

# Tech Pack



Element Reference	Base Build Specification														
<b>1.0 Introduction</b>	<b>Base Build Specification</b>														
1.1 Building Description	<p>Angel Square has been designed as a contemporary building that will positively contribute to the surrounding area. The site offers generous, flexible office accommodation in a prime location as the gateway to Angel, Islington.</p> <p>It offers amenities such as planted terraces, a wide aspect office lobby and café and cycle facilities, providing a highly desirable and future-proofed building. The project is also built around a reused and retained existing structural frame, allowing it to achieve the highest environmental credentials.</p>														
1.2. Building Uses	<p>The building is an office-led development, with the floors used as follows:</p> <table><thead><tr><th>Floor</th><th>Usage</th></tr></thead><tbody><tr><td>Roof</td><td>Biodiverse Green Roof, Accessible Viewing Terrace, Photovoltaics</td></tr><tr><td>Floor 06</td><td>Office, Terrace, Open-Top Building Plant</td></tr><tr><td>Floors 01 – 05</td><td>Office &amp; Loggia Balconies</td></tr><tr><td>Upper Ground</td><td>Main Reception Lobby (including café bar and future retail concession), Office, Affordable Workspace Entry, Affordable Workspace + Public House Cycle Store</td></tr><tr><td>Lower Ground</td><td>Affordable Workspace, Public House, Cycle Store, Showers &amp; Changing Facilities</td></tr><tr><td>Basement</td><td>Building Plant, Loading Bay, Waste Store, Public House Cellar, Back-of-House &amp; Landlord Facilities</td></tr></tbody></table>	Floor	Usage	Roof	Biodiverse Green Roof, Accessible Viewing Terrace, Photovoltaics	Floor 06	Office, Terrace, Open-Top Building Plant	Floors 01 – 05	Office & Loggia Balconies	Upper Ground	Main Reception Lobby (including café bar and future retail concession), Office, Affordable Workspace Entry, Affordable Workspace + Public House Cycle Store	Lower Ground	Affordable Workspace, Public House, Cycle Store, Showers & Changing Facilities	Basement	Building Plant, Loading Bay, Waste Store, Public House Cellar, Back-of-House & Landlord Facilities
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1.3. Number of Floors	The building consists of eight full floors and a below-ground basement.														

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	Floor	Floor to Underside Soffit Heights
1.5. Floor-to-Underside Soffit Heights	Floor 06	Approx. 3.210
	Floor 05	Approx. 3.270m
	Floors 01 - 04	Approx. 3.235m
	Upper Ground Office	Approx. 3.235m
	Upper Ground Lobby	Approx. 4.3m
	Upper Ground Café	Approx. 5.4m
	Lower Ground Cycle Store / Showers	Approx. 2.4 - 2.6 / 3.5m
	Basement	Approx. 3.28m / 5.42m
	Floor	Floor-to-Underside Services (minimum)
1.6. Floor-to-Underside Services (minimum)	Floor 06	Generally 2.85m
	Floor 05	Generally 2.85m
	Floors 01 - 04	Generally 2.85m
	Upper Ground Office	Generally 2.85m
	Upper Ground Lobby	Generally 4.6m
	Upper Ground Café	Approx. 5.4m
	Lower Ground Cycle Store / Showers	Generally 2.1m - 2.4m with local areas lower
	Basement	Generally 2.2m with local areas lower

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### 1.7. Floor Voids

- The raised access floor zone is nominally 150mm.

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### 1.8. Grid

- Generally, the building has a 6x6m (width by depth) grid internally (adjacent to core) and 6x.7.5m (width by depth) grid externally (adjacent to façade).

Element Reference	Base Build Specification
<b>2.0 Building Criteria</b>	

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### 2.1. Floor Loadings

Office:

- Finishes 0.85 kPa
- Live load 2.5 kPa + 1.0 kPa partitions

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### 2.2.1 External Noise Intrusion – Office Areas

Room	Noise Rating $L_{eq}$ (NR)	Maximum noise levels, LA1 (dB)
Cellular offices	NR 35	50 dB
Open plan offices	NR 40	55 dB

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### 2.3. Fire Strategy Criteria

#### Means of Escape

Evacuation will be phased two floors at a time. Category L1 Detection and alarm system is installed throughout the building, including the roof and terraces. Protected routes of escape are provided from all areas to an external area of safety. Evacuation lifts have also been included to allow for the evacuation of mobility-impaired people, and level escape is available via Torrens Street.

#### Fire and rescue service access

The design of the building allows for protected access to all areas of the building for the fire and rescue service from the primary access point on Torrens Street, and secondary protected access via Islington High Street. Within the building are two firefighting shafts with firefighting lifts and dry risers, and a fire control centre is accessible on the lower ground floor via Torrens Street.

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### 2.4. Occupational Density

The building is designed to an occupancy of 1:8 sq m.

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2.5. Sustainability Criteria	<ul style="list-style-type: none"><li>• BREEAM UK New Construction 'Outstanding' (targeted)</li><li>• Wired Score 'Platinum' (as minimum)</li><li>• WELL Core 'Platinum' (as minimum)</li><li>• NABERS '5*' (as minimum)</li><li>• Embodied Carbon (A1-A5): 475kg CO<sub>2</sub>e/m<sup>2</sup> GIA</li></ul>
2.6. WC Provision Criteria	<ul style="list-style-type: none"><li>• WC numbers have been calculated based upon an occupancy density of 8 square metres per person at 100% occupancy, with a 50/50 male/female split as required by BS 6465 – 1:2006:2009. Each gender specific WC also includes one ambulant cubicle.</li><li>• Separate 'Male' and 'Female' cubicles, as well as two gender neutral fully accessible toilets, are provided at each office floor.</li><li>• Additional WCs and WHBs are also be provided in both the male and female cycle changing areas to supplement the shower facilities.</li><li>• A fully accessible WC are provided adjacent to the office entry lobby for use by staff and waiting visitors.</li><li>• WC facilities are provided in the building's basement for use by building maintenance staff</li></ul>
2.7.1. Lift Provision – Passenger Lifts	3 no. lifts are dedicated passenger only lifts, with a duty load of 1600kg/21 persons. The lifts are machine room less (MRL) in design and have a speed of 1.6m/s. These lifts serve levels from LG to Level 06.
2.7.2. Lift Provision – Firefighting Lifts	<p>1 no. lift is a dual passenger/firefighting lift, with a duty load of 1600kg/21 persons, and be MRL with a speed of 1.6m/s. This lift is a dual entry and serves levels from Basement to Level 06.</p> <p>An additional firefighting lift is provided in the Goods Lift (see 2.10).</p>
2.7.3. Lift Provision – Evacuation Lifts	2 no. lift are dual passenger/evacuation lift, with a duty load of 1600kg/21 persons, and be MRL with a speed of 1.6m/s. One of these lifts serves from Basement to Level 06 with the other serving levels from LG to Level 06.

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2.7.4. Lift Provision – Goods Lifts	In addition to the main passenger lift bank, a dual goods/firefighting lift with a duty load of 2500kg is provided. This lift is machine room less (MRL) in design and have a speed of 1.6m/s. This lift is dual entry and serves levels from Basement to Level 06.
2.8. Floorplate Divisibility	All office floors (Levels 01-Level 06) have the potential to be divided into three separate tenancies. The location of these tenancy splits are defined by the means of escape, riser allocation and the position of acoustically enhanced façade mullions.  At Upper Ground floor, an additional single tenancy is provided.
2.9. Tenant Plant Areas	Capacity for tenants to install additional condensers.
2.10. Car Parking	There are no car-parking facilities within the building. An accessible drop off space is located on Torrens Street.
2.11. Cycle Parking	A dedicated cycle store for office users with a capacity of 356 spaces.  30 no. spaces are provided by Folding Cycle Lockers  2 no. Electrical Cycle Spaces are also provided
2.12. Shower Facilities	Dedicated male and female changing rooms are provided, in addition to a series of gender-neutral shower and changing pods.  12 no. shower cubicles  348 no. lockers (total over whole development)  The gender-neutral facility provides 6 private shower cubicles with changing spaces, and a separate superloo WC.  An Accessible Shower Room, designed to meet Part-M is provided, with associated WC facility.

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<b>3.0 Building Structure</b>	
3.1. Foundations	The building's foundations are composed of a underreamed piles with RC caps and slab.
3.2. Substructure	The basement is composed of RC core walls and RC columns. The retaining walls are contiguous pile walls.
3.3. Superstructure	The existing superstructure are composed of RC columns, RC core walls and ribbed RC slabs typically. Existing retained structure - RC framed building.
<b>4.0 External Envelope</b>	
4.1. Description – Office	The typical office cladding is a double-glazed, thermally broken unitised curtain wall system with polyester-powder coated (PPC) aluminum framing to the inner and outer face. This is set behind a glass fibre-reinforced concrete (GRC) frame which provides architectural depth and articulation to the building's façade.
	The office windows are double glazed sealed units, with an appropriate air gap and a glazing specification designed to maximise optical clarity within the performance requirements and the extent of glazing. High performance clear solar coatings are incorporated to meet the building performance targets and those of Approved Document L2 of the Building Regulations.
	The cladding module is generally 3m wide with glazing generally informed by the 1.5m typical office planning grid to allow flexibility in internal layouts.
	Internally, coordinated positions blind boxes have been identified. Blind boxes and roller blinds are to be installed by tenants to and agreed building standards.
4.4. Roofing Systems – Loggias	The loggia balconies at levels 01-05 are accessible to office tenants, with a natural stone paving supported on adjustable pedestals to provide a level finish that allows rainwater to drain away below the finishes.
4.5. Roofing Systems – 06 Terrace	The roof terrace at level 06 is accessible to building users, with hard and soft finishes zones, incorporating planting and urban greening.

Element Reference	Base Build Specification
<b>5.0 Internal Areas</b>	
5.1. Main Lobby / Reception	<p>The main reception of the building is accessed via Islington High Street. Access is provided via two sliding door drums.</p> <p>There is a level change of 1.5m between the main lobby and the café level, connected by stairs and an accessible platform lift. The lobby's cafe area also has a secondary doorset for external access, along with an accessible WC and baby-change facilities.</p> <p>The main lobby/reception space have high quality finishes, including :</p> <ul style="list-style-type: none"><li>• Walls : Natural Clay Plaster – White Colour – Polished</li><li>• Flooring : Polished terrazzo with stained oak timber to café area.</li><li>• Ceiling : Natural Clay Plaster – White Colour – Polished</li><li>• Lighting : Integrate Downlights, Pendants and Wall Lights</li></ul> <p>A bespoke reception desk is provided, with small power, data and telecommunications provision, as well as security functions.</p> <p>Security turnstiles, linked to the destination control system is provided. Badge credentials for visitors shall be managed by the main lobby reception design.</p> <p>Designated seating areas, and other zones for art exhibits are provided within the main lobby.</p> <p>Building signage is provided.</p>
5.2. Cycle Entry Lobby	<p>The cycle entry lobby of the building is accessed via Torrens Street.</p> <p>Access to the building's cycle store is provided via this entry lobby, and through sliding door set on Torrens Street with access control provision.</p>

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5.3. Office Areas	<p>Office areas are accessed via a shared core, with three entry/egress points to each floor.</p> <p>The office areas have an insitu concrete slab (existing or new), that is treated with a dust inhibitor and shall have a 600mm x 600mm fully accessible, fully encapsulated medium-grade raised access floor.</p> <p>The internal (core) walls of the office areas are of plasterboard finish with matt-emulsion paint finish (white).</p> <p>Structural columns within the floorplate are left in an exposed condition.</p> <p>The soffit of the office areas is left in an exposed condition, with the existing ribbed concrete soffit and new reinforced concrete left exposed.</p>
5.4. Stairs	<p>The building is served by two primary circulation/fire access stairs.</p> <p>The building is served by 6 no. passenger lifts.</p> <p>The Lift Lobby have high quality finishes, including :</p> <ul style="list-style-type: none"><li>• Walls : Stained Oak Wall Cladding</li><li>• Flooring : Polished terrazzo</li><li>• Ceiling : Painted plasterboard</li><li>• Lighting : High level linear LED and wall-mounted sconces</li><li>• Architraves and Lift Doors : Bronze coloured PPC stainless steel</li></ul>

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5.6. Lift Cars	<p>Passenger lift cars, as described in section 2.7 have bespoke finishes, with Firefighting / Evacuation lifts fitted out to the same standard as passenger lift cars and to meet the requirements of BS 476 and any other standards.</p> <p>Passenger lifts have high quality finishes, including:</p> <ul style="list-style-type: none"><li>• Walls : Profiled oak cladding with bronze kick-plate and mirror to rear wall.</li><li>• Flooring : Porcelain tile</li><li>• Ceiling : Suspended ceiling - white</li><li>• Lighting : High-level perimeter lighting with integrated spotlights</li><li>• Architraves and Lift Doors : Bronze coloured PPC stainless steel</li><li>• Handrail : Bronze coloured PPC stainless steel</li><li>• Control Panel : Bronze coloured PPC stainless steel</li></ul>
5.7. Toilets	<p>Separate male/female WC areas are provided, each accessed via a separate privacy lobby and based upon a cubicle-system with central 'island' sink bank with basins, taps and mirrors. Each WC bank provides 1 no. ambulant disabled cubicle with an outward opening door and stainless steel grab rails.</p> <p>WC areas have high quality finishes, including :</p> <ul style="list-style-type: none"><li>• Walls : Limewash paint</li><li>• Flooring : Porcelain tile</li><li>• Ceiling : Painted Plasterboard</li><li>• Cubicles : Timber veneer, with black-bronze ironmongery</li><li>• Vanity : Fluted oak with seamless Corian basin</li><li>• Lighting : High level linear LEDs and wall-mounted sconces</li><li>• Fixtures and Fittings : Dark grey / gunmetal</li></ul> <p>Each office floor has two no. accessible WC rooms,</p>

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5.8. Cycle Store	<p>The building's primary cycle store is located at lower ground level and accessed at grade from the cycle lobby. The Cycle Store has robust, high quality finishes, including :</p> <ul style="list-style-type: none"><li>• Walls : Microcement finish – white</li><li>• Flooring : Coloured resin flooring</li><li>• Ceiling : Exposed Services with areas of painted plasterboard ceiling</li><li>• Lighting : High level linear LEDs</li><li>• Fixtures and Fittings : Galvanised steel cycle stands</li></ul>
5.9. Showers / Changing Facilities	<p>The building's shower and cycle facilities are located at lower ground level, directly adjacent to the cycle store. Separate male, female and gender neutral facilities are provided, as are separate accessible shower/WC room. The Shower and Changing facilities have robust, high quality finishes, including :</p> <ul style="list-style-type: none"><li>• Walls : Limewash paint and porcelain tiles</li><li>• Flooring : Porcelain tile</li><li>• Ceiling : Painted Plasterboard</li><li>• Lighting : High level linear LEDs and wall-mounted sconces</li><li>• Fixtures and Fittings : Dark grey / gunmetal</li><li>• Ventilated lockers and changing benches are provided to each changing room. An additional drying room of wire cage lockers is also provided.</li></ul>
5.10. Terraces & Loggia	<p>Levels 01-05 each have a loggia balcony, directly accessible from the floorplates. Level 07 has an accessible terrace, accessed via a 'pop-up' stair and accessible lift. This level shall also have biodiverse green roof and an area of photovoltaics.</p>

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<b>6.0 Building Operations</b>	
6.6. Back of House Areas	Exposed soffits, with coordinated high-level services.
6.7. Mail Room	The Mail Room is located at Basement level, directly adjacent to the building's loading bay.
6.8. Waste Store	The shared Waste Room is located at Basement level, accessible via a shared circulation corridor. The waste store provides waste and recycling facilities for the building's users.
6.9. Loading Bay	<p>The shared Loading Bay is located at Basement level, with access via a secure loading bay door from Torrens Street. Ramp access is provided from Torrens Street to the Loading Bay level.</p> <p>3 designated vehicle parking bays, with associated unloading zones and a staging zone.</p>
6.11. Façade Cleaning & Maintenance	To clean and maintain the building's façade, abseiling-based cleaning services will be carried out by a specialist abseiling contractor.
<b>7.0 Landlord Finishes</b>	
7.1. Slab	Generally, the slab is exposed concrete – whether 'existing' or 'new'.
7.2. Soffit	Generally, the soffit is exposed concrete – whether 'existing' or 'new'. Where existing, this soffit has a ribbed profile.
7.3. Walls	Generally, walls are exposed concrete, painted blockwork or plasterboard – depending on location. Where walls are plasterboard, a painted timber skirt shall is provided.
7.4. Doors & Ironmongery	Generally, doors are either painted timber or metal with satin stainless steel ironmongery. Fire rating, acoustic rating and security/locking requirements are the relevant specialist's requirements.
7.5. Metalwork	Generally, any architectural metal work is painted.

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<b>8.0 Building Services</b>	
8.1.1. Plant Resilience	<p>Single 2.1 MVA Supply from UKPN</p> <p>In the event of a mains power failure, standby diesel power backup will feed the life safety equipment of the building or 50% of tenant lighting and small power for 7hrs through load shedding if required. Additional space is available to increase oil storage if required.</p>
8.1.2. Electrical Services	<p>Small Power - On floor 25 W/m<sup>2</sup></p> <p>Lighting 6 W/m<sup>2</sup> (including Cat B allowance and assuming daylight diming PIR)</p>
8.1.4. Tenant Services Provision	Every tenant space is serviced by a 4-pipe fan coil unit system, along with an AHU with provisions for de-humidification.
8.2.1. Electrical	New 2.1MVA UKPN Power Supply are provided to the site.
8.2.2. Telecommunications	Two Intake rooms are provided at the basement level to enable diverse routes to the tenant floors from telecoms companies.
8.3. Drainage and Plumbing	<p>A siphonic rainwater drainage system is provided. This discharges into a pumped attenuation tank and provides make-up for the reclaimed water system.</p> <p>A greywater recycling system from the showers also serves the reclaimed water tanks.</p> <p>The reclaimed water system is used to flush WCs throughout the building.</p>
8.4. Heating Systems	<p>Air Source Heat Pumps (ASHP) serve the low temperature hot water system which provide heating and domestic water (through additional water-eater heat pump) to the building. The ASHP is at roof level with pumps, thermal storage and ancillary equipment at basement level.</p> <p>Winter Set Point in Office Areas is 20°C with a control band of +/- 2°C. Set Point in Office Areas is 24°C with a control band of +/- 2°C.</p>
8.5. Thermal Insulation	Thermal Insulation is provided throughout the building to reduce heat loss and gain to the pipework and ductwork systems.

<b>Element Reference</b>	<b>Base Build Specification</b>
8.6.1. On-floor Ventilation	On-Floor Ventilation On-Floor Air Handling Units with Thermal Wheel Heat Recovery is provided to each tenancy.
8.6.2. Basement Ventilation	The basement and lower ground floor areas are provided with ventilation systems with thermal wheel heat recovery.
8.7. Comfort Cooling Systems	Air Source Heat Pumps (ASHP) serve the chilled water system which provide cooling to the building. The ASHP is at roof level with pumps, thermal storage and ancillary equipment at basement level.
8.8.1. Sprinkler and Dry Riser	An OHIII Sprinkler System is provided in addition to a BS 9999 Dry Riser System.
8.8.2. Fire Alarm System	An L2 Fire Alarm System and a Voice Alarm System is installed to Landlord and Cat-A areas.
8.9. Automatic Control	A Building Management System is installed to control equipment, meter energy and provide fault finding and efficiencies the building services.
8.11. Telecommunications & Network Provisions	Cableways are provided for intake rooms to tenancy floors for use by tenants. Dedicated comms risers are available to each tenancy area.