

Specification

33 Central has been designed to exacting standards, as a prime City of London office building. The building provides flexible Grade A floor space wrapped in a modern energy efficient façade with a target BREEAM 2011 rating of ‘Excellent’.

1.0 Structure

1.1 Key Dimensions

Typically 2.75m clear floor to ceiling, raised floor 150mm overall. Ninth floor is 3.0m clear floor to ceiling. First floor is 2.8m clear floor to ceiling, raised floor 200mm overall. Double height entrance hall at ground floor, 6.5m clear floor to ceiling.

1.2 General

Structural steel columns and beams with composite slab construction. Beams, designed with a Response Factor of 6, have web openings for services distribution and intumescent paint fire protection.

1.3 Loadings

Offices: 3.0kN/m² (+1.0kN/m² for demountable partitions) live load plus 5% office floor area at 7.5kN/m².

Ninth Floor Terrace: 5.0kN/m²

Roof Garden: 5.0kN/m²

Lobbies and circulation areas: 5.0kN/m²

Plant areas: 7.5kN/m² to areas generally located at roof and basement areas.

Loading bay: One refuse collection wagon with 7.5t and 11.5t front and rear axle loadings respectively, accompanied by 7.5t box vans plus 5.0kN/m².

2.0 Occupational Densities

Building Services: 1:8m² of net office space (1:6m² on levels 1 and 2).

Toilets: 1:8m² of net office space to comply with BS 6465:1 2009 and BCO Guide 2009, 60/60 male/female.

Lifts: Levels 1 & 2: 1:6m² of net office space based on 80% utilisation.
Levels LG, GF, 3 – 9: 1:8m² of net office space based on 80% utilisation.

Means of Escape: 1:6m² of net office space.

3.0 Mechanical Services

3.1 Target Operative Temperatures

General Office Areas: Summer 24°C (+/- 2°C). Winter 20°C (+/- 2°C).

3.2 Heating and Cooling

4-pipe variable air volume fan coil unit system served by centralised low temperature hot water and chilled water systems.

3.3 Chilled Water System

Three packaged water cooled water chillers located at ninth floor level with space for a fourth chiller if required serve the primary CHW pumps located in the basement. Separate secondary circuits will serve the air handling units and fan coil units.

3.4 Heating System

Two gas fired condensing boilers, with space for connection to a future district heating scheme, located in the basement boiler room serving the primary heating circuit. Separate secondary circuits will serve the air handling units and fan coil units.

3.5 Ventilation

Offices: 12l/s/person with an additional 10% allowance at the risers for future Tenant use.

Toilets: 10 air changes per hour with air make up supply by transfer from offices.

3.6 Acoustic Noise Levels

Average noise levels under normal operating conditions due to mechanical plant.

General Office

(open plan): NR38

Entrance Hall: NR40

Toilets: NR40

3.7 Building Management

The building services plant will be provided with DDC automatic control. The BMS controllers associated with the plant will be intelligent and addressable and shall be connected via a communication network to a central network controller.

3.8 Lifts

The passenger lifts within the building incorporate the latest destination and access control systems, reducing waiting times during peak arrival and allowing for enhanced security and customisation.

7 x 21 person destination control lifts (1 no. Combined passenger/firefighting), designed to operate at 2.5m/s with an up peak arrival rate of 15% of the population in a 5 minute period and an average waiting time of less than 25 seconds.

1 x 2,500kg goods lift, designed to operate at 1.6m/s which serves lower ground to ninth floor levels.

4.0 Electrical Services

4.1 Electrical Distribution

One UKPN substation rated at 2.6MVA provides the mains supply and is delivered at 11kV.

4.2 Power Provision

Lighting: 12W/m²

Small Power: 25W + 10W/m². Additional capacity within the risers.

Levels 1 and 2

Small Power: 150W/m²

4.3 Lighting

Lighting will generally be in accordance with the CIBSE LG7 2005 with the uniformity in the office Category 'A' spaces being no less than 0.8. Average lighting level within the space is 500 lux.

4.4 Standby Power

A landlord's standby diesel generator set will be provided at basement level to support the life safety equipment.

Space provision will be provided for 2 No. 1 MVA Tenant Standby Generators, with fuel storage for 24 hours.

4.5 Telecommunications Services

Two IT/Comms rooms with incoming sleeved provisions will be provided at basement level. Each office floor will be provided with 2 x IT/Comms riser cupboards.

4.6 Security and CCTV

Landlord's CCTV system for surveillance of external areas and various landlords' common parts in strategic locations. The following will also be provided:

- Intruder alarm system to monitor all external doors leading from or to street level.
- Access control readers to the ground floor reception pass door, fire control entrance and loading bay.
- Audio/visual communication between the reception desk and entrance doors.
- Intercom (audio only) to loading bay entrance.
- Remote door release from the reception desk to the pass door.
- Containment with draw wires will be installed for turnstiles in the entrance hall and to designated doors on to the office floors, for installation of a future tenant's access control system.

5.0 Tenant Plant

Provision will be provided in the form of risers and plant space allocation at ninth floor level for future tenant plant.

6.0 Terraces

Roof Garden: A private landscaped roof garden, provides amenity space with 360° City and river views and combines soft and hard landscaping, stone pavers and hardwood timber decking to circulation areas and sedum roof.

Ninth Floor: Incorporates a dedicated south-facing terrace with river views.

7.0 Internal Finishes: Landlord's Areas

7.1 Entrance Hall and Ground Floor Lift Lobby

Floor: Proprietary screed floor system prepared to receive high quality natural stone flooring. The system incorporates the slopes within the entrance hall and lift lobby and entrance matting within a stainless steel matwell frames.

Walls: Full height high quality glass or stone feature wall to entrance hall continuing through to panelling on lift lobby walls and stainless steel architraves to lifts.

Ceiling: Painted plasterboard suspended ceiling system with integrated downlights, air diffuser grilles and ceiling mounted mechanical and electrical services. A feature chandelier will be provided.

Fitments: Building address signage and interactive tenant directory to be provided within the entrance hall.

Bespoke reception desk with integral lockable storage, service facilities and controls compliant with current accessibility recommendations. The desk finishes will be a high quality to compliment reception materials.

7.2 Passenger Lift Lobbies

Floor: High quality stone floor finishes to match reception area at first – ninth floor levels.

Walls: High quality wall finish. All fitments are stainless steel.

Ceiling: Feature ceiling with downlights and air diffuser grilles, and ceiling mounted mechanical and electrical services.

Doors: Full height glazed central lobby doors and side lights. Stainless steel fittings to office entrances on the east and west side of the lift lobby areas

7.3 Fire Escape Stairs/Core 1 and 2

Floor:	Stair treads and half landings comprise folded metal steel pan treads, risers and landings with a proprietary rubber studded floor finish with stair nosings. Sand and cement screed to main floor landings prepared for durable floor finish.
Walls:	Painted plasterboard drylining.
Ceiling:	Painted plasterboard ceilings in stair lobbies and half landings. Staircase ceilings and soffits will be painted plasterboard. Downlights and emergency light fittings will be provided at landings and half landings.
Fitments:	Painted steel balustrades with stainless steel handrails. Fire escape signage and floor numerals will be provided within lobbies.
Doors:	Fire-rated white painted doors with stainless steel ironmongery and vision panels.

7.4 Passenger Lifts

Floor:	High quality natural stone finish to match lift lobby.
Walls:	2 no side walls of each lift are full height opaque glass panels with inset brushed stainless steel car controls including LCD flat screen indicator panels. Feature finish back wall with stainless steel handrail. Doors are brushed stainless steel finish.
Ceiling:	Backlit glass panel ceiling.
Doors:	Stainless steel.

7.5 Goods Lift

Floor:	Stainless steel chequer plate floor.
Walls:	Brushed stainless steel wall panels and rubber buffer rails.
Ceiling:	Polyester powder coated steel panels with inset lighting.
Doors:	Brushed stainless steel. Key locking system.

7.6 Fire Fighting Lift

Floor:	Stainless steel chequer plate floor.
Walls:	Brushed stainless steel wall panels.
Ceiling:	Metal painted panels with inset lighting.
Doors:	Brushed stainless steel.

7.7 Male and Female Toilets

The internal toilet finishes will be as follows:

Floors:	Vitrified ceramic floor tiles to match lift lobby stone finishes.
Walls:	High quality full height feature walls with opaque glass panelling and splashback to complement vanity tops. Painted plasterboard walls prepared to receive applied finishes. Polished plate safety glass mirrors above vanity top splashback and to walls.

Cubicles:	Doors and toilet cubicles panelling comprising full height, high quality finish partitions. Glass faced panelling and integral push-flush button to WCs.
Ceilings:	Painted plasterboard ceilings installed throughout the toilet areas with downlights.
Vanity Top:	Polished stone tops with countersunk basins or similar, soap dispensers and taps.
Sanitaryware:	Sanitary fittings are white glazed vitreous china. WC pans, seats and covers together with duct mounted cisterns, flush pipes. Wall mounted urinal bowls with duct mounted cisterns and toughened glass privacy screens to male toilets.
Sundry Items:	Built in paper towel dispensers, towel bins and associated fittings.

7.8 Accessible Toilets

Sanitary fittings and accessories are provided and will match high quality finishes within main toilet areas. 1 no. separate unisex fully accessible toilet will be provided on each floor from lower ground floor to level 9 and will be handed on alternate floors.

7.9 Cycle Changing and Shower Facilities

Cycle changing and shower rooms will be painted plasterboard walls, painted plasterboard ceilings and ceramic floor tiles throughout. Stainless steel ironmongery and floor drainage channels. Shower cubicles with laminate glass shower screens. Feature coloured solid grade laminate lockable changing room lockers. Hardwood timber bench seating.

7.10 Ancillary Spaces

Ancillary spaces will be painted plasterboard linings and painted blockwork within lower ground or basement areas. High quality fire rated solid core hardwood doors with stainless steel ironmongery.

8.0 Category A Works

8.1 Purpose

It is intended that the following specification represents the uniform standard for the works by the Landlord in finishing the office areas to Category A standard or by way of a capital contribution to the incoming tenant.

The design option will enable future compliance with Office Lighting LG7.

8.2 Finishes

Raised Floor

Medium grade raised access flooring with a nominal depth of 150mm (overall) at typical floors and 600mm x 600mm tiles.

Suspended Ceilings

A suspended ceiling system comprising polyester-powder coated smooth-finish perforated pressed metal tiles fixed into a non-visible clip-in suspension system with sound-absorbent mineral wool padding, compatible with the 1.5m building module / grid.

The abutment of the suspended ceiling to the external wall is formed by a perimeter strip of plasterboard incorporating air diffuser slots, downlights and a space for blind boxes, painted in two coats emulsion.

Light fittings are integrated as part of the ceiling system.

Window Blinds

Internal blinds to be provided by the tenant.

Internal Signage

The following signs are provided as statutory signage:

- Electrical/telephone risers
- Toilets symbols
- Cleaners cupboards
- Storage rooms (see Base Building Definition for means of escape signage)

Decoration

Emulsion paint wall decoration is provided on core walls and external walls in office areas.

Access doors to all ducts and risers comprise fire rated steel access doors using a proprietary metal door system.

Carpet

A carpet allowance will be provided to the tenant.

Floor Boxes

A floor box allowance will be provided to the tenant.

8.3 Services

Ductwork & Fan Coil Units

The fresh air ductwork system from connections adjacent to the cores on each floor. Fresh air ductwork is extended to each fan coil unit. Fan coil units can be shut off when the room temperature is correct, with fresh air supplied directly to the distribution element.

The fan coil units around the glazed perimeter are spaced to typically serve zones of 6m x 4.5m. In central areas on the office floors approximately two FCU per 50-65m² is provided.

The 4-pipe fan coil units will be variable volume EC motors type.

Heating and cooling for the fan coil units is provided from the central boiler and chilled water systems. Energy meters will be installed on the heating and chilled water at each riser connection.

At the perimeter air is supplied by slot diffusers. Air is returned to the ceiling void via combined linear slot diffusers / luminaires.

In central office areas, air is supplied and returned to the ceiling void via combined linear slot diffusers / luminaires.

The fan coil units are designed to a maximum noise criterion of NR 38 is achieved in the general office space.

Controls

Each FCU is provided with a BMS controller. Temperature sensors will be mounted in the ceiling void, for each unit, with coiled cable to allow for partition or column mounting at a later date.

The Category A controls are fully compatible with the Base Building BMS and interface will be provided with the building control system for provision of mechanical ventilation LTHW and chilled water. Frost protection will be provided by the fan coil units.

Electrical Services

Category A electrical works includes the following:

- Category A lighting comprising all plug modular in wiring, switching and all controls meeting Part “L2B” of the Building Regulations from tenant

distribution boards located in the on floor electrical cupboard.

- LED recessed modular type luminaires, with reflector and semi-specular louver assembly, currently meeting the current industry standards including CIBSE LG7 (design intent) arranged to provide a maintained illuminance lighting level in open plan office spaces of 500 lux controlled by occupancy detector.

- The perimeter fixtures will be controlled by daylight sensors with automatic dimming control.

- Luminaires at emergency exits plus the necessary quantity in the office floor are complete with self-contained batteries for three hours autonomous operation for escape lighting.

- Smoke detectors and voice alarm speakers meeting the requirements of the Building Regulations and British Standards are provided on each office floor as part of the Base Building works.

- Any smoke detectors and voice alarm speakers installed as part of the base building adjacent to cores are to be repositioned to the Category A ceiling.

- Power supplies to fan coil units.

Sprinkler Installation

Sprinklers and associated pipework protecting office areas are extended from the termination points of the base building system.

Sprinkler spacing in office areas is on the basis of Ordinary Hazard Group 3 Classification.

The sprinkler heads are likely to be of the pendant fast response.

9.0 Environmental

The environmental impact of 33 Central has been a key consideration of the building design.

The development has improved the local environment and urban landscape through the removal of an existing outdated elevated concrete walkway and the installation of a new external pedestrian lift with public stair serving London Bridge from Upper Thames Street.

The lower ground and basement levels are retained structures and the upper façade has been designed to a high performance to reduce heating and cooling loads. The building will demonstrate reduced carbon emissions and achieve BREEAM 2011 ‘Excellent’.

Building plant has been selected to reduce fuel consumption and to achieve an Energy Performance Certificate rating (EPC) Level B.

At roof level, photo voltaic cells will be installed, providing at peak performance 85kWh/m² per annum.

10.0 Servicing and Car Parking

The loading bay and vehicle entrance is located within the Arthur Street elevation providing access into the lower ground car parking areas, refuse storage and cycle changing facilities.

Controlled access via a dedicated secure lobby will be afforded into the main building at lower ground level for those visitors arriving by car or motorcycle.

Within the lower ground floor, 2 wheelchair accessible parking spaces and 22 motorcycle spaces are provided.

Secure storage for 237 bicycles is provided with associated Male and Female showers (12 total) and changing facilities with lockers.