



Application

University

Client

Birkbeck, University of London

Project Management

Building Services, Birkbeck

Installation date

February 2023

Targets

Washrooms, electronic controls, urinals, education, water saving, easy to install easy to maintain

DELABIE set to deliver £30k+ annual cost savings at Birkbeck, University of London

A recent trial to reduce water consumption - following the installation of DELABIE's TEMPOMATIC 4 intelligent urinal control plate - demonstrated **99% in water cost savings** at Birkbeck, University of London.

Birkbeck's Building Services Manager, Spensa Wheeler, responsible for technical services contracts and facilities doesn't hold back: **"It's fair to say the results have been outstanding and exceeded our expectations."**

Birkbeck is a large estate of 18 separate buildings in central London, including a mix of Grade 2 listed town houses and eight-storey 20,000 sq ft more modern buildings, where much of the learning is delivered during the evening, with its premises used during the day on a commercial basis.

Gaining control

Spensa says it was during the pandemic things came to a head: *"We became even more conscious of our water usage and in particular the urinals near constant water flow, although functioning with no occupancy for extended periods. There would always be a trickle and then an automatic flush and we had no control systems to manage this. So, we started a conversation with Delabie to gain greater control over water usage in our urinals and investigate the potential for significant savings."*



Spensa Wheeler and Alex Wishart from the technical services team

Outstanding results

For one week's test normal water consumption was 10.5 m³. After installation of Delabie's new Tempomatic 4 urinal flush valve it was 0.102 m³. A 99% water saving. Representing a saving of £25.93 per week for just two urinal installations.

Spensa continues: *"The results were significantly better than we imagined. We were saving an eye watering amount of water and when we look at potentially rolling TEMPOMATIC 4 across 18 buildings, likely millions of litres of water in a year, which translates to several thousands of pounds worth of cost savings in water consumption alone as can be seen here:*

	£	m ³
no. of urinals	50	50
saving /week	12.97	5.205
saving across estate/week	648.50	260.25
per year (x52)	33,722	13,533

"These figures just reflect the water savings. In addition, we know there will be a reduction in on-going maintenance costs. We don't expect to be having to react to leaks etc. Installation and maintenance are low. Plus, with a system that has no manual intervention it's also more hygienic for users too.

"In terms of payback, we are looking at 10 months for these two installations to have paid for themselves. Each system cost just a few hundred pounds to purchase, and we used our in-house labour. This means TEMPOMATIC 4 is a really viable option. Our business case is going to the business panel with a recommendation to roll out installation across all 18 buildings, with a payback period of just 6 months, and a potential saving of over £30k per year."

The TEMPOMATIC 4 - intelligent rinsing

The TEMPOMATIC 4 urinal is an intelligent urinal valve that detects high-frequency periods and no activity, adapting its rinse accordingly. During peak periods only the urinal bowl is rinsed between two users. At the end of the busy period, an additional rinse takes place to clean the bowl completely and renew the water in the trap. The TEMPOMATIC 4 urinal valve offers 3 programmes according to the urinal type, each with an optional hygienic duty flush. The duty flush can be programmed to take place every 12 to 24 hours after the last use to flush the pipework and prevent the crystallisation of uric acid, water stagnation and back flow due to system vacuums.

The trial

Birkbeck chose to retro fit and trial the TEMPOMATIC 4 urinal plate in two locations in one building. One in the Men's on the 5th floor, where there was a higher use facility, and the second in a much smaller footfall area. Birkbeck measured the output during a normal term-time/working week, taking meter readings to quantify the results.



Full roll out - more savings

"We are very pleased." Reaffirmed Spensa. "This one product will deliver significant savings; it looks nice and is easy to install - I can't find a downside to the system. I'm a member of the Association of University Engineers and I will be sharing the positive results we have achieved within that forum, as well as endorsing a roll out across our multiple sites."

Calculations based on 154.15p for water and 94.88p for wastewater Thames Water 2022 pricing

DELABIE products installed



TEMPOMATIC 4 urinal control plate with satin finish
Ref. 430PBOX + 430016