

KENYON LANE, MOSTON. APARTMENT DEVELOPMENT

VENTILATION STRATEGY REPORT

PREPARED BY:



**21 ARGYLE STREET
BIRKENHEAD
WIRRAL CH41 1AD**

Tel: 0151 647 0857

Fax: 0151 647 0858

Email: admin@psdltd.co.uk

Ref: CF/CA/1883/VS_Issue 2

Date: July 2020

Contents

SECTION 1	Ventilation Introduction
SECTION 2	Residential Ventilation
SECTION 3	Communal Area Ventilation
SECTION 4	Summary
APPENDIX 1	Floor plans

Signed by: *Colin Finlay*

Dated: *July 2020*

SECTION 1 **VENTILATION INTRODUCTION**

The Kenyon Lane development is an apartment scheme with a total of 33 apartments. The buildings consist of the following apartments.

TYPE	No.
1 Bed Apartment	3
2 Bed Apartment	30
TOTAL	33

The ground floor area consists of the entrance lobby, bin store and riser.

This report has been undertaken to explain the ventilation principles for the development to ensure compliance with the Building Regulations Part F and also to provide an efficient installation to assist in the SAP calculations.

SECTION 2 **RESIDENTIAL VENTILATION**

The residential ventilation will be designed to comply with the Building Regulations Part F.

Each apartment includes a bathroom, kitchen and lounge within the 1 or 2 bed apartments, which will include extract ventilation providing trickle and boost ventilation and a supply ventilation to the habitable rooms utilising a self-contained MVHR unit in each apartment.

The MVHR units will be designed to provide the extract rates listed within the Building Regulations giving a minimum of 8l/s extract from each bathroom and 13l/s extract from the kitchen area when boosted from a manual switch, utility cupboards will also be provided with extract ventilation at 13l/s

Fresh air will be supplied into the habitable rooms such as bedrooms and lounge areas where ceiling mounted diffusers will be located. The fresh air flow rates will be calculated to match the requirements of the Building Regulations Part F.

Purge ventilation will be provided by the use of opening windows, as purge ventilation is not a regular requirement it is anticipated that this will be acceptable. The windows will be sized to provide an opening area of 1/20th of the floor area to ensure that they comply with the Building Regulations.

Thermal modelling calculations will be undertaken to assess whether overheating is likely to occur ensuring the building will comply with CIBSE TM52 and CIBSE TM 59.

If overheating is shown to occur in the apartments then further precautions will be taken which will take the form of improved G values to the glazing, increasing the ventilation rate and opening areas also incorporating further ventilation systems should it be deemed necessary.



Typical MVHR unit



Typical MVHR Installation

SECTION 3

COMMUNAL AREA VENTILATION

- **Communal Corridors** – Naturally ventilated via openable windows and trickle vents.
- **Bin Store** – Natural ventilation via louvre door, mechanical extract ventilation via air quality sensor to provide 10 air changes/hour with wall mounted fan.
- **Entrance Lobby** – Naturally ventilated via opening doors.

SECTION 4

SUMMARY

The ventilation for the Kenyon Lane Apartment development in Manchester, will be designed to comply with the requirements of Building Regulations Part F and will include energy efficient extract and heat recovery fans.

The residential areas will mainly consist of whole house mechanical ventilation with heat recovery supplying fresh air to the habitable rooms and extracting from the wet rooms on a continuous basis a boost facility on the unit will give the increased ventilation rates when required.

APPENDIX 1 FLOOR PLANS

Ground Floor plan

Kenyon Lane



First, Second and Third Floor plan

Kenyon Lane

