Unvented Systems and Applications Explained

Properties within the UK generally use two types of plumbing systems, vented and unvented. Understanding these is the first step to ensuring you select the correct water boosting solution for your property.

Unvented System (Mains Pressure)

More common in newer properties, this system uses the mains water supply to directly feed cold water services, a combination boiler or pressurised hot water cylinder. The system performance is dependent on the incoming mains pressure to the property, which may be low or intermittent. Unvented systems typically require 1.5 bar working pressure and 20 litres per minute flow to operate effectively.



Water Pressure

OFWAT stipulates that water companies must maintain a minimum pressure in the supply pipe of seven metres static head (0.7 bar pressure) at pavement level. The majority of UK water authorities typically quote a standard of service which specifies that water pressure should not normally fall below ten metres head (1 bar pressure).

At this pressure, the pressure available on the second or third floor might be extremely low or even non-existent.

UK Water Regulations

A pump may be fitted directly to the incoming mains water supply, as long as it has been approved by WRAS - The Water Regulations Advisory Scheme (www.wras.co.uk) and has been designed to limit the water flow drawn from the mains to a maximum 12 litres per minute.

Mainsboost

Suitable for unvented systems and designed to be connected directly to the incoming mains water supply where there is low or intermittent mains water pressure. Mainsboost systems provide additional pressure and flow to multiple outlets simultaneously within a property, including unvented boilers.



Application guide			
The following illustrates just some of the typical applications for Stuart Turner's			
Mainsboost range of water performance systems.		Mainsboost	
House - 1 bathroom	•	•	
House - 1 bathroom + cloakroom		•	
House - 1 bathroom + 1 en-suite			
House - 1 bathroom + 2 en-suites			
Larger properties with more than 1 bathroom +			

PumpAssist

2 en-suites

than 150 litres

Apartment block

Commercial

Hotel

Supply direct to a Combination Boiler

Unvented stored water system up to 150 litres

Larger property with stored water system greater

Expert assistance every step of the way with PumpAssist, our friendly and dedicated team of highly trained and experienced technical experts. Available to offer installation and product selection advice.

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monsoon

showermate

wasteflo

mainsboost

aquaboost

/ater Volume Defined				Water Volume Unlimited					
mited Space			No Space Constraints						
Flomate 80	Mainsboost Flomate 100	Mainsboost Flomate 200	Mainsboost Flomate 300	Mainsboost Range	Mainsboost Plus Range	Mainsboost Charger Range			
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Please Note: This is a general guide only.									





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