

BUILDING MATERIAL SPECIFICATIONS & FINISHING SCHEDULE

University Campus & Accommodation Facilities · Reference document for material approvals and design clarification

All materials and workmanship shall conform to the relevant British Standard or equivalent approved international standard current at the time of construction.

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#	Item Code	Material / Item	Specification & Dimensions	Remarks / Notes
Roofing				
1	R-01	Roofing Sheet	Colorbond steel, 0.47mm base metal thickness; profile as per structural drawings	Colour as approved by Project Manager / Client
2	R-02	GI Pipe – Truss	33mm dia, 2.6mm wall thickness, hot-dip galvanised or equivalent	Roof truss members
3	R-03	RHS Rafters	120×60×3.6mm rectangular hollow section, mild steel; refer P-05 for finish	Marine paint finish
4	R-04	C-Purlins	C50×100mm, galvanised steel or as approved by structural engineer	Spanning between rafters
5	R-05	Roof Insulation	Double-sided aluminium foil with mesh layer, min 50mm thickness	Under roofing sheets
6	R-06	Ridge Capping	Colorbond, factory-formed, matching roofing sheet colour; silicone sealed	
7	R-07	Flashing	Colorbond, matching roof profile, 0.42mm minimum	At wall/roof junction
8	R-08	Cement Fascia Board	Fibre cement, factory-primed, paintable	
9	R-09	UPVC Gutter	UPVC, profile to match downpipe system; brackets at 600mm c/c	
10	R-10	UPVC Downpipe	75mm dia, UPVC; brackets at 1200mm c/c maximum	
Ceiling				
11	C-01	Gypsum Board	9mm thick, 4'×8' sheet, tapered edge, moisture-resistant	Interior rooms and corridors
12	C-02	Cement Board Ceiling	6mm thick, 4'×8' sheet, fibre cement or equivalent	External soffits, under eaves, wet areas and toilets
13	C-03	Ceiling Framing Timber	2"×1½" treated timber, H3 treatment minimum; dimensions as per architectural drawings	
14	C-04	PVC Ceiling Cornice	White PVC, L-profile perimeter border, min 2mm wall thickness; length as per architectural drawings	Perimeter finish
15	C-05	Ceiling Access Panel	450×450mm, cement board panel with hook, latch and hinge	Where applicable
Tiles & Flooring				
16	T-01	Floor Tile – General	600×600mm homogeneous tile, polished or semi-polished finish, min 7mm thick	All general interior areas
17	T-02	Floor Tile – Wet Areas	300×300mm ceramic or porcelain, non-slip, R10 rating minimum; R11 at shower areas	Toilets and wet areas
18	T-03	Wall Tile – Wet Areas	300×600mm ceramic or porcelain, matt finish	Toilet walls full height to ceiling
19	T-04	Tile Adhesive	Polymer-modified cement-based adhesive (e.g. Ardex, Weber or equivalent approved)	As per tile manufacturer specification
20	T-05	Tile Grout	Cement-based, colour-matched, sanded; 2mm joint width minimum	
21	T-06	Skirting Tile	100mm high skirting tile, matching floor tile material and finish	
Painting & Finishes				
22	P-01	Exterior Paint	Alkali-resistant weather-shield; 2 coats over 1 coat primer; minimum 80 microns DFT	Colour as approved by Project Manager / Client
23	P-02	Primer / Sealer	Water-based alkali-resistant sealer; 1 coat before topcoat	
24	P-03	Interior Paint	Washable matt emulsion; 2 coats over putty or primer	Colour as approved by Project Manager / Client
25	P-04	Wall Putty / Skim Coat	Polymer-modified white putty; 1–2mm skim coat before paint	
26	P-05	Marine / Structural Paint	Anti-corrosive marine alkyd; 2 coats on all exposed steel elements; minimum 100 microns DFT	All steel roofing and structural members
Doors & Windows – Aluminium				
27	A-01	Aluminium Double-leaf Door	Dimensions as per architectural drawing; thermally broken aluminium frame; double-leaf; powder-coated matt finish, colour as approved by Architect; with hardware (standard duty: door height ≤2200mm; heavy duty: door height >2200mm)	Refer to drawings for swing direction and vision panel
28	A-02	Aluminium Single-leaf Door	Dimensions as per architectural drawing; thermally broken aluminium frame; single-leaf; powder-coated matt finish, colour as approved by Architect; with hardware (standard duty: door height ≤2200mm; heavy duty: door height >2200mm)	Refer to drawings for swing direction and vision panel; toilet doors: privacy bolt in lieu of standard lock
29	A-03	Aluminium Sliding Door	Dimensions as per architectural drawing; thermally broken aluminium frame; sliding configuration; Grade 316 stainless steel track; powder-coated matt finish, colour as approved by Architect; with hardware	Refer to drawings for number of panels

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30	A-04	Aluminium Double-leaf Window	Dimensions as per architectural drawing; thermally broken aluminium frame; double-leaf casement; clear glass (thickness as per door/window schedule); powder-coated matt finish, colour as approved by Architect; with hardware	Refer to drawings for opening direction
31	A-05	Aluminium Single-leaf Window	Dimensions as per architectural drawing; thermally broken aluminium frame; single-leaf casement or louvre as per drawings; clear glass (thickness as per door/window schedule); powder-coated matt finish, colour as approved by Architect; with hardware	Refer to drawings for type and opening direction
32	A-06	Aluminium Sliding Window	Dimensions as per architectural drawing; thermally broken aluminium frame; sliding; Grade 316 stainless steel track; clear glass (thickness as per door/window schedule); powder-coated matt finish, colour as approved by Architect; with hardware	Refer to drawings for number of panels
33	A-07	Aluminium Fixed Window	Dimensions as per architectural drawing; thermally broken aluminium frame; fixed non-opening; clear glass (thickness as per door/window schedule); powder-coated matt finish, colour as approved by Architect; perimeter sealed	

Doors – Other Types

34	D-01	GRP / Fibre Door	GRP door, pre-hung in aluminium or GRP frame; suitable for continuous use in wet areas; with privacy bolt	Toilets and wet areas
35	D-02	Solid Timber Door	Solid core timber door, hardwood veneer, pre-hung; finish as per architect's specification	Rooms as indicated on architectural drawings

Air Conditioning

36	AC-01	Split AC Unit – 9,000 BTU	9,000 BTU/hr, inverter-type, R32 refrigerant, ceiling or wall-split; minimum EER 3.0	Small rooms and offices
37	AC-02	Split AC Unit – 12,000 BTU	12,000 BTU/hr and above inverter-type, R32 refrigerant, ceiling or wall-split; minimum EER 3.0	Larger rooms; capacity as per mechanical drawings
38	AC-03	Copper Refrigerant Pipe	12mm dia, soft annealed copper tube, insulated; run as per mechanical layout	
39	AC-04	Condensate Drain Pipe	20mm dia UPVC, fall as per mechanical drawings; insulated where exposed	

Electrical – Lighting

40	E-01	LED Downlight – 18W	Ceiling-mounted, 18W, 4000K, IP20 minimum, BS standard	Interior dry areas: classrooms, offices, corridors
41	E-02	LED Panel Light – 600×600mm	Recessed LED panel, 36–40W, 4000K, BS standard	Offices and open-plan teaching areas
42	E-03	LED – Outdoor Wall	Wall-fixed, IP65, 18–20W, 4000K, BS standard	External facades, building perimeter and pathways
43	E-04	LED – Soffit / Eave	Surface-mounted, IP65, 10–15W, BS standard	Under eaves and covered external walkways
44	E-05	LED – External Ceiling	Ceiling-fixed, IP65, 15W, BS standard	Covered outdoor ceilings and car park soffits
45	E-06	LED – Dimmable Interior Wall	Wall-fixed, IP44, dimmable, 12–15W, BS standard	Common rooms, breakout spaces and accommodation corridors
46	E-07	Emergency Light – Maintained	Wall-mounted maintained LED, 3-hour battery backup, BS standard	Escape routes, stairwells and main corridors
47	E-08	Emergency Light – Non-Maintained	Self-contained, 2-hour battery backup, BS standard	Secondary corridors and internal rooms
48	E-09	Ceiling Exhaust Fan	Ceiling-mounted, with delay-off timer, min 200 m ³ /hr; sized to achieve min 10 ACH	All toilet and wet area ceilings
49	E-10	Ceiling Fan	3-blade ceiling fan, step regulator, min 1200mm sweep	Accommodation rooms and naturally ventilated spaces

Electrical – Wiring & Accessories

50	EW-01	Switch – 1 Gang	1-gang 1-way, 10A, white, flush-mounted, BS standard	
51	EW-02	Switch – 2 Gang	2-gang 2-way, 10A, white, flush-mounted, BS standard	
52	EW-03	Switch – 3 Gang	3-gang, 10A, white, flush-mounted, BS standard	
53	EW-04	Switch – 4 Gang	4-gang, 10A, white, flush-mounted, BS standard	
54	EW-05	Power Socket – 13A Double	13A, 2-gang, switched, flush-mounted, BS standard; height as per electrical drawings	
55	EW-06	Weatherproof Power Socket	13A, 2-gang, IP66, surface-mounted, BS standard	External and outdoor locations

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56	EW-07	Wiring Cable – 2.5mm ²	2.5mm ² copper, PVC insulated, 450/750V, single core	
57	EW-08	Earth Wire – 4mm ²	4mm ² copper, PVC green/yellow, 450/750V	
58	EW-09	Main Feeder Cable – 16mm ²	16mm ² copper, PVC insulated, 3-core + earth	
59	EW-10	Conduit – 25mm	25mm dia UPVC conduit for general wiring; EMT steel conduit in plant rooms and exposed locations	
60	EW-11	Cable Tray – 300mm	300mm wide, perforated GI cable tray	

Electrical – Distribution Boards

61	DB-01	Main MCB – 63A 4-Pole	63A, 4-pole, 10kA breaking capacity	Sub-distribution boards URA Approved
62	DB-02	Main MCB – 125A 4-Pole	125A, 4-pole, 10kA breaking capacity	Main building DB URA Approved
63	DB-03	MCB – 6A 1-Pole	6A, 1-pole, Type B, 6kA, DIN rail mounted	Lighting circuits URA Approved
64	DB-04	MCB – 10A 1-Pole	10A, 1-pole, Type B, 6kA, DIN rail mounted	URA Approved
65	DB-05	MCB – 16A 1-Pole	16A, 1-pole, Type B, 6kA, DIN rail mounted	Power circuits URA Approved
66	DB-06	RCCB – 63A 30mA 4-Pole	63A, 4-pole, 30mA sensitivity, Type F (suitable for inverter and variable speed drive circuits)	URA Approved
67	DB-07	DB Enclosure – 36-Way	36-way metal or polycarbonate enclosure, IP55, with DIN rail	Building sub-boards URA Approved
68	DB-08	DB Enclosure – 100-Way	100-way metal enclosure, IP55, with DIN rail	Main building distribution board URA Approved

ICT & Data / Security

69	ICT-01	CCTV Camera	IP camera, min 4MP, IR night vision, IP66, H.265+	External perimeter and key internal areas
70	ICT-02	Access Control	RFID card reader, controlled door access; fail-secure or fail-safe mode as specified by security consultant	Refer to security layout drawings
71	ICT-03	Network Cable – CAT6	CAT6 UTP, 250MHz, LSZH jacket	
72	ICT-04	NVR – 8 Channel	8-channel Network Video Recorder, H.265+, 4K output, with HDD bay	
73	ICT-05	NVR – 16 Channel	16-channel Network Video Recorder, H.265+, 4K output, with HDD bay	
74	ICT-06	HDD Storage	Surveillance-grade SATA HDD; capacity as per system design	
75	ICT-07	Patch Panel	24-port CAT6, 1U, 19" rack-mount	
76	ICT-08	RJ45 Keystone Jack	CAT6 keystone jack, 90° punch-down, UTP	
77	ICT-09	Dual Face Plate	Dual-port surface or flush plate for keystone jacks	
78	ICT-10	Network Rack – 7U	7U wall-mount cabinet, 19", 300mm depth, vented	
79	ICT-11	Network Rack – 9U	9U wall-mount cabinet, 19", 400mm depth, vented	

Plumbing & Sanitary

80	PL-01	Water Supply Pipe – 25mm	25mm dia, UPVC pressure-rated, with fittings; refer to plumbing layout	
81	PL-02	Waste Water Pipe – 63mm	63mm dia, UPVC, solvent-weld joints; refer to plumbing layout	
82	PL-03	Sewer Pipe – 110mm	110mm dia, UPVC solid wall, rubber ring joints; refer to plumbing layout	
83	PL-04	WC – Ceramic	Close-coupled WC, vitreous china, white, with cistern and soft-close seat	Toilets
84	PL-05	Wash Basin	Countertop or wall-hung ceramic basin, white, with waste fitting	
85	PL-06	Floor Drain – 100mm	100mm dia UPVC floor drain with removable chrome grating - Cotto, Grohe or equivalent approved	Wet areas and toilets
86	PL-07	Bidet Shower	Wall-mounted bidet shower head with flexible hose and hook, chrome finish - Cotto, Grohe or equivalent approved	All toilets
87	PL-08	Shower Head & Arm	Wall-mounted fixed shower head with chrome arm and flow regulator; hand-held slider rail option where accessibility is required - Cotto, Grohe or equivalent approved	Accommodation toilet shower area
88	PL-09	Stop Valve	15mm or 20mm ball valve, PN16 rated, chrome finish - Cotto, Grohe or equivalent approved	
89	PL-10	Basin Mixer Tap	Single-lever basin mixer, chrome, 15mm connection; ceramic cartridge - Cotto, Grohe or equivalent approved	
90	PL-11	Bib Tap – Low Level	Low-level wall bib tap, chrome, 15mm, with backflow preventer - Cotto, Grohe or equivalent approved	
91	PL-12	Vanity Mirror	Min 400×600mm, polished edge, wall-fixed	Toilets
92	PL-13	Booster Pump	Domestic pressure pump, automatic pressure switch; capacity and head as per hydraulic design	

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Fire Safety & Detection				
93	FS-01	CO ₂ Fire Extinguisher – 2kg	2kg CO ₂ extinguisher, with wall-mount cabinet, BS standard	Electrical rooms and server areas
94	FS-02	Water Fire Extinguisher – 9L	9 litre water extinguisher, with wall-mount cabinet, BS standard	General areas
95	FS-03	DCP Extinguisher – 2kg	2kg dry chemical powder, ABC rated, BS standard	Kitchen and plant areas
96	FS-04	Foam Extinguisher – 2kg	2kg AFFF foam extinguisher, BS standard	Fuel storage and generator areas
97	FS-05	Exit Sign	LED illuminated exit sign, maintained mode, min 3-hour battery backup, BS standard	All escape routes and stairwells
98	FS-06	Smoke Detector	Optical smoke detector, ceiling-mounted, addressable, BS standard	All occupied rooms, corridors and common areas
99	FS-07	Heat Detector	Fixed temperature heat detector, ceiling-mounted, addressable, BS standard	Kitchens, plant rooms and areas unsuitable for smoke detection
100	FS-08	Fire Alarm Panel	Addressable fire alarm control panel; capacity as per fire detection layout; with battery backup, BS standard	Central or zone-based installation as per fire engineer's design

Quantities are stated in the Bill of Quantities. Colour selections, brand approvals and substitutions require written confirmation from the client.