



Top Tips – Water – Measuring Flows

Every business needs to know the volumes of water that flows from wash basin taps, showers, toilets and cisterns. Why?

Because water costs money – and hot water can cost from 4 to 10 times the cost of cold water.

Currently in Ireland businesses are charged from €2.00 to €3.20 per cubic litre of water (1,000 litres).

So a cold water tap in a guest bedroom that has a flow rate of 15 litres per minute that is operated for 3 minutes per use, 6 times per day (occupied room), @ 100% occupancy will cost you up to €158 – for each occupied room. Reduce the flows to 6 litres per minute and it will cost you €63 – a saving of €95 – at a cost of a few Euro to install an aerator or nothing if you can reduce the pressure.

If it is a hot water tap using electricity to heat the water the 15 ltr cost will be c. €1,588 and the 6ltr cost will be €950 – a saving of c. € 638 – per annum – forever! *(Can you imagine the costs in your public bathrooms which are constantly in use)*

So, get measuring and start reducing those flows – without impacting on guests comforts or needs.

Its not difficult – you just need a few simple tools;

- A bucket
- A graduated jug
- A stopwatch, watch with a second hand, smartphone with stopwatch app

Use the Water Equipment Cost Reduction Analysis Calculator which you can find in the members section of the GHP website under Tools and Templates on your home page.

Work out the total savings you could make and then get a plumber to give you a quote for the works. Then make it happen.

Further Tip: Whatever solution you select – Low Flow shower head, tap aerator etc. Install 1 or 2 first and test them out until you are happy with the result. You may not be able to reach the optimum targets, water can be a strange thing, but the objective is to reduce overall flows.

So, how do you measure the flows – its quite easy really and the following pages tells you how.

Members who have implemented these actions and reduced flows have saved thousands of Euro over the years.



Measuring Volume of Cisterns (Toilets and Urinals)

Equipment

Have a bucket of water similar in capacity to the cistern to hand plus a graduated jug, 1 litre.

For Urinal cisterns you also need a step ladder and follow Health & Safety Guidelines

Procedure

Open the cistern cover and engage the mechanism to make it flush (A full flush)

When the flushing stops hold the ballcock up so that the cistern does not automatically refill

Using the graduated jug fill the cistern with water from the bucket until it reaches the “Water line” inside the cistern

Release the ballcock and close the cistern lid

Record the litres of water used to fill the cistern on the Water Flow document.

Measuring Flows from Taps

This is for Wash Basins – you do not need to measure bath flows as you want the bath to fill quickly.

Place an empty bucket under the ubend of the sink. Unscrew the ubend and dispose of the waste water.

Turn the taps on to a regular cycle for 60 seconds – all the water is collected in the bucket.

Replace the ubend.

Using the graduated jug measure the volume of water = the flow.

Note: If there are individual taps you should measure the flow from each separately and then add them together to estimate the normal guest use.



Measuring Flows from Showers

Turn on the shower and set it at the normal flow that guests use.

Insert the bucket and fill for 60 seconds.

Using the graduated jug measure the volume of water = the flow.

Note: If the flow is too high measure for 15 seconds and multiply the result x 4 – Flow per minute.