

50 St Mary Axe (0254)

Letting specification

23.02.2009

1 Structure and Envelope

The main superstructure comprises of a braced steel frame (app 7m span / 90min fire rated) and the elevations are formed from a series of pre-fabricated natural Portland stone panels.

Bronze anodised aluminium framed double glazed windows from ground to sixth floor, with full height curtain wall glazing, to the seventh floor. The glazing system is toughened externally and laminated internally, with a solar control film to moderate the external solar gain.

External stainless steel Brise Soleil, 0.9m overhang provide additional solar shading to the seventh floor. In addition stainless steel balustrades provide protection to the external terraces on fourth, sixth and seventh floors.

The flat roofs incorporate a high performance covering including insulation and vapour barrier, external terraces have stone paving slab finish.

The main entrance comprises of single sliding stainless steel doors which are set back from the pavement and form a draught lobby, with a curved glazed canopy over and integrated lighting.

Imposed loadings

Basement Floor:

Plant room areas/Bicycle parking = 7.5kN/m^2

General office area = $4\text{kN/m}^2 + 1\text{kN/m}^2$ for Partition walls

Ground Floor:

General office areas = $4\text{kN/m}^2 + 1\text{kN/m}^2$ for Partition walls with a 30m^2 enhanced loaded area per floor of 7.5kN/m^2

Corridor area = 5kN/m^2

Utility area/ refuse chamber & Sub-station = 8.5kN/m^2

First to Seventh Floor:

General office areas = $4\text{kN/m}^2 + 1\text{kN/m}^2$ for Partition walls with a 30m^2 enhanced loaded area per floor of 7.5kN/m^2

Terrace areas = 3kN/m^2

Roof Level:

Plant room = 7.5kN/m^2

Terrace areas = 3kN/m^2

2 Offices

The office floors are designed with an occupancy level of one person per 10m² of net lettable floor area and 1 person of 6m for fire provisions.

Toilets are based on an average occupancy over the whole building of one person per 10m² of net internal floor space and a nominal male: female ratio of 60:60.

3 unisex toilets and 1 disabled toilet with alternate shower/cleaner per floor, 1 unisex toilet on 7th floor, 1 toilet & shower in the basement and 1 disabled toilet and disabled shower on the third floor. Showers are provided on 4 out of 7 floors of the building.

Office floor nominal dimensions

| | |
|----------------------------------|--------------------------|
| Raised Floor | 100mm overall/75mm clear |
| Finished floor to ceiling height | 2,650mm |
| Slab to slab height | 3,450mm |
| Structural grid | app 5x5m |
| Planning grid | app 7x7m |

3 Finishes

Offices

The flooring consists of a fully accessible 100mm raised modular system with suspended tiles (600x600mm) on adjustable pedestals.

All internal walls are skimmed painted plasterboard, integrating square edged painted MDF skirting boards.

Principle doors are flush American white oak veneered incorporating glazed vision panels with brushed stainless steel ironmongery.

The ceilings are suspended perforated metal planks - white, 600x1200mm spanning between chilled beams with integral lighting and services.

Reception

Black ceramic tile flooring, with skimmed and painted plasterboard partitions with a ceramic skirting and recessed high and low level fluorescent lighting.

The reception desk is made from American white oak, integrated with glass and stainless steel which incorporates recessed lighting with backlit etched glass receiving tenants signage. A American white oak timber feature incorporates recessed lighting, a plasma screen and a sitting bench.

Staircases

The principle stair has a galvanised metal finish with black recycled rubber treads. Walls are skimmed and painted incorporating recessed wall lights and brushed stainless steel handrails.

The secondary stair is made of galvanised steel with, incorporating stainless steel handrails.

Toilets Areas

Glass wall tiles integrated with ceramic flooring and ceramic skirting. Skimmed plasterboard suspended ceilings, with recessed perimeter lighting. Toilets are wall hung with concealed cisterns, incorporating a dual flush system with satin stainless steel taps.

Lifts

Two 13 person 1000 kg lifts with 900mm wide centre opening doors. Lift interior to include stainless steel cladding with recessed ceiling lights. One lift will serve as a fire fighting lift. One lift is for fire fighting purposes.

Core

Ceramic tile flooring with painted skimmed plasterboard partitions to incorporate 125mm ceramic skirtings, to match the floor. Secret fix panels are used to conceal service risers. Doors are flush American white oak veneered with glazed vision panels, incorporating brushed stainless steel ironmongery.

4 Sub-Station

Provides storage space for refuse bins and rooms for incoming services, natural ventilation to the street is achieved through louvers and louvered doors.

5 Waste Management

Refuse chamber is provided at ground level of Bevis Marks with 2 x 1100 litre Euro Bins.

7 M&E Services

Design Occupancy

Open Plan Offices 1 person per 10m²

8 Mechanical Services

Schedule of Design Criteria

Outside Temperatures

| | |
|---------------|-----------------|
| Winter Design | -4°C saturated |
| Summer Design | 29°C db/20°C wb |

Notes:

- 1) Winter design criteria is used for the sizing of heat emitters / heating plant.
- 2) Summer design criteria is used for the sizing of cooling coils / cooling plant.
- 3) Heat rejection plant will be capable of operating up to ambient temperatures of 35°C without failure but with reduced cooling capacity.

Average Internal Design Dry Resultant Temperatures:

| | Summer | Winter | Comment |
|----------------------|--------|--------|-----------------|
| General Office Areas | 23.0°C | 22.0°C | See notes below |
| Basement Plant Room | | 10°C | Heated only |
| Stairs | - | 18°C | Heated only |
| Toilets | - | 18°C | See notes below |

Notes:

1) All internal dry resultant temperatures will be subject to the following range:

Summer $\pm 1.5^{\circ}\text{C}$

Winter $\pm 2.0^{\circ}\text{C}$

2) Circulation stairs are provided with minimum background heating only.

3) Toilets are not directly conditioned. Extract make-up air will be from the adjacent office space ceiling void which will also provide the method of heating (i.e. via the transfer of warm office air into the toilets)

4) Winter dry resultant conditions are approximate assuming design occupancy and equipment load. Design Air temperature is $21^{\circ}\text{C} \pm 1.5^{\circ}\text{C}$ control tolerance for offices.

Population Densities:

General Office: 1 person per 10m^2 net lettable.

Internal Cooling Load Densities:

(Watts/ m^2 net lettable)

| | Lighting | Small Power |
|----------------|----------|-------------|
| General Office | 12 | 25 |

Outside Air Provision:

12 l/s/person for net lettable office area based upon occupancy densities defined above

Air Change Rates:

Toilets: 10 extract with air supply by transfer from offices

Filtration:

Office Areas:

To European Standards: Pre-filter to G3 (minimum). Final filter to F7 (minimum)

Internal Noise Level:

(Average under normal operating conditions due to mechanical plant)

| | |
|----------------------------|------|
| General Office (open plan) | NR38 |
| Toilets | NR40 |

External Noise Level:

The plant at roof level will be selected in accordance with the Local Authorities requirements

Rainwater Intensity:

150mm/hour to BS12056 Part 3.

Water Storage

10 Litres per day / person based on one person per 10m^2 for the offices.

9 Electrical Services

The following schedule identifies the W/m² allowances used to determine the electrical loads .

| | |
|------------------|--------------------|
| Lighting | 12W/m ² |
| Small Power | 25W/m ² |
| Mechanical Plant | 75W/m ² |

Low Voltage Distribution

Supply from EdF substation is located at ground floor level providing low voltage supplies to the building at 400 volts.

Metering

The electrical services distribution allows for multiple or floor-to-floor tenancy splits with space for separate check metering for tenants services if required.

Low Voltage

Rising main bus-bars serve tenants lighting and small power distribution boards.

Lighting

Illumination levels will be as follows;

Offices 300 – 500 lux at desk level.

Target level illuminance 400- 500 lux with 50% average illuminance on all solid walls.

| | |
|-------------|----------------------------|
| Stairs | 100 – 150 lux floor level. |
| Toilets | 200 – 150 lux floor level |
| Plantrooms | 200 lux floor level |
| Switchrooms | 200 lux floor level |
| Reception | 300 lux |

Office

Office accommodate incorporates high efficiency low brightness louvred luminaires accommodated in an integrated services tile utilizing T5 lamps to give standard service illumination of average 400 lux to meet CIBSR LG7 standard for VDT office usage. **The lighting installation shall not exceed 1500 cd/m².**

Emergency Lighting

This is incorporated using the main office luminaires to meet BS5266 recommendations and the requirements for means of escape.

Lifts

Two x 13 person (1000kg) lifts serving all levels within the central core – 30 second wait interval. The speed of the lifts is 1.6m/s.

Fire Protection

The fire alarm system is to BS5839 and L2 standard, single stage evacuation.

The protected lobby will be pressurized.

An addressable fire detection and alarm system will be installed throughout the office areas.

Security

A CCTV system is installed to monitor all external entrance and exit doors. An intruder alarm is fitted to every external door at Ground Level.

Conduits are provided to every door leading to the office space for future tenants to install an access control system.

A door entry system is provided at ground floor level entrance with direct connection to all tenants floors. Currently the door entry panels are located within the tenant's electrical risers with 20m of additional coiled cable for future location.

Telecommunications

An incoming telecommunications room is located at Ground Level.

Routes for cabling – Additional routes for IT cabling have been established from street level to central electrical riser.

Empty cable trays have been allowed for future tenant voice/data requirements.

Lightning Protection

The lightning protection installation comprises a system in accordance with British Standards BS6651:1992.

10 Plant Space Allowance

Plant space is available at roof level for tenant designated plant subject to planning.

11 Cycle Storage

A cycle storage room is located in the basement with access from Bevis Marks through the secondary stair. A shower room is provided at this level.

12 BREEAM Rating

Very Good