

# THE ARC

## EC ONE

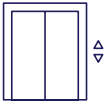
## SPECIFICATION



9 showers  
(4 male/4 female/  
1 accessible)



237 cycle spaces and  
lockers exclusive  
to the offices



5 passenger lifts and  
1 x 2,500kg goods lift



1250KVA standby  
generator 72 hours



Designed to achieve  
BREEAM Excellent



Radiant panel heating  
and cooling system



All electric power  
– no gas



15 l/s per person  
ventilation system

### SUMMARY

- Offices within concrete frame structure L1–6 formed with concrete core and traditional install brickwork façade, brick facing pre-cast panel façade
- Design density 1 person 8m<sup>2</sup> with escapes of 1 person 8m<sup>2</sup>
- Floor to ceiling heights 2.7m with floor to floor slab 3.75m
- Chilled Ceiling Radiant System for heating and cooling
- Raised floor (cavity 100mm)
- Completed to CAT A condition
- Exposed ceiling throughout office floor plate

### LIFTS

- Office passenger lifts population densities 1 person per 8m<sup>2</sup> at 80% occupancy
- Office passenger lifts handling capacity 12% of population/5 minutes (up peak)
- 4 x 1,275kg (17 person) passenger lifts
- 1 x 1,275kg (17 person) passenger lifts/ Fire fighting
- 1 x 2,500kg (33 person) goods lifts/ Fire fighting

### SERVICES

#### Resilience:

- Standby generator capacity 1250KVA for Landlord essential and Life Safety Loads for 72 hours at 50% operational load factor

#### Heating and Cooling:

- Chilled Ceiling Panel System for Radiant Heating and Cooling service by 2 ASHP (air source heat pump) on the roof of the tower
- The heating and cooling system being passive results in better acoustics and energy consumption

#### Ventilation:

- Fresh air is 15 l/s/person based upon 1 person per 8m<sup>2</sup> and 1 person per 2.5m<sup>2</sup> in meeting rooms, based on 80% open space and 20% meeting rooms.
- Filtration within the Air Handling Units will be very high, with 70% pre-filtration and 90% final filtration, exceeding current Covid recommendation within the workplace

### Plant Locations:

- Level -1 Plant Rooms – Air handling plant, Switch rooms, Water pumps/tanks and Life safety systems
- L22 – Air Source Heat Pumps for both Residential and Commercial units on individual separate loops

### TENANT FACILITIES

#### WC's:

- Based on occupancy density with a Male: Female Ratio of 60:60 at 80% utilisation
- Cold Water Storage 17,000 litres
- Water consumption 45 litres/person per day

#### Bicycle and Showers:

- 9 Showers (4 male/4 female/1 accessible)
- 237 Cycle spaces exclusive to the offices
- 237 lockers

### SUSTAINABILITY

- Designed to achieve BREEAM Excellent
- Designed to achieve WELL Gold
- Designed to achieve DNGB
- High performance glazing to control solar gain and heat loss
- Radiant panel heating and cooling system which is circa 33% more efficient than fan coil units
- Energy efficient lighting
- Lighting PIR to only turn on lights when required
- Central ASHP (air source heat pump) from a central loop to service the office spaces
- BMS energy monitoring system
- Heat recovery provided on office air handling units
- All-electric building – no gas use
- Variable speed pumps on heating and chilled water systems to match plant energy consumption with actual building loads