

1.0 Scope of Work

- 1.1 The works comprise the creation of a new eight storey building accommodating retail at part basement and ground floors with six upper floors of office use.
- 1.2 The office floors will be fitted out to a high quality “Category A” standard, including accessible suspended ceilings and raised floors. Floor to ceiling glazing affords views of Bishops Square and Spitalfields and the historic character of the adjoining conservation area. The office entrance is through a corner reception and waiting area on Steward Street with easy access into the building’s single core. Two staircases and a pair of generous passenger lifts provide vertical circulation to the upper floors. Cyclist facilities and showers are found in the basement and exterior terraces at levels five and six provide private amenity.

2.0 Design Criteria

2.1 Design Parameters

Planning grids are 1,500 mm x 1,500 mm.

Office finished floor to ceiling height – 2.76 m.

Raised floor void – 150 mm (including floor tile).

Ceiling void (including ceiling construction) – 400 mm.

2.2 Occupancy

The WC occupancy condition is 1:12 sq m with a 60/60 gender split.

Building Services 1:10 sq m (net internal area).

Means of Escape 1:6 sq m (net internal area).

Future proofing: Building services and lift provision will accommodate an increased occupancy of 1:8 sq m. Services are provided in the risers to allow tenants to provide additional WCs to accommodate an occupancy of 1:8 sq m.

3.0 Building Works

3.1 Common Part Areas

3.1.1 External fabric

External elevations are in brickwork up to level 4. Levels 5 and 6 are clad in curtain walling.

3.1.2 Glazing

Solar control double glazed units, set within aluminium frames with a natural anodised finish.

3.1.3 Main Reception

The reception will be finished with Dinesen timber floor and a brick feature wall. Other walls will be plasterboard painted white and a fair-faced concrete wall near the lift core.

Plasterboard ceiling with Barrisol lighting panels. Additional lighting includes slot lights in the lift lobby and floor standing feature lights in the waiting area.

3.1.4 Lifts

Two 17 person 1,275 kg passenger lifts.

Speed – 1.6 m/s.

The performance of the lifts exceeds BCO recommendations.

Lift cars will have white metal ceiling, back painted white glass cladding to walls, mirror to side wall and porcelain tile flooring.

3.1.5 Stairs

Stairs will have exposed concrete risers, painted plasterboard soffits and porcelain tile treads incorporating colour contrasting nosings.

Steel balustrades painted silver will support brushed stainless steel handrails.

Lighting will be by linear lights above the landings and half landings.

3.1.6 Doors and Ironmongery

All doors will be solid core flush painted white and with hardwood lipping and have high quality brushed stainless steel ironmongery.

3.1.7 WCs

Superloos are provided. Full height blockwork walls give acoustic privacy and are finished in floor to ceiling ceramic tiling. The floors will be finished in porcelain tiles. Lacquered timber vanity units conceal cisterns and services with tiling above and a circular mirror.

High quality vitreous china wall hung WC and wash basin fittings and brushed stainless steel accessories.

Ceilings will be a suspended proprietary plasterboard system (MF) with slot lights.

3.1.8 Cleaners Cupboards

Cleaners cupboards have vinyl flooring and wall hung stainless steel cleaners sink.

3.1.9 Bicycle Storage

Bicycle store facilities for 28 bicycles are provided at basement level, together with 28 lockers.

3.1.10 Showers

Four showers and two WCs will be provided at basement level, adjacent to the bicycle storage area. Each shower cubicle includes a generous shower tray, wash hand basin and shelf and a fold down bench. Male showers will include a shaver point with hair dryers in the female cubicles.

3.1.11 *Disabled Access*

Disabled WCs are provided to each floor in accordance with Approved Document M (2004). An additional disabled shower cubicle is included at ground floor level.

Automated access door provided to the main office reception.

3.2 *Office Floors*

3.2.1 *Ceilings*

Office ceilings comprise a combination of painted plasterboard and proprietary perforated metal pan white ceiling tiles, 1,200 mm x 300 mm with acoustic infill. Chilled beams are integrated flush into the ceilings.

A plasterboard margin detail will be created around the perimeter incorporating downlights.

3.2.2 *Lighting*

Luminaires will be LG7 compatible and fully integrated into the suspended ceiling.

3.2.3 *Floors*

Raised floors will be proprietary metal encapsulated tiles on adhesive fixed steel pedestals.

The overall floor void will be 150 mm, including floor tile.

3.2.4 *Walls*

Perimeter walls will be generally plasterboard and painted white. Columns will be circular with a fair-faced concrete finish.

Skirtings will be recessed with a shadow gap detail and painted white.

4.0 *Mechanical Services*

4.1 *Design Criteria*

The following design criteria has been utilised in the design of the base building services.

4.1.1 *External Design Criteria*

Summer = 30°C db 20°C wb
Winter = -4°C db -4°C wb

4.1.2 *Internal Design Criteria*

Internal Offices (for purposes of main plant sizing)

Temperature:

Summer 24°Cdb +/- 2°C (chilled beam)

Swing to 25°C at occupancy of one person per 8 sq m

Winter 21°Cdb +/- 2°C

Humidity:

Summer 45%RH +/- 10%

Winter no RH Control.

Provision in gas supply capacity for tenants' future supply of steam humidification.

Toilet Areas

Summer no dedicated cooling, make up air from offices.

Winter min 19°C

No humidity control.

Staircase – 18°C (min).

Reception

Summer 24°Cdb +/- 2°C

Winter 21°Cdb +/- 2°C

No humidity control.

Temperature and humidity tolerances quoted are control tolerances only. Plant and equipment to be designed to maintain specified temperatures.

4.2 *Office Air Conditioning Loads*

Lighting: 12w/sq m.

Equipment: 25w/sq m.

Occupancy one person per 10 sq m with provision to increase to one person per 8 sq m.

Heat gain from people

90 w/p Sensible.

50 w/p Latent.

4.3 *Ventilation Rates*

Offices: 2.21/s/sq m.

Toilets: 10 ac/hr.

Kitchenettes/Tea Stations

Landlord's riser for future tenant extension.

4.4 *Occupancy Period*

Plant noise emissions designed to allow 24 hour operation.

4.5 *Internal Noise Levels*

Offices: NR38.

Toilets: NR45.

Reception: NR45.

Corridors and lobbies: NR40.

4.6 *Filtration Standard*

Specification: Eurovent 4/5.

Primary filters: EU 3.

Secondary filters: EU 7.

4.6 *Air Conditioning*

The offices are temperature controlled by an active chilled beam system with terminal re-heat on fresh air supply.

Perimeter control zones, approximately 6m wide by 4.5 m deep.

Internal zone control, chilled beam group serving approximately 50 sq m.

System Operating Parameters:

Primary chilled water
10°C Flow 15°C return

Secondary chilled water
12°C Flow 14°C return

Primary LTHW
80°C Flow 70°C return

Secondary LTHW
55°C Flow 45°C return

Office Fresh Air Supply
13°C Summer 13°C Winter

Chilled Beams are connected into a Central Building Management System. The chilled beam control system is suitable for adaptation in the future by means of localised wall sensors or user adjustable thermostats if required by tenants as part of their fit out.

5.0 *Public Health*

5.1 *Cold Water Service*

A potable water storage tank is provided at basement level.

A boosted pressurised water supply serves sanitary appliances and basement showers.

A grey water recycling system is provided to serve WCs.

Cisterns are provided with internal overflows in accordance with the Water Supply (Water Fittings) Regulations.

Insulation is provided for frost protection and to guard against the build up of temperature to all cold water pipes and storage cisterns.

Valved boosted water connections are provided for tenant's tea stations at each floor level in the core.

5.2 *Hot Water Service*

Hot water is provided to toilet areas and basement showers by centralised, modular low water content buffer vessels with quick recovery plate heat exchangers served by the central boiler plant.

5.3 *Soil and Waste Installation*

Vertical stacks are cast iron with UPVC wastes and vent pipes.

Stub waste connections are provided for future tea stations at each floor level in the core.

6.0 *Electrical Services*

6.1 *Electrical Design Criteria*

The following allowances have been used to calculate the overall building load, main switchgear ratings etc:

Service: Peak Allowance.

Tenant's lighting: 12w/sq m.

Tenant's power: 25w/sq m.

Tenant's future SER loads
500w/sq m over 20 sq m per tenancy (2no per floor).

Landlord's Power, Mechanical Services, Lifts, etc
80w/sq m.

6.2 *Tenant's Power*

Two tenant's rising bus bars are provided in the core with provision for 3No plug in positions per floor. One tap off for tenant lighting and power with space for tenant SER and further subdivision tap offs.

An integrated MID approved energy metering system is provided.

The system covers all utilities and load centres in accordance with Building Regulations Part L.

6.3 *Voice & Data*

2No data risers are provided in the core with tray distribution containment systems.

6.4 *Standby Generation*

A landlord's 156 kVA standby generator is provided to serve life safety systems.

6.5 *Security Systems*

A proximity card reader and audiovisual entry phone system provides access to the office entrance with facilities for the system to be extended to the office floors. CCTV coverage is provided to the perimeter of the building and entrance area.

7.0 Lighting

Lighting is designed in accordance with the requirements of CIBSE Code for Interior Lighting to allow tenants to comply with the CIBSE lighting Guide LG7.

The following criteria have been adopted at the relevant working plane height:

Office areas open plan – 400 lux average.

Entrance hall – 200 lux average.

Toilets – 200 lux average.

Stairs (at Tread Level) – 150 lux minimum.

Plantrooms – 200 lux average .

Emergency lighting – 0.5 lux average for office areas.

1.0 lux minimum for defined escape routes.

8.0 Fire Alarm System

Fire alarm system is being installed in accordance with BS 5839 – Category L2 .

9.0 Environmental Features

- 9.1 BREEAM – The works are designed to achieve a BREEAM 2008 rating of 'Excellent'.
- 9.2 Photovoltaic panels will provide approximately 9% on-site renewable power contribution.
- 9.3 Facilities for cyclists – 28 bicycle racks, 28 lockers and 5 showers.
- 9.4 Grey water recycling to serve WCs .

10.0 Structural Frame

The basement and ground floor will be constructed with in-situ cast concrete, as will all vertical structural elements.

Floors to the upper storeys (1st to 6th) will be constructed from in-situ post-tensioned concrete. A structural steel frame will enclose the 6th floor office space. The screening to the adjacent plant will also be formed with steel.

11.0 Floor Loadings

The building will provide floor loadings of 3.5 kN/sq m live load and 1.0 kN/sq m partition load for all office floors and the ground floor reception area.

Retail space at ground and basement will have a live load allowance of 5.0 kN/sq m.

The plant (roof and basement) areas will have a loading capacity of 7.5kN/sq m.