

GENERAL SPECIFICATION – Phase One: Units 1-5

Building

- 1 – Substructure** Mass foundations to structural engineer's design.
- Reinforced concrete power-float finished screed, on polythene damp proof membrane, on 75mm expanded polystyrene insulation (U-value 0.2 W/m²K) on suspended pre-cast concrete plank floor system designed and constructed by specialist contractor to BS 8110 Part 1. Floor to have loading capacity to structural engineer's design. Floor surface regularity Category SR2 to BS8204 Part 2 (±5mm in 3m).
- 2 – Frame** Steel frame, to structural engineer's design. Frame to be gloss paint finished.
- Nullifire System S60 intumescent paint finish to steelwork supporting upper floor structure and steelwork on party wall line.
- 3 – Upper Floor** Pre-cast concrete plank floor system designed and constructed by specialist contractor to BS 8110 Part 1, bearing on steelwork with screed finish.
- 4 – Roof** Double skin profiled steel, plastisol coated external roofing sheets, with integral insulation layer and colour-coated profiled steel liner sheets, fixed to steel Z purlins on structural frame (U-value 0.21 W/m²K). Details of roofing trims, verges, eaves, flashings etc to be agreed with architect prior to manufacture.
- 5 – Stairs** Steel staircase to requirements of Part B and Part M of Building Regulations. Max. riser 170mm, equal goings of 250mm with colour contrasting nosings. Tubular stainless steel handrail to both sides of staircase. Handrails to extend 300mm beyond top and bottom risers.
- 6 - External Walls** Part cavity masonry, with Lignacite facing blockwork outer leaf, (plinth of dark blue engineering brick, main walling of Sahara Dune Natural 7N blocks, 110mm insulation filled cavity, and lightweight blockwork inner leaf.
- Part Kingspan KS600/900/1000MR double skin insulated composite sheets incorporating bonded insulation layer (U-value 0.23 W/m²K), fixed to steel Z purlins on structural frame. Cladding system to be Loss Prevention Council approved. Details of cladding trims, drips, flashings etc to be agreed with architect prior to manufacture.
- 7 – Windows** Polyester powder coated aluminium windows and glazed screens with 24mm sealed Low-E glass double glazing units

outer panes to be 6.7mm laminated glass. Windows fitted with 8,000mm² trickle vents in window head sections and lockable ironmongery. White gloss painted mdf window boards fitted internally. Opening lights to ground floor windows to be fitted with casement stays to limit opening to 100mm. Windows to achieve security performance in accordance with BS7950 (either BS kite-marked or BBA certificated).

8 – External Doors

Polyester powder coated aluminium doors, frames with 24mm sealed Low-E glass double-glazing units with laminated safety glass, frames weather-stripped and integral with glazed screen. Doors with Perko or similar approved closers. Matching coloured letter flap with brush seals fitted into bottom rail of door. Offset cranked 'D' handles externally with SAA finish. 5 lever lock certified to BS3621:2004. Insulated (U-value 0.6 W/m²K) colour-coated glazed sectional roller doors with electric operation.

9 - Internal Walls

Concrete blockwork walls generally to ground floor with emulsion painted 12.5mm plasterboard and skim on dabs – fairfaced and painted in workshop areas. Timber framed partitions faced both sides with 15mm plasterboard and skim and emulsion painted. Mineral wool insulation fill to partition voids. Party walls below pre-cast ground floor: 200mm Durox Supablok in 1:1:6 mortar, with dpc incorporated as detailed. Party walls above pre-cast ground floor: 140mm Durox Supablok in 1:1:6 mortar. Walls to be fire stopped to underside of roof covering/first floor with Rockwool foil faced Fire Barrier Slab.

10 – Internal Doors

Light colour timber veneer flush fire doors with glazed panels generally to requirements of Approved Document M, doors to wcs without glazed panels. Doors in white gloss painted softwood frames with mdf architraves. Doors with Perko or similar approved closers. Brushed finish stainless steel lever handles, kickplates, pushplates, pull handles as appropriate to location.

11 – Wall finishes

Workshop Area – White emulsion painted fairface blockwork and finished inner liner to external wall panels.
Office Area – White emulsion painted plasterboard.
WCs – Emulsion painted plasterboard to all walls. White glazed ceramic tiles splashback to rear of basin.
Lobbies – Emulsion painted plasterboard to all walls.
Generally - 70mm MDF skirtings.

12 – Floor finishes

Workshop Area - Power floated concrete floor.
Office Area – Wood effect laminate flooring.
WCs and lobbies – Non-slip vinyl flooring.
Entrance Lobby, Staircase and Landings – Carpet finish and contrasting stair nosings.

13 – Ceiling finishes

Workshop Area – fairface underside of roof inner lining sheets.
Office Area – Armstrong Dune Max Microlook or equivalent approved suspended ceiling with 600x600mm lay-in tegular tiles.
WCs and lobbies - Plasterboard and skim with emulsion paint finish.

14 – Fittings	<p>Stainless steel inset sink and drainer in 30mm laminate faced worktop with melamine faced cupboard enclosure to kitchen area.</p> <p>Fire exit and fire safety signs to requirements of Building Control.</p> <p>External unit name and number sign in etched glass effect manifestation film to front and rear personnel doors.</p> <p>Low level boxings for wastes and plumbing.</p>
15 – Sanitary Fittings	<p>White glazed ceramic wc bowls with closed-couple cisterns, white glazed ceramic hand-rinse basin and chrome mixer taps in wcs.</p> <p>Mirror, toilet roll holder and towel rail to wcs.</p> <p>Disabled wc to include lever-handle taps and handrails to meet requirements of Part M of the Building Regulations.</p>
16 – Disposals Installation	<p>Upvc soil and waste pipes connected to underground foul drainage system.</p> <p>Plastisol coated steel rainwater gutters and plastics downpipes connected to underground surface water drainage system.</p> <p>Concealed joints to guttering.</p>
17 – Water Installation	<p>32mm Alkathene underground service pipe from meter position to internal stop tap. Cold water services to wcs, sinks, basins, and heating system. Hot water to basins and sink from instantaneous electric water heaters.</p>
18 – Heating Installation	<p>Wall mounted electric panel heaters to stair/lobby areas and wcs.</p> <p>ECA compliant recessed ceiling-mounted reverse cycle cassette heat pump/air conditioning unit with external wall-mounted chiller unit to serve ground and first floor offices.</p> <p>Metering, Monitoring & Targeting energy management system with 'out of range' values.</p>
19 - Ventilation Installation	<p>Electrically operated individual extract fans to wcs. To provide extract rates of 6litres/second to each wc. Fans ducted to outside air and operated by light switches with 15 minute overrun timers. External extract grilles to be spray painted to colour match cladding.</p>
20 – Electrical Installations	<p>New incoming 12.5kVA rated 240v mains supply to meter position and consumer unit. Consumer unit to be provided with 3 spare ways. Electricity meters and consumer units to be installed min. 2m above ground floor level in riser cupboard.</p> <p>Ring mains to be located at first floor level with drop-down cables to ground floor.</p> <p>Wiring cut into blockwork walls to be encased in plastic conduits.</p> <p>Power cabling in office to be in dado height three-compartment white plastic trunking fitted with 13A sockets at 2m centres.</p> <p>300 lux lighting level in office areas with Category 2 fluorescent fittings.</p> <p>300 lux lighting level in wcs, and circulation areas with compact fluorescent surface mounted light fittings.</p>

300 lux lighting level in production areas with hi-bay discharge lamp fittings.

Emergency call system to disabled wc with pull cord operation, remote alarm sounder, and reset control in wc.

Emergency lighting system to BS 5266: Part 1 to all areas to requirements of Building Control/Fire Officer. Emergency light fittings to be provided to all wc compartments and stair landings.

Provide lighting with an average initial efficacy of not less than 45 luminaire-lumens/circuit-Watt as averaged over the whole area.

Photo-electric dimming lighting controls to office areas with 2no. sensors to full open plan offices.

Passive infra red presence detector lighting controls with adjustable time delay to wcs.

21 - Protective Installations	Fire Alarm and detection system as L1 system to BS 5839 Part 1 to meet requirements of Fire Officer/Building Control. Lightning protection to BS6651:1999 – if risk analysis requires.
22 - Communications	BT ducting only from site perimeter to office with conduit connection to dado trunking for installation of internal cabling by tenant. Below ground ducting access boxes to be provided in paths/roadways. BT control boxes to be installed min. 2m above ground floor level.
23 – Air Testing	Air testing to be conducted upon completion. Design air permeability is 10m ³ /(h.m ²) at 50 Pa to the requirements of Approved Document L2A.
24 – Entrance Canopies	Glazed cantilevered entrance canopies to be provided above each front personnel door.

External Works

1 – Site Works	<p>Pavings. Pavings to accommodate loadings of heaviest anticipated standard road vehicles. All paving laid to falls to surface water drainage gullies and channels.</p> <p>Bitumen Macadam paving to roadways with 255x155 half-battered kerbs and 150x50 EF edgings to perimeters on concrete base and haunch.</p> <p>200x100x80 concrete block paving to car parking and unit forecourt areas with cars spaces marked with contrasting blocks, 150x50 EF edgings to perimeters on concrete base and haunch.</p> <p>Pavement crossing to be constructed to requirements and approval of Suffolk County Council Highways Department.</p> <p>Planting/landscaping and topsoil – Topsoil to all unpaved areas to specification to be agreed with local planning authority. Refer to drawings 1578/150 and 151.</p>
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2 – Drainage

Separate foul water and surface water underground drainage systems discharging to sewers.

Surface water systems - System collecting water from rainwater pipe gullies laid to fall to sewer. System collecting water from gullies in paved areas and drainage channels and laid to fall to sewer. Petrol/oil interceptor to be provided to requirements of Environment Agency on outflow from paved area drainage to sewer. All drains to be protected as required from traffic loadings. Inspection covers and gulley gratings in paved areas to be Class A heavy duty fittings. Linear drainage channels to be provided across roller shutter doors and connected to surface water system.

Foul drainage system - connecting to soil and vent pipes, stub stacks and gullies and laid to fall to sewer. All drains to be protected as required where passing under building and from traffic loadings. Inspection covers and in paved areas to be Class A heavy duty fittings. Sewage pumping station in location shown on drawing 1578/37. Non-return valves to be fitted in line with inspection covers as flood protection.

3 – Services

Water

Individual metered connection to Anglian Water Services main in public highway, with buried piped connection to unit.

Electricity

Individual connection to off-site mains with buried cable connection to meter box positioned on each unit. Landlords supply to meter box positioned on end gable wall of one block of units.

Telephones

Buried ducts laid for connections between British Telecom off-site services and service connection point in unit.

Lighting

External photocell street lighting units fixed to all faces of building. Allow 2 lights per mid-terrace unit, 4 lights per end-of-terrace unit.