# **Building Specification**



#### General

# Clear floor to ceiling height

 $3^{rd}$  –  $5^{th}$  floors – 2.70m

Ground Floor – 5.05m

The above allows for:

- Lighting zone including ceiling depth -150mm
- Raised floor zone including raised floor panels –150mm

# Means of escape ratio

1 person per 10 m² net area for standard office floors.

## WC provision

WC provision on every upper office floor based on an occupancy of 1 person per 10 m $^2$  at 60/60 male/female split.

## Structure

# Floor loading: typical office levels

• Imposed Load 3.50 kN/m<sup>2</sup> + 1.00 kN/m<sup>2</sup> (partitions)

## MEP - Offices

# Passenger lifts

- Two (17 persons) machine-room-less (MRL) lifts will serve ground level to level 5 and will operate at a speed of 1.6m/s
- One of the passenger lifts will be designated as a firefighting lift and serve one additional floor at level BM

# Goods lifts

1 No 1600 kg goods lift will serve all floors.

### Performance

Population density: 1 per 10 m<sup>2</sup> NIA.

# Design conditions

External design conditions

- Summer: 29°C/20°C db/wb
- Winter: -4°C db 100% saturated

Internal design conditions

- Summer: 22°C ± 2°C
- Winter: 22°C ± 2°C

#### Heating systems

The office will be heated by means of a Variable Refrigerant Flow (VRF) System.

#### Cooling systems

Cooling loads:

- Lighting: 10 W/m<sup>2</sup>
- Small power: 25 W/m<sup>2</sup>
- Additional spare capacity 10 W/m²
- The offices will be cooled with fan coil units by means of a Variable Refrigerant Flow (VRF) System

## Ventilation systems

Primary Air Supply Rate (Outside Air)

• 12 l/s per person at 1 per 10m<sup>2</sup>

# Electrical supply/power/lighting systems

- Building design maximum demand load 650 kVA for office area
- Separate incoming electrical utility substation located at Lower Ground Level

## Power allowances

- Lighting: 10 W/m<sup>2</sup>
- Small power:  $25\,\mathrm{W/\,m^2} + 10\,\mathrm{W/m^2}$  in riser capacity
- Lighting levels office areas: 350 450 Lux to CIBSE SLL Guide I G7