



Cleverly simple
control of energy.

irus

LeakDetect

Escape of water building protection



Take control of **Escape of water**
with a system **designed specifically** for **multi-occupancy accommodation.**



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The provision of student accommodation presents many challenges. Safety, comfort and affordability being top of the list.

Since 1997 we have been developing products and specifically for this sector.

Our core focus is to deliver systems that help our customers provide **comfortable, safe** and **compliant** accommodation while maximising operational efficiency.



LeakDetect

Escape of water building protection

Irus LeakDetect keeps buildings safe by monitoring moisture sensitive pads and other sensors. It raises the alarm when escape of water occurs. Whether a burst pipe or a faulty piece of equipment, LeakDetect will inform you of intensity and location.

Monitoring and operation

The sensors communicate with the Irus Portal via the individual ControlSensors around the site. When a leak is detected, alerts are sent to appropriate members of the team. Valves, on each tank, or on the main riser are automatically instructed to close. This isolates the affected area and stops further supply of water from entering the system.

There are three levels of action to Leak alerts:

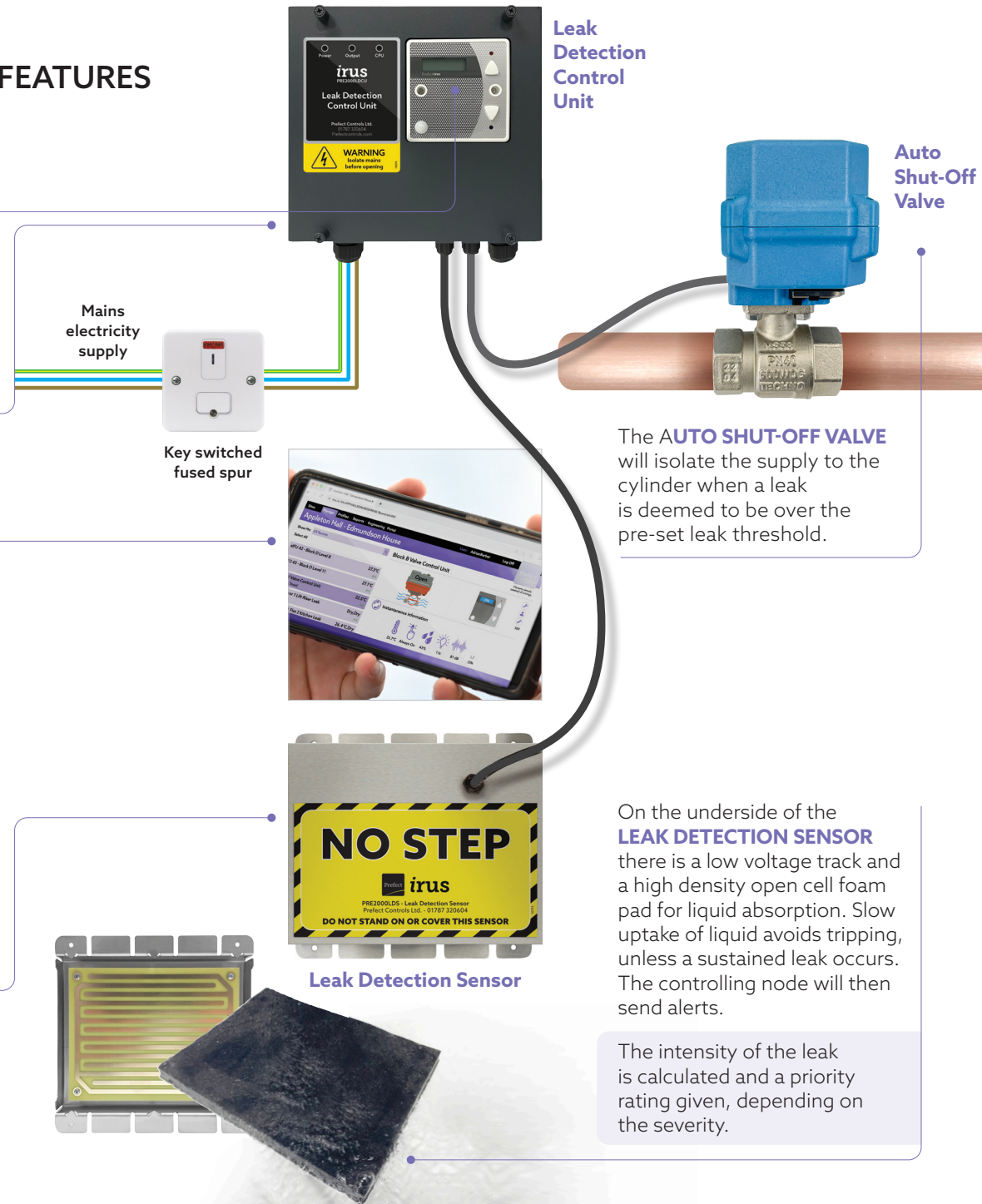
- Alert only where an SMS and/or email are sent to specified addresses/numbers.
- Individual Cylinder Shut-Off Valve where a single tank can be isolated closest to where the issue has arisen.
- Riser Shut-Off Valve where supply to the entire block is isolated.

The **LEAK DETECTION CONTROL UNIT** is positioned close to the sensors. When a leak is detected it communicates with the Irus Portal using MBS (Mains Borne Signalling).

Leak detection components are **ROBUST**, capable of withstanding challenging environments.

The **IRUS PORTAL** can be accessed from any internet enabled device. The status of each sensor and valve can be checked remotely. Profiles can be altered, and the environmental conditions of a sensors location viewed i.e. humidity, light, sound pressure and temperature.

The **LEAK DETECTION SENSOR** is strategically positioned in areas where leaks are most likely to occur. For example, in cylinder cupboards, under sinks in kitchens or in the vicinity of showers.



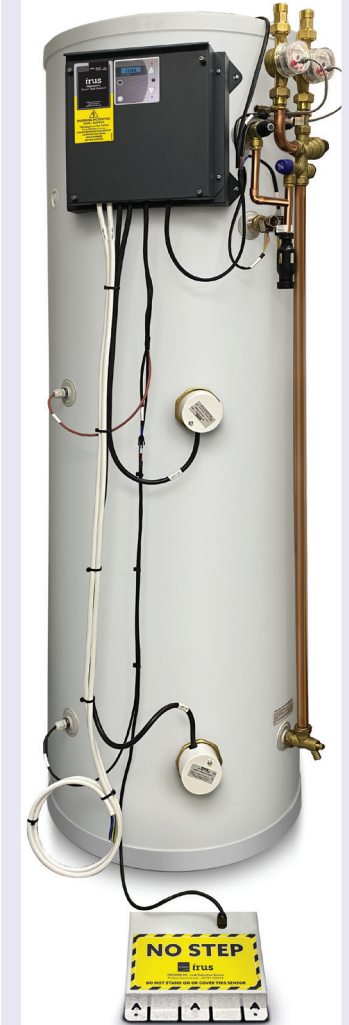
Leak Detection Control Unit

Auto Shut-Off Valve

The **AUTO SHUT-OFF VALVE** will isolate the supply to the cylinder when a leak is deemed to be over the pre-set leak threshold.

On the underside of the **LEAK DETECTION SENSOR** there is a low voltage track and a high density open cell foam pad for liquid absorption. Slow uptake of liquid avoids tripping, unless a sustained leak occurs. The controlling node will then send alerts.

The intensity of the leak is calculated and a priority rating given, depending on the severity.



The Irus **SMART TANK** has integrated leak detection connectivity for the addition of Leak Detection Sensors.

LeakDetect

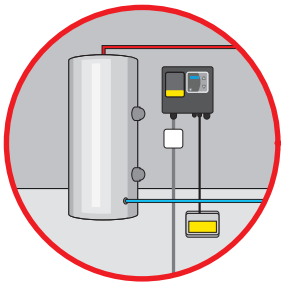
There are three levels of action that Irus can take to minimise damage when leaks are detected.

Wherever there is water and potential for escape, **LeakDetect** is a universal solution for all building types and water systems. When moisture is detected Irus tests and verifies a leak is the cause, when confirmed the alert is sent.

There are three levels of action that can be taken to minimise damage when leaks occur. For all options, leak detection sensors are positioned where leaks are most likely to occur.

OPTION 1 ALERT ONLY

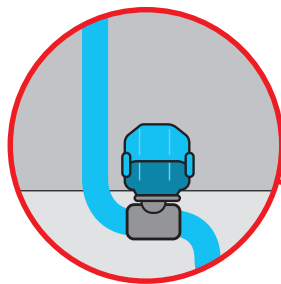
This option simply identifies and verifies a leak, then alerts designated email and SMS contacts.



OPTION 1 ALERT ONLY

OPTION 2 RISER SHUT-OFF VALVE

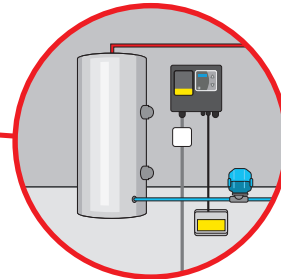
An Auto Shut-Off valve is installed on the incoming cold water supply for each wet riser core. They have the capability to isolate the riser should a leak be detected by any of the sensors.



OPTION 2 RISER SHUT-OFF VALVE

OPTION 3 INDIVIDUAL CYLINDER VALVE SHUT-OFF

Auto Shut-Off valves are installed on the incoming cold water supply for every cylinder. These are instructed to switch off the supply when leaks are detected.



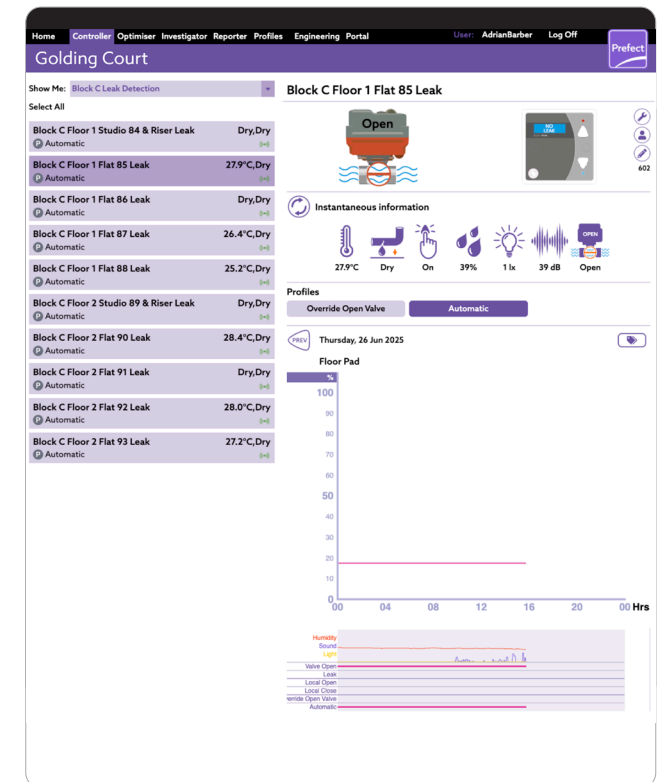
OPTION 3 INDIVIDUAL CYLINDER SHUT-OFF VALVE



SMS or EMAIL MESSAGES or both, are sent to designated personnel detailing the location and intensity of the leak.

THE PORTAL

The portal provides easy access to monitor all leak detection devices and view current and historic data.



The *irus* ecosystem

Hardware - Control and Monitoring



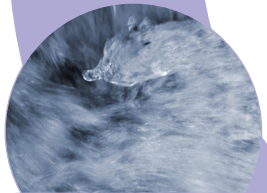
SpaceHeat



HobSensus



SmartTank



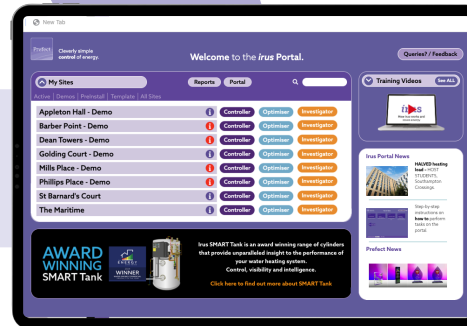
LeakDetect



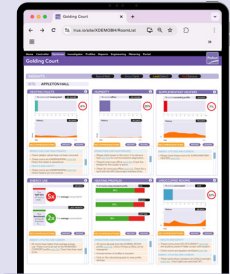
UtilityMeter



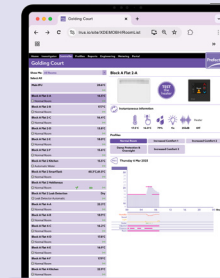
WaterSense



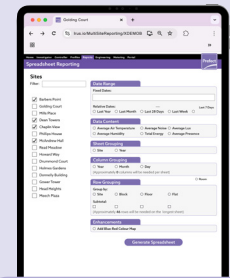
Software - Control and Analytical tools



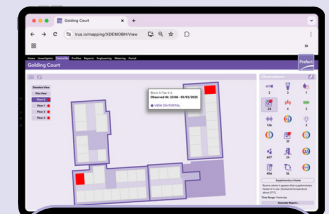
Optimiser



Controller



Reporter



Investigator