

Specification summary

Lower ground floor level provides sheltered and secured cycle storage, plant and changing facilities for cyclists as well as associated car parking

Base-build will accommodate office floors in a predominantly open plan arrangement with services enabling a split into 3 separate tenancies

Office floors

<i>Raised floor zone (overall)</i>	150 mm clear
<i>Finished floor to suspended ceiling</i>	2800 mm
<i>Services zone (within 700mm structural zone)</i>	450 mm max depth penetrations
<i>Lighting zone</i>	100 mm

Targeting a BREEAM rating of 'Excellent' under BREEAM New Construction 2014 and an EPC rating of A

Targeting a Wired score rating of Platinum

Loading criteria

<i>Ground floor office</i>	4.00 kN/m ² + 1.00 kN/m ² for partitions
<i>Office floors – typical (upper ground to third)</i>	4.00 kN/m ² + 1.00 kN/m ² for partitions
<i>Office floors – 5% storage around cores</i>	7.50 kN/m ²

Dedicated concierge area within reception, with associated desk

Workplace Density 1 person per 8m²

Dedicated broadband connection

A Hybrid VRF Heat Recovery system shall provide space heating and comfort cooling throughout the buildings occupied spaces

Adiabatic humidification shall also be incorporated in the AHU's to control relative humidity (%RH) levels in the building.

The reception shall include speed gates to facilitate the flow of staff at peak times.

Provision shall be made for 2×21-person and 1×17-person passenger lifts within the central core, each incorporating an air purification system and touch free controls.

Fully accessible modular suspended ceiling system utilising perforated metal tiles based on a 600 x 600mm tile.

Details

1 PURPOSE

Grade 'A' office building to provide approximately 82,000 NIA sq.ft. office accommodation over 5 floors, with a ground floor reception. The lower ground floor level provides sheltered and secured cycle storage, plant and changing facilities for cyclists as well as associated car parking.

2 BUILDING DESCRIPTION

2.1. Uses

The space provides large open plan floor plates, with a central core including 3 no. passenger lifts, the central stair and washroom facilities. Two extra escape staircases are located along the south side of the floor plates.

At ground floor level there will be a double height entrance off the new civic plaza accessed from Dundas Street and a new retail unit (A1 – A5 use) at the upper ground level, facing Dundas Street. Within the lower ground floor level are back-of-house facilities for the building management, cyclists, car access to the parking and plant enclosures, including a zone for tenant plant.

The roof benefits from a green space open for events and potential for allotment style growing areas along with an array of solar panels.

2.2. Description

The base-build will accommodate office floors in a predominantly open plan arrangement with services enabling a split into 3 separate tenancies.

2.3. Design criteria

The office shall be designed in line with BCO guidelines.

Office Floors:

Raised floor zone (overall)

150 mm clear

Finished floor to suspended ceiling

2800 mm

Services zone (within 700mm structural zone)

450 mm max depth penetrations

Lighting zone

100 mm

2.4. Sub-divisibility

The core and services are designed for split letting of up to 3 tenancies per floor.

2.5. BREEAM & Sustainability

The development is targeting a BREEAM rating of 'Excellent' under BREEAM New Construction 2014 and an EPC rating of A.

2.6. WIRED Score

The development is targeting a Wired score rating of Platinum.

3 OFFICE

3.1. Sub and Superstructure

The office shall be designed in line with BCO guidelines, with enhanced imposed load allowances as detailed under 'Loading Criteria'.

The structural grids are typically circa 9m x 14m bays with the secondary beams at 3m centres.

The superstructure floor plates will typically comprise 150mm thick normal weight concrete metal deck slabs with a 51mm re-entrant profile such as Tata Steel ComFlor 51+ decking or similar. These will be supported on 700mm deep fabricated plate girder downstand beams acting compositely with the slab above. The services zone will be integral with the beam depth, with 450mm deep penetrations provided within the beam depth to accommodate horizontal distribution across the floor plates.

3.2. Loading Criteria

The floor slabs are generally designed to accommodate the imposed live loads as follows:

Lower ground floor – car park	2.50 kN/m ²
Lower ground floor – plant areas	7.50 kN/m ²
Ground floor lobby	4.00 kN/m ²
Ground floor office	4.00 kN/m ²
	+1.00 kN/m ² for partitions
Ground floor retail space	4.00 kN/m ²
Upper ground floor retail space	4.00 kN/m ²
Office floors – typical (upper ground to third)	4.00 kN/m ²
	+1.00 kN/m ² for partitions

Office floors – 5% storage around cores

7.50 kN/m²

Third floor terrace

5.00 kN/m²

Roof terrace – accessible

5.00 kN/m²

Roof terrace – maintenance and access only

1.50 kN/m²

in areas of PV cells

3.3. Wall Finishes (Summary)

Reception:

The reception area shall be finished in a combination of dry-linings, new joinery around the reception desk and new feature walls TBC. (Note – access to services above ceiling to be accessed via proprietary ceiling panels.)

Core Areas:

3 coats emulsion paint on taped and jointed plasterboard. Painted MDF or softwood skirting will be provided to core walls within office areas.

Washroom Areas:

Walls will generally be finished in a combination of full height ceramic tiles or 3 coats of emulsion paint, applied directly to taped and jointed moisture resistant plasterboard.

3.4. Floor Finishes (Summary)

Reception:

Selected in-situ / stone / porcelain or similar floor tiles will be laid in the entrance space and provide slip resistance in both wet and dry conditions (this shall be verified by an independent UKAS accredited test, and a PTV value of 40 in the wet). A recessed skirting is to be fitted into the wall build-up.

Details

An aluminium reinforced entrance mat will be fitted adjacent the main entrance doors and within revolving door. An optional timber floor may be laid within the reception space, to provide a differing finish from the main floor. The timber is to be located in one space, which is intended to be a break-out / visitor space.

Common Landlord Areas:

The raised floor will comply with latest MOB PF2 PS/SPU March 1992 medium grade standard and will include all necessary fire breaks and closure details around the perimeter and columns, and earth bonding back to the occupier's earth bar in the main electrical riser shaft.

Raised Access Floor: 600 x 600mm encapsulated floor tiles, with adjustable pedestals.

Carpet tiles to be installed within landlord areas shall be bonded to the raised access floor with a suitable tackifier to the carpet supplier recommendations.

Washrooms and Core:

Self-levelling screed with anti-slip floor tiles.

3.5. Ceiling Finishes (Summary)

Reception:

Taped and jointed plasterboard finished with 3 coats emulsion paint. Ceiling to include feature lighting incorporating recessed down-lighters. A feature finish may be applied to the entrance space, in a zone anticipated near the reception desk to align with the feature wall finish.

Washrooms and Core:

Taped and jointed plasterboard finished with 3 coats emulsion paint. Ceiling to include feature lighting

incorporating recessed down-lighters. (Note – access to services above ceiling to be accessed via proprietary ceiling panels.)

3.6. Joinery

Reception:

There will be a dedicated concierge area within reception, with associated desk. The joinery wall with integrated main reception desk shall include space for back-of-house storage.

The main reception desk shall include a heater, and controls for fire systems, access and security systems. Comm's and data shall be provided for two receptionists.

3.7. Services Risers

Landlord and Tenant Risers are provided within the office floors. The risers are fire rated with the doors and walls of the riser forming the enclosure. The riser floors are to be provided with an open galvanised mesh grating at each floor level.

3.8. Facilities Management Areas

Landlord Facilities management areas are provided at ground floor level, behind reception. Included within this area is a BMS / FM office, and a Fire Command / Security room, to be laid out to suit specific requirements. These rooms will be finished in painted plasterboard walls, plasterboard and suspended tile ceilings, and carpeting on a raised access floor.

4 SERVICES

4.1. Design and criteria for building services

External Design Conditions

Summer 25°C Dry Bulb and 20.5°C Wet bulb
Winter -10°C Saturated

Internal Design Conditions

Summer 24°C ± 2DegC*
Winter 20°C ± 2DegC
Humidity Control 50% RH ± 10%

* Occupied areas only (eg office, reception).

No comfort cooling to ancillary spaces (eg toilets)

Occupancy

Workplace Density – 1 person per 8m2

Internal Plant Loadings

(for cooling and fresh air calculations)

Lighting – 10 W/m2
Small Power – 25 W/m2
People – 90/50 W/person (sensible/latent)

Ventilation Rates

Office Areas – 12 l/s/p or 1.5l/s/m2
Toilets – 6 ach/hr
Circulation Areas – 3 ach/hr
Shower Areas – 10 ach/hr

Design Illumination Levels

Office Areas – 500 Lux & 0.60 Uniformity
Toilets/Circulation Areas – 200/300 Lux
Car Park – 10 Lux

Electrical Cat A Office Load Allowance

Lighting – 10 W/m2

Small Power – 25 W/m2
Miscellaneous – 35 W/m2

Noise Criteria

Office Areas – NR35

Toilets/Circulation Areas – NR40

4.2. Utilities

Electrical

A new SPEN substation shall be provided for the office building. The utility provider shall then provide a separate metered supply for each demise (maximum 3 per floor) located in a dedicated switch room and a dedicated cubicle isolator owned by the landlord for landlord demise. The Retail Unit within the building shall be provided with a dedicated metered supply from SPEN. A new switchboard shall be provided within the basement switch room to serve the common office areas. Base level power factor correction that shall match the building services requirements.

Telecommunications

Multiple telecoms providers are within the area and shall be brought into the site to support the office. A dedicated room will be provided for incoming comms that shall then distribute to basement level risers. Containment (cable basket) for tenant IT cabling installations will be provided within main risers. A Landlord Information Communication Technology (ICT) system is proposed based on a Cat6A network cabling topology. This installation will provide data points for the Internet Protocol (IP) CCTV cameras in addition to data points for the main reception desk and a data point for a WIFI hub in the main reception. The landlord managing agent shall provide a dedicated broadband connection to allow communication.

Details

Water Services

A new incoming mains water connection shall be provided from the local water authority network, sized to cater for the demands of the office.

Drainage

Drainage will be designed to meet Scottish Water SFS 4 and CEC drainage guidelines.

Gas

A new connection to the utility providers network shall supply metered gas via an appropriately sized governor within the site boundary to the lower ground floor plantroom to serve the landlords heat generation plant.

4.3. M&E Installations

Space Heating & Cooling

A Hybrid VRF Heat Recovery system shall provide space heating and comfort cooling throughout the buildings occupied spaces. The hybrid system will circulate water (not refrigerant) to void mounted ducted fan coil units to provide temperature control. Central plant shall be located at lower ground floor.

Ventilation Systems

Mechanical ventilation shall be provided throughout the building from combined supply and extract Air Handling Units (AHU) located at lower ground floor. Air shall be drawn from intakes at roof level to serve the full fresh air AHU's. The AHU's will provide additional filtration and heating/cooling to temper the fresh air supply. Adiabatic humidification shall also be incorporated in the AHU's to control relative humidity (%RH) levels in the building. Heat shall be recovered and transferred from extracted air to incoming fresh air via thermal wheel with a purge section to minimise air transfer/

leakage. Ancillary spaces such as washrooms, showers and circulation shall also be served from a dedicated AHU providing mechanical extract and fresh air supply.

Fire and Protection Services

Shared automatic fire suppression sprinkler, vehicle fume and smoke clearance ventilation systems shall be provided as part of the overall development, to serve the area of lower ground floor car park that falls within the office building's demise. New and or existing fire hydrants shall be provided or maintained to cover and protect each face of the building to ensure compliance with current regulations.

A dry riser installation shall be provided within each escape stair to provide protection to all levels.

The installation shall comprise a multi-loop analogue addressable panel complete with an independent standby battery source. All zones shall be visually indicated on the panel at the Main Entrance. The building shall be provided with a dedicated fire alarm panel at the front reception and a repeater panel at the rear at the entrance / exit to the Green.

Automatic Controls (BEMS)

An automatic control system shall be provided to control all mechanical plant serving the office as well as providing energy monitoring facilities to all meters etc.

Communication Risers

Individual risers shall be providing for each tenant suite from basement to 3rd floor, assuming up to 2 tenants on ground floor or first floor, and up to 3 tenants on any of the upper floors.

Lightning Protection

The structure of the building shall be assessed under

BS EN 62305 during the detailed design stage to determine the level of protection required from direct or indirect lightning strikes with appropriate allowance made based on the outcome of the assessment.

Security

A comprehensive alarm detection system shall be provided in all vulnerable areas and shall include door monitoring contacts with multi-function passive infra-red (PIR) corridor and trap detection to form a perimeter protection system to the new building. The building shall have a PC based head end to manage the site door access requirements. This shall be linked to the car park barriers and any area for controlled access. Dedicated CCTV shall also be provided as part of the site security review.

The reception shall include speed gates to facilitate the flow of staff at peak times.

Lift Installation

Provision shall be made for 3no. 21-person passenger lifts within the central core. Each lift car shall incorporate an air purification system and touch free controls.

Tenant Plant Space

A future tenant plant area has been allocated at lower ground floor level with direct communication to internal risers and external air, providing flexibility to accommodate a wide variety power, IT and cooling plant resilience options for single or multiple tenants. A secure tenant plant area has also been allocated at roof level for communication installations if required. There is also plant area identified for tenant generator if deemed a requirement.

5 EQUIPMENT

5.1 Refuse and recycling facilities

A refuse collection and storage area is provided as part of a dedicated landlord's demise area within the lower ground floor / car park area. The strategy will be to move waste from each floor and collect in this refuse area. Collection is to be managed from the street on Eyre Terrace.

6 EXTERNAL WORKS

6.1 Paving and lighting

Within the site boundary new, contemporary reconstituted stone paving is to be used. Terraced metal planters containing seasonal planting mixes are included within the public realm. Lighting and seating are also to be included. A new accessible route is to be formed from Dundas Street and also through into the adjacent park.

6.2 Façade

The façades are a combination of framed Natural and Precast Stone with deep reveals containing full height double-glazed window units and / or curtain walling areas.

Cat A fit-out

1. OFFICE FINISHES

1.1. Floor boxes and carpets

Allowances for floor boxes and carpets will be provided subject to specific leasing negotiations.

2. OFFICE SERVICES

2.1. Lighting, Small Power & Fire Detection

Provision of primary lighting will comprise suspended and/or recessed modular LED luminaires and an intelligent lighting control system. Provision of emergency lighting shall be made for all areas and shall be provided together with directional over door illuminated signage.

Each tenant demise shall be provided with the following:

- General lighting and power Distribution Boards
 - Main containment runs to support LV/ELV cabling.
 - Fire detection and alarms with each tenant demise.
 - Conduit drops for access control at entry points
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2.2. Ventilation, Heating & Cooling

The Hybrid VRF system shall provide heating and cooling to the office floor plates via concealed ceiling void mounted fan coil units delivering conditioned air via ducted ceiling mounted swirl diffusers. The units shall be selected and arranged in accordance with BCO zoning recommendations. Mechanical extract and treated fresh air from the centralised AHU's shall ventilate the offices via the

fan coil units, ceiling mounted grilles and/or bell mouths terminated in the ceiling void.

2.3. Electrical Supply

The office shall have a power supply of approx. 540kVA for the office floors above podium and basement area below that forms part of the demise. This value shall be reviewed in stage 3 once the building services strategy has developed further.

2.4. Additional Tenant Facilities

A domestic water services and drainage connection strategy shall be provided to support incoming tenants fit-out requirements. Tenant plant areas and communication risers for IT, power, cooling, and communication equipment has been considered.

2.5. Wall finishes

3 coats emulsion paint on taped and jointed plasterboard to perimeter walls and core walls.

2.6. Floor finishes

The raised floor will comply with latest MOB PF2 PS/SPU March 1992 medium grade standard and will include all necessary fire breaks and closure details around the perimeter and columns, and earth bonding back to the occupier's earth bar in the main electrical riser shaft.

2.7. Ceiling finishes

Fully accessible modular suspended ceiling system

utilising perforated metal tiles based on a 600 x 600mm tile. Acoustic pads will be provided to the back of the ceiling system for damping to achieve the specified acoustic performance. All ceilings to be laser levelled. Sealed cavity fire barriers provided where necessary. Perimeter linear diffusers or grilles will allow air distribution adjacent to the windows, located within a continuous plasterboard margin or within the ceiling tiles. Shadow gap edge trims are to be installed to the perimeter of all areas.

Access panels in plasterboard ceiling shall be discrete and painted to match the surrounding ceiling.