

A close-up photograph of a Waterguard control panel. At the top, a blue LCD screen displays the time '12:08 FRI 20-OCT-17', the status '>GUARD: LOW', and 'CHANNEL 1: OK' and 'CHANNEL 2: OK'. Below the screen is a horizontal indicator light with green and red segments. A blue oval button with the 'Waterguard' logo is visible at the bottom. A blue banner with the word 'Waterguard' in white is overlaid on the right side of the image.

Waterguard

TECHNICAL SPECIFICATION: WATERGUARD SERIES 7

Internal only and major water leak detection

Complete protection and BREEAM compliance for New Construction, In-Use and Refit and Refurbishment.



WORKING PRINCIPLES

Designed specifically to fully comply with BREEAM WAT02 and WAT03 assessment criteria for water monitoring and leak detection, the Series 7 range of systems will detect any minor and major water leak both from the site boundary and internally within the building.

This range of systems can identify different flow levels using a pulse count sent to the Series 7 control panel after every 1 or 10 litres of water flow. Therefore identifying leakage rates, e.g. continuous, high and/or low level, over set time periods with a self-learning function which monitors normal consumption.

The Series 7 BREEAM compliant WAT02 internal water leak detection system reduces consumption of potable water through the effective management and monitoring of a buildings water consumption. This is a single channel system using a pulsed water meter internally within the building where the mains supply enters the building.

The Series 7 BREEAM compliant WAT03 major water leak detection system also reduces the

consumption of potable water through minimising wastage due to water leaks both internally and from the site boundary. This dual channel system includes two pulsed water meters; at the site boundary after the utilities meter and internally where the mains water supply enters the building.

Multiple isolation valves can be added to either system to protect against the damage and disruption caused by leaks. Although not a requirement of BREEAM isolation valves are recommended to mitigate the risk of water damage during construction and then occupation.

The controller is completely adaptable to suite the user's requirements and water usage with several adjustable parameters and operational features listed.

ADJUSTABLE PARAMETERS

- Two guard levels for when the building is occupied (low guard) and unoccupied (high guard)
- Full 7-day timer for timed guard level switching
- Water usage analysed by volume per ½ hour, hour, guard period or 24-hour periods

A close-up photograph of a Waterguard control panel. At the top left, a blue LCD screen displays the date and time '12:08 FRI 20-OCT-17' and status information: '>GUARD: LOW', 'CHANNEL 1: OK', and 'CHANNEL 2: OK'. Below the screen are two indicator lights, one green and one red. In the center, there is a blue oval button with the 'Waterguard' logo. A blue banner with the word 'Waterguard' in white serif font is overlaid on the right side of the image.

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OPERATIONAL FEATURES AND BENEFITS

- Activated by irregular flow levels identified by the consumer.
- Audible and visible alarm when activated by a detected leak.
- An integrated back-up battery will continue to power the controller for many weeks in the event of a mains power loss.
- Available with or without an automatic solenoid shut off valve dependent on application
- Compatible with water meters with pulsed outputs of 1, 10 & 100 Litres per pulse
- Meter reading visible at the controller
- Output link available to BMS
- Full events log for checking detailed activity
- Records and displays the maximum and minimum litres of water used in high and low guard periods
- Override function for unlimited water for a controlled period of up to 90 minutes
- Shut off the water supply in high guard
- Available for pipe sizes 15mm to 150mm
- 12V and 240V versions available
- 24-hour maximum water usage allowance
- Compatible with Waterguard DataCom for offsite alerts via SMS
- Optional Waterguard Pulse Splitter allowing an additional pulse count to be sent to the BMS

TECHNICAL DATA

Waterguard Series 7

Size (W x H x D)	145 x 85 x 50mm
Power	12vdc 250mA/72 Mw (Transformer Included)
Volt free relay	24vdc, 1 amp (not included request on ordering)
Burst power (when about to operate a valve)	840mW for 5 seconds
Back up battery	AAA size, NiMH, 1.2V nominal, 850MaH
Initial back up battery charge time	Flat to full in 5 days
Expected battery life	1 year
Alarm output	Maximum switching voltage 50V, maximum switching current 1A

Solenoid Valve

15mm – 54mm solenoid	6vdc derived from the control panel
54mm – 150mm valve drive output	150mS burst, capacity discharge, rated for 6V, 6W bipolar valve

Pulsed Water Meter

Meter input	Supplies 3V at 3mA, 20uS pulse at 2Hz
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INSTALLATION

Unlike other major water leak detection systems on the market the Series 7 range requires only one control panel to monitor both the internal and external water meters as well as control any additional solenoid/actuating valves. This control panel which requires a mains power supply is usually wall

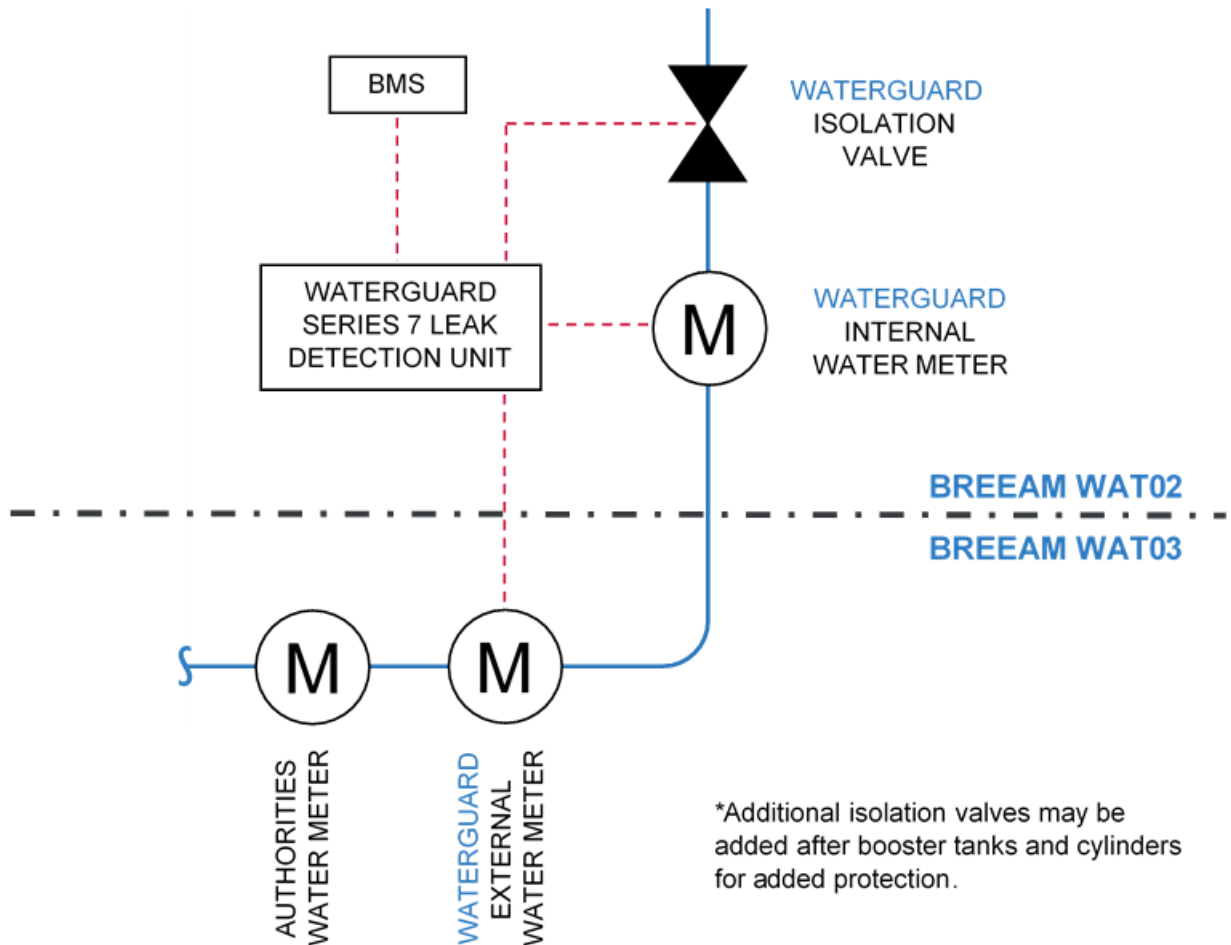
12:08 FRI 20-OCT-17
>GUARD: LOW
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mounted in the buildings plant room but can be installed anywhere that is accessible to hear and see the alarm output. The control panel is then linked to the water meter(s) using 2 core cable (not supplied), (1mm² up to 100 meters and 1.5mm² up to 150 meters). Please see individual data sheets for information on plumbing components.

STANDARD SYSTEM CONFIGURATION



Use in conjunction with the Waterguard PIR systems to isolate the water supply in frequented toilets and wet areas for maximum BREEAM credits.

Waterguard

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Any application, water leak detection and prevention.
To find your solution visit www.waterguard.co.uk.

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