The Scalpel

Specification

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Office
386,312 sq ft NIA

Restaurant, Retail and Coffee Shop
11,583 sq ft NIA

396 Bicycle Parking Spaces

18 Motorcycle Parking Spaces

1 Wheelchair Accessible Car Parking Space

Dimensions
– 1.5m planning grid
– Floor to floor height 3,925mm
– Finished floor to ceiling height 2,750mm
– Raised floor zone 150mm
– Structural zone 875mm
– Minimum ceiling zones below beams 150mm

Occupation Density
– 86 sq ft (8 sq m) per person - low zone (floors 1-12)
– 86 sq ft (8 sq m) per person - mid zone (floors 13-24)
– 129 sq ft (12 sq m) per person - high zone (floors 25-35)
– 65 sq ft (6 sq m) per person means of escape

Resilience
– Dual power supply to all areas
– 3 generators provide 100% back up

Air Conditioning
– Low energy cooling provided to suit fan coil units

Washrooms
– Based on zonal occupant densities with a male:female ratio of 60:60 at 80% utilisation

Cycle Shower and Locker Provisions
– 40 showers | 396 lockers

Ventilation
– Fresh air supply 16 l / s / person + 20%

Loading Densities for Cooling
– Lighting 8 Watts / sqm
– Small power 30 Watts / sqm
– Supplementary cooling 350 kW building wide

Plant Locations
– On floor plant rooms
– 2 roof level plant rooms
– Billiter Street annex
– Building basement

Energy Reduction Measures
– BREEAM 2014 “Excellent”
– PV cells on the roof
– High performance glazing to control solar gains and heat loss
– Energy efficient LED lighting
– Daylight sensors and presence detection on internal lighting
– Heat recovery on AHUs
– Variable speed, electronic controlled DC fan coil units
– High performance water cooled chillers
– Sub-metering for energy monitoring of services
– Reduced energy lift installation
– Building planned and orientated to optimise passive shading by the core

Vertical Transportation

– 3 banks of TWIN passenger lifts (22 lift cars): 1,600kg, 21 persons
– 2 x goods lifts: 1 x 4,500kg and 1 x 2,250kg
– 1 x fire fighting lift: 1,000kg, 13 persons
– 2 cycle access lifts: 2,000 kg
– Compliant with BCO 2014 guidance

Benefits of Twin Lifting

– Two lift cars in each shaft, operating separately
– Improved lift efficiency over a double decker system
– Improved inter floor travel efficiency
– Lower energy consumption - only a single car is dispatched during low demand periods

Developer

WRBC Development

a W. R. Berkley Company

Contractor

Skanska UK Limited

Professional Team

Architect

KPF

Structural and Building Engineering Services Consultant

ARUP

Vertical Transportation Consultant

ARUP

Sustainability and BREEAM Consultant

ARUP