

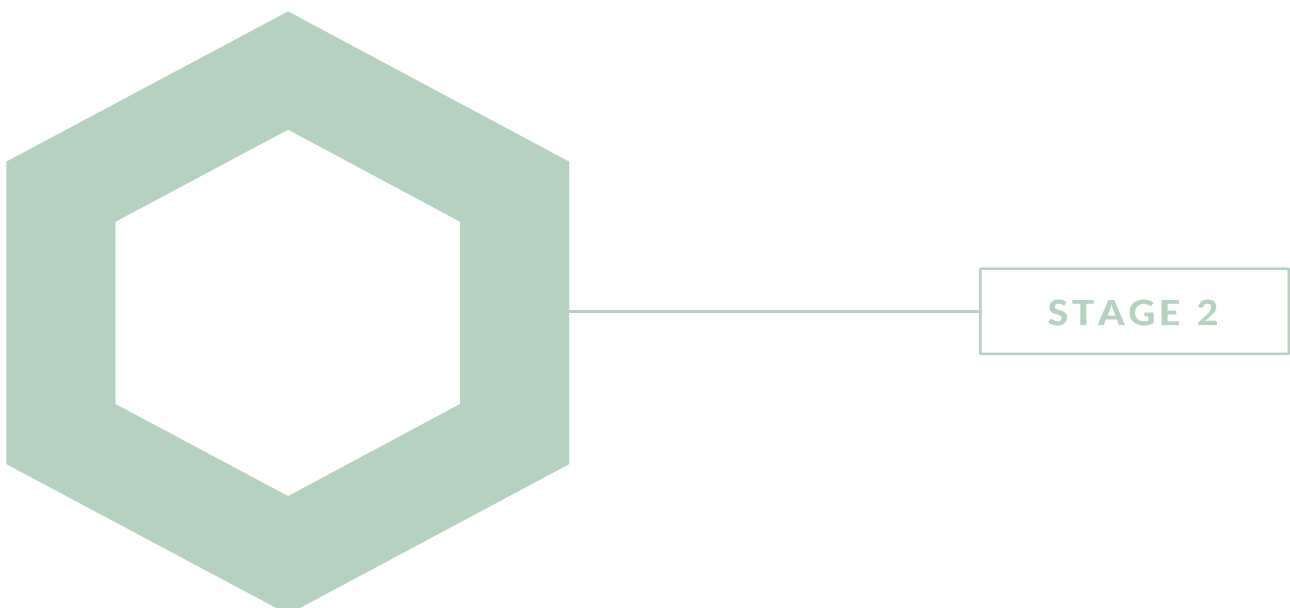
Arundel Street. Manchester. Logik Developments.

MEP ENGINEERING

STAGE 2 REPORT

VENTILATION STRATEGY

REVISION D – 01 APRIL 2022



Audit sheet.

Rev.	Date	Description of change / purpose of issue	Prepared	Reviewed	Authorised
A	19/09/17	First Issue	ST	ST	ST
B	12/03/19	Updated to revised scheme – option F	NN	RCM	RCM
C	16/03/22	Updated for optimised scheme	RCM		RCM
D	01/04/22	Updated in response to Comments	RCM		RCM

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Project number: 04/05920

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Executive summary

This ventilation statement has been prepared to support the planning application proposed for the Arundel Street apartment complex in Manchester on behalf of Logik Developments.

In 2019 consent was obtained for the scheme and Logik Developments is now seeking alterations via a non-material amendment.

The document has been prepared to support the planning application for the new development which comprises of residential, commercial and landlord areas as defined in the Simpson Haugh & Partners Design and Access Statement submitted as part of this planning application.

This report outlines the proposed ventilation strategy for the development.

1. Apartments

The proposed ventilation strategy for apartments is via mechanical ventilation incorporating heat recovery (MVHR) to maximise energy efficiency.

Dedicated MVHR units will be located within the MEP service cupboards for each apartment.

A plastic ductwork system shall distribute the supply and extract ventilation throughout the apartment within the ceiling void. Extract ventilation will be provided to all bathrooms and en-suites. Extract ventilation will be provided in the kitchen and positioned 1m from the cooker.

Insulated plastic ductwork shall connect to intake and exhaust louvres integrated to the external façade of the apartment. The external louvres shall be screened to prevent the intake of insects and debris from entering the system. The external louvres shall be positioned to eliminate short circuiting of air and cross contamination.

The overheating of the apartments will be dealt with by a combination of measures dependant on acoustic constraints outlined in the project acoustic report; the proposed measures are as follows:

- Openable windows where apartments front onto quieter facades such as those around the courtyard area and where apartments are away from the Mancunian Way.
- Acoustically attenuated façade vents on apartments that front onto the noisier facades such as those on the Mancunian Way.

In addition to the manual acoustic vents and openable windows the MVHR units will be sized to allow for increased air flow rates over and above the standard Approved Document Part F minimum rates to allow the tenants to increase the ventilation to help minimise the risk of overheating.

The system installed shall meet the requirements of Approved Documents L and F of the Building Regulations.

2. Commercial Areas

The commercial areas at ground floor in the main building will be provided with louvred connections on the façade for the tenants to fit out their own space with ventilation plant located at high level within the area it is serving. The tenant will be required to design and install the plant in accordance with current Approved Documents, CIBSE Guides, BSRIA Guides and all British Standards in place.

Any kitchen extract within commercial spaces will be provided by the tenants and comply with current Approved Documents, CIBSE Guides, BSRIA Guides, British Standards and Building Engineering Services Association DW/172 Kitchen Ventilation Systems.

The commercial areas within the DOT building will be ventilated via a combination of decentralised MVHR units serving the office areas and extract fans within the gym area to boost the natural ventilation afforded by the windows.

Louvres will be located on the courtyard elevation of the building.

3. Landlord & Amenity Areas

The landlord and amenity areas will be provided with local MVHR units, either in or adjacent to the space it serves. The MVHR units will incorporate heat recovery measures and have specific fan powers aligned with Approved Document Part L.

The MVHR units will be connected to the façade via louvres for intake and exhaust air which will incorporate attenuators to minimise sounds intrusion to the building and noise breakout of the plant to outside.

4. Smoke Ventilation

Smoke ventilation from the cores will be via a combination of auto-opening vents and mechanical extract in accordance with the project fire strategy.

5. Standards

The ventilation systems will be designed in accordance with the following relevant standards in force at the time of design:

- Building Regulations
- British Standards
- CIBSE Guides
- BSRIA Guides (where applicable)
- CDM Regulations
- Noise limits in accordance with the project Acoustic Report
- The project Fire Strategy Report.
- BESA DW/172



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