

Specification

1. Structure

Structural Frame and Sub Structure

Record information shows this is a purpose built office building originally constructed circa 1920 with minor alterations undertaken circa 1955. The general structure is an internal historic steel frame and loadbearing masonry façades and party walls, which are founded on traditional corbelled brick foundations with mass concrete strips.

Ground and first floor levels are generally of clay pot and steel filler joist floors; upper levels are concrete slabs with steel filler joists.

A “soft spot” is to be created in the slab between lower ground and ground floors, close to the Lewisham Street entrance.

Floor Loadings

Design codes at the time of construction provided imposed load allowances for office floor plates of:

Ground floor	=	4.78kN/m ² (100 lb/sq ft, no partitions)
1st–7th floor	=	4.78kN/m ² (100 lb/sq ft, no partitions)

However it is suggested that imposed loads are limited to current design code values of:

Ground floor	=	3.0kN/m ² plus 1.0kN/m ² partition
1st–7th floor	=	2.5kN/m ² plus 1.0kN/m ² partition

Tenant Plant:

Capacity for additional tenant plant is 5kW per each floor (assuming 75% diversity), therefore total additional capacity available is 45kW.

2. Office

Raised Floors

A fully accessible metal tiled raised access floor is provided throughout the offices. Clear voids range from 75mm to 150mm.

Ceilings

Plasterboard ceilings with LED pendant light fittings. The air conditioning system will be exposed, including galvanised ductwork.

Columns

White-painted steel columns.

Doors

The office lobbies feature white timber doors with an inset glazed vision panel set beside a fixed glazed side panel. The ironmongery features a brushed stainless steel tall pull handle, push and kick plates and concealed door closers.

Walls

Generally plaster finishes, although with specific walls left as an exposed brick finish.

3. Lifts

A Destination Hall Call System will be installed with access from all lift waiting points. The system will enable a population density of one person per 10m² at 80% occupancy.

Passenger Lifts

- Three 8 person passenger lifts with full disabled access.
- Two lifts serve the basement to the seventh floor and the third lift serves ground floor up to the roof terrace level.
- Lift speeds – 1.0 metres per second.
- Average waiting time – BCO compliant, sub 30 seconds.

4. Mechanical Services

Air Conditioning

Mechanical ventilation and comfort cooling is provided to all office areas utilising ceiling mounted fan coil units. The mechanical ventilation system supplies fresh air to these fan coil units and they cool and circulate the fresh air.

The fan coils are connected to the variable flow refrigerant distribution pipework, condensate drains and BMS controls. Fan coils are generally provided at one per structural bay.

The fan coil units are controlled by local controllers, providing independent heating and cooling to each office floor. The local controller sets times for the units to switch on and off, and local thermostats provide individual temperature control for each unit.

Air handling plant is located at roof level. Each AHU is architecturally and acoustically screened.

Air Conditioning Design Criteria

	Winter	Summer
External Design Conditions		
Temperature	-4°C 100% RH	39°C 23°C wb

Internal Design Conditions

Office Areas:		
Temperature	22 +/- 2°C	20 +/- 2°C
Fresh Air	12 l/s/person	12 l/s/person
Personnel Capacity	1 Person/10m ²	1 Person/10m ²
Equipment Gains	25 W/m ²	25 W/m ²
Lighting Gains	12 W/m ²	12 W/m ²

Toilets:		
Temperature	20°C +/- 2°C	Not controlled
Humidity	Not controlled	Not controlled
Ventilation	12 l/s per WC	12 l/s per WC

Lift Lobbies:		
Temperature	20°C +/- 2°C	20°C +/- 2°C
Humidity	Not controlled	Not controlled
Occupancy	1 person/10m ² (Transient)	1 person/10m ² (Transient)

Noise Levels	
Offices	NR38
Toilets	NR40

Office Ventilation

Conditioned fresh air supply and extract ventilation is provided from new air handling units located within plant enclosures on the roof.

Filtered and heated/cooled air is delivered to the office areas via ducted distribution systems, the supply air generally being discharged into the rear of each fan coil unit, with the exception of the upper floors where air is supplied from diffusers on the perimeter ductwork and recirculated by the fan coil units within the space.

Extract air is returned via return air grilles at the risers, undergoes heat exchange to temper the supply air, and is exhausted to atmosphere at roof level.

Toilet, Changing and Shower, Supply and Ventilation

Dedicated and separate mechanical ventilation is provided to all toilet and shower areas. Air is extracted from WCs at a rate of 12l/s per WC, and supply air is drawn in passively from adjoining areas.

Bicycle Store

A dedicated bicycle store has been provided in the lower ground floor with ease of access from Dartmouth Street though the back of house entrance. The back of house stair is fitted with an integrated bicycle ramp.

Heating

Heating to the building is provided by heat pumps within the roof plant enclosure and distributed via variable flow refrigerant pipes to fan coil units. The mechanical ventilation system supplies fresh air to these fan coil units and they heat and circulate the fresh air. Fan coil units generally supply air towards windows to offset down draughts during cold external conditions.

Additional warming of ventilation air is provided by gas fired boilers. Low temperature hot water from these boilers is supplied to heating coils in each air handling unit via a pumped distribution circuit.

Water Systems

Capped cold water potable water supply services and drainage are provided within the core riser at each level for future connection to a tenant's kitchenette.

Dry Risers

A dry riser is located within the central stairwell for use by the fire brigade.

5. Electrical Installation

Supply and Distribution

The incoming supply is derived from the UK Power Networks (UKPN) substation adjacent to the building at lower ground level. The 615kVA supply from the substation connects to the adjacent switch room. From here the supply connects to the landlord's board and a rising bus bar in the central riser fitted with tap offs and sub-meters at each floor.

Miniature Circuit Breaker distribution boards are provided for tenant's lighting and general power at each level.

Lighting

- Main office areas are provided with suspended LED luminaires to provide illumination of 300-500 lux at desk level.
- The lighting scheme design and encompasses the aims of LG7 compliance, including glare control.
- Luminaires are controlled by a lighting control system with daylight linked presence detectors located for open plan arrangements.
- Flexibility has been provided in the system for a tenant to adapt to suit the partition layout.

6. Protective Installations

Fire Alarm

The building is provided with a fully addressable fire alarm system.

Lightning Protection

The existing lightning protection system is to be modified and made fully compliant with IEC/EN 62305 and NFC 17-102 to achieve a Level 1 coverage.

7. Communications and Security

Telecommunications

Incoming BT copper and Virgin Media fibre services are provided into the building for distribution within communications containment within the central riser. Additional fiber companies will be able to serve the building subject to necessary wayleaves.

Security

Landlord areas are provided with access control utilising electronic pass, which will be required to use the services entrance, and the main entrance out of hours. Tenant areas are not provided with access control. There is capability for tenants to expand and utilise the landlord's access control system for their own demise, or to make use of their own system.

Operation of the entrance door may be configured to suit tenant business hours.

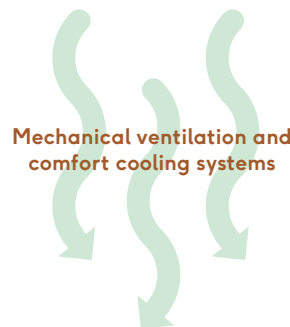
CCTV

CCTV coverage is provided to the perimeter of the building. CCTV cameras view the main entrance, reception, the service entrance, southern light well, roofs terrace, and the fire escape. The images are viewed by reception personnel and are digitally recorded.

8. Building Management

Building Management Systems

The building is provided with a central Building Management System to automatically control all central plant.



Mechanical ventilation and comfort cooling systems



54 secure bike stores, shower & changing facilities



10 roof terraces with spectacular views



1 person per 10 base occupancy



Floor to soffit heights of up to 3.6m