

# Specification

## THE EARL BUILDING SUMMARY

- Brick façade with high-efficiency, solar-controlled glazing.
- Flexible planning grid.
- 4.0kN/m<sup>2</sup> office floor loading.
- 1:8 base occupancy (person/m<sup>2</sup>) 12 L/S/P.
- 3.6m floor-to-ceiling height to reception area.
- 2.7m clear floor-to-ceiling height to office demise.
- 4-pipe fan coil unit air conditioning.
- Doors to have card readers with low-energy release.
- Average lift waiting time 19.2 seconds.
- 2 no. 13-person passenger lifts serving all office floors.
- 1 no. 8-person firefighting lift serving all office floors.
- 13W/m<sup>2</sup> small power base load.
- 132 no. bicycle storage spaces.
- 6 no. self-contained shower/changing rooms including one wheelchair accessible shower.
- Locker and drying room facilities.

## DESIGN OCCUPANCY

**Means of escape**  
1 person per 6m<sup>2</sup>.

**Internal climate**  
1 person per 8m<sup>2</sup>.

**Lift provision**  
1 person per 8m<sup>2</sup>.

**Sanitary provision**  
1 person per 10m<sup>2</sup> 60:60.

## FLOOR HEIGHTS

**Ground to first floor**  
(Underside of ceiling) 3.6m.

**Office floors (2nd, 3rd, 4th, 5th)**  
(Underside of finished ceiling) 2.7m.

**Raised access floor zone**  
Nominal 150mm.

**Floor construction**  
RC Slabs.

## STRUCTURE

- Reinforced concrete frame.
- Concrete cores.
- Pre-cast concrete stair.

## FAÇADE

- Brick façade with floor-to-ceiling high-efficiency double-glazed units with solar control coatings.

## LOBBY AND RECEPTION

- 2.7m bronze aluminium doors accessible to main lobby.
- Automated revolving doors.
- Natural stone walls to the reception area.
- Touchless Boon Edam speedgate.
- High-quality contemporary furniture and feature lighting.
- High-quality ceiling finishes.
- Fire smoke detection systems.
- Reception desk – PC Sum allowance for bespoke designed reception desk.
- Lifts – 2 no. Floors finish to match lobby. Mirror and stainless-steel walls and ceilings finishes.
- Fire smoke detection systems.

## LIFT LOBBY (GROUND FLOOR)

**Floors**  
Terrazzo.

**Internal walls**  
Part large format natural stone and bronze clad lift fittings and doors.

**Ceilings**  
Plaster painted.

## INTERNAL OFFICE FINISHES (2ND, 3RD, 4TH AND 5TH FLOORS)

**Walls**  
Plastered and painted (brilliant white) walls (NIC).

**Floors**  
600mm x 600mm raised access flooring (NIC).

**Doors**  
Painted timber door sets.

**Columns**  
Reinforced concrete.

**Ceiling**  
Metal suspended ceiling system: SAS System 150 300 x 1200 metal perforated ceiling tiles with linear plasterboard margins and bulkheads (NIC).

## TERRACE (4TH FLOOR)

Pre-cast pavers to terraces.



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## TOILETS

### Walls

Painted plasterboard walls with inset mirrors.

### Floors

Porcelain Terrazzo floor tiles.

### Ceilings

Painted plasterboard and SAS System 150 (NIC).

### Doors

Painted timber doorsets.

### WC cubicles

Oak veneer solid doors full height cubicle.

### Vanity units

Bespoke stone vanity unit with integrated basins and flush mounted mirror over.

### Sanitary ware

Wall-hung WC pans and urinals with concealed cisterns and porcelain Terrazzo backing. Hands-free taps, sensor flush to WCs, hand dryers and sensor soap dispensers.

## SHOWER AND CHANGING FACILITIES

### Drying and locker rooms

#### Ceiling

Exposed (unfinished) concrete ceiling.

#### Exposed

Fair faced block work. Painted white.

#### Shower cubicles

HPL solid doors with ceramic wall tile.

#### Floors

Porcelain floor tile throughout.

- Mechanical ventilations of these areas. Supply and extract @10 air changes per hour with heat recovery.

- HPL full-height locker system.
- PIR Controlled lighting – surface mounted.
- Fire smoke detection systems.

## PASSENGER LIFTS

Touchless destination control.

### Manufacturer

KLEEMANN.

### Size

2 no. 13 person – duplex serving all floors.

1 no. 8 person firefighting.

### Lift speed

1.0m–1.6m per second.

### Lift car finish

Flooring to match reception. Other finishes to be bespoke.

### Waiting time

2no. 1000kg, 1.6m/s, Group Collective Traffic mode: Up peak 1. Average waiting time 19.2 seconds.

## MECHANICAL INSTALLATION

Ventilation fresh air provided by a centrally located air handling unit located at roof level.

One unit will distribute air evenly throughout the building from separate riser locations.

The AHU comprises of intake and discharge sections, filters, heating coil, cooling coil, heat exchanger, supply fan, return/exhaust fan and attenuators.

Toilet ventilation is provided through a roof mounted air handling unit.

The air-conditioning system will comprise 1no. primary air-handling unit at roof level to serve offices. Provision for a 4-pipe FCU air conditioning system will be provided connected to external

chillers at roof level. FCUs should be supplied with local control and centralised control on a floor-by-floor basis to allow for separate tenancies. Space will be provided at roof level for tenant fit-out condensers to comms rooms etc.

The landlord areas are heated by radiators and heater batteries off the LPHW circuit. The reception area is serviced with an electric door air curtain and 4-pipe fan coil units.

## DESIGN PARAMETERS

### Winter temperature

#### Outside

-3°C dB saturated.

#### Internal office

21°C±2°C. No RH control.

#### Toilets

19–21°C. No RH control

#### Reception

21°C±2°C. No RH control.

### Summer temperature

#### Outside

26°C db 19.5°C wb.

#### Internal office

22°C ±2°C. No RH control.

#### Toilets

22°C ±2°C. No RH control.

#### Reception

21°C ±2°C. No RH control.

### Fresh air supply

#### Offices

12 litres/sec/person at 1 person per 8m<sup>2</sup>.

#### Toilets

10 air change/hr/extract plus make-up air.

## Water services

Main water supply will be provided from the Local Authority main to cold water storage tanks located at basement level. A booster pump set will be provided to pump the cold water from the storage tanks to all outlets within the toilet core. A separate booster pump set will be provided to pump mains water to the tenant tea stations at each floor level at two separate locations per floor.

Hot water will be provided to the land lord areas by indirect calorifiers.

## Drainage services

Soils and wastes drainage will be provided to serve the toilet cores on each floor. Each office floor plate will be provided with locations for tea station drainage and condensate drainage from internal fan coil units.

## Firefighting equipment

Special purpose fire extinguishers will be provided in the boiler room. General purpose fire extinguishers will be provided at strategic locations. Dry risers will be provided within firefighting shafts.

## ELECTRICAL INSTALLATIONS

- The building has an ESB double substation and provision for multi-tenant metered LV Power Supply – 1 metre per floor (provision for additional tenant metre space and SDB per floor in Block A offices floors).
- A sub main cable terminated into an isolator shall be provided in each tenant area.

## DESIGN CRITERIA

### One person per 8m<sup>2</sup>

#### Lighting

7w per m<sup>2</sup>.

#### Small power

25w per m<sup>2</sup>.

#### Misc. small power

13w per m<sup>2</sup>.

### Lighting

#### Offices

Energy efficient LED modular mixed recessed and suspended.

Luminaires selection to comply with the design intent of CIBSE Lighting Guide LG7.

#### Reception

Bespoke lighting design to reflect high-quality reception area.

#### Toilets

Low-energy lighting scheme provided.

### Lighting control

The lighting control system will be provided with presence/day light sensors.

Landlord areas will be controlled via standalone presence sensors.

Emergency lighting to IS 3217.

## BUILDING MANAGEMENT SYSTEM

BMS will control all primary, landlord mechanical plant and environmental systems. The system will be open network to allow interfaces with other systems.

## PROTECTIVE INSTALLATION

### Fire alarm system

Fire detection and alarm is in accordance with IS 3218 and designed to L-1 Standard.

There are individual loops to each tenant floor.

### Security Systems

- An IP based CCTV system will monitor external areas, entrance foyer and back stair.
- Wiring will be provided at tenancy doors, for future tenant access control system to interface with base build access control/security system at the reception.

### Communication

- 2 no. incoming communication providers services in 2 no. locations will be provided to each tenant floor. Spare underground ducts and cable tray distribution within the service risers will be provided to allow diverse connections to the building.

## LEED & BER

The building is targeting LEED GOLD and a BER B1 rating.

