

New boiler is top of its class for efficiency and hot water delivery

Atmos Multi is a new range of domestic gas condensing boilers from **Atmos Heating Systems**. The **Multi** range offers an exceptionally high efficiency rating in its class – 90.3% seasonal; together with an integral 80 litre unvented hot water storage tank. This format enables the Atmos to offer all the operational advantages of both stored and instantaneous hot water systems without their drawbacks.

After 7 years on the Dutch market, the Atmos Multi is a well proven and reliable product, voted Holland's 'Best Boiler' in the equivalent of 'Which?' magazine.

The wall-mounted boilers are available in two output ranges, with modulation between 7.3kW to 22.5kW and 9.8 to 29.0kW. The downward firing, condensing burner system gives a SEDBUK rated seasonal efficiency of 90.3%, which puts the boiler in the highest class for SAP rating. It also provides exceptionally clean combustion, with maximum NOx figures of 19 parts per million.

The control system also adds to the operational efficiency. It includes a Most Efficient Start (MES) feature which switches the boiler into condensing mode whenever possible and stops short cycling. The boiler mounted control panel includes a diagnostic display as well as operating readouts for temperature and water pressure.

Hot water is supplied from the in-built 80-litre store. With the additional heating coil offered on the Multi Plus this store can be brought from 10 to 60 deg C in 12 minutes. This means that the boiler can provide up to 700 litres (or 150 gallons) of hot water in one hour. The Atmos Multi is ideal for homes with two bathrooms or a bathroom and en-suite shower room. Like a traditional system, hot water flows immediately the tap is opened, thus saving water. This could amount to 1,300 gallons a year. Unlike most storage systems however, the water is at mains pressure giving a very satisfying shower without the need for additional pumps.

For the ultimate in energy efficiency the hot water store in the boiler can also be connected to the Atmos **MonoSolar** solar heating system.

The new Atmos Multi is designed to be installed in place of a traditional boiler and cylinder system. It can be fitted for example in an airing cupboard or under stair space. The balanced flue system can be run up to 32m, so siting the boiler is easy. This flexibility frees up kitchen or utility room space for the customer.

Atmos boilers can be connected directly to Underfloor heating systems as well as conventional radiator heating systems. Atmos offer builders and specifiers a design service as well as on site advice and training for installers.

Extra warmth for pensioners

Hot water for a new retirement home complex in the East Midlands is being provided by **Atmos** with its **Multi** condensing boiler.

The brief for the heating and hot water system was to create a compact, high efficiency system at 'minimal' cost. Offering high efficiency it was selected for its ability to cope with the complex flueing system of the project. Flue runs of up to 30m equivalent length were used.

Housing Focus, Oct 2002

High efficiency boilers stand the heat

New residential accommodation at a redeveloped factory in Bristol is being heated by Underfloor heating powered by the **Atmos Multi 24/80** condensing gas boiler. A former tobacco factory in the city's Bedminster area has been converted for multiple use, with the lower three floors being used as offices and a café bar, and the top floor converted into six open plan loft style apartments.

Underfloor heating was selected because of high ceilings and modern open plan format with minimal interior walls on which to site radiators.

The boiler chosen was the Atmos Multi 24/80, which is said to have a SEDBUK Class A efficiency rating of 90.3 per cent.

According to Atmos: "The lower water flow temperature required by Underfloor heating systems allows the Multi to operate in its most efficient condensing mode for 90 per cent of the time, resulting in substantially lower fuel bills. Because Underfloor heating only requires a low flow temperature, the boiler's operating efficiency averages an amazing 96 per cent."

The Atmos products were selected specifically for the task by the owner of the building, **George Ferguson**, president of the **Royal Institute of British Architects**, and installed by Gloucester-based **Hypocaust**.

Cliff Greening of Hypocaust commented: "**This installation presented very particular challenges as each apartment is basically one large room, making the positioning of radiators difficult, and therefore necessitating a different solution.**"

"Underfloor heating is ideal for applications of this nature as all areas are heated evenly without heat unnecessarily being lost as it rises naturally. The fact that the water in an Underfloor system needs normally only to be heated to between 45 and 65 deg C makes it especially compatible with condensing gas boilers which can operate at maximum efficiency throughout."

H & V News, May 2003