

The Fitzrovia London

Ventilation and Extraction Statement

Condition 29 Discharge: Issue 1



# Applicant Name: Prudential UK Real Estate Nominee 1 Limited and Prudential Real Estate Nominee 2 Limited Property: 10 Fenchurch Avenue

Property:	10 Fenchurch Avenue
	London
	EC3H 5AG

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Prepared by:	JV
Checked by:	MDC
Validated by:	MDC



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#### 1.00 INTRODUCTION

The purpose of this document is to summarise the mechanical ventilation and extraction philosophy to be provided to the Fitzrovia development, Tottenham Court Road, London for the discharge of planning condition 29.

For clarity condition 29 is repeated below:

Prior to commencement of development (excluding demolition to the existing slab level and site preparation works) on site, full details of the mechanical ventilation including air inlet locations and filters shall be submitted to and approved by the local planning authority in writing. Air inlet locations should be located away from busy roads and other relevant sources of emissions and as close to roof level as possible, to protect internal air quality. The development shall thereafter be constructed and maintained in accordance with the approved details.



# 2.00 VENTILATION PRINCIPLES

The ventilation principles for the development included in this report have been split into three main elements of the development:

- 1. Commercial Office
- 2. Retail Units
- 3. Residential Apartments

The ventilation principles to each element of the development are summarised below:

- Commercial Office Mechanical ventilation to the office accommodation and ancillary areas
   Retail Units The retail units are to be provided on a shell basis. Therefore, ventilation louvres are provided in the façade for future tenant use.
   Residential Apartmenta Whele hause machanical ventilation systems.
- 3. Residential Apartments Whole house mechanical ventilation systems. Purge ventilation by openable windows/doors.

#### 3.00 MECHANICAL VENTILATION

The mechanical ventilation systems to each element of the development are described below where applicable normal mode operation and smoke mode operation are included.

#### 3.01 MECHANICAL VENTILATION – COMMERCIAL OFFICE

The following areas of the commercial office shall be provided with mechanical ventilation:

- Open plan office areas
- D1/B1 flexible space offices
- Ground floor reception
- Ground floor cafe
- Toilets
- Basement B1 and B2
- Basement shower and changing areas
- Building management offices
- Basement B1 meeting rooms
- Refuse store
- Firefighting shafts
- Circulation areas and stairs

The remaining areas of the ancillary office accommodation are unoccupied storerooms, equipment rooms. These areas are not provided with mechanical ventilation. For clarity the firefighting lobbies are not provided with normal mode mechanical ventilation so that the requirements of BS 9999 are not compromised i.e., the services in a fighting shaft will serve the firefighting shaft only.

The mechanical ventilation to each area will be as follows:

•	Open plan office areas	Two heat recovery supply and extract ventilation systems each serving a notional tenancy to the Tottenham Court Road façade and the Morwell Street façade. The Morwell Street system also serves the flexible D1/B1 space at ground floor and lower ground floor
•	Ground floor reception	Served by the Morwell Street office heat recovery supply and extract ventilation system
•	Ground floor cafe	Dedicated local heat recovery supply and extract ventilation system
•	Toilets	Dedicated extract system to the north and south cores. Mechanical supply make-up air from the basement mechanical ventilation system.
•	Basement B1 and B2 – normal mode	Central heat recovery supply and extract ventilation system. Serves all areas of the basement excluding the retail units. It also provides the supply make-up air to the office floor toilet areas.



•	Basement B1 and B2 – smoke mode	Smoke extract ventilation system with natural make-up air via the basement supply air ventilation ductwork. Serves all areas of the basement including the smoke extract to the retail units at B1 level
•	Basement shower and changing areas – normal mode	Served by the basement central heat recovery supply and extract ventilation system
•	Basement shower and changing areas – smoke mode	Served by the basement smoke extract system
•	Building management offices	Dedicated local heat recovery supply and extract ventilation system
•	Basement B1 meeting rooms – normal mode	Served by the Morwell Street office heat recovery supply and extract ventilation system
•	Basement B1 meeting rooms - smoke mode	Served by the basement smoke extract system
٠	Refuse store – normal mode	Dedicated local mechanical extract.
•	Refuse store – smoke mode	Served by the basement smoke extract system
•	Firefighting shaft – smoke mode	Mechanical smoke extract differential pressure system to the firefighting lobbies
•	Firefighting shafts – normal mode	No mechanical ventilation
•	Circulation areas and stairs	Fresh air supply via the basement central heat recovery supply and extract ventilation system

#### 3.02 MECHANICAL VENTILATION – RETAIL UNITS

As part of the base build installation the retail units are being provided on a shell basis for future tenant fit out. Therefore, any mechanical ventilation shall be provided by the future tenants

#### 3.03 MECHANICAL VENTILATION – RESIDENTIAL APARTMENTS

The following areas of the residential block shall be provided with mechanical ventilation:

- The apartments
- Refuse store
- Firefighting shafts

The remaining areas of the ancillary residential accommodation are unoccupied storerooms, equipment rooms. These areas are not provided with mechanical ventilation. For clarity the firefighting lobbies are not provided with normal mode mechanical ventilation so that the requirements of BS 9999 are not compromised i.e., the services in a fighting shaft will serve the firefighting shaft only.

The mechanical ventilation to each area will be as follows:

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The residential apartments are each Apartments • provided with a dedicated mechanical whole house heat recovery ventilation system. Refuse store

Dedicated local mechanical extract.



# 4.00 AIR INLET AND EXHAUST POINTS AND FILTRATION

The air inlet and exhaust points are shown on the ventilation principles drawings in the appendix. The locations of the inlet and exhaust points plus the filtration grades are summarised as follows:

COMMERCIAL OFF	ICE			
Office Fresh Air Su	pply And Extract – AH	U1	& AHU2	
Fresh air inlet	From the plant enclos	From the plant enclosure at roof level		
Exhaust air outlet	Within the plant enclo	sur	e at roof level	
Filtration efficiency	Inlet - Panel	:	65% (G4)	
	Inlet - Rigid Bag	:	70% (F7)	
	Exhaust - Rigid Bag	:	70% (F7)	
Basement Supply A	And Extract – AHU3			
Fresh air inlet		et pl	enum to Morwell Street	
Exhaust air outlet	To the exhaust air ple			
Filtration efficiency	Inlet - Panel	:	65% (G4)	
	Inlet - Rigid Bag	:	70% (F7)	
	Exhaust - Rigid Bag	:	70% (F7)	
Toilet Extract – EXC	01 & EX02			
Exhaust air outlet	Within the plant enclosure at roof level			
Building Manager's	Toilet Extract – EX03			
Exhaust air outlet	Via a façade louvre at high level ground floor in Morwell Street			
Cafe Toilet Extract	– EX04			
Exhaust air outlet	Via a façade louvre at high level ground floor in Morwell Street			
Refuse Extract – EX	(05			
Exhaust air outlet	Via a façade louvre at	: hię	gh level ground floor in Morwell Street	
Firefighting Shaft S	moke Extract – EX FF	1		
Exhaust air outlet	Within the plant enclo	sur	e at roof level	
Basement Smoke E	xtract Fan – EX FF2			



Exhaust air outlet	To the exhaust air plenum to Morwell Street		
Heat Recovery Vent	tilation Unit – Café Are	ea -	- HRU 01
Fresh air inlet	Via a façade louvre at	hig	gh level ground floor in Bayley Street
Exhaust air outlet	Via a façade louvre at	: hig	gh level ground floor in Bayley Street
Filtration efficiency	Inlet - Panel	:	65% (G4)
	Exhaust - Panel	:	65% (G4)
Heat Recovery Ven	tilation Unit – Building	) Ma	anager Room – HRU 02
Fresh air inlet	Via a façade louvre at	: hię	gh level ground floor in Morwell Street
Exhaust air outlet	Via a façade louvre at	hig	gh level ground floor in Morwell Street
Filtration efficiency	Inlet - Panel	:	65% (G4)
	Exhaust - Panel	:	65% (G4)
Retail Units			
Fresh air inlet	Louvres built into the Tottenham Court Road signage location/detail at high level ground floor		
Exhaust air outlet	Louvres built into the Tottenham Court Road signage location/detail at high level ground floor		
RESIDENTIAL			
Refuse Extract – EX	(06		
Exhaust air outlet	Via a façade louvre at	gro	ound floor in Morwell Street
Firefighting Shaft S	moke Extract – EX FF	3	
Exhaust air outlet	Within the plant enclo	sur	e at roof level
Whole House Venti	lation Units		
Fresh air inlet	Ventilation opening in	the	e façade to each apartment
Exhaust air outlet	Ventilation opening in the façade to each apartment		
Filtration efficiency	Inlet - Panel	:	Grade G3 Synthetic
	Exhaust - Panel	:	Grade G3 Synthetic



# APPENDIX

Drawing No.	4650/M/800	Ground floor ventilation principles
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