Saving Water, Saving Money: Taps and Showers

Water series

Water is a precious natural resource that businesses should manage in the same way they manage other resources. The cost of water will inevitably continue to rise, due mainly to increases in energy costs. A large proportion of water consumed in hospitality businesses comes from guest bathrooms and public washrooms. A number of options are available to reduce water consumption from taps and showers, which still offer a high-quality experience for the customer, while saving your business money.

Did you know? Repairing a dripping tap could save in excess of 5,000 litres (5m^3) of water a year. Finding and repairing four dripping taps could save you £42 per year in water costs alone, often for the cost of fitting a new washer. Make sure to check your taps regularly.

Water efficient taps

Water efficient taps aim to provide high performance while at the same time reducing the amount of water required. It is recommended that any improvements are carried out with supervision from a qualified plumber.

- **Aerated taps**

Tap aerators are devices that can be retrofitted to existing taps to mix air with the water, producing the same force of flow, and cost as little as £5 per unit, with a payback period of around 3 months.

- **Spray taps**

Spray taps work by forcing water through small holes in the tap outlet, thus producing a mist or spray. Spray taps can reduce water use by between 60% and 70% compared with conventional taps. However, the spray head needs to be checked regularly for fouling from soap, grease and lime scale.

Automatic shut-off taps

Automatic shut-off taps turn off the tap after a certain time. This makes them particularly useful in public areas, for example in visitor attractions, holiday parks or public toilets in hotels. The main types of automatic shut-off taps are:

- **Percussion taps**

Percussion or push taps are self-closing taps that close after they have been operating for a pre-set time, generally between 1 and 30 seconds, thus eliminating the possibility of water being left running. To be most efficient, push taps need to be well maintained to ensure correct operation. Percussion taps cost around £20 each and can reduce water use by over 50%, compared with conventional taps. They can be supplied as kits, which simply fit onto existing standard tap bodies without the need to disrupt pipework connections.

- **Passive infrared (PIR) sensors for taps**

The use of a PIR sensor will automatically start and stop flow through a tap as it detects when the tap is used. The sensor controls the flow of a pre-set amount of water into the tap per use.

Top tip:
For information on enhanced capital allowances for **water saving technology**, like efficient taps, toilets and showers, please see the Water Technology List: **wtl.defra.gov.uk**.

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Water efficient showers

Typically, a conventional shower uses 35 litres (for a 5-minute shower), costing around £65 per year if used once per day. Power showers use substantially more water (70 litres for a 5-minute shower) and increases the annual cost to around £130.

Water efficient showerheads are available that can reduce the water consumption without diminishing the customer experience, provided the water pressure is adequate.

The amount of water used by a shower can be reduced by:

- using a 'water saver' showerhead
- installing a flow restrictor in the pipework upstream of the shower fitting or in the shower head
- using a push button to control water use (applicable in public showers such as in changing rooms, leisure facilities, and holiday parks).

Did you know?
By placing an aerator in a showerhead, you can reduce water usage by up to 70%.

Hot water

Provision of hot water is essential for hospitality businesses but it can lead to considerable energy costs. Make sure to set appropriate hot water temperatures. Excessive heating of hot water is wasteful, expensive and could scald staff or guests. The optimum temperature for stored hot water is 60ºC which is adequate to kill Legionella bacteria and is sufficiently warm for staff and guests to use.

Even if you are currently not on a water meter your business can still achieve energy savings and reduce costs by using less hot water. Wasting hot water is literally throwing money down the drain. The table below provides an indication of the additional cost of hot water against base water supply costs.

Typical Water Costs	
Mains – supply only	£0.77/m^3
Mains – supply and wastewater treatment	£2.12/m^3
Hot water (60°C) – gas heated	£2.82 – £3.98/m^3
Hot water (60°C) – electrically heated	£6.48 – £7.64/m^3

Further Advice

For more information on water saving opportunities see:

Resource Efficient Scotland – how to make quick water savings **www.resourceefficientscotland.com/content/key-task/make-quick-water-savings**

Zero Waste Scotland – Implementing a water minimisation programme guide **www.zerowastescotland.org.uk/content/implementing-water-minimisation-programme-0**

For further advice contact Resource Efficient Scotland, **www.resourceefficientscotland.com** or call **0808 808 2268**.

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