

# SUMMARY SPECIFICATION

Natural stone façade
2.80m floor-to-ceiling height
1.5m planning grid
5.0 (+1) kN/sq m office floor loading
1:8 base occupancy (person/sq m)
Category 'A' fit-out
4 pipe fan coil air conditioning
Localised Temperature control
Energy Efficient LED Lighting
Integrated Lighting Management
Full Electronic BEMS
Lift Destination and Conventional Control Management Systems
6 x 13 person passenger lifts
1 x 2,000 kg goods lift
2 x 4,000 kg car lifts
25 W/sq m small power base load
29 car parking spaces
200 bicycle spaces
26 showers in tenant changing space
Drying room
Tenant space at basement level including 264 lockers and changing facilities
NZEB Compliance Standard
BER A-3 rating minimum
LEED 'Gold' Version 4 Targeted
Well Silver Targeted
Wired Score Platinum Targeted
5,651 sq ft of terraces
Rainwater harvesting
EV, e-bike and scooter charging facilities
Bike repair station

## Sustainable Design Standards

- The building will comply with the Nearly Zero Energy Building Standard NZEB ensuring that the operation will minimise the primary energy consumption and also include an onsite renewable energy source contributor
- The building will achieve an energy rating certificate of A3 minimum
- Additional independent certification will be provided by achieving a LEED Gold Rating Version 4
- The LEED standard ensures Leadership in Energy and Environmental Design (LEED) and certification provides an internationally recognized independent verification of a building's green features allowing for design, construction, operations and maintenance of resource-efficient, high-performing, healthy and cost-effective buildings
- To ensure optimum efficiency, energy saving and achieve comfort levels, a full computerised energy model of the proposed building was undertaken
- Modern high efficiency simultaneous heating and cooling energy generators are used to facilitate the buildings centralised energy plant and contribute towards renewable contribution requirements
- Combined Heat and Power is also used to contribute positively towards the building's renewable energy contribution
- Highly efficient LED Lighting modules are included in installation and fit out
- A fully integrated lighting management system is fitted on all floors and car park
- An automatic car park ventilation system is installed in the car park areas to maintain quality environmental air standards in response to occupancy
- A fully certified sprinkler fire-fighting system including on site water storage and diesel and electric pumping facilities. In compliance with life safety standards, zone and monitored valves are installed throughout the development

- Essential services are powered by a specific generator that starts automatically on power failure
- Comprehensive commissioning and testing to ensure energy efficient operation
- Utilisation of low water usage sanitary fittings and inclusion of rainwater harvesting systems for flushing
- Secure cyclist parking, shower and locker facilities promoting sustainable transport
- Dublin Bikes Scheme within 100m of the building
- LUAS Stops adjacent to the building
- 9,000 sq ft green roof
- Double glazed window panels with solar control coatings



# DETAILED SPECIFICATION

## OCCUPANCY

- **Means of escape:** 1 person per 6 sq m
- **Internal climate:** 1 person per 8 sq m
- **Lift provision:** 1 person per 8 sq m
- **Sanitary provision:** 1 person per 8 sq m
- **Toilet Ratio:** 60% male & 60% female provision to BS6465-1 2006 + A1 2009.

## PLANNING MODULE

- 1.5m planning grid generally throughout.

## STRUCTURAL GRID

- 9.0m x 9.0m generally.

## FLOOR LOADINGS

- **Office Floors:** 5.0kN per sq m (+ 1kN per sq m partitions)
- **Lift Lobby + WC Areas:** 5.0kN per sq m
- **External Terraces:** 5kN per sq m
- **Plant Rooms:** 7.5kN per sq m
- **Area of roof outside of plant areas:** 5kN per sq m
- **Car Park:** 5kN per sq m
- **Service Yard:** HA Loading
- **Bicycle Storage + Shower Area:** 5kN per sq m.

## FLOOR HEIGHTS

- **Reception floor to ceiling:** 7.9m to SSL and 6.75m to suspended ceiling
- **Office slab-to-slab:** 3.8m
- **Office floor to ceiling generally:** 2.80m
- **Raised floor zone:** Nominal 150mm (top of structural slab to top of finished floor level)
- **Ceiling zone:** 500mm (underside of ceiling to soffit of structural slab above)
- **Structure generally:** 350mm solid concrete reinforced slabs.

## STRUCTURE

- The structure is an in situ concrete framed solution with flat slabs throughout. Lateral stability provided by the concrete core. Perimeter columns and internal columns are generally on a 9m module. The office floor plates are set back at the 5th and 6th floors to provide generous tenant terraces areas

## EXTERNAL FINISHES

- The façade has been designed to respond sensitively to the rhythm, texture and variety of the historic context and the elevational treatment of the overall development will respect the scale of its surroundings. The materials and finishes reflect the prevailing character of both the immediate and the wider surrounding conservation area
- The façade is composed of a palette of high quality natural materials consisting primarily of stone, metal, glass and brick. The stonework will be a light coloured limestone with thin bed mortar joints in a colour to match the stone. The windows to the street elevations are composed of large bronze anodized aluminium framed glazed screens. The façade at 5th and 6th set back levels is a curtain wall with expressed external mullion with bronze anodized finish. To the rear elevations facing Adam Court and Duke Lane a brick facing is proposed, with white mortar joint. All glazed elements will be highly efficient double glazed units with solar control coatings
- The double height office entrance is composed of a full height glazed revolving door, glazed screens and bronze anodized aluminium framing element
- The shopfronts at ground level are a unified design of bronze aluminium framed and 'frameless' glazed screens and doors. A stone cornice and fascia above the glazing provide a controlled signage zone, in keeping with the overall façade design

## EXTERNAL LANDSCAPING

- At street level granite paving will extend from existing street kerb to new building line forming a continuous high quality pavement surface. Generous stone paved roof terraces at 5th and 6th floor levels with a total area of 540 sq m (5,800 sq ft)

## INTERNAL OFFICE FINISHES

- **Walls:** Emulsion-painted dry lining
- **Floors:** 600x600mm access flooring medium duty
- **Columns:** Self finished circular concrete
- **Ceiling:** Metal suspended ceiling system to suit 1.5m square planning module. Perforated 1,200x300mm ceiling tiles with plasterboard border to perimeter and cores. Ceilings to incorporate light fittings, diffusers, smoke detectors, illuminated signage and all cavity barriers as required to comply with the Building Regulations. Painted plasterboard margins will incorporate slot diffusers and down lighting

## RECEPTION

- **Walls:** Portuguese limestone 'Branco Classico' full height with decorative bronze grille screening to acoustic panels. Polished plaster wall to set off artwork
- **Floors:** Terrazzo with inset brass strip movement joints forming a decorative pattern
- **Ceiling:** Suspended painted plasterboard rafts with decorative lighting and concealing HVAC equipment and air grilles
- **Reception Desk:** Bespoke two person desk in selected wood and stone design

# DETAILED SPECIFICATION

## LIFT LOBBY

- **Walls:** Stone cut to measure wall paneling with satin polish refined finish.
- **Floors:** Terrazzo with inset brass strip movement joints forming a decorative pattern.
- **Ceiling:** Plasterboard suspended ceiling system incorporating light fittings & perimeter trim.
- **Doors:** Hardwood timber veneered door and frame with glass panel inset.

## TOILETS

- **Walls:** Mosa Terra Tones glazed, dry pressed ceramic wall tile, on white biscuit, with colour matt finish
- **Floors:** Mosa Terra Tones tiled floor with slip resistant finish and anti-bacterial and anti-fungicidal flexible grout
- **Ceilings:** Moisture resistant white painted plasterboard and metal tile
- **Doors:** Timber veneered and with solid hardwood frame
- **WC Cubicles:** Full height real wood veneered partition system from Venesta with contrasting colour edge detail to doors and panels
- **Vanity:** Purpose made 20mm thick selected solid surface vanity top in Cararra Marble with ceramic under counter top basins
- **Sanitary Ware:** High quality white vitreous china sanitaryware from VitrA. Chrome plated brass, water saving, sensor operated taps and matching soap dispensers from Stern. Concealed dual flush cisterns incorporated into sanitaryware wall hanging frames from Geberit.

## SHOWERS

- 26 showers: 13 male, 12 female and 1 unisex accessible.
- **Walls:** Glazed, dry pressed ceramic wall tile, on white biscuit, giving a powder matt appearance from the Matt Collection by Mosa.
- **Floors:** Quartz floor tile from Mosa with slip resistant finish and antibacterial and antifungicidal flexible grout.
- **Ceiling:** Moisture resistant plasterboard with plain metal ceiling tile inset incorporating access hatches, light fittings and service fittings including perimeter trim.
- **Cubicle:** Venesta glass aqueous shower cubicles with glass doors & compact grade laminate partitions with bench.
- **Sanitary Ware:** Vandal resistant solid brass shower head with thermostatic mixer. Touch activated electronic self closing shower control.

## LIFTS

- **Manufacturer:** Kone
- **Provision:** 6 no. 13 person passenger lifts  
One of the six main core passenger lifts includes pass thru door at Ground level, providing direct access from the service yard to all office floors.  
One of the six main core passenger lifts performs as a fire fighting lift. An additional FF lift is provided in the NW core
- **Lift Speed:** 1.6m per second
- **Internal lift finish:** The passenger lift cars will include stainless steel doors, back painted white glass wall panels, full height mirror to rear wall, natural stone floors to match the lobby, metal ceiling with feature lighting and stainless steel control panel and handrails
- **Waiting Time:** Passenger lift peak average interval is less than 25 seconds Destination Control included
- **Dedicated Cyclist & Goods Lift:** A separate lift of 2,000kg capacity is located adjacent to the service serving basement to first floor, providing cyclists with direct access to secure cycle parking area.

## CAR LIFTS

- **Manufacturer:** Kone
- **Provision:** 2 no. x 4,000 kg Hydraulic Car Lifts
- **Lift Speed:** 0.25m per second

## MECHANICAL INSTALLATIONS

- Fresh air provided by 3 No. Air Handling Units located in Basement Plant Areas and Roof.
- Full run around Heat Recovery facilities are included in the Air Handling Units.
- Two stage High efficiency air filtration is provided in Air Handling Unit Plenum.
- Temperature conditioning of internal environment is provided by ceiling mounted Fan Coil Units with localised waterside control and temperature sensing
- Supply and Exhaust air is delivered and extracted by ceiling mounted diffusers
- The Reception Area is fully air-conditioned along with Lift Lobbies

## DESIGN PARAMETER

### Winter Temperature

- **Outside:** -3°C db saturated
- **Internal Office:** 21°C ±2°C
- **Toilets:** 21°C
- **Reception:** 21°C ±2°C.

### Summer Temperature

- **Outside:** 26°C db 19.5°C wb
- **Internal Office:** 22°C ±2°C.
- **Toilets:** 22°C ±2°C
- **Reception:** 21°C ±2°C.

## FRESH AIR SUPPLY

- **Offices:** 10 litres / sec / person at 1 person per 8m<sup>2</sup>
- **Toilets:** 10 air changes / hr extract plus make up fresh air

## ACOUSTIC LEVELS

- **Office Open Plan:** NR38
- **Toilets:** NR40
- **Staircores:** NR40
- **Reception Area:** NR40

## WATER SERVICES

- 24 hour Water Storage at 45L/person
- Rainwater Harvesting for WC and Urinal Flushing.

## AUTOMATIC CONTROL SYSTEM

- All mechanical plant and pumps are controlled and monitored by a centralised BEMS control system that is interfaced with local control zones and systems.

## ENERGY METERING

- All primary services and main energy distribution is provided with localised meter monitoring fed back to centralised BEMS.

# DETAILED SPECIFICATION

## ELECTRICAL INSTALLATIONS

- The building is facilitated by an ESB networks consisting of three phase and Neutral low voltage system and a Medium voltage 10/20. KV Supply
- The Electrical MV switch room and ESB substations are located at perimeter of site in Duke Lane
- The building has a dedicated ESB Substation and provision for multi-tenant occupancy and metering
- All centralised landlord plant is fed by the client substation basement area allowing benefits of MV metering cost rates and reduced operating costs
- The availability of MV facilities allow consideration for single tenant occupancy and reduced MV Metering Rates
- ESB designated sub station is located in Duke Lane
- MV switching and metering is at Duke Lane and Landlords MV switching and sub-station/ Transformers (cast resin) are located on Lower ground floor in unit sub configuration
- There is a comprehensive system of power distribution consisting of 2 sub distribution panels on floors 1 to 6
- All landlord items and equipment are connected to landlord designated infrastructure and separately metered.

## DESIGN CRITERIA

- One Person per 8m<sup>2</sup>
- **Lighting:** 5w per sq m
- **General Services and Small Power:** 25w per sq m

## LIGHTING

- **Offices:** Energy efficient LED Modular Recessed Dimmable Luminaires Selection to comply with the Design Intent of CIBSE Lighting Guide LG7.
- **Reception:** Bespoke Lighting Design to reflect high quality Reception Area
- **Toilets:** Low Energy LED Lighting Scheme provided.

## LIGHTING CONTROL

- The main tenant lighting installation and main landlord car park areas control system will utilise lighting control modules interfaced with a lighting management system
- This system will be programmable for any reasonable future fit-out requirement. Smaller landlord areas will be provided with standalone presence / lighting control sensors
- Emergency Lighting installation to IS 3217.

## STANDBY POWER

- Life Safety Generator installed by Landlord with provision for full load Generation for Single Occupancy Use.

## BUILDING MANAGEMENT SYSTEM

- A complete Building Management System will control all primary Mechanical Plant and Environmental Systems on each floor. The system will be open network to allow interfaces with other systems.

## PROTECTIVE INSTALLATION FIRE ALARM SYSTEM

- Fire Detection and Alarm is in accordance with IS 3218 and designed to L-1 Standard and or as required by the fire certificate and mandatory regulations. The main panel will be fully addressable with battery back-up facilities.

## SPRINKLER AND DRY RISER INSTALLATION

- The Office areas and core areas are protected by an automatic sprinkler system designed to comply with the fire certificate requirements
- Dry risers will be installed in stair cores 1 and 3 to meet requirements of the fire certificate

## SECURITY SYSTEMS

- An IP based CCTV system will monitor external areas, entrance foyer and Lift Lobbies. Empty conduit with draw wires will be provided at core / tenancy doors, for future tenant access control system to interface with base build access control / security system at the reception, basement and future security turnstiles.

## COMMUNICATION AND WIRED SCORE CERTIFICATION

- An incoming telecommunication room will be served by two different Telecom duct networks to allow diverse connections to the building. Each of these communication rooms has 3 spare ducts in addition to the Telecom service to the street for future connections to other providers. Cable tray distribution will be provided from these telecommunication rooms to IT risers which serve the office floors
- The building will target Wired Score Platinum certification. Wired Score's Accreditation for Developments is designed to ensure that buildings are constructed to the highest possible standards to exceed the technology needs of all future tenants.

## ACCESSIBILITY

- Step-free access is provided to the office accommodation from the internal circulation spaces
- Accessible WC's are provided on each floor
- An accessible shower and changing room is provided at basement level adjoining the cycle storage.

## CAR & BICYCLE PARKING

- **Car parking spaces:** 29 (including 2 accessible spaces)
- **Bicycle spaces:** 200 secure spaces located at basement level

## GOODS LIFT

- There is a 2000 kg goods lift with direct external access from the service yard which travels from B2 to G.