

# Specification

## ENGINEERING SERVICES STRATEGY

The engineering services strategy for 33 Foley Street is based upon central plant for cooling, heating, hot and cold water to the office building. Small power will be the responsibility of the tenant, all floors will be provided with a Cat A lighting scheme.

Plant rooms are located within the pavement vaults for cold water storage at the front of the building and a floor by floor fresh air plant. Separate tenants and landlords electrical risers on each floor.

The building incorporates plant and riser space to accommodate future tenant plant, an IT riser and tenants cooling. The building services strategy is based on all services being surface mounted and visible through wall areas.

All floors will be fitted out to a Cat A standard. The Cat A design will target a BREEAM rating of Excellent.

## COOLING & HEATING

Cooling and heating will be provided by Variable Refrigerant Flow (VRF) systems. Lower Ground to level 4 will each be served by two condenser units; one serving the west zone and the other the east zone of each floor plate whilst level 5 will be served by a single condenser. The condenser units will be located at roof level within an attenuated enclosure.

Internal spaces will be served via surface mounted fan coil units supplying individual diffusers located throughout the space. The units will be zoned to ensure that simultaneous heating and cooling in the same zone is prevented.

## VENTILATION

Full fresh air ventilation will be provided via local on-floor air handling units (AHUs).

## PUBLIC HEALTH SERVICES

A new metered mains water supply from the local authority water main will serve a cold water storage tank located within the pavement vaults at the front of the building, a boosted pump set will be provided adjacent to the tank to distribute the water around the building. Ultra Violet disinfection shall be provided together with Electromagnetic water conditioning units.

A drain connection together with a valved and capped connection shall be provided for two future tea points per floor. Domestic hot water will be generated centrally by a gas fired water heater located at roof level.

## STRUCTURE

|                                   | FFL TO FFL (MM) |
|-----------------------------------|-----------------|
| LOWER GROUND FLOOR – GROUND FLOOR | 3,350           |
| GROUND FLOOR – FIRST FLOOR        | 3,615           |
| FIRST FLOOR – SECOND FLOOR        | 3,575           |

## FIRE PROTECTION SERVICES

The building will be provided with a single dry rising main located within the central core, it will be served from an inlet valve set at the front of the building adjacent the main entrance doors. Dry riser outlet boxes will be provided at each floor level.

## ENERGY METERING SYSTEM

An integrated Building Energy Management System (BEMS) will be provided to monitor the heating and cooling system, landlords and tenants electrical loads. The system will have the facility for tenants billing.

## LV DISTRIBUTION

The building is provided with a UKPN sub-station, located at lower ground level and accessed via the building lightwell. The building is directly connected to the sub-station which provides the building with a total availability of 350kVA. This service feeds a new electrical switchboard at lower ground level.

Within the main core, separate landlords and tenants risers will be provided.

The electrical services distribution has been arranged to allow for part floor, single floor, multiple floor by floor or single tenancy. Separate metering will be provided for Tenant's and Landlord's services. Lighting distribution boards will be provided, small power distribution boards and the associated distribution will be the responsibility of the tenant.

## GENERAL LIGHTING

The lighting installation to Landlords shell and core areas will consist of recessed LED downlights and surface mounted decorative luminaires. The Cat A office lighting will be provided by suspended LED direct / indirect luminaires.

A Dali microprocessor based central lighting control system will be provided to monitor and control the lighting installations within the Landlord's and Cat A tenants areas.



## GENERAL SMALL POWER

Power distribution including distribution boards within office floors shall be the responsibility of the tenant. Separate landlords distribution boards are provided to serve core lighting and small power services.

## COMMUNICATIONS

A communications riser is provided within the tenants space linking all floors.

## ACCESSIBILITY

Each accessible WC and shower will be provided with an attendance alarm system comprising of a local power supply unit, an alarm call pull cord switch, alarm indicator / sounder located outside of the WC and an alarm accept / reset switch located inside the WC. Each system will be linked to a remote monitoring panel located at the reception desk.

## FIRE DETECTION & ALARM

The building will be provided with a single analogue addressable fire detection and alarm system designed to meet the requirements of BS 5839 and BS EN 54. the Cat A systems will be designed to meet Category L2 with the facility for tenant expansion to achieve Category L1.

## EMERGENCY VOICE COMMUNICATIONS (EVC) SYSTEM

An EVC system will be provided to facilitate communication between the fire service access point and the disabled refuge points throughout the building.

## LIGHTNING PROTECTION

The building will be protected by a lightning protection system in accordance with BS EN 62305.

## WARRANTIES

The vendor is in a position to assign a set of warranties (or contracts where appropriate) in relation to the construction of the building.

## SUSTAINABILITY

Each aspect of the design has been scrutinised to achieve optimum functionality and sustainability from its green roof which acts as a thermal mass reducing heat loss to its large aspect windows which allow maximum light reducing internal lighting requirements.

The mechanical and electrical services exceed building regulations by utilising low energy LED lighting, highly efficient double glazing, fully flexible high COP heating and cooling systems, along with a zonal controlled ventilation plant. Photovoltaics also contribute to the reduction of CO<sub>2</sub> emissions and assist in the drive to reduce energy consumption.

