



WHAT IS A WATER BOOSTER?

WOOD-BURNERS

A water booster is a water-heating unit that can be fitted to most slow-combustion solid fuel heaters. These can be single or double copper or stainless steel coils. With Yunca wood-burning heaters, these are installed inside the firebox and are connected by a piped system to the household electric water cylinder. A permit is required and a registered plumber should carry out the installation.

The cylinder must have inlets in it to receive the pipes from the water booster unit. Once fitted, do not turn your cylinder off, as it's a booster only that you are fitting. Set your cylinder's thermostat to a temperature of 65°C. A pipe supplies water from the cylinder to the water booster unit where it is heated and returned by another pipe back to the cylinder; therefore creating a flow through which hot water continuously travels when the fire is in operation.

How does it work?

The water booster unit works by thermal convection. Hot water being less dense than cold, rises and the heavier cold water falls from the cylinder to the water booster, and is then heated; therefore creating a thermal convection cycle.

The following conditions should be observed when connecting the unit:

1. Ensure that the correct manufacturer's water booster unit is used.
2. The bottom of the water cylinder must be above the top of the water booster outlet from the unit - **THE HIGHER THE BETTER.**
3. It is recommended that the cylinder should be no more than 3 metres horizontally away from the fire - **THE CLOSER THE BETTER.**
4. The hot water return pipe must rise continuously from the outlet at the back of the heater to the water cylinder to prevent air locks forming, and also to improve efficiency. - **TO ENSURE FLOW, THE PIPE MUST HAVE A MINIMUM RISE OF 1 IN 5.**
5. If a riser pipe is not already fitted to a cylinder, one should be fitted during installation of the water booster. The riser pipe must exceed two thirds of the cylinder height.
6. Use sweeping bends only. Sharp bends or restrictions should be avoided, as these reduce the flow factor. - **THE LESS BENDS THE BETTER**
7. The pipes from the water booster to the cylinder should be lagged to prevent heat loss.
8. The system must be free flowing. For that reason, no stopcocks or taps should be fitted.
9. The fire should never be lit until all plumbing is connected, and the hot water cylinder has been filled.

We note that water booster installations can vary from house to house, so your plumber should work out its feasibility for your particular situation.

WARNING

When fitting a water booster, please consider the following information:

The hot water within the cylinder may rise above the accepted temperature of 65°C. This may result in damage to dishwashers and automatic washing machines. To eliminate the risk of scalding, we recommend the installation of a tempering valve. This may be a mandatory requirement in some areas, so please seek the advice of your local authority.

TO ENSURE PROPER FUNCTION, THE RETURN PIPE MUST HAVE A MINIMUM RISE OF 1 IN 5.

