

DETAILS IN THE ROUND

Seventy St. Mary Axe has been designed with the most exacting of occupiers in mind. The result is a world-class building with a robust specification and the highest quality finishes.

SUMMARY SPECIFICATION

Occupancy ratio of 1:8

Reception floor-to-ceiling height – 5.8m

Offices floor-to-ceiling height – 2.75m

Four pipe fan coil air conditioning

LED lighting

10 x 21 person destination controlled lifts
(10 serving G-9; 6 serving G-20)

Gallery Terrace on Level 21

328 bicycle spaces + 360 lockers

32 showers

2 x goods lifts (2,000kg)

2 x ancillary (inc. fire) lifts (630kg / 8 person)

150mm typical raised floor height

1.5m planning grid

2 no. 2MVA/1.6MW generators
with 24 hour minimum fuel storage

BREEAM excellent

1. DIMENSIONAL

Element	Specific	Base Build and Cat A Fit Out
Floor-to-ceiling height	Offices (floors 2–20 inc.)	2.75m (from top of raised floor)
	Passenger lift and stair lobbies (floors 2–20 inc.)	2.74m
	Toilets (floors 2–20)	2.74m
	Level 21 Executive Office	2.6m (min) (from top of raised floor)
Headroom	Entrance Reception	Min. 5.8m
	Loading bay	Min. 5.0m
	Plantrooms	Varies
Raised floor height	Offices (floors 2–20 inc.)	150mm nom. 135mm (min) (from slab to top of floor tile)
	Executive Office (floor 21)	300mm nom.
Planning grid	Offices (floors 2–21 inc.)	1.50m
Column grid	Offices (floors 2–21 inc.)	Varies
Floor-to-floor heights	Offices (floors 2–20 inc.)	3.75m

2. POPULATION DENSITY

Element	Specific	Base Build and Cat A Fit Out
Means of escape	Offices (floors 2–21 inc.)	6 sq m / person (min)
Lifts	Offices (floors 2–20 inc.)	8 sq m / person (with 80% utilisation)
Toilets (designed to BS 6465:1) 2006	Offices (floors 2–20 inc.) Floor by floor general provision	Min. 8 sq m / person at 80% utilisation floor by floor with 60/60 gender split
	Disabled provision	1 no. disabled WC per floor (handing alternates on each floor)
Mechanical	Office cooling	8 sq m / person

3. STRUCTURE

Element	Specific	Base Build and Cat A Fit Out
Imposed loads	Office floors (and partitions, raised floor and services)	3.5 (+1.0 and 0.85) kN/m ²
	Office floors (approx. 5% of NIA in specified zones)	7.5 kN/m ² (inc. partitions)
	Core areas floors 1–8 inc. (and partition allowance)	3.5 (+1.5) kN/m ²
	Staircases typically	5.0 kN/m ²
	Roof maintenance access	1.5 kN/m ²
	Loading bay	10 kN/m ²
	Basement plant area Roof plant areas	7.5 kN/m ² (min) 7.5 kN/m ² (min)

4. MECHANICAL / PLUMBING

Element	Specific	Base Build and Cat A Fit Out
Cat A fit-out	Central FCU spacing	67.5 m ² /unit max. applicable to the largest floor area
	Perimeter FCU spacing	27 m ² /unit
Cooling load	Office area - lighting	10 W/m ²
	Office area - small power Note: See 1.2.10 for future tenant CER cooling provision	Total provision 38 W/m ² office NIA Provides 25 W/m ² and 55 W/m ² over 25% of office NIA
	Retail unit	150 W/m ² heat rejection via metered branch, on the landlords cooling system
Extract rates	Toilets and showers	10 AC/hr
	Utility	6 AC/hr (based on a room volume of 45m ³)
	Loading bay	6 AC/hr
	Basement storage areas and plantrooms	3 AC/hr
Smoke ventilation	Below Ground Level, B1, B2 and B3	Mechanical
	Offices	Not required
	Below and above ground fire fighting lift lobbies and stairs within core	Utilise the Colt shaft ventilation system (to comply with CoL district surveyor requirements)

4. MECHANICAL / PLUMBING CONTINUED

Element	Specific	Base Build and Cat A Fit Out
Inside temperature	Office – summer design	24 ± 1.5°C
	Office – winter design	24 ± 1.5°C
	Toilets	20°C (min)
	Transformer rooms	35°C db (max)
	Showers	24°C (min)
Inside humidity	Office – summer Office – winter	60% RH (max) 40% RH (min) De-humidification via central supply air handling plant. (Space within AHUs included for humidification to be added by tenant to system following completion of base build works)
	Outside conditions	Summer design (db)
Critical plant		35°C
Cooling tower operation (wb)		20°C
Winter design (sat)		-4.5°C
Outside air supply	Occupancy	1.6 l/s per sq m NIA office Provides for 12 l/s per person at one person per 8 sq m at 80% utilisation with additional 25% capacity for meeting room supply etc.
Water storage	1 person / 8 sq m	16 litres per person
Cooling tower water storage	1 day	

5. ELECTRICAL

Element	Specific	Base Build and Cat A Fit Out
Electrical loads	Office areas Installations are designed to accommodate the stated loads	Small power total provision 40W/m ² NIA (equates to 25W/m ² office NIA and 60W/m ² over 25% office NIA) Lighting: 10 W/m ²
Illumination levels	Illumination is designed to be in accordance with the CIBSE code for interior lighting (current edition) and for 'maintained illumination' average levels as follows: Lift cars, corridors, toilets, electrical switch rooms, storage rooms, car park and loading bay Stairs and cleaners cupboards Telecom room Plant rooms Open plan office areas	100 lux 150 lux 100-150 lux 200 lux 400 lux maintained average based on assumed reflectance of ceilings (70%), walls (70%), closed blinds (25%) and floor cavity 40% (light coloured carpet) A uniformity of 0.7 for task areas and 0.5 for the surrounding areas based on task areas of 500 mm squares located anywhere in the area except within 500mm of walls, glazing or columns and a surrounding area to the task area

6. ACOUSTICS

Element	Specific	Base Build and Cat A Fit Out
Average noise criteria services installations	Office areas open plan	NR 38 (40–50db LAeq, T)
	Office areas cellular	NR 35 (<40db LAeq, T)
	Entrance Hall and Reception	NR 45
	Toilets	NR 45
	Stairs, corridors and circulation	Nominally NR 45
	Storage areas	Nominally NR 45
	External	Level of noise emitted from any plant is lower than the existing background level by at least 10db (A) Sound insulation generally complies with section 7.6.3.1 of BS8233

7. LIFTS

Element	Specific	Base Build and Cat A Fit Out
Passenger lifts	Design population density	8 sq m / person
	Utilisation	80%
	Handling capacity	15% (in 5 min. interval)
	Average interval / waiting time	30s / 25s (max)
	Car capacity	21 person
	Car loading	80%
	Speed: 4 No. G-9	3.0m/s
	Speed: 6 No. G-20 (N.B. operate as a single group)	3.5m/s
Fire fighting lift and ancillary lift	Capacity	630kg / 8 person
	Speed	1.6m/s
	Internal car dimensions	1.1m x 1.4m x 2.4m high
Goods lifts	Capacity	2,000kg
	Speed	1.6m/s
	Internal car dimensions	2.65m x 1.45m x 2.4m high