



Aguarda



CONTRIBUTE TO BREEAM

IN-USE INTERNATIONAL V. 6.0.0



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10 reasons to use Aguardio Leak Sensor and Shower Sensor in you building certification:

1. The sensors are perfect as a reduction measure because they are easy and quick to install and provide immediate results.
2. Aguardio can provide documentation for reduction potential, so you can use the sensors in strategic planning and reduction roadmap.
3. Reduce water consumption costs.
4. You get data and documentation of water use and reduction, down to the individual toilet and shower.
5. You get total operation and maintenance information for O&M planning.
6. You get a flexible system solution with a user-friendly interface that can be used by operating personnel.
7. You get an APP solution, so you can involve the facility managers and users directly.
8. The Shower Sensor helps reduce your energy consumption for heating hot water.
9. Temperature and humidity in the bathroom are monitored to reduce the risk of mold or legionella.
10. You receive information about the use of the shower or toilet so you can reduce the need for cleaning. Also, from data estimate the number of bathrooms/toilets needed (e.g. after renovation).

Asset Performance	Criteria Name	Leak sensor	Shower sensor
Energy (Ene)	Ene 11 Installed controls		X
	Wat 01 Water monitoring	X	X
Water (Wat)	Wat 05 Water efficient equipment: showers		X
	Wat 08 Leak prevention	X	

Management Performance	Criteria Name	Leak sensor	Shower sensor
Management (man)	Man 03 Maintenance policies and procedures.	X	X
	Man 04 Environmental policies and procedures	X	X
Health and wellbeing (hea)	Hea 14 Thermal comfort	X	X
	Hea 18 Legionella risk management	X	X

Energy (Ene)	Ene 22 Energy audit	X	X
	Ene 24 Reduction of carbon emission		X
Water (Wat)	Wat 14 Water strategy		

Leak Sensor:

Lack of clean drinking water is a growing challenge worldwide, and it is crucial that we become better at managing our water resources responsibly.

The UN's Sustainable Development Goals, CSRD, EU taxonomy and building certification schemes all focus on reducing and streamlining water consumption.

The Aguardio Leak Sensor is easy to install. The sensor immediately monitors water consumption in toilets. The sensor also contributes to the certification of construction and buildings in operation.

Up to 20 percent of all toilets run/leak (e.g. US sources) and a toilet running as much as 275 liter/day often cannot be heard or seen visibly. In the pursue of water efficiency, leaking toilets are therefore an obvious area to focus on.

Not everyone associates water with CO₂ emission. Water is pumped up from underground, transported to and from our buildings and purified before being led back into the sea.

This process requires energy. Therefore responsible consumption of water also reduces CO₂ emissions from water management.

Customers' experiences:

The Leak sensor detects leakage down to 3 liters per hour (as tested independently by the leading Danish test institute Teknologisk Institut). When a leak is detected, the Sensor emits a digital or an audible alarm. The sensor is so effective that customers choose to turn off the alarm in the first weeks, due to the number of leaking toilets and thus the number of alarms. Often rather many toilets can be leaking rather much over a year but perhaps not every day – toilets can leak on/off due to both e.g. toilet technology and minerals building up. With the data from leak sensor customers can monitor the development of the total leak situation in their “toilet population” in buildings and thereby work on optimizing service & maintenance plans and follow how the leak situation develops (more and more toilets normally start leaking).

More than just a Leak Sensor:

Leak Sensors are developed to monitor toilets, but our customers use data from the sensor for much more than toilet maintenance.

Space management

At e.g. campsites (like CAMP Hverringe), our sensors can be used to plan which and how many of the campsite's toilet buildings will be in use.

This is possible because customers have data from the leak sensor, on when and how much the toilets are used via the estimates on number of flushes per toilet.

By closing the toilet buildings to the redundant toilet buildings, lower costs for cleaning and heating the toilet buildings are achieved, without compromising customer service.

Strategic maintenance

By collecting data for when toilets start to leak, our customers can begin to accurately foresee maintenance

needs. This allows strategically planned maintenance instead of handling the toilets individually when a leak occurs.

Strategically planned maintenance is more cost-effective than individually handling. At the same time, it provides better workflows for the technical staff.

Strategic reduction targets

Several of our customers work strategically with water conservation.

Up to 20 per cent (or more! Actually often seen in older buildings) of toilets are leaking. For many building owners, there will be a significant potential for water reduction, which can be included in the company's strategic reduction targets.

Leak Sensor collects data and thus provides an input to consumption overview when companies need to provide annual documentation for water reduction.

Shower Sensor:

Lack of clean drinking water is a growing challenge worldwide, and it is crucial that we become better at managing our water resources responsibly.

The UN's Sustainable Development Goals, CSRD, EU taxonomy and building certification schemes all focus on reducing and streamlining water consumption.

Aguardio's Shower Sensor helps to reduce water consumption through behavior change by direct interaction with the resident.

Most people agree that spending time in the shower is a lovely experience. But the experience can change with the awareness of the consequences of the long shower. It is both expensive and unnecessarily consumes the earth's water resources.

An average shower takes 7,1 minutes (average interval often 6-8 minutes). But even first 2-3 minutes of water flowing can be enough for the body to be clean.

The shower sensor detects the exact bath time and displays it while you are in the shower.

UK universities like University of Surrey and Cranfield University have analyzed the effect of the Shower Sensor on our behavior. The reporting shows that the showering time was reduced by 21.27% in tourism/hospitality and up to 30% in homes (even 33% in student accommodations), which means reduced shower durations of often 2-3 minutes when the solution is used as specified.

At the same time, the studies show that shower users find, that by reducing showering time, they contribute to protecting the world's water resources. Thus, the short showers become a positive experience for users.

The data about shower behavior (e.g. when and how being showered incl. shower duration, e.g. do people pause water while soaping/using shampoo) and the development can be used for reporting, estimations of usage of water & energy from showering, following-up and the opportunity involving the users via info and there the potential to change behavior in even more sustainable direction.

More than just a Shower Sensor:

Mold prevention:

The shower sensor measures both temperature and humidity in the room. Therefore, some of our

customers use the sensor to monitor the risk of mold. The risk of mold to occur rises when the humidity rises above 70-75 per cent.

To prevent mold it is essential that the bathroom is sufficiently ventilated to keep down the humidity.

If the humidity rises above 70-75 per cent for a long period of time, it will appear on data overview from the Shower Sensor.

This allows the resident or technical staff to know when ventilation is needed.

Mold is harmful to health and at the same time the cost of renovation due to mold is high. Which provides us with good reason to make an effort to avoid mold in our bathrooms.

Renovation costs also can be significant due to mold.

The Shower Sensor contribute to building certifications schemes. Unlike many reduction measures, the Shower sensor is easy to install and requires only a small investment. At the same time, the sensor provides precise data for following-up on reduction.

The Shower Sensor interacts directly with the resident, taking us one step closer to the smart building of the future.