








aquatherm

The logo for Aquatherm features a stylized red flame or water droplet shape above a blue circular ripple effect. The brand name "aquatherm" is written in a black, lowercase, sans-serif font.

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Cover shot: Aquatherm Eco F34 in traditional setting

Heating with wood



You might just want a cosy wood fire at the heart of your home, but it is good to know that when you heat with wood you are also shifting to low carbon heating.

Burning sustainably sourced firewood releases the same amount of CO₂ as the tree absorbed during its lifetime. There is thus no nett gain in CO₂ because in a sustainably managed forest every tree felled is replaced with another.

Burning wood can also help to lower your heating bills as well as reduce your reliance on the utility companies.

Aquatherm stoves are part of a new generation of boiler stoves that take low carbon wood heating to a new level of efficiency, looks and ease of use.



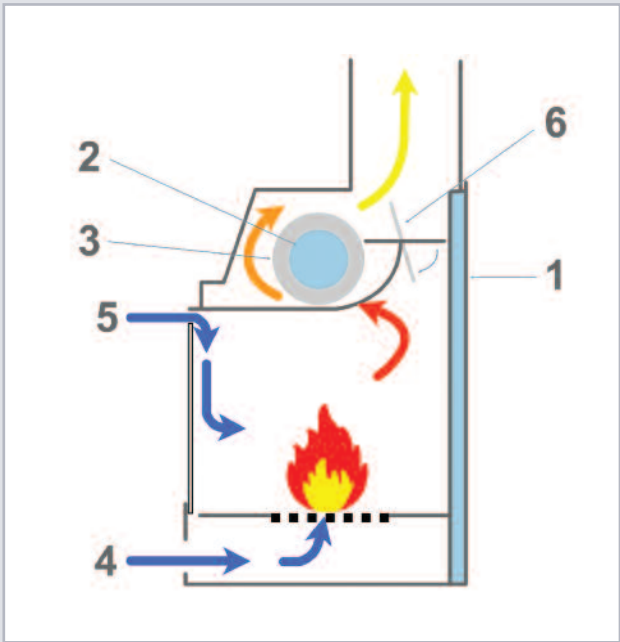
Efficient combustion



The range of Aquatherm Eco stoves achieve impressive efficiencies of over 78%. They do this by maintaining good supplies of air to the fuel combined with an innovative combustion and heat exchange system specifically designed for burning wood.

Water is heated at the back (1) and the side of the stove and in a large heat exchanger running through the top of the firebox (2). This exchanger has unique heat transfer fins (3) to improve efficiency and the flow of flue gases. Primary air (4) is supplied through the grate (and can be optionally routed via an external air duct), whilst the secondary air supply (5) also provides an airwash to keep the window clear and your view of the fire uninterrupted.

stove is opened. With the optional external inlet, air can be ducted directly from outside the house into the firebox.



A cleverly designed flue gas by-pass system (6) ensures that smoke cannot enter the room when the door of the



■ Aquatherm Eco F34



A stunning insert stove with a door that slides up and into the wall above. This stove not only looks great but is highly efficient and can power all your central heating and hot water.

AQUATHERM ECO F34

- 24kW to water, 10kW to the room
- 78% efficient, dedicated woodburner
- Suitable for vented or pressurised systems

“This stove is highly efficient and can power all your central heating and hot water.”



■ Aquatherm Eco F26



The smaller of the two up and down door versions, the F26 is still capable of running more than ten radiators and providing the domestic hot water.

AQUATHERM ECO F26

- 17kW to water, 9kW to the room
- 78.4% efficient, dedicated woodburner
- Suitable for vented or pressurised systems



"Capable of running up to ten radiators and providing the domestic hot water."

■ Aquatherm Eco C26



This stunning stove has a huge curved glass window, giving a great view of the flames. The counter-weighted door slides smoothly up and into the wall above to open.

AQUATHERM ECO C26

- 17kW to water, 9kW to the room
- 78.4% efficient, dedicated woodburner
- Suitable for vented or pressurised systems

"The counter-weighted door slides smoothly up and into the wall above to open."



■ Aquatherm Eco F21



One of the smaller Aquatherms, the F21 is still powerful enough to take care of all the heating and hot water needs in a modest sized house. It maintains the high efficiencies of the Aquatherm Eco range, but with a door that opens out into the room.

AQUATHERM ECO F21

- 15kW to water, 6kW to the room
- 78.2% efficient, dedicated woodburner
- Suitable for vented or pressurised systems



"It maintains the high efficiencies of the Aquatherm Eco range, but with a door that opens out into the room."

■ Aquatherm Eco F15



The smallest of the Aquatherms, the F15 produces a maximum of 15 kws, ten of which go to radiators and hot water. The F15 comes as standard with the overheat safety system installed.

AQUATHERM ECO F15

- 10.5kW to water, 4.5kW to the room
- 75.1% efficient, dedicated woodburner
- Suitable for vented or pressurised systems

"The smallest of the Aquatherms, the F15 produces a maximum of 15kws, ten of which go to water."



Plumbing



With their high heat outputs Aquatherm Eco stoves are capable of running a full central heating system as well as providing the domestic hot water. They are well suited for linking to an accumulator tank, to store heat for use when required, and for running in conjunction with solar thermal panels. They are ideal for linking in with an existing oil or gas central heating system.

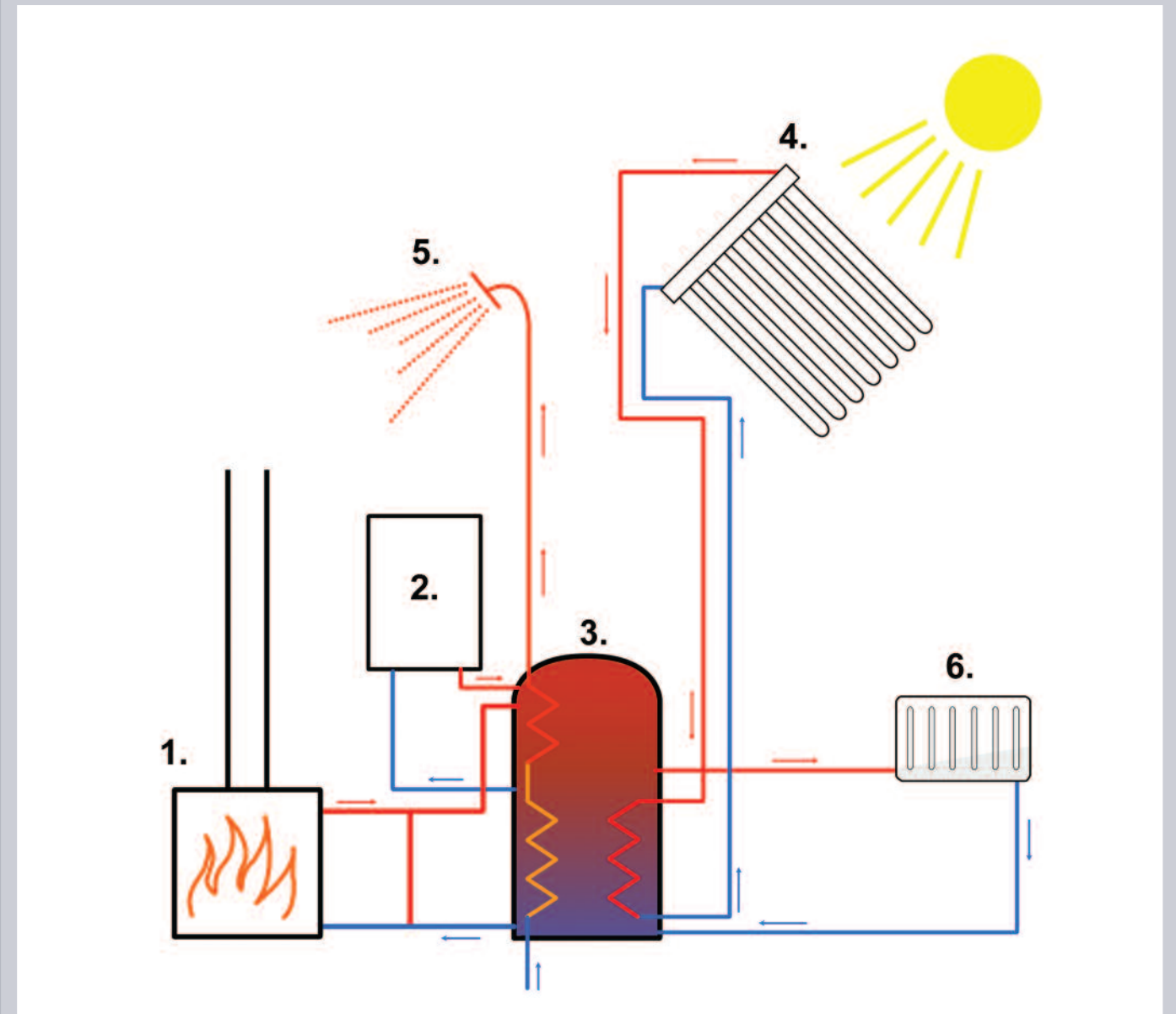
Wood heating and solar panels complement each other perfectly, with the stove doing the heating and

hot water during the cold periods and the sun providing the hot water in the warmer months.

Aquatherm Eco stoves can be installed to open vented or pressurised systems. Most of the range can come as a 'CS' model which means that they have a built in overheat safety system.

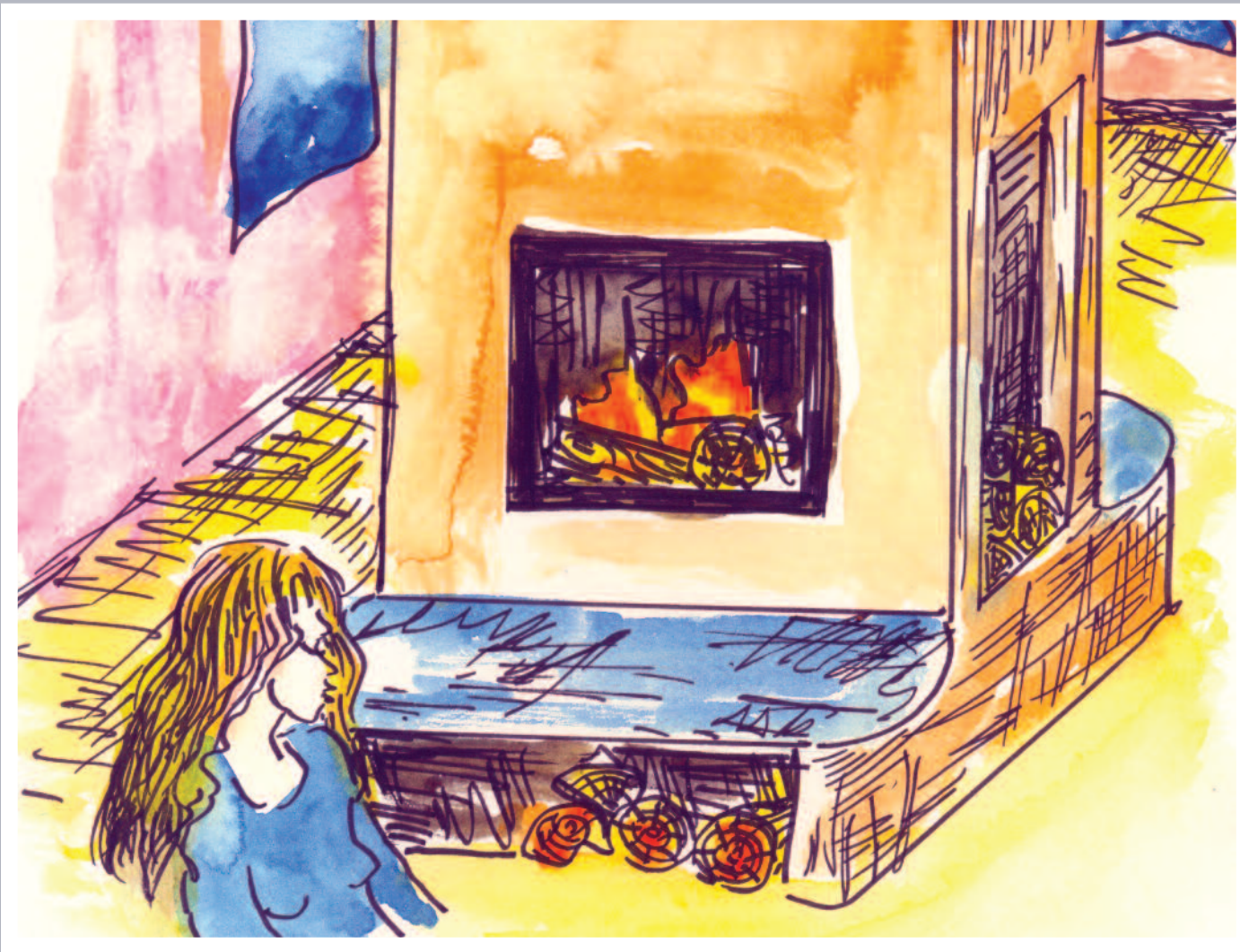
To get the best performance from your stove it is recommended to use a load unit. This ensures that the boiler quickly reaches and maintains operational temperature and greatly improves efficiency.

Typical system layout



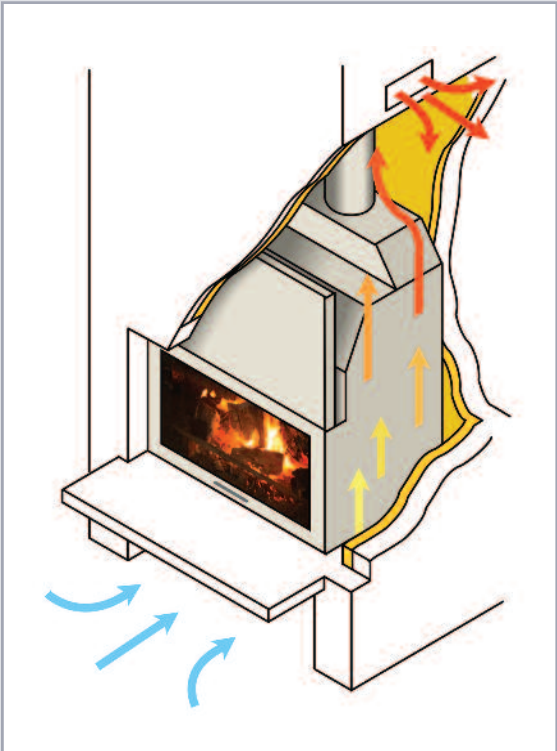
Here we show a representation of a typical heating and hot water system. The Aquatherm stove (1) and conventional boiler (2) both link to the accumulator tank (3) which also has solar thermal input (4) to provide domestic hot water during the warmer months. The tank provides mains pressure domestic hot water (5) as well space heating (6) for the house.

Installation










Aquatherm Eco stoves can be installed into an existing fireplace or a newly built chimney breast. They can also be installed freestanding by cladding with masonry or studwork. The large clean lined window lends itself perfectly to a minimalist contemporary setting or, by using a fireplace surround, one has a stunning new take on the traditional English open fire.

Whilst the majority of the heat goes to the central heating, warmth is also convected directly to the room. This means designing in vents or air gaps to the top and bottom of the installation chamber. Often a log store is placed under or near the stove and this is a convenient place to site an unobtrusive air vent. Vents can also be placed to the sides of the chimney breast or the hot air can be ducted to other rooms.



Dimensions

							
	F15	F21	F26	F34	C26	P26	P34
Height	950	1380	1380	1380	1380	1380	1380
Width	650	790	800	990	740	750	920
Depth	530	640	680	800	760	680	780
Window size	484mm x 360mm	640mm x 550mm	750mm x 450mm	900mm x 540mm	700mm x 570mm	700mm x 540mm	850mm x 540mm
Max heat to water	10.5kW	15kW	17kW	24kW	17kW	17kW	24kW
Max heat to room	4.5kW	5kW	9kW	10kW	9kW	9kW	10kW
Efficiency	75.10%	78.20%	78.40%	78.00%	78.40%	78.40%	78.00%
Flue diameter	150mm	175mm	200mm	250mm	200mm	200mm	250mm
Weight	115kg	180kg	230kg	275kg	230kg	230kg	275kg
Tapping size	1¼" BSP	1¼" BSP	1¼" BSP	1¼" BSP	1¼" BSP	1¼" BSP	1¼" BSP
CS model	As standard	Available	Available	Available	Not available	Available	Available
Minimum enclosure dimensions H/W/D	1450mm, 850mm, 630mm	1880mm, 990mm, 740mm	1880mm, 1000mm, 780mm	1880mm, 1190mm, 900mm	1880mm, 940mm, 860mm	1880mm, 950mm, 780mm	1880mm, 1120mm, 880mm
Testing standard	EN 13229	EN 13229	EN 13229	EN 13229	EN 13229	EN 13229	EN 13229



Optional extras and system components



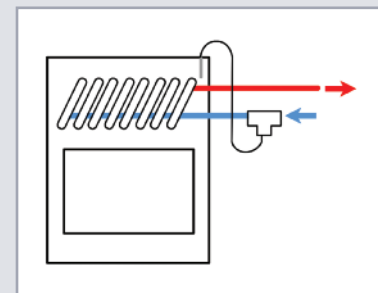
■ Load unit

A load unit ensures that the boiler quickly reaches and maintains an operating temperature of above 60°C. This increases the efficiency of both the Aquatherm and the accumulator tank. The load unit comes pre-insulated and includes a pump with a built-in thermosyphon bypass.



■ Flue thermostat

Used to automatically control the load unit, a flue thermostat is much more accurate and efficient than a pipe thermostat. The flue thermostat prevents heat being leached from the water tank by the stove and minimises pump run times.



■ CS models

Many Aquatherm stoves are available as a CS ("Closed System") model. The CS models come with an integrated overheat safety device and are suitable for connection to pressurised systems (as well as vented systems). If the water reaches 97°C then mains cold water is flushed through a coil in the boiler taking the excess heat away and preventing overheating. The overheat safety device also makes the stove simpler to install.



■ Direct air intake

An optional direct air intake fitting allows Aquatherm stoves to draw their primary air source through an external air duct which reduces draughts in the room. The air intake has a control knob which is installed into a wall near the stove and lets you adjust the burn rate of the stove.



■ Accumulator tanks

Aquatherm stoves are very well suited for use with accumulator tanks. Heat from the stove is stored in the large body of water and can then be used when needed. This means, for example, that you can have your heating come on in the morning when the stove is not lit. An accumulator tank also allows you to burn your Aquatherm at it's most efficient. An accumulator tank is an easy way of joining your Aquatherm stove to your hot water and heating system and allowing you to link in a conventional boiler and solar panels.



Firewood



■ Moisture meter

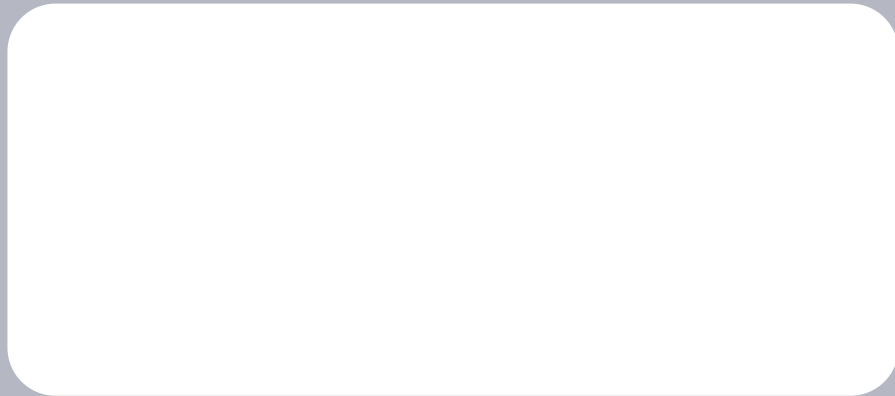
A moisture meter is a small, but invaluable tool for the serious woodburning stove owner. It will allow you to gauge how well your wood is seasoning or to determine whether your supplier's wood is dry before you accept the delivery.



All stoves require well seasoned wood with a moisture content of below 25% and this is particularly true for boiler stoves. The stove window blacking up or a drop in heat output is a sure sign that unseasoned wood is being burnt. Using damp wood also increases the risk of a chimney fire.

That means that it pays to think ahead when it comes to your firewood. If you have your own trees then saw, chop and stack during winter and spring allowing the wood to air dry over the summer. You might also consider buying in bulk from a forestry supplier, a sawmill, or as freshly chopped logs from a firewood supplier. Store your wood under cover but with good wind access. Stack your wood with gaps between the stacks rather than heaping it in a pile. Some types of wood can be dry enough in just one season, others should be stored for two.





www.aquathermstoves.co.uk

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