RESIDENTIAL DEVELOPMENT
ROSE PLACE
LIVERPOOL

VENTILATION STRATEGY

PREPARED BY:

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Rose Place Residential Development, Liverpool

Ventilation Strategy

1.0 Ventilation Introduction

Rose Place is a proposed residential development located on St Anne Street in Liverpool, it is proposed to provide 127 apartments over a total of 7 storeys with a mixture of single and two bedrooms, a retail/commercial unit will be located on the ground floor, as will a car park which will cover approximately 50% of this level.

As part of the ventilation strategy for the apartments a full dynamic thermal model will be undertaken on the IES suite of software to ascertain that summertime overheating is in accordance with CIBSE TM59, SAP calculations will be carried out to ensure the apartments comply with the Building Regulations Approved Document L1a which will in turn generate the EPC's for each apartment.

2.0 Apartment Ventilation

Mechanical Ventilation will be designed in accordance with Approved Document Part F System 4 using continuous Mechanical Extract Ventilation (MEV). Ventilation rates will be designed to comply with table 5.1a and 5.1b Approved Document Part F. However, overheating calculations will be taken into account and flow rates will be adjusted to avoid overheating.

Purge ventilation will be accommodated via openable windows in accordance with Approved Document Part F section 5.7 and Appendix B.

The above Ventilation Strategy will contribute towards the SAP compliance for the apartments.

3.0 Commercial Units

The Commercial unit will be constructed as a shell as occupancy is unknown at this stage, this will then be fitted out by the tenant. An SBEM calculation will be carried out in accordance with Building Regulations Part L2a to ensure the shell specification will achieve a pass, this will then be passed on to the tenant so they are aware what installation has been included to provide a pass.

It is envisaged that mechanical supply and extract ventilation will be installed in each unit utilising a heat recovery unit providing sufficient fresh air to satisfy the occupancy, this unit will achieve the heat recovery efficiency and include the specific fan power to ensure the SBEM calculation achieves a pass.

4.0 Car Park

The car park will be provided with a natural ventilation system. The car park ventilation will be designed in accordance with Approved Document Part F and Approved Document Park B.