

FlowSmart. The high efficiency, high performance space saving heating system.





FlowSmart

For homes with above average hot water demands, look no further than FlowSmart.

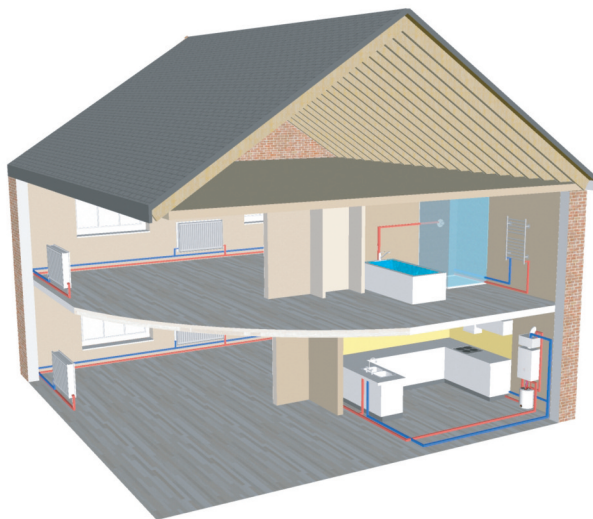
FlowSmart at last enables even large households to enjoy the energy efficiency benefits of the combination boiler.

The system incorporates a CD35C combination boiler, a GasSaver flue gas heat recovery unit and either a 25 or 50 litre thermal store.

All components can be sited in a space smaller than the average airing cupboard and there is no need for any tanks in the loft – a useful factor when considering a loft conversion.

Features overview

- 3 year guarantee
- Exceptional energy efficiency
- Ideal for households with above average hot water demands
- Continuous hot water
- Flow rate equivalent to a stored system
- Space efficient installation
- SAP Appendix Q recognised



Count on us

Award-winning service comes as standard when you become an Alpha customer. Whether you need help choosing the right product for your home, or you experience difficulty with an Alpha product, help is always at hand. Simply call our helpline to speak to one of our dedicated customer service advisors.

We're here to help
0844 871 8764

Delivering so much more

FlowSmart increases the combination boiler's ability to deliver hot water, making it a serious alternative to a conventional boiler for properties with substantial hot water demands.

Combi boilers have long been accepted as the most energy efficient and space saving boiler option available. Not surprisingly, they are therefore the popular choice for the majority of new domestic installations in the UK.

However, the combi's inability to supply large volumes of hot water simultaneously to a number of outlets often results in the conventional boiler and hot water cylinder set-up being the preferred option.

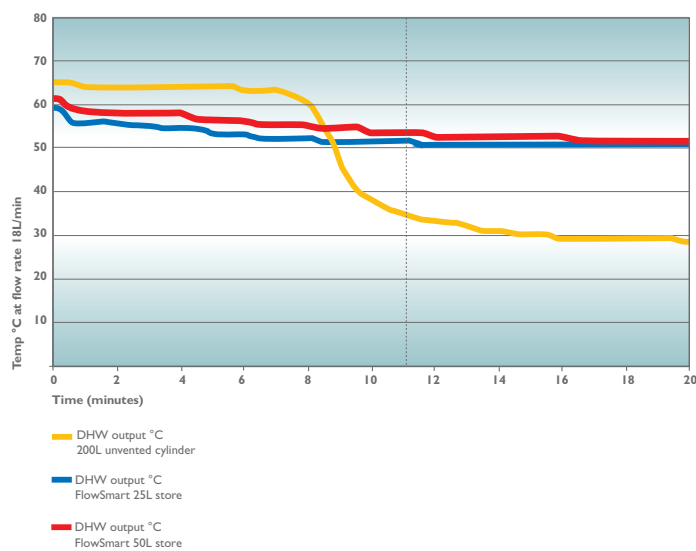
FlowSmart brings together the energy and space efficiency advantages of a combi, with the hot water delivery rate of a system boiler – in one convenient package.

FlowSmart Vs system boiler with 200L unvented cylinder

Using either the 25 litre or the 50 litre thermal store, FlowSmart delivers 18 litres of hot water per minute, at 50-60°C, for at least 30 minutes.

A typical system boiler set-up delivers 18 litres of hot water per minute, at 50-65°C, but only for approximately 9 minutes. After 10 minutes, the water drops to below 40°C.

Please note that the flow rate of hot water achievable is dependent on the incoming mains supply, whichever system you choose.



Proven performance

As the case studies on the following pages demonstrate, FlowSmart is the perfect solution for a wide variety of project types – from family homes to small commercial buildings.

The next time you are looking for an energy efficient heating system capable of supplying large volumes of hot water, look no further than FlowSmart.



- Installer:** C. Jenkin Builders Ltd, London
- Product installed:** FlowSmart 25
- Property:** 4 bedroom property, home to 2 adults and 2 growing children.
- Why FlowSmart:** The homeowner wanted a better flow rate as the existing combi wasn't coping with supplying two bathrooms. They were considering going with an unvented hot water cylinder, but instead FlowSmart was specified for performance and as an economical way of providing hot water.
- Product replaced:** A Worcester combination boiler

“The FlowSmart system was simple to fit and my customer is very pleased with the performance, which has surpassed their expectations. The family now enjoy a much improved flow rate, plus will save money on their energy bills. An all-round success.”

C. Jenkin, Managing Director



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- Installer:** Boiler Healthcare, Folkestone
- Product installed:** FlowSmart 25
- Property:** 4 bedroom property, home to 2 adults and 6 children with ages ranging from 12-21 years.
- Why FlowSmart:** With 8 people living in this property the hot water requirements are very demanding. Every member of the house has to leave for work or school within a 60 minute period, so there is a large volume of hot water being used in the morning. FlowSmart is able to deliver hot water more consistently than a traditional system boiler with unvented cylinder.
- Because hot water is not stored unnecessarily, FlowSmart will also help to lower fuel bills by using less gas. Plus, renewable technology can be incorporated into the system at a later date, bringing further fuel savings while helping to protect the environment.
- Product replaced:** Baxi Solo boiler and 145 litre hot water cylinder

“I've looked hard at the likely savings I'll be able to make, and I'm convinced the payback period on this system will be much quicker than other fuel saving options out there in the market. Plus, thanks to the compact design of the system, I've now got half a useable cupboard. With eight people sharing this house, extra storage space is always most welcome.”

Mark North, Homeowner and Installer



For properties that have an unusually high DHW requirement, above and beyond the typical large family home, more than one FlowSmart system can be installed to provide an even greater level of performance.

Working together, multiple systems can deliver even higher flow rates and still save space and energy compared to a stored water alternative.

Installer: Pugh's Plumbing and Gas Services, Port Talbot

Product installed: 2 x FlowSmart 50 systems

Property: A luxury refurbished farm house with an 814 litre circular bath and 10-jet body shower and 300mm shower head.

Why FlowSmart: The original specification was to have two 500 litre hot water storage tanks, plus two industrial-size boilers housed in a neighbouring barn. However, storing 1000 litres of hot water would have potentially resulted in immense energy losses. There would also be an issue of temperature drop in an installation that runs from the barn to the house, and the risk of frost in winter months.

Instead, two FlowSmart systems are now working together – eliminating the need to store 1000 litres of water, and almost halving the boiler output demands. This set-up is more than capable of meeting the hot water demands, plus compact enough to install in the utility room.

“FlowSmart is a fantastic product and I will definitely be fitting more in the future. It was the perfect choice for this property and my customer is really happy with both the performance and savings that FlowSmart brings.”

Ian Pugh, Pugh's Plumbing and Gas Services



FlowSmart is not just ideal for domestic properties.

With its capability of supplying exceptionally large amounts of hot water on demand, it can also be specified for commercial use.

Without the need to store hot water, the FlowSmart system is an extremely compact solution that can bring valuable energy savings to businesses.

Installer: Newave Heating, Bolton

Product installed: 3 x FlowSmart 25 systems

Property: Commercial laundry for the five hotels in the Lavender Hotels Group, located at the Bolholt Hotel.

Why FlowSmart: The primary reason for specifying three FlowSmart systems to be installed together was reliability. Being a commercial laundry, the customer could not afford to risk there being any downtime should anything ever go wrong with one of the boilers in the system. This installation safeguards against this, ensuring that the laundry is fully operational at all times.

An additional factor in the specification was the gas savings that FlowSmart can bring. This laundry, which uses four 39.5kg capacity washing machines, operates 24 hours a day, 7 days a week.

Product replaced: Large unvented store with Andrews commercial water heater

“This installation was quite unusual because there is no central heating running off the boiler, therefore no zone or motorised valves. The system was very straightforward to install and we have achieved a 40 litres per minute flow rate at 50°C. The customer is very happy. It is too early to quantify the energy savings, but I look forward to receiving this data.”

Mark Owen, Newave Heating

How FlowSmart works

When there is a demand for DHW, mains cold water flows into the GasSaver where its temperature is raised using heat reclaimed from boiler flue gases.

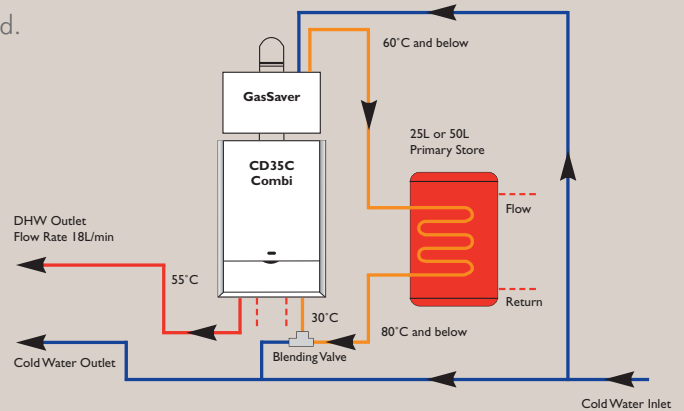
This pre-heated water then passes through a copper coil heat exchanger in the thermal store, where it is heated further by surrounding hot water from the primary system.

The water then passes through a blending valve, where it is controlled to 30°C.

Because this mains water is pre-heated before entering the boiler, the boiler's

workload is significantly reduced. This enables the boiler to satisfy heavy DHW demands for long periods, without any detrimental effect to flow rate.

FlowSmart is Building Regulations approved.



STEP 1

Using a spirit level, tape the GasSaver and PremierPack templates to wall. Mark all positions as indicated on wall, drill holes and add rawplugs. Mark flue position and drill hole.



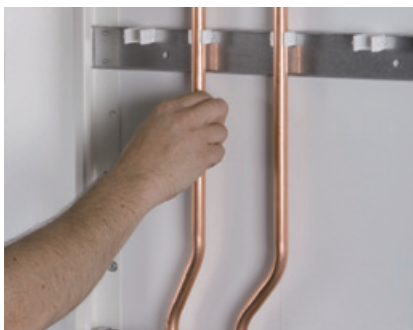
STEP 2

Screw PremierPack, GasSaver hanging bracket and top fixing bolt assembly to wall. The boiler and GasSaver can now be simply hung whenever you are ready.



STEP 3

Drill hole in wall and push Pressure Relief Valve pipe through. Pull back so that the rubber grommet completes a seal, mark off and cut to required length.



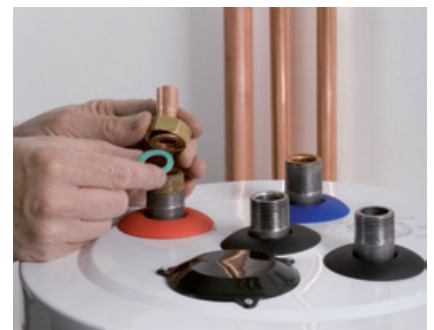
STEP 4

Remove tails from boiler and screw to PremierPack. Measure, cut, bend and fit GasSaver mains inlet/outlet pipework to PremierPack using the pipe clip plate. Complete any other necessary pipework and fit using pipe clips where required.



STEP 5

Complete any soldering that is necessary.



STEP 6

Position thermal store where required, and fit washers plus tails to connections shown on pipework label on top of store.



STEP 7

Install blending valve between mains water supply and hot outlet of thermal store. The blended outlet connects to the boiler cold water inlet.



STEP 8

Fit expansion vessel to primary return pipe of thermal store, using the compression T-piece provided.



STEP 9

Fit Y-Plan mid position valve to primary flow, thermal store primary inlet connection and heating circuit.



STEP 10

Lift boiler on to PremierPack and fasten connections from PremierPack to boiler.



STEP 11

Fit GasSaver flue clamp and lower GasSaver on to flue turret. Secure GasSaver using top fixing bolts and adjust to level. Tighten screws on GasSaver flue turret.



STEP 12

Connect the pipework to GasSaver and fit flue pipe.



STEP 13

Position and fit junction box, fuse spur, 2-channel timer and room thermostat.



STEP 14

Remove thermal store thermostat panel. Cut insulation material as required and remove. Wire up cylinder thermostat and fit into cut hole and secure using the fastening supplied.



STEP 15

Lower boiler control panel and remove terminal block cover. Replace 3-core power chord with 4-core cable to provide a switched live connection at terminal one.



STEP 16

Replace terminal block and cover, push control panel back into place and screw down. Fit pipe cover tray to complete installation.



STEP 17

Adjust all settings on controls, thermostats and timers according to installation instructions and homeowner's requirements. Commission the system, carefully following the commissioning guidelines provided.



STEP 18

Completed installation.

Request your
FREE DVD

Get to know FlowSmart

See how it works, how to install it and how it can reduce household gas bills.

For a free DVD just call us on **0844 871 8760**

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