

Swailles SuperLab

Laboratory & Offices, Oxford / UK

Case Study/07-2024



Photo Credit: Robin Swailles Design

Application

Laboratory & Offices

Property Developer

Robin Swailles Design

Installation date

January 2022

Targets

Direct flush, sustainability, electronic flush system, rainwater harvesting

Ecological soundness no longer needs to be at odds with aesthetically beautiful design, as perfectly demonstrated by a new high-concept office space in Oxford.

Destined for start-up tech companies, Swailles SuperLab at Osney Mead in Oxford provides workspace infrastructure for innovators in the field of science. However, the first occupant Milvus Advanced loved the space so much that they took over the whole building.

According to CEO, Robin Swailles, building design was a key consideration. The brief was to maximise sustainability through the use of innovative technology including energy capture via photovoltaic panels, vehicle recharging points and rainwater harvesting to achieve optimum sustainability ratings. The interior delivers a positive working environment, with an emphasis on fun, giving serious solutions for spirited science. There is a roof-top terrace and the canteen space features a replica London underground carriage.

The washroom design was very important; Director of Operations Peter Okros explains: "The laboratory design uses the entire roof as a rainwater catchment area which fills a 10,000L storage tank in the car parking area. The harvested water is filtered 3 times and then it's pumped back into the toilets via a separate pipework system. 5 bar dynamic pressure is produced, which is more than enough to serve the cistern-less toilet systems chosen for the build."

The rainwater capture system to flush the toilets is independent of the mains water supply, and helped the building to achieve an excellent EPC "A" rating. It is designed to operate all year round, providing a plentiful supply of water even in the height of summer. The flushed water discharges to a storm waste water soak away to complete the cycle.



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DELABIE's TEMPOMATIC Dual Control direct flush system is compatible with rain water, grey water and sea water, and is designed for intensive use in public buildings, making it the ideal choice for the SuperLab project. Most toilets flush with drinking water, the treatment of which requires substantial energy and resources. By using grey water to flush toilets, water treatment and supply costs can be significantly reduced.

Harnessing the system pressure, the TEMPOMATIC Dual Control WC flush valve connects directly to the water supply without the need for a cistern. The flush can be activated via a push-button on the control plate, or automatically when the user leaves. The "intelligent" automatic flush delivers either 3 or 6 litres per flush according to use, compared with the 12-litre flush from a toilet with a cistern, ensuring further water savings. The flush volume can also be reduced to 2L/4L to meet BREEAM and other environmental schemes.

The choice of cistern-less WCs that flush with rainwater means that both drinking water consumption and costs are reduced, providing a beautifully designed, innovative workspace that is entirely sustainable.



DELABIE products installed



S21 S wall-mounted stainless steel WC pan with matte black or satin finish
Ref. 110310BK & 110310



Slimline black WC seat with lid
Ref. 102819



TEMPOMATIC Dual Control WC flush valve
Ref. 464006



TEMPOFIX 3 self-supporting frame system
Ref. 564005DE



Wall-mounted stainless steel toilet brush set with lid in matte black or satin finish
Ref. 4051BK & 4051S



Stainless steel toilet roll holder in matte black or satin finish
Ref. 510083BK & 510083S



MINI BAILA washbasin & washbasin waste in polished satin
Ref. 121180 & 611



ALGUI countertop basin & washbasin waste in matte black
Ref. 120110BK & 6110BK



Liquid soap dispenser 1L in matte black and satin finish
Ref. 512066BK & 510582



Soap dispenser drip tray in matte black and satin finish
Ref. 512067BK & 512067S



Stainless steel mirror
Ref. 3458



Stainless steel paper towel dispenser in matte black and satin finish
Ref. 510601BK & 510601S



Wall-mounted stainless steel rectangular bin in satin finish
Ref. 510461S