

VIADUX – SWIMMING POOL

The ventilation rate supplied to the pool hall will be provided to control condensation, control the pool hall air quality with regards to temperature & humidity and remove chlorinous smells and other disinfection by-products from the air.

The supply and extract ventilation system will operate all the time the pool is in use, and even when the pool is not in use to maintain the environmental conditions and prevent condensation throughout the year.

The ventilation system will be designed to maintain the pool hall at a constant temperature of 1deg C above the pool water temperature and have a relative humidity of between 55 – 65%. The pool hall environmental conditions will be constantly monitored by temperature and humidity sensors in the hall signalling back to the building management system”.

We would aim to keep the humidity towards the lower recommended level to reduce the effect on the existing listed brick construction within the basement area.

To limit the physical impact on the listed brick arches we would propose that the ventilation system utilises the void infill sections between the top of the arch and the existing brick columns.

The proposals for the type of ventilation terminal will need to be agreed with the interior designers, one solution however could take the form of jet diffusers located at high level between the brick arches (typical detail below) to supply conditioned air into the pool hall.



Extract from the pool hall could be in the form of a single extract louvre, again located at high level between the brick arches at one end of the pool hall.



The HVAC systems as of yet have not been designed for the pool and associated areas that support the pool and hence a definitive updated part L2 cannot be provided.

However, we can confirm that all building services including both Mechanical and Electrical services will be designed in accordance with the efficiencies as required under part L2A including

- Specific fan powers ventilation systems
- Lighting Efficiencies and control
- Heat Recovery on ventilation systems
- Boiler / ASHP efficiencies
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Although we are unable to update the Part L calculations until the design is progressed, we do not anticipate that the revised scheme will have a significant impact on the overall Carbon emissions of the overriding scheme in terms of CO₂ per m²