



KELLEN
HOMES

Ventilation Strategy

Riverpark Road, Manchester



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Introduction

- 1.1 The purpose of this report is to confirm Kellen Homes' ventilation strategy for the 498 dwellings consisting of apartments and houses at our Riverpark, Manchester development.

Accommodation Schedule

- 1.2 Below is a detailed accommodation schedule of the properties to be delivered, however it can be summarised as 221 house & 277 apartments.

Housing Ventilation

- 1.3 All houses will be fitted with Vent-Axia decentralized Mechanical Extract Ventilation (dMEV).
- 1.4 dMEV is a whole dwelling ventilation system utilizing continuously running extractor fans in wet rooms removing stale/moist air and background ventilators in habitable room providing fresh clean air.
- 1.5 The system comprises of several dMEV located in wet rooms, where fans run continuously at low speeds, ensuring consistent extraction of moist air and reducing the risk of condensation and mould growth. These systems use low-energy fans and intelligent sensors to adjust fan speeds based on humidity and occupancy levels. dMEV systems offer a whisper-quiet solution which is fully compliant with Part F1(1) 2021. Background ventilators on habitable room windows provide a supply of fresh makeup air to replace the stale air extracted by the dMEV system.
- 1.6 **Appendix 1** provides more information on the Vent-Axia Lo-Carbon NBR dMEV fan available in 100mm and 125mm.

Apartment Ventilation

- 1.7 All apartments will be fitted with Mechanical Ventilation with Heat Recovery (MVHR)
- 1.8 MVHR is a whole dwelling system which is located within the store of the apartments. This provides fresh filtered air while retaining most of the energy used in heating the building.
- 1.9 MVHR systems run 24/7, constantly removing stale air and introducing fresh air. These systems recover 80-90% of the heat from extracted air, reducing energy consumption. MVHR filters incoming air, removing pollutants and improving indoor air quality. The system helps prevent condensation, dampness and mold growth by controlling humidity levels.
- 1.10 **Appendix 2** provides more information on the Vent-Axia Lo-Carbon Sentinel Econiq mechanical ventilation with heat recovery system.

Apartments Smoke Ventilation

- 1.11 This will be designed by the Fire Engineer in accordance with Part B and BS:9991.

Appendix 1

No. of bedrooms	2013 Edition	2021 Edition	Increase
1	13l/s	19l/s	46%
2	17l/s	25l/s	47%
3	21l/s	31l/s	47%
4	25l/s	37l/s	48%
5	43l/s	43l/s	48%

Lo-Carbon NBR dMEV C

- Continuously running 100mm and 125mm dMEV with sleek circular design
- Designed to comply with the latest Building Regulations Parts L1A and F 2021
- SAP PCDB listed with SFP's down to 0.08 W/l/s
- Near silent operation independently tested
- IPX5 rated, wall and ceiling mounted Zones 1, 2 and 3
- Low ceiling void - 56mm (100mm spigot) and 66mm (125mm spigot)
- Easy to commission, fully adjustable variable control platform
- Intelligent humidistat option with proportional speed increase and timer
- Comfort control option
- 7-year warranty



