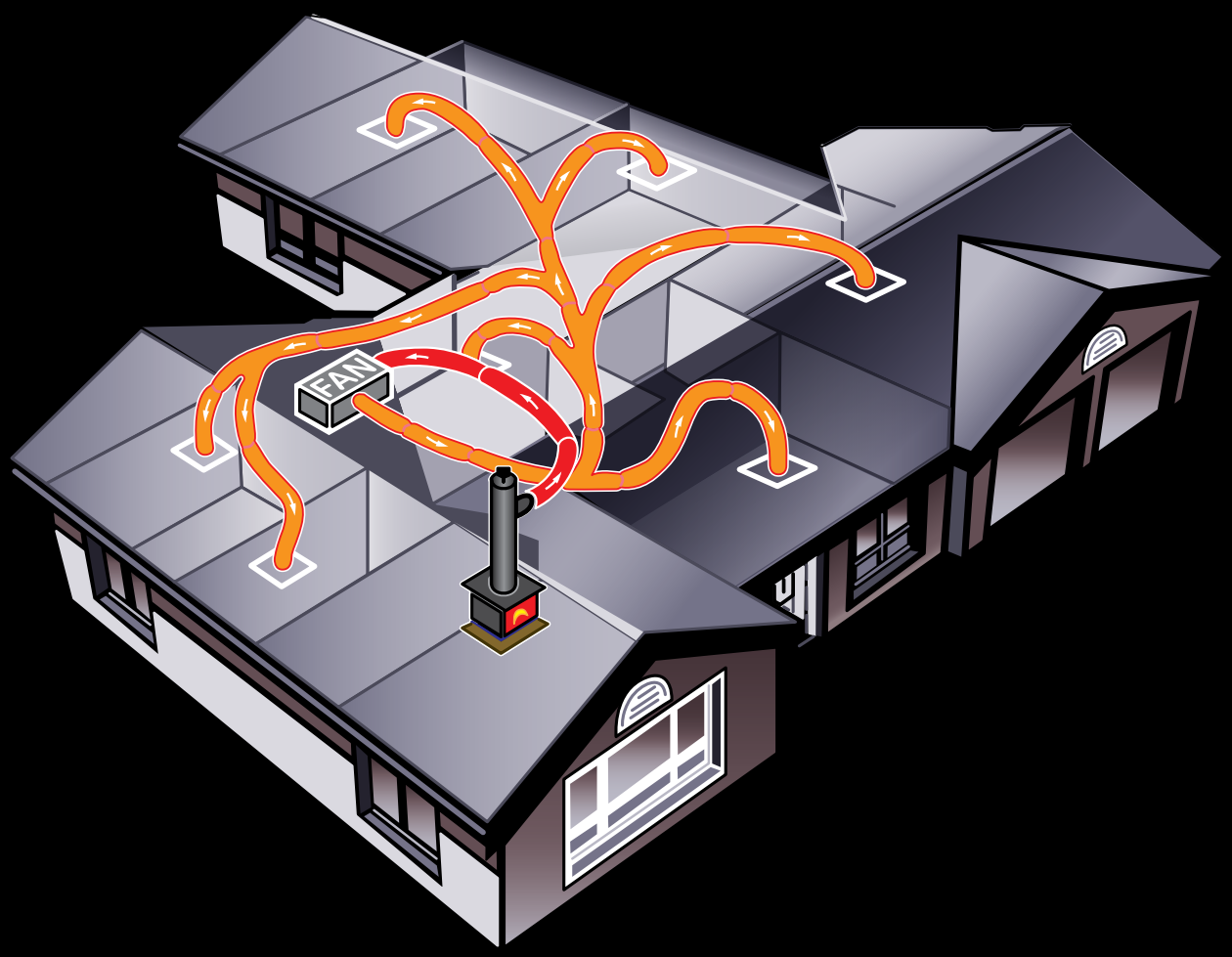
A REVOLUTION IN DUCTED WOODFIRE HEATING

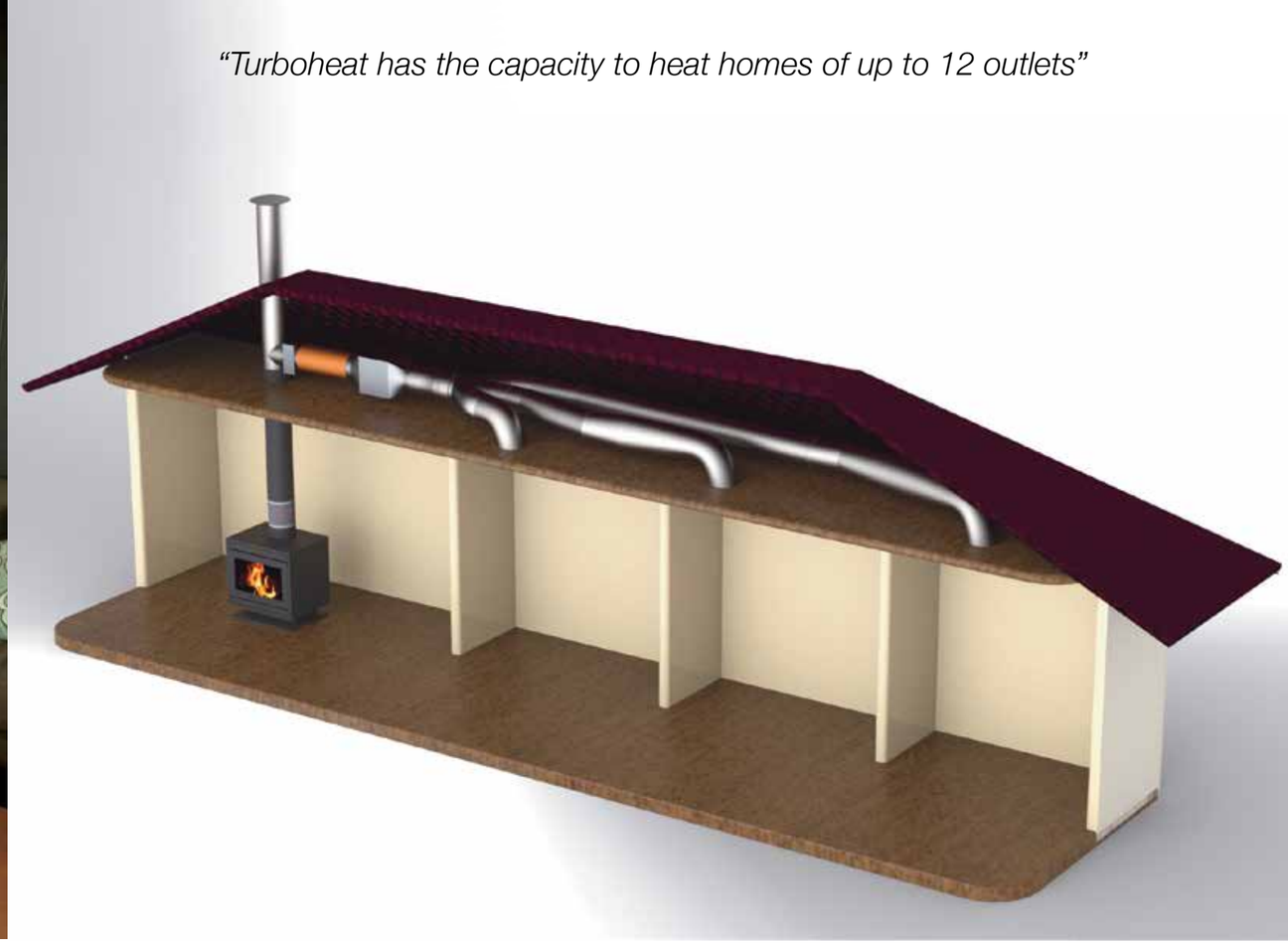
Turboheat

"It's your heat"



YOUR HEAT
YOUR INVESTMENT

"Turboheat has the capacity to heat homes of up to 12 outlets"



Turboheat

Turboheat is a ducted heating system from a solid fuel heater. Turboheat is a patented heating system and is independently tested and complies to all relevant AS/NZL standards. By capturing and utilising the excess radiant heat from the active flue pipe to heat the air within the Turboheat "Heat exchanger" it then distributes it throughout your whole home.

It is durable and designed for functionality and safety above all else, it has been and always will be our highest priority. Full compliance with regulatory requirements is paramount and we adhere to them. (AS/NZL appendix F 2918 and AS/NZ 4012/4013 2014)

The Turboheat system is made to resist high temperatures and has thermal insulation between the heat exchange casing, which is twin walled for protection against excess heat on the outer casing. The main flue exchanger is made of the highest 316/304 grade stainless steel which extends the length of the flue and through the ceiling and roof to the cowl.

Turboheat has a specially designed and unique control unit. This diagnoses both heat and air temperature for ease of operation enabling you to maintain the heated air at specific comfortable temperatures and flows.

This concept also communicates to the innovative fan system which maintains a constant heat being pumped throughout the home. The Turboheat fan system is 'state of the art' and provides a 86% power efficiency to that of a standard fan system of 60%-70%. This enables a huge 800litres/sec air movement through 8-12 outlets.

This fan system is so power efficient that the design complements those homes which are using solar or wind technologies, for off grid. Again, setting Turboheat apart from all other systems. Turboheat's unique patented design has been specifically directed at lowering the carbon footprint whilst heating the whole home.

Pedestal

The “Freestanding” is suited to most 6" active flue system wood heaters and is excellent for heating all homes.

The Turboheat ducting range is from 6 outlets to 12 outlets. Once exceeding 12 outlets, Turboheat would recommend zoning.

Turboheat’s air delivery volume is 800 litres/sec with a fan speed at 100%. Most Turboheat systems have an average run speed of 65%. Although this run speed seems small, its can actually supply up to 12 vents comfortably.

Inbuilt

The “Inbuilt” is Turboheat’s zero clearance inbuilt model This provides a large heat output, due to its versatility.

The inbuilt suits most new homes and provides a more modern contemporary facade, to a wood heaters aesthetics.

The Invention

Turboheat is a family owned business based in Melton, Victoria.

Luke Doran along with his father-in-law Garry Sheedy saw the need for a product capable of heating a family home which would also be an economic investment.

Luke and his wife Rebecca had a young family and was attempting to heat the home by running a wood heater alongside a bottled gas heater.

Turboheat was born out of their struggle to reduce the cost of running both expensive heat sources.

2010 saw Luke and Garry win an award with their patented Turboheat system which was then launched onto the market along with Lukes brother Jon.

Now with their extensive experience in the heating industry Turboheat has a patented system which clearly stands apart from any other product the market offers.

Turboheat has pushed the boundaries with its advanced and innovative engineering design, manufacturing, installation and distribution.

Turboheat is now a widely recognised system for its superior performance and value for money capabilities.

Quality

Turboheat is passionate about quality and use only the best of materials which is supported by a professional warranty and service profile.

Heat Exchanger - Double insulated twist Lock stainless steel 304 Grade with inbuilt flue pipe

Air Filter - Pending.

Fan Unit - 315watts @ 100% fan speed drawing a maxium 2 Amps.

Ducting - 1 - 1.5 Insulated flexible ducting.

Performance

Turboheat eco friendly
Why wood heating is good heating?
Environmental benefit's

- Firewood is a sustainable source of energy
- Wood heaters deliver the lowest cost energy for home heating
- Wood heating emits less Greenhouse Gases than other forms of home heating

Turboheat is cheaper to use

- Cost effective form of heating
- Provides ambiance to the home
- Heats the whole house
- No need for other heating appliances to be used.

Zoning

- You can manually zone by turning each vent off at the actual vent its self. You must always have at least 6 vents operating all ways.
- Automated zoning system are available which can adjust the airflow's to each room, as well as zoning off sections of the home with a touch-pad on the wall.

How much space do we need up in the roof?

A minimum of 600 mm is required, if it is less please ask a Turboheat representative for advice. We can custom build parts to suit. (Extra cost apply)

Turboheat is a Central ducted heating system, NOT A TRANSFER SYSTEM.

Why Turboheat stays hotter longer?

When Turboheat turns off it won't cool your house down straight away like every other device does. The reason for this is that there still is a wood fire burning.

Turboheat is user friendly

Turboheat is simple to use it is automatic and thermostatically controlled, just put wood into the fire place when needed and after that sit back and enjoy the warmth of your whole home.

Can Turboheat be installed on any wood heater?

Yes it can be as long as it meets all current AS/NZL Standards and has a 6" spigot.
If your heater is more then 5 years old it may not not meet current compliance.

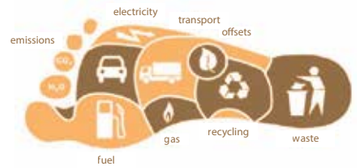
How much power does it use?

Max power consumption is 315watts at 100% fan speed with a 2 AMP max draw. Most jobs only require 60-80% fan speed, which is 60-80% of power consumption.

Greenhouse Emissions

What effect on the active flue emissions do we have? Does it cool the active flue?

- Turboheat is controlled and regulated so that the active flue outer surface temp does not drop below 120 degrees celsius, the flue stays hotter to allow secondary combustion of pm10 (emissions) with the initial banking of heat in our exchanger, this allows the flue to increase in temperature more then the standard drafting that takes place with standard triple skin flue's, this keeps the inner flue free of creosote.
- Authorised independent testing has shown that our Turboheat system has no detrimental effect on flue emissions and in testing improved the reduction of emissions by over 50%, creating an increase in secondary burning of the pm10 before emitting into the atmosphere.



Greenhouse emissions footprint.

- Contrary to what many people believe, wood heating provides the cheapest form of domestic heating, and also delivers the smallest green house foot print because of it's low greenhouse emissions.
- Reduces fossil fuels
- According to a report published by Elsevier completed by the CSIRO and Scion Australia, the use of firewood for domestic heating has the potential to reduce fossil-fuel use and associated CO2 emissions. The report suggests that the level of possible reductions depends upon the extent to which firewood off-sets the use of fossil fuels. This relates to the efficiency with which wood is burnt, and use of fossil fuels for collection and transport of firewood.
- To get the most out of your wood heater and reduce emissions, the AHHA recommends only using hardwood in your wood heater.

Performance testing results

- A standard wood heater with the Turboheat Exchanger on the high burn rate produced a 28% increase in power output, a 32% increase in the maximum power output, 14% increase in efficiency and a 70% reduction in particulate emissions.
- On the medium burn rate setting, a standard wood heater with the Turboheat Exchanger produced a 13% increase in power output, 7% increase in efficiency and a 70% reduction in particulate emissions.
- On the low burn rate setting, a standard wood heater with the Turboheat Exchanger produced the same power output, 3% increase in efficiency and a 20% increase in particulate emissions.
- Overall, on average a standard wood heater with the Turboheat Exchanger wood produced a **15% increase in power output, 8% increase in efficiency & a 54% reduction in Particulate emissions**. The Turboheat Exchanger uses the excess heat from the active flue pipe to distribute hot air to the living area. This is why we see a much higher increase in power output and efficiency on the high burn setting when the flue temperature is much higher.
- It would be expected that the Turboheat Exchanger would give similar results on appliances that have elevated flue temperatures.

Ducting & Air delivery

- Turboheat can tap into your existing ducting as long as it is not evaporative airconditioning ducting. You will have to make sure that the ducting is rated **R1** or **R1.5**
- Our system has a minimum air movement capacity for both the safety of the fan and the Turboheat unit itself.
- The minimum requirement is either , 4 x 250mm outlets, or 6 x 200mm outlets.

Fire Wood Tips

Collecting Fire Wood

If people collect their own firewood the cost is simply their own time and perhaps some fuel for transport and a chainsaw.
Talk to your local council for information on times and dates.

If buying wood

- Be sure of what you are buying or collecting that the firewood is recommended by the manufacturer.
- Moisture content should be on the range of 12-15%.
- Firewood must be sold by weight, so don't pay for excess weight in wet wood.

Storage Tips

- Buy your wood in spring or summer. Wood heaters operate best when wood is completely dry and well-seasoned.
- Store wood under cover in a dry ventilated area. Wood stored on pallets or in a criss-crossed fashion allows air to circulate freely.

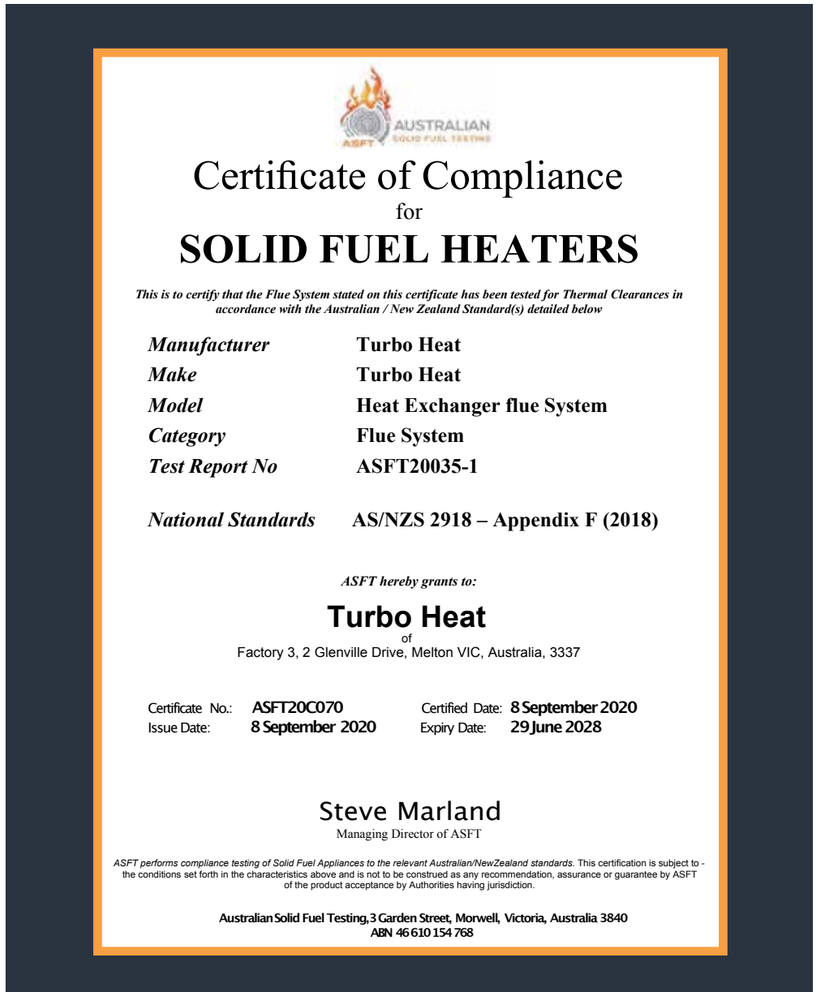
Money Saving Tips

Getting the best performance from your fuel and appliance will save you money each year

- Make your home more energy efficient by insulation in the ceilings and walls.
- Prevent heat leaks through cracks in doors and windows.
- Reduce heat loss through windows by drawing heavy curtains at night.
- Collect your own wood
- Turboheat's innovative approach to combining wood heating and ducted heating has reduced the cost of living dramatically. No more outrageous monthly or quarterly bills. The power consumption is extremely low making it cost effective to everybody especially to the home owners who decide to build off grid.
- Turboheat is really a one-off payment (the initial cost). After the initial cost there are no real ongoing costs. Collect the wood and you can have free heating all year round.

"Turboheat has the capabilities to heat your whole home from one heat source only, which makes it stand apart from all the others".

- As a guide only, you need not use any more than what is recommended on the wood heater that you are currently using. In fact, most of our clients tell us they use less. There are a lot of variants on this, like fuel usage, wood and condition of wood, customer comfort, wood heater operation, and model of wood heater, etc.



AUSTRALIAN SOLID FUEL TESTING

Certificate of Compliance
for
SOLID FUEL HEATERS

This is to certify that the Flue System stated on this certificate has been tested for Thermal Clearances in accordance with the Australian / New Zealand Standard(s) detailed below

Manufacturer	**Turbo Heat**
Make	**Turbo Heat**
Model	**Heat Exchanger flue System**
Category	**Flue System**
Test Report No	**ASFT20035-1**
National Standards	**AS/NZS 2918 – Appendix F (2018)**

ASFT hereby grants to:

Turbo Heat
of
Factory 3, 2 Glenville Drive, Melton VIC, Australia, 3337

Certificate No.: **ASFT20C070** Certified Date: **8 September 2020**
Issue Date: **8 September 2020** Expiry Date: **29 June 2028**

Steve Marland
Managing Director of ASFT

ASFT performs compliance testing of Solid Fuel Appliances to the relevant Australian/NewZealand standards. This certification is subject to - the conditions set forth in the characteristics above and is not to be construed as any recommendation, assurance or guarantee by ASFT of the product acceptance by Authorities having jurisdiction.

Australian Solid Fuel Testing, 3 Garden Street, Morwell, Victoria, Australia 3840
ABN 46 610 154 768

Turboheat
Wood fire ducted heating

Notes

Contact Us

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3337 Victoria

Distributor

Quote

Quote details:

Package:

Wood Heater:

Ducting/Outlets:

Quoted Price:

Extras: