

Pulse Eco Shower
182 Kilcatten Road,
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Trial Summary Report
Case Study

The QUESTOR Centre carried out work on behalf of Pulse Eco Shower comparing their product, to shower heads that delivered the water jet through multiple small holes. These shower heads are referred to in this summary as Shower Head B.

Prior to delivery to the QUESTOR Centre, 2 of each of the shower heads had been trialed over an eight week period in homes in a hard water area in County Laois in which at least two adults reside. Following the trial, one of each of the shower heads was analysed for build-up of limescale, whilst samples of the other were obtained and examined using a Scanning Electron Microscope (SEM). These samples were compared with the clean shower head samples.

Limescale

Limescale analysis was carried out by ICP analysis of a known volume of extract water which was passed through each of the shower heads. This analysis determined the Calcium concentrations of the extract water (a key indicator of limescale build-up). The extracts from the Pure Pulse shower showed a small increase in Calcium content to **0.6** milligrams/kg

Shower Head B showed a large increase in Calcium content to a figure of **143** milligrams/kg. The increase in concentration with Shower Head B was approximately **238** times higher than that observed with the Pure Pulse Shower.

Bacteria

SEM microscopy gave an indication of the degree to which the shower heads became colonised by micro-organisms. At a magnification of 10000x, **2** bacterial cells were observed with the sample taken from a Pulse Eco Shower and **27** cells were observed in the sample taken from Shower Head B, ie **13.5** times more bacteria in Shower head B than the Pure Pulse Shower head. This result implies that bacteria are significantly less likely to colonise a Pure Pulse Shower than their competitors.'

Best regards



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