

Royal Berkshire NHS Foundation Trust ERF – Ventilation Statement

PROJECT TITLE	Royal Berkshire NHS Foundation Trust ERF
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The Royal Berkshire NHS Foundation Trust are proposing to demolish an existing pre-fabrication cabin and replace with a new build clinical space on the Southern end of the site. The ventilation of the space will be designed in accordance with Approved Document F 2021, the NHS HTM & HBN standards and CIBSE Guidance.

Based on the NHS standards, treatment rooms, wards, utility rooms and WC's must be mechanically ventilated. The proposed building also contains a minor theatre. Under the HTM requirements, theatres are considered to be a critical area and must be mechanically ventilated by its own dedicated plant with upgraded filtration requirements.

Based on Approved Document F 2021, circulation spaces require a ventilation allowance of $0.5l/s/m^2$. Due to the circulation space being predominantly landlocked, there is insufficient free area from natural ventilation openings, resulting in these spaces being mechanically ventilated.

Spaces that could potentially be naturally ventilated under the NHS HTM standards, are, the admin areas and consulting rooms. However, due to the close proximity of the frequently used car park, situated immediately adjacent to the proposed new building elevation, the risk of noise and air pollution is significant and therefore, these spaces will be mechanically ventilated.

Where areas are mechanically ventilated, the air handling unit will include a form of heat recovery in compliance with Approved Document L incorporating, filtration and variable speed low energy fans. Attenuation will be provided on the room and atmosphere sides of both the supply and extract connections, in response to the results from the acoustic assessments carried out throughout the design process.

The ventilation plant will be situated in a plant compound adjacent to the building as shown below.

