

SPECIFICATION

The building is a dramatic new crystalline form on the London skyline. It comprises 220,000 sq ft of office space over 19 floors, with a total height of 85m. There are 2 retail units amounting to 3,518 sq ft on the ground floor.

1.0 BUILDING SPECIFICATION

1.1 Structure

The structural frame principally consists of a reinforced concrete vertical structure (columns and cores), with post tensioned concrete floor plates.

FULLY GLAZED

1.2 External Envelope

The building has a smooth, flush and fully glazed facade which complements the building's crystalline shape. It is composed of fully glazed, unitised cladding units on a 1,500mm grid. All corner and other junctions are constructed of glass-to-glass joints without cover strips or other visible fixings. Solar shading is achieved by applying opaque white fritted stripes to each unit which form a continuous and repeating pattern vertically up each facade, except the 100% transparent sloping north west facade. This pattern allows for 3/4 of each typical cladding unit to be fully glazed and maximises views out of the building, whilst complying with all current energy performance requirements. The entrance lobby and retail units on the ground and first floors of the building have fully transparent glazed screens which reveal the dynamic sloping concrete columns. Natural Yorkstone paving extends around much of the building and ties into the broader Southwark Landscaping Masterplan of Blackfriars Road.

2,909 SQ FT RECEPTION NEARLY 9M IN HEIGHT

1.3 Dimensions

Floor to ceiling height – 2.7m from top of floor tile to underside of ceiling
Raised floor – 150mm (min) nominal total depth including tile thickness
Structural grid – 9m
Planning grid – 1.5m
Internal bay – 10.5m x 9m
Perimeter bay – 9m x 6m

1 PERSON PER 8 SQ M

1.4 Occupancy Standards

Engineering systems – 1 person per 8 sq m NIA
Passenger lifts – 1 person per 8 sq m NIA (80% utilisation)
WCs – 1 person per 8 sq m NIA based on 120% of the occupancy figures for a male/female split
Means of escape – 1 person per 6 sq m NIA

1.5 Floor Loadings

Plant areas – 7.5kN/m²
Office areas – 3+1kN/m²
Circulation areas – 4kN/m²
Raised access floors are medium duty as defined by the PSA standard

1.6 Acoustics

(Average under normal operating conditions due to mechanical plant)

General office (open plan): NR 38 (max)
Toilets: NR 40 (max)
Reception: NR 40 (max)

2.0 INTERNAL FINISHES

2.1 Main Entrance

Main interior walls are lined with profiled concrete panels with feature recesses for the reception desks and lift frontages.

Reception desks are dark smoked timber with inlaid stainless steel marquetry.

Lift frontages comprise shot peened stainless steel doors and architraves with glass encased silk mirror backed wall panels.

The concrete structure, which includes a raked colonnade, is exposed, both internally and externally.

The ceiling is painted plasterboard with recessed lighting coffers using LED exposed and concealed fittings.

The floor finish is high quality large format Blue Savoy Light marble with extruded aluminium entrance matting.

Security lanes are bespoke units, finished in shot peened stainless steel and glass finish, which are linked to the lift 'Hall Call' destination system and security system.

2.2 Offices

Walls: internal walls on office levels are all painted drylined.

Floors: office floors comprise medium duty raised access tiles with stainless steel grilles to perimeter trench heating.

Columns: all columns are concrete. Perimeter columns against facade are drylined and on average 450mm x 700mm. Internal columns are circular and 825mm / 900mm in diameter on lower levels and 700mm / 500mm diameter on upper levels and are naturally finished. All columns are on a 9m grid.

Interior of facade: the facade is fully glazed (partially fritted), except for 1,500mm every 9m which corresponds to the perimeter column location, where there is a full height insulated panel (anodised aluminium finish) where not covered by the column itself.

Ceiling: 350mm ceiling build-up including ceiling construction, with a chilled ceiling and beam A/C system and 1,400mm x 500mm ceiling tiles set between 100mm C channels.

Doors/riser cupboards: access doors are generally painted timber finish, with riser doors being white painted finish. Riser doors are discrete metal framed panels finished to match adjacent walls.

2.3 Staircases

The two principal escape stairs are finished to a high standard with high quality light fittings, Bolon woven vinyl flooring, plasterboard walls, pre-cast concrete soffit and stainless steel handrails. One disabled refuge per escape stair (which are also firefighting stairs) in compliance with BS 5588.

2.4 Lift Lobbies

Lift lobbies have partially fritted full height glazing revealing excellent views over London. The lift doors, reveals and overpanels are finished in shot peened stainless steel. Flooring is Blue Savoy Light marble. Walls are a mixture of glass encased silk panelling and plasterboard finishes.

Ceilings are painted plasterboard finish and with inset high quality lighting. Climate control is via chilled beam.

2.5 WCs

WCs are designed to 1 person per 8 sq m based on 120% of the occupancy figures for a male/female split. This is based on BS 6464 2006 and equates to 4 male and 5 female cubicles per floor. One wheelchair accessible unisex WC cubicle is situated on each floor.

All WCs have a bespoke resin bound marble conglomerate finish. White high gloss lacquered panelling forms the WC cubicle fronts with glass panel to the rear and panelling below the worktop of the vanity unit.

The vanity unit is a continuous Corian trough type basin and splashback with high quality fittings and a mirrored section above to ceiling level. A recessed LED lighting detail also forms part of this unit.

All supply air/extract air provision is within the ceiling void and includes recessed/hidden grilles.

2.6 Showers

The shower areas include 100mm x 100mm white and grey gloss finish tiled walls, white washed oak/stainless steel change benches and hooks. Showers will include fixed rain and flexible shower heads with separate thermostatic valves and diverters, bespoke Corian soap shelves and clear glass shower doors. Floors will comprise reconstituted stone flooring with antislip finish.

DESTINATION CONTROL PASSENGER LIFTS

2.7 Lifts

8 No. passenger lifts using destination control are provided with Blue Savoy Light large format natural stone to match reception, back painted toughened glass, seamless Corian finish to the entry wall, mirror wall surfaces, shot peened stainless steel handrails, skirtings and lift doors/architraves. There is also a programmable LCD information display screen and seamless LED illuminated soffit.

1 No. goods lift with stainless steel finishes to walls, handrails with a studded rubber flooring.

1 No. firefighting lift, stainless steel finishes to walls/handrails with floor finish to match lobby.

Passenger lifts

Available floors are served by the low rise lift bank – four 21 person/1,600kg, 2.5m/s, MRL lifts with destination control, based on 1 person per 8 sq m and 80% utilisation: CIBSE Guide D and BCO 2009 compliant.

Up peak average waiting time = 25 seconds or less.

Provision for Level 11 lift zone crossover – inactive unless required for tenant inter-floor traffic in the future.

Goods lift

2,000kg MRL goods lift (1.6m/s) serving all floors.

Firefighting lift

8 person/630kg MRL lift (1.6m/s) serving ground floor to Level 19.

3.0 MECHANICAL SERVICES

3.1 Performance Conditions

Outside temperatures

Winter design: -4°C saturated

Summer design: 29°C db/22°C wb

Average internal design air temperatures

Summer design: 24°C ± 2°C

Winter design: 21°C ± 1.5°C

Outside air provision

Outside air supply rate = 1.6 l/s/m²

Internal cooling load densities

Lighting: 12W/m²

Small power: 25W/m²

Note: The main plant and riser infrastructure incorporates additional cooling of 10W/m² for the net lettable office area.

CHILLED CEILINGS

3.2 HVAC Strategy

The offices will be conditioned by chilled ceilings with perimeter passive chilled beams in conjunction with low level perimeter trench heating.

Mechanical heating/cooling and ventilation using fan coil units and an underfloor heating system will condition the main entrance hall.

3.3 Lighting

The office lighting is a dimmable recessed LED module incorporated into the ceiling tiles which incorporates occupancy and daylight controls.

Target illumination levels are as follows:

Offices: At desk level, target level illuminance 400 lux with 50% average illuminance on all solid walls

Stairs: 150 lux floor level

Toilets: 200 lux floor level

Lift lobbies: 200 lux

Corridors: 100 lux at floor level

Reception: 200 lux general, 300 lux over reception desks and seating areas

Emergency lighting is provided in accordance with BS EN 1838 and BS 5266 throughout the building.

4.0 ELECTRICAL SERVICES

4.1 Building Power Supply

The building is served by two 11kV HV circuits taken from the UKPN high voltage network, serving a double-ended switchboard with two 3MVA transformers (N+N arrangement) based upon a maximum demand of 3.2MVA. The UKPN Energy HV switchgear is located on the ground floor within a dedicated UKPN switchroom.

Combined tenant and landlord life safety services 1,500kVA generator set supporting firefighting lifts, firefighting core lighting, sprinkler, wet risers and smoke clearance systems.

4.2 Power Distribution for Tenants

Two tenant risers are provided, with busbars sized to provide for loads as listed below:

Lighting: 12W/m²

Small power: 25W/m²

Future small power: 10W/m²

Distribution boards are provided on each floor in each riser for future tenant power fit-out.

Note: The main switchgear and transformer design includes approximately 150kW of supplementary electrical capacity allowance for the whole building.

Socket outlets are provided in circulation/landlord's area for cleaning of the building and general use.

4.3 Fire Alarm

The building is provided with an addressable fire alarm and detection system to BS 5839 Part 1 Category L2. Alarm will be given by a voice alarm system to BS 5839 Part 8.

SPECIFICATION

4.4 Security Provisions

The following security systems are provided:

Intruder detection
Access control
CCTV

The access control system is provided at the main entrance and turnstiles. Empty conduits are provided at designated doors on each floor for the installation of future tenants' access control systems.

4.5 BMS

A BMS and EMS system is provided to serve the development. The system provides integrated control with distributed intelligence.

5.0 TENANT PROVISIONS

5.1 Mechanical & Electrical

Riser space allowed in core for tenants to route refrigerant pipework from 24hr IT rooms to small condenser units within designated plant space zones at roof level.

5.2 Communication Services

Two comms rooms for incoming supply sleeves are provided for the development. The comms rooms are connected by containment to the two comms risers serving the building.

5.3 Satellite Distribution

A landlord's communal satellite TV system is provided for future tenants' connection.

5.4 Kitchens

Space provided for ventilation ductwork and associated plant for the future fitting of a kitchen on one floor within Levels 1 to 10.

5.5 Teapoints

Drainage and water supply are provided at either end of the core for the future installation of tea points.

5.6 Servicing

There is a large loading bay to the rear (east) of the building, which is accessed from an existing service road off Burrell Street. This will give access for rigid trailer type vehicles of up to 7.5t size. The dimensions of the service/delivery bay are 14.5m x 9m (average) x 4.8m (high).

Refuse handling facilities are provided off the loading bay.

The building manager's suite is located on the first floor.

A staff rest room, shower, WC and kitchenette are also provided within the basement level.

One cleaner's cupboard per floor is provided with large trough sink and water supply.

5.7 Bicycle Racks

10 bicycles spaces are remaining and can be accessed undercover using a double tier bike storage system and Sheffield stands to the rear of the building, accessed from the adjoining service road.

12 SHOWERS

5.8 Showers

There are 12 showers including a Part M compliant disabled shower provided in the basement of the building for cyclists and other building occupants, which exceed BREEAM requirements.

Separate WC facilities are co-located with the showers dedicated to male and female use, together with separate mirrors and hair drying facilities.

120 LOCKERS

5.9 Lockers

120 lockers are provided with high quality laminate facing, with integrated heating and ventilation for assisted drying.

5.10 Car Parking

There is one disabled car parking space within the development scheme for use by the office tenants.

5.11 Retail

There are two retail units with a total area of 3,518 sq ft of usable space on the ground floor accessed from Blackfriars Road.

5.12 Subdivision

The office floors are capable of being occupied by up to 2 separate tenants per floor.

6.0 ENVIRONMENTAL

6.1 BREEAM 2011

New Construction assessment carried out for the office with a targeted score of 'Excellent'.

6.2 EPC Target B

The office element of the scheme achieves an improvement over Part L2A:2010 exceeding 25% (27.95% actual).

Efficient building fabric with solar control glazing.

Efficient lighting system and appliances – LED lighting in office areas.

Mechanical heat recovery via thermal wheel.

High efficiency chiller plant.

Use of high efficiency low NOX boiler for heating.

Photo Voltaic panels on the roof.

Energy sub metering facility provided by an Energy Monitoring System (EMS).

Water saving features specified for the offices achieving an improvement over baseline figures exceeding 50%.

Provision of 50 cubic metres attenuation tank for the site and achievement of a 50% reduction in surface water discharge rate.