

General Building Requirements

- Category A specification, to comply with the British Council for Offices "Guide to Specification 2019" except where otherwise agreed.
- 10 car parking spaces and 2 motorcycle spaces to be located in the car park. 2 EV charging points to be provided.
- The total provision is 150 bicycle spaces. 26 bicycle spaces are to be located within The Antares Building and 78 within Vega or otherwise in accordance with BCC bicycle parking standards: 1 per 50sqm gross internal area. A further 46 spaces are available in the external area to the rear of Vega and Capella.
- 8 shower rooms plus one accessible shower room and a drying room.
- The Design Occupancy of The Antares Building is 400 people (1 per 7.5sqm NIA).
- The Antares Building will be independent from the remainder of the Redcliffe Wharf development in terms of incoming services, district heating connection, plant and distribution services, entrances, cores (lifts, staircases and sanitary provision) and designated car parking.
- EPC 'A' rating to be achieved upon completion of Cat A works.
- Preference shall be given to recycled materials and materials from sustainable sources wherever practicable.
- External and internal doors onto common areas are to be ducted to allow future installation (CAT B) of full internal proximity access control system.
- Raised floor to net internal office areas overall height 200mm (150mm nominal void). Clear height of office areas to underside of exposed concrete slabs to be 3225mm and a minimum of 2700mm to underside of services.
- The Antares Building is to be capable of physical sub-division on a floor-by-floor basis to allow two occupancies at Levels 0, 1 and 2; and one at Levels 3 and 4.
- Capped services to be provided to support tea making facilities to each office occupancy area.
- Air tightness to achieve 3 ACH @ 50 Pa.
- Space provision at Level 5 roof plant compound for tenant plant allocated to each office suite.
- Office areas, services and fenestration designed to accommodate a 1.5m planning module.
- The Antares Building is to achieve a minimum BREEAM 'Excellent' rating.
- The Antares Building is to target achieving a minimum Well 'Gold' rating.

Mechanical & Electrical Building Services System Requirements

Electrical: PV array, roof-mounted, extent to be in accordance with the approved plans submitted with planning application 18/06659 F. CAT A works to allow for on floor distribution small power capacity 25 W/ m2 and busbars in Landlord risers. Other busbars to form part of Cat B works.

Extensive metering system and methodology in line with CIBSE TM39.

Electrical Substation within the building operated by Western Power Distribution.

Lifts (minimum 2 No.): Waiting time – up peak < 25 secs.

Handling capacity – up peak 12% (85/10/5).

Average waiting time – two way < 30 secs.

Handling capacity – two way 13% (45/45/10).

Lighting: Average maintained illumination, office 350 lux.

Other areas CIBSE & British Standards. LED luminaires throughout.

Lighting energy use less than 8 kWhr/m2/annum, based on 60 hours per week occupancy.

Wireless and addressable lighting management system including daylight dimming.

Mechanical: District Heating Plantroom within the building operated by Bristol City Council.

Comfort cooling + heating: The system to operative temperatures (plus or minus 2 degrees) based upon an occupancy density of 1 person per 7.5 sqm and a fresh air supply provision of 12 litres per second per person at 1 person per 7.5sqm, as follows:

- Internal design criteria, summer (where cooled) 24oC, +/- 2oC.
- Internal design criteria, winter 21oC (WC's: 18oC; Changing Rooms: 23oC), +/- 2oC.

External design criteria, summer 31.1oC db, 19.6oC wb.

External design criteria, winter -0.6oC db, 100% sat.

Mechanical ventilation system with ceiling-mounted 4 pipe fan coil units, not to exceed 25°C for more than 5% of the occupied hours and not to exceed 28 o C for more than 1% of the occupied hours.

Toilet ventilation extract rate to be a minimum of 10 ach.

Maximum background noise levels due to engineering services, measured at desk level (800mm above ffl) throughout NR 40.

Integrated BMS, operating over a Common Network System.

Perimeter heating.

Provision of heating and chilled water infrastructure to facilitate addition of local heating/cooling to serve meeting rooms, etc.

Individual local temperature control. Control zones max 20m².

Public Health: Low water usage fittings. Low water use flushing for urinals and WCs. Sprinkler system and tank.

Structure

Foundations: Piled foundations to structural engineer's specification.

Internal load bearing walls: Concrete shear walls 250 mm thick which is located around vertical circulation cores on each level.

Retaining Walls: Concrete retaining walls, tanked externally.

Frame: New reinforced concrete slab at Level 0.

In-situ concrete frame including generally 250mm thick post-tensioned flat slabs on a 9m x 9m grid.

Circular fair faced concrete columns where exposed externally.

Steel frame to pitched roofs and to North facing staircase enclosures.

Stair: In-situ concrete stairs and landings to SE fire escape staircase (circulation stairs between ground and second floor).

Precast stair and landings to North facing staircases.

Short in-situ stairs for access to the car parking and the main office from car parking.

Envelope Completion

External walls: Existing random rubble stone/brick walls to be removed and rebuilt. Reuse and replacement of the existing stone where necessary and match the existing mixed stone grade of Redcliffe Way perimeter wall. Insulated Pennant stone to medium density blockwork walls with integral ventilation cavity supported from calcium silicate board fixed to SFS stud framework spanning between concrete slabs with mineral wool insulation between SFS studs along Quaker Garden elevation. Breather membrane and rigid insulation on top of CP board to be included. Pennant stone coping.

Concrete cladding panels with mineral wool insulation supported by concrete slab (Level 00).

Pitched roof block: Horizontal timber (Larch or similar) rainscreen cladding (200 mm x 750 mm overall boards) fire treated to Euro Class B as minimum, with treated softwood battens supported from cement particle board fixed to SFS stud framework spanning between concrete slabs with mineral wool insulation between SFS studs or concrete shear wall. Horizontal rain screen cladding fire breaks to all floors. Breather membrane and rigid insulation on top of CP board to be included. Stainless steel bolt fixings. PPC aluminium channels and flashings to match window system. Insulated soffits to be clad in same hardwood panels on steel framing system to match external wall finish.

Flat roofed annexes: Aurubis Pre-oxidised copper sheet cladding (Nordic Brown) with horizontal standing seams on exterior grade plywood substrate with treated softwood battens forming ventilated cavity on proprietary aluminium cladding rail system supported from cement particle board fixed to SFS stud framework spanning between concrete slabs with mineral wool insulation between SFS studs. Breather membrane and rigid insulation on top of CP board to be included. Cladding to extend to form balustrade at roof plant levels. All flashings, soffits, sills, channels to collect rainwater run-off, to be colour coated aluminium Nordic Brown colour and finish.

Internal face of parapets: Insulated render to be coated to match copper cladding system.

North facing stair enclosures: Curtain walling with low profile cap systems, flush glazing system to staircase enclosures fixed to steel support structure spanning between half- landings/ landings. Polyester powder coated aluminium channels at each floor level.

Polyester powder coated aluminium panel with thermal insulation between base of copper/ timber clad walls and top of stone wall coping to SE elevation and to top of stair towers.

Roof

Level 01 roof: Single ply membrane roof over tapered insulation board on steel profile deck supported by a steel roof structure with copper flashing or stone coping in the perimeter.

Insulated flat roof above the staircases and plant room: Single ply membrane roof over tapered insulation board on steel profile deck supported by a steel roof structure with VW Zinc Pigmento Green roof flashing as a copping.

Uninsulated Pitched roof enclosure above external plant area: VW Zinc Pigmento Green roof sheeting with standing seams over external quality

plywood on steel profiled deck. Roof build-up supported by a steel roof structure and purlins.

PV array to SW facing roof pitches with support framework.

Floor to roof plant areas: Alumasc Hydrotech structural waterproofing system on structural slab with thermal insulation. Open jointed precast concrete pavers on proprietary plastic spacers on insulation. Drainage channel to perimeter.

Level 3 and Level 5 terrace: Alumasc Hydrotech structural waterproofing system on structural slab with thermal insulation. Open jointed precast concrete pavers with natural stone aggregate on proprietary plastic spacers on insulation. Structural slab to be designed to allow for landscaped terrace to tenant fit-out.

Gulley outlets to flat roof areas with integral leaf/ gravel guards. Galvanised steel sliding access ladder on horizontal rail to allow cleaning/ maintenance of PV array.

Concealed internal rainwater pipes with welded joints (cast iron to basement car parking levels).

Structural glass balustrade to Level 3 terrace facing Floating Harbour in lieu of solid wall upstand, above the lower terrace.

Curtain wall systems/ Windows & external glazed doors: Thermally broken and fully drained proprietary anodised aluminium framed clear double glazed sealed window and door systems. External glazed sliding doors to terraces as part of curtain walling system. All windows set within timber clad walls to have polyester powder coated metal trim to full depth of window reveals. Main entrance to have double glazed flush structural glass assembly fixed back to secondary steel structure/ Level 2 structural slab. Fully glazed revolving door and 2no automatic opening pass doors for disabled access. Entrance glazing to incorporate anodised aluminium louvres to provide solar shading.

Other external doors: Access doors to roof plant areas to be polyester powder coated aluminium faced solid doors. Pre-oxidised copper cladding to solid core steel doors to match adjacent copper cladding.

Louvres: Painted galvanised steel ventilation grilles providing natural ventilation to car park. Colour to match copper cladding system. Polyester power coated galvanised steel louvred sliding gate.

Louvres within copper cladding to be formed from stainless steel support strips and finished in pre-oxidised copper sheeting.

Sundries: Polyester powder coated aluminium proprietary sun louvres. Brushed stainless steel handrail and clear frameless toughened structural glass balustrade to Level 2 terrace above entrance lobby. Motorised proprietary roof access hatch for stair access from Level 4 offices to Level 5 roof terrace. Statutory signage.

Internal Completion: Office

Internal Walls: Independent plasterboard stud partition with skim plaster finish coat. Concrete/ concrete blockwork walls to be plasterboard dry lined with skim plaster finish coat. Plasterboard lining to external walls fixed to independent SFS studs.

Ceilings: Exposed soffits to underside of structural slabs to open plan office areas. Suspended proprietary plasterboard ceiling system to circulation/ wc & shower areas.

Floor finishes: PSA/ MOB medium grade fully accessible and encapsulated raised floor on pedestals to all office areas on upper floors and to areas either side of entrance/reception area on ground floor.

Floor finishes to circulation areas: ceramic stone-effect tile to entrance/reception area and ground floor lift lobby. A rated, heavy duty grade twist pile carpet tiles to upper floor lift lobbies. Ceramic tiles (Royal Mosa, Terra Tones) to office WCs, resin floor finish (Peran STB) to showers and drying rooms over raised, insulated concrete screed.

Wall finishes: Low odour water based paint finish.

Ceramic tiles for wc & shower area finishes:

- Royal Mosa Change (300 x 600 format) to shower rooms.
- Royal Mosa Change (150 x 300 format) to WC rooms.

Internal doors, Windows and Joinery: Fenix (or Valchromat) Grigio Efeso laminated doors/ doorsets.

Softwood painted skirtings, architraves and window boards.

Internal glazed fire rated screens and doors to north side escape stairs, Levels 1-4.

Internal glazed screens to Level 0 office suites facing Reception Area/Lift Lobby.

Ironmongery: D-line, PVD charcoal finish throughout. PVD charcoal finish kick plates and vision panels.

WCs and Shower rooms, Sanitaryware – Level 0: Lockers and Drying Room fit out not included.

Laminated and IPS ducted wall system, full height, integrated to conceal all plumbing to WC cubicles. Chrome plated Monobloc mixer taps and pop-up waste fittings to basins. Floor resin system within shower areas laid to fall, to shower gullies. Clear glass shower screens.

Level 1-4: Laminated and IPS ducted wall system, full height, integrated to conceal all plumbing to WC cubicles. Back to wall pan, concealed cistern. Low profile 2 person trough vanity basins cantilevered from RC wall with chrome finish accessories. Laminated and IPS Stainless steel sink in Cleaner Cupboards.

Staircase finishes: Bolon Plank illuminate, carpet to staircase riser and treads with contrasting nosings and aluminium stair edging to exposed stringer faces. Painted steel balustrades with hardwood continuous handrails.

Painted steel accommodation stair at Level 4 offices leading to Level 5 roof terrace with integral disabled access stair lift. Stair finish by tenant. painted steel balustrades and brushed stainless steel handrail.

Reception desk, security turnstiles. Matwell to office entrance.

Interior Completion: Plant and Ancillary

Floor: Floor sealant to structural concrete slab in plant rooms, cycle stores and refuse stores.

Walls: Fair faced concrete blockwork.

Low odour water based paint to refuse store.

Ceilings: Proprietary pre-finished thermally insulated board below office accommodation.

Low odour water based paint to refuse store.

Sundries: Polyester powder coated steel faced solid core doors.

Proprietary galvanised steel cycle stands (semi vertical rack by Bike Dock Solutions or similar): 78 stands to be provided within Vega; and 26 (13 double stacking) within The Antares Building car park to provide a total of 104 spaces. 40 external stands plus 6 no Sheffield cycle stands behind Vega/ D.

Interior Completion: Car Park

Floor: Tarmac finish on road base and compacted hardcore sub-base to car park areas to Civil Engineer's Specification.

10 car park and 2 motorcycle bay markings, circulation direction arrows to floor to be applied in thermoplastic paint.

Walls: Fair faced concrete blockwork.

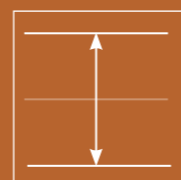
Ceiling: Proprietary thermally insulated and fire rated board.

Sundries: Protection to columns at front of car park bays.

In-situ concrete steps with galvanised steel balustrade and handrail. Disabled access hoist to provide access to Lift Lobby.

Polyester powder coated steel louvered sliding gate to car park entrance with intercom call system to security/ reception or security access control.

Horizontal copper seams to match cladding to fire exit doors.



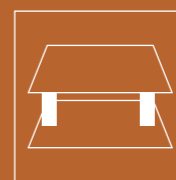
Double height reception



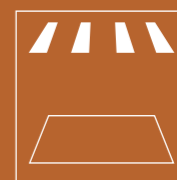
4 pipe fan coil air conditioning



Double glazed windows



Raised floors



Open plan floor plates