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N11 DOMESTIC KITCHEN FITTINGS

To be read in conjunction with Section A and other related sections of the Specification, Preliminaries and Contract Conditions.

N11.1000 SCOPE, SUBMITTALS AND TESTING

N11.1100 SPECIFICATION AND SCOPE

N11.1101 Prescriptive Works

- a) Supply, deliver, install and warrant the works in strict compliance with the materials and workmanship requirements of the Specification.
- b) Where required to prepare drawings these shall be limited to final detailing of components, systems, etc. indicated on the Design Drawings, necessary to demonstrate their safe installation.
- c) Where alternative products are offered by the Contractor and accepted by the Architect, provide full supporting documentation in respect of the complete system or installation.

N11.1102 Scope of Works

This section of the Specification, when read in conjunction with the Design Drawings, provides particular requirements with respect to the works, which include the following:

- a) Domestic kitchen fittings.

N11.1200 SYSTEM TYPES

Domestic Kitchen Fittings

N11.1201 Type SPF-01 Kitchen Fittings

Kitchen units/ worktops/ cupboards.

N11.1300 SUBMITTALS AND TESTING

Tender Submittals

N11.1301 Tender Response

Not required.

Samples, Mock-ups, Prototypes and Quality Benchmarks

N11.1302 Pre-contract Samples

Not required.

N11.1303 Post Contract Samples

In accordance with Section A.4000, post contract samples of the following shall be provided:

- a) Complete base unit with door and drawer.
- b) 500mm length of worktop.
- c) Each type of ironmongery item.

N11.1304 Mock-ups

Not required.

N11.1305 Prototypes

Not required.

N11.1306 Benchmark Requirements

The following quality benchmarks shall be provided in accordance with Section A.4000:

- a) First completed domestic kitchen of each type installed in location to be agreed with the Architect.

Testing

N11.1307 Testing Requirements

Provide evidence/ testing data and reports to demonstrate that all materials/ products proposed have been tested to meet the standards specified within.

N11.2000 SYSTEMS/ PRODUCTS AND MATERIALS

N11.2100 SYSTEM DESCRIPTIONS

Domestic Kitchen Fittings

N11.2101 Type SPF-01 Kitchen Fittings

Kitchen fittings comprising base units, plinths, drawer units, cupboards, together with worktops.

- i) Reference: Monaco Aluminium Range, supplied by Graham Plumbers' merchants
Tel: 01452 521501, or acceptable equivalent.

- ii) Ironmongery: Stainless steel handles from the manufacturer's standard range.

- a) Worktops shall be black granite crystal work surface minimum 40mm thick formed edges.

N11.2200

MATERIALS

N11.2201

Core Material for Plastic Laminate-faced Panels

- a) The substrate for decorative laminate bonded board shall be one of the following:
 - i) Particleboard in accordance with BS EN 312, grade P5.
 - ii) Plywood in accordance with BS EN 636.
 - iii) MDF in accordance with BS EN 622: Part 5.
 - iv) Blockboard/ Laminboard in accordance with BS EN 636.
- b) Adhesives shall comply with BS EN 204, type to match durability class of core material.
- c) Preserving treatment: Organic solvent with water repellent in accordance with the British Wood Preserving and Damp-proofing Association Commodity Specification C5.
- d) Moisture content shall be appropriate to the core materials to suit the internal environmental conditions.

N11.2202

Plywood

- a) Class ***2/ 3*** plywood to satisfy the requirements of BS EN 313, BS EN 314, BS EN 315, BS EN 322, BS EN 324, BS EN 325, BS EN 326, BS EN 335, BS EN 635, BS EN 636, BS EN 1084, DD CEN/TS 1099, BS EN 12369 and BS EN 1995.
- b) Minimum class 2 or class 3 bond quality to BS EN 314, in thickness to suit the design requirements.
- c) Plywood durability shall satisfy the minimum hazard class 3 to BS EN 335 (i.e. moisture content frequently above 20%) unless otherwise agreed.
- d) Dimensional tolerances to BS EN 315 and to satisfy any additional requirements of this Specification.
- e) Ensure that fastenings do not protrude above surface of board. Fastenings shall be of a type recommended for the purpose by the fastenings manufacturer.
- f) Finish shall be suitable for its location, sanded where finished or unsanded where not visible.
- g) Preservative treatment shall be as Section Z12 and to TRADA recommendations.

N11.2203

Decorative Laminates

- a) Decorative high-pressure laminates of less than 2mm in thickness forming bonded panels shall be manufactured in accordance with BS EN 438: Part 3.
- b) Compact grade laminates of a thickness of 2mm or greater shall be manufactured in accordance with BS EN 438: Part 4.
- c) Edgings shall be formed using Colorcore solid grade high-pressure laminate to match laminate facings in colour and texture. Edges including rebated edges shall be fully lipped and bevelled on all sides so as to show no black lines.
- d) Colour of laminate: To be confirmed by the Architect.
- e) The panelling shall not be installed before the surrounding areas are made watertight, wet trades have finished their work, wall and floor tiling is complete and the surrounding area has dried out.
- f) Do not cut, plane, drill or sand prefinished panels unless otherwise indicated on the Design Drawings.
- g) The panelling shall be installed securely using adequate concealed fixing components, without causing stress or distortion to panels and doors. No visible fixings shall be used.

N11.2204

Compact Grade Laminate

- a) Compact grade laminate to BS EN 438: Part 4 Grade CGS.
- b) Compact grade laminate panels shall be used to locations as indicated on the Design Drawings.
- c) Machine cut to sizes as shown on the Design Drawings.
- d) Concealed fixings shall be used.
- e) Exposed edges shall have edges chamfered/ bevelled and polished to avoid sharp edges unless shown otherwise.
- f) Compact laminate shall be of a solid colour type (throughout) to ensure that solid colour laminate is always visible at edges, i.e. no black edges shall be acceptable.
- g) Concealed panel edges shall be square edged with clean-cut edge.
- h) Supplier: Formica Ltd (UK), or acceptable equivalent.
- i) Colour: To be confirmed by the Architect.

- N11.2205 Metals
- Refer to Section Z11.
 - Metals shall be free from defects that will impair their strength, durability, performance or appearance. Metals used in exposed work shall be produced to the highest commercial standards of flatness, free of surface blemishes including waves, striations, tool and die marks, other defects and/ or impurities and manufacturer's names and identifying numbers. Profiles shall be true to angle or curvature as required with sharp edge and corners.

N11.2300 FABRICATION

N11.2301 Accuracy of Fabrication

- Exact Site dimensions shall be taken as necessary before starting fabrication. Report any discrepancies to the Architect without delay and obtain instructions before proceeding.
- Permissible deviations for panels:
 - Length: $\pm 1.5\text{mm}$.
 - Width: $\pm 1.5\text{mm}$.
 - Squareness: $\pm 1.5\text{mm}$ in 1m (taking longer of 2 sides at any corner as a baseline and measuring the deviation of the shorter side from the baseline perpendicular).
 - Flatness (of panels with a core thickness of 12mm and over, as delivered to Site): $\pm 1\text{mm}$ under a 600mm straightedge.
- Finished dimensions of components must be such that the required accuracy of the finished linings/ panelling and joints can be achieved.

N11.3000 SITE INSTALLATION

N11.3100 INSTALLATION OF DOMESTIC KITCHEN FITTINGS

N11.3101 Moisture Content

During delivery, storage, fixing and thereafter to Practical Completion, conditions of temperature and humidity shall be maintained to suit specified moisture content(s) of timber components. Components shall be tested with an agreed moisture meter, to the manufacturer's recommendations.

N11.3102 Workmanship

- Methods of fixing and fastenings shall be in accordance with the manufacturer's recommendations unless specified otherwise.
- Do not install the works before building is weathertight, wet trades have finished their work and the building is well dried out.
- Before, during and after installation, temperature and humidity must be maintained at levels approximating to those that will prevail after the building is occupied.
- Set out accurately to ensure frames, panels and doors are plumb, level and accurately aligned.
- Do not cut, plane or sand prefinished surfaces unless otherwise agreed with the Architect.
- Fix securely as Section Z20, using manufacturer's fixing components without causing distortions to frames, panels and doors.
- Adjust hinges so that doors hang and close automatically when left open.
- Doors and drawers shall be accurately aligned and not binding. Adjust as necessary to ensure smooth operation.
- Ironmongery shall be checked, adjusted and lubricated as necessary to ensure correct functioning.

N11.3103 Fixing of Taps

Taps shall be fixed securely, making a watertight seal with the appliance.

N11.3104 Wastes/ Overflows

Waste/ overflows shall be bedded in waterproof jointing compound and fixed with a resilient washer between appliance and backnut.

N11.3105 Sealant Pointing

- Sealant shall be silicone based to BS EN ISO 11600, Type B with fungicide.
- Colour shall be white.

N11.3106 Fitting Trims

Wherever possible, trims shall be in unjointed lengths between angles or ends of runs. Where running joints are unavoidable, acceptance of location and method of jointing shall be obtained. Angle joints shall be mitred unless otherwise specified.

N11.3107 Fixtures

- a) Workmanship: Units shall be manufactured and rigidly assembled by skilled workmen to the complete satisfaction of the Architect. Reinforcing shall be provided as required to ensure a rigid and secure assembly. Exposed surfaces shall be free from dents, tool marks, warpage, buckle, glue and open joints. All joints, corner and mitres shall be accurately fitted. Fastenings shall be concealed. Threaded connections shall be made up tightly so that threads are entirely concealed.
- b) All joints and corners shall be accurately fitted to shapes and dimensions indicated, with all lines, angles and surfaces in true alignment, plumb, level and in proper plane.
- c) Use the proper thickness of metal, adequate stiffeners, supports and proven details of assembly so that the finished material will conform to the highest standards of the industry. Reinforce members and joints with steel plates, bars, rods or angles for rigidity and strength as needed to comply with performance requirements.
- d) All exposed work shall be carefully matched to produce continuity of line and design. Joints in exposed metal work shall be accurately fitted and rigidly secured with hairline contacts. Exposed joints in flat surfaces shall be flush, unless otherwise indicated. End joints shall have sleeves of the same outline as the exposed shapes to assure good alignments.
- e) Do not install units that have members that are warped, bowed, deformed or otherwise damaged or defaced. Remove and replace such members as directed.
- f) Accurately cut and form the materials to the required shape and profile with all exposed surfaces free from irregularities and defects. Carefully fit and match all components before assembly to maintain continuity of line between them. Provide hairline joints between contact surfaces of non-welded joints, unless indicated otherwise. Complete all cutting, drilling, welding, etc., before the application of final finishes.
- g) Drill, countersink and tap components as necessary to receive threaded fasteners. Use concealed fasteners wherever possible. Set out exposed fasteners where permitted in an even manner.
- h) Accurately align components and rigidly secure all non-moving joints by welding or fixing with machine screws or bolts. Reinforce joints and components as necessary to achieve the required strength and provide proper joint fixing. Ensure that no areas of unfinished material are visible in the finished work. Drive in all exposed fasteners level and flush with the adjacent surfaces. Disassemble the works only to the extent necessary to facilitate transportation to Site.
- i) All elements of framework and associated beads and strips shall be stored on Site such that they do not get damaged or distort.

N11.3108

Heating

Agree arrangements for operating the heating installation up to the date of Practical Completion of the works to ensure that excessive moisture movement of elements does not take place.

N11.3109

Ironmongery

Assemble and fix carefully and accurately using fastenings with matching finish supplied by the ironmongery manufacturer - prevent damage to ironmongery and adjacent surfaces. At completion, check, adjust and lubricate as necessary to ensure correct functioning.

N11.3110

Protection

- a) Do not deliver components to Site until required and do not remove protective packaging/coverings until immediately before required for fixing.
- b) Stack boards, panels, shelving, etc. flat on bearers and separated by spacers where necessary to prevent damage to or from projections.
- c) Keep components and completed work clean and dry, and adequately protect from physical damage until Practical Completion.

N11.3111

Completion

- a) Doors and drawers shall be accurately aligned and not binding. Adjust as necessary to ensure smooth operation.
- b) Ironmongery shall be checked, adjusted and lubricated as necessary to ensure correct functioning.

N11.3200

TOLERANCES

N11.3201

Installation Tolerances

- a) A high degree of accuracy shall be employed in the fabrication and installation of the works and support structures.
- b) At the time of completion, the visual requirements of the works shall be such that within any planning grid section the allowable tolerances are achieved.
- c) On-Site Dimensions:
 - i) All dimensions to be checked on Site.

- ii) The final design shall accommodate all specified tolerances and differences between actual Site dimensions and dimensions shown on the Working Drawings.
- iii) The works shall be erected in proper alignment in relation to established lines and grades as shown on the Working Drawings and account shall be taken of the installation tolerance requirements of the panel system such that units are accurately located.
- iv) Cut-outs for interfacing works shall be to the dimensions indicated on the Design Drawings $\pm 1\text{mm}$.

N11.3300

INSTALLATION OF APPLIANCES

N11.3301

Generally

All goods shall be installed in accordance with the manufacturer's details.

End of Section