

Water Sustainability in the Built Environment

FlowGuardian
PIR WaterSave
FlowStop®
Smart Flexi-Pad



ANDEL

Protecting your assets. Protecting the environment.



NET CARBON
ZERO BY
2025

Introduction to ANDEL

Founded in 1992, Andel has steadily grown to become one of the global market leaders in the design, development and application of specialist leak detection, flood defence and environmental protection systems.

Andel provides a range of innovative products and services in four key specialist areas:



Peter Double started with Andel in 1999, as the first leak detection employee, while still a student. 22 years later, he works as the company's Managing Director.

Together with a hard working management team, Peter has big goals for Andel and the company's potential.



Peter Double
Managing Director

ABOUT THE FlowGuardian

Water is a precious resource and underground leaks can be responsible for significant water wastage if left unchecked.

FlowGuardian is a robust water leak detection and high-usage alarm system that measures flow between a site boundary and a property.

FlowGuardian is an effective and sustainable water conservation solution, saving precious water, saving on water bills and earning BREEAM credits.



HOW THE FlowGuardian WORKS

FlowGuardian uses two flow meters, the limits of which can be set on installation and actively monitors the mains water supply to buildings.

One flow meter is situated at the site boundary and the other within the building after the stopcock (the control tap for your mains water supply).

The programmable, wall-mounted control panel has a simple, interactive push-button LCD display with audible buzzer alarm.

All alarms are displayed continuously until corrected and reset on the system.

The system monitors the pipework between the external and internal flow meters for leaks and uses the flow rates and volumes from the internal flow meter to identify excessive water usage. The system provides a sustainable, water conservation solution.

FlowGuardian can help to achieve recognition and credits with BREEAM assessment and certification.

Andel's **Floodline**® leak detection systems provide the optimum solution for protecting any building of any size from internal leaks. Combined with **FlowGuardian**, the system meets the requirements of BREEAM water monitoring, water leak detection and water flow control.

FlowGuardian can be installed as a stand-alone system or can easily be integrated into a **Floodline**® leak detection monitoring system providing a sustainable solution to water usage.



FlowGuardian BREEAM Credits

FlowGuardian can help you achieve BREEAM credits

FlowGuardian provides flow monitoring and water leak detection in line with the defined BREEAM standards WAT02 and WAT03 and can earn BREEAM credits subject to a successful audit by an authorised third-party assessor.

WAT02 water monitoring

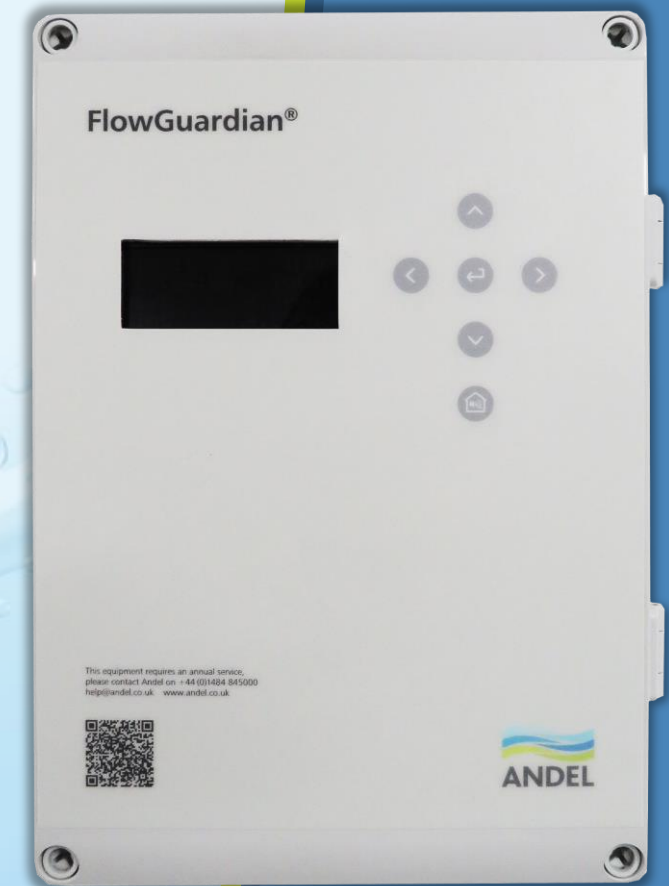
The aim of WAT02 is to ensure water consumption can be monitored and managed, and therefore encourage reductions.

One credit – Compliant water monitoring system

WAT03 water leak detection and prevention

The aim of WAT03 is to reduce the impact of water leaks that may otherwise go undetected.

One credit - Compliant leak detection system



ABOUT THE PIR WaterSave

*Floodline® PIR WaterSave – for
BREEAM credits and water
conservation.*



Floodline® PIR WaterSave is a reliable system that detects movement and automatically switches the water supply off when no movement is detected.

Floodline® PIR WaterSave is an effective water conservation solution, saving precious water, saving on water bills and earning BREEAM credit.

PIR WaterSave

Functions and Features

Floodline® PIR WaterSave is a flow control system with a device fitted to each WC area/facility to ensure water is supplied only when needed and therefore preventing water leaks and water wastage.

As defined by the standards in BREEAM WAT03, Floodline® PIR WaterSave is an automatic device detecting occupancy or movement in an area to switch water on and turn it off when the presence is removed. It can aid in the accumulation of credits subject to a successful audit by an authorised assessor and is worth one credit under WAT03.

Floodline® PIR WaterSave system comprises a Floodline® control panel and PIR (Passive Infra-Red) sensors which have the combined ability to control motorised valves, switching the water supply on and off as required through the detection of movement in the monitored area. The system can manage up to three motorised valves and a further two PIR sensors if required.



PIR WaterSave BREEAM Credits

Andel products can help achieve recognition within BREEAM® subject to suitable assessment by an authorised assessor.

Floodline® PIR WaterSave can help you achieve BREEAM credit.

Floodline® PIR WaterSave provides flow monitoring in line with the defined BREEAM standard WAT03 and can earn BREEAM credit subject to a successful audit by an authorised third-party assessor.

WAT03 water leak detection and prevention

The aim of WAT03 is to reduce the impact of water leaks that may otherwise go undetected.

One credit - Compliant flow control devices.



ABOUT FlowStop®

Avoid the costly consequences of water damage from burst pipes, internal leaks and floods with FlowStop®

FlowStop® is ideal for residential customers, landlords and property agents, student accommodation, hotels, offices and commercial premises.

FlowStop® monitors your water supply and automatically shuts it off in the event of unusual flow activity or a temperature drop and the risk of freezing pipes.

FlowStop® – a highly cost-effective and easy-to-install automatic mains water shut-off system, offering 24-hour protection against internal leaks and floods.

With FlowStop® there are options to add leak detection sensors to vulnerable areas such as kitchens, utility rooms, bathrooms, with appliances or toilets and sinks that use mains water.



BENEFITS OF USING FlowStop®

UK insurers pay out around £1.8 million every day to customers making 'escape of water' claims on their buildings and home contents insurance. Nearly one in five claims is for damage caused by leaks with many in the winter months due to frozen pipes that have burst.

- Source: Association of British Insurers



Cost-effective and WRAS approved, Andel FlowStop® automatically isolates your water supply in the event of abnormal flow activity or the risk of freezing pipes – and because it can monitor two water supplies it is ideal for multi-occupancy developments with separate hot and cold water supplies.

- Highly cost-effective
- Suitable for residential or commercial settings
- Low maintenance
- Easy install, easy set-up
- Monitors up to two water supplies (ie: hot & cold supplies)
- Freeze protection
- Time-out protection
- Excess flow protection
- 24-hour non-use protection
- Override control
- Discreet wall-mounted control unit (double-gang white faceplate)
- Easy-to-fit water flow meter and valve unit
- Optional leak detection sensors
- Optional connection to BMS
- Optional connection to onward GSM for absent occupants
- Mains or battery powered

FlowStop®

FEATURES & FUNCTIONS

FlowStop® Control Unit:

Faceplate: Discreet design double-gang faceplate featuring 2-digit LED number display, red LED warning light and 4 navigation buttons for easy set up. Can be surface mounted or flush mounted using a standard back box.

Reset Button: Resets the system following activation and allows water to flow again.

Override feature: Turns the monitoring off to allow for prolonged water use such as watering the garden.

Additional leak detection sensors: Can be added to detect leaks in vulnerable areas such as under washing machines and dishwashers as well as in bathrooms and toilets (optional).

Output: Volt-free relay contact rated 30V @ 1A per input.

FlowStop® Flow Meter/Valve:

Freeze Protection: Turns the water OFF if the temperature falls below 1-5°C (user adjustable).

Time Out Protection: Turns the water OFF if water has been running for more than 10-60 minutes (user adjustable).

Excess Flow Protection: Turns the water OFF if the system senses that there has been a burst pipe or there is an abnormal flow of water between 10 and 40 litres per minute (user adjustable).

24-Hour Non-use Protection: Turns the water OFF if no water has been used for 24 hours.

Reset Button: Resets the system and allows the water supply to flow again.

Technical information

Pipe Size:

Andel FlowStop® valves are available in UK and EU 15mm and 22mm diameter pipe sizes.

Power:

Mains 240V or battery operated (9V PP3 1200mAh).

Construction:

Control Unit: Moulded ABS

Dimensions:

Control Unit:
W145mm x H85mm x D9mm

Operation:

Max working pressure 10 bar.
Min operating pressure 1 bar.
Working temperature 4-80°C.
Can handle 2 inputs and control up to 3 motorised valves.

ABOUT THE Smart Flexi-Pad

The Andel Smart FlexiPad Sensors have been specifically designed for installing in narrow voids such as underneath dishwashers, washing machines, sinks, baths, and showers.



The Smart FlexiPad will detect a water leak on any part of its surface and after use. It is activated with any conductive liquid and then can be wiped clean for ease of drying and reuse.

The Smart Flexi-Pad is constructed of tough, flexible plastic sheet with bonded 'carbon-loaded' detection tracks. The sensor can lay loose, while the sounder or Wi-Fi transmitter is surface mounted and is supplied with double sided adhesive strip.

Smart FlexiPad comes in two versions; **Audible Sounder only** and **Wi-Fi Only**.

Smart Flexi-Pad

Functions and Features

Dimensions:

Sensor – 400mm x 300mm x 1mm
(8mm at connection point)

The Sounder – 98mm x 40mm x 23mm

Sounder enclosure – 98mm x 4mm x 23mm

Wi-Fi enclosure – 70mm x 25mm x 20mm

Adhesive Pad – 3M Double Sided, Thickness 2mm

Power:

Audible only version uses a standard PP3 9v battery.

Wi-Fi version uses 2 x AAA batteries

(with a low battery warning)

Battery life expectancy – 1 year +

Alerts:

Discoverable Wi-Fi Connects to all popular Smart home APPs. Notifications can be set in your smart home App under the device options page.

The options menu has both notification and battery monitor notification settings. Audible version has local 90dB that sounds for as long as the sensor is in contact with water.

There are two ways to silence the sounder – Remove the battery - by accessing the battery compartment slider, on the underside of the enclosure.

Dry the mat, ensuring that it is completely dry, then re-fit the battery.
Or simply dry the mat completely.



WORLDWIDE MARKET

Clients of Andel's Water control systems

Her Majesty The Queen
The Royal Household
The Houses of Parliament
The UK Ministry of Defence
The National Health Service
BT
O2
EE
Orange

Vodafone
Equinix
Global Switch
Goldman Sachs
Deutsche Bank
HSBC
National Bank of Australia
Massachusetts Institute
of Technology

The Pentagon
Marina Towers Financial District Singapore
NATO
The Gnome Campus
University of Oxford
University of Cambridge
Chep Lap Kok Airport Hong Kong
UK Air Traffic Control
The Shard

Where are these products in use?

United Kingdom | Ireland | France | Poland | Netherlands | Belgium | Italy | Spain | USA | Brazil
| China | Singapore | Australia | South Africa | Saudi Arabia | UAE | Kuwait | Israel



ANDEL

Protecting your assets.
Protecting the environment.

<https://www.andel-environmental.eu/>



Thank you.