

## 8.00 External Walls

### 8.01 Generally

The colour, materials and texture of external walls shall reflect the proposed use and functionality of the project and shall be selected on a life-cycle cost basis taking into account the long term maintenance and operation of the wall and its finishes over twenty (20) years, as well as the initial cost of construction. Innovative design solutions are encouraged within these parameters.

The materials and texture of external walls shall be approved by GU at the preliminary sketch design stage.

*It is a Mandatory requirement that all walls shall be waterproof.*

### 8.02 Construction

External walls to buildings shall be designed with particular care and consideration given to the possible future effects of shrinkage, cracking and thermal movement.

Mortar joints to face brick and face blockwork shall be ironed to a half round radius.

Façade staining shall be avoided by careful design and detailing to shed water clear of the building, clear of lower projections and clear of pathways. Parapet cappings and window framing shall be designed to ensure facade staining is avoided.

### 8.03 In-situ Finishes

If untreated exposed concrete is proposed and approved by CLF, the surface finish shall be a minimum Class 2 'off-form' finish to comply with the requirements AS 3160 – 2010, with colour control in accordance with Clause 3.4. The tender and construction documentation shall clearly specify the requirements for surface finish in accordance with Table 3.3.1, and test panels shall be provided in accordance with Clause 3.5. The acceptable tonal range of the concrete surface shall not exceed five (5) tones.

Where the concrete finish and colour control does not meet the satisfaction of the Superintendent, such surfaces shall be rendered or receive another acceptable applied finish.

Any exposed concrete edges shall be treated to ensure compatibility with the predominant finish to the external wall surfaces.

Standard grey concrete masonry is not acceptable as a permanent external finish, however coloured concrete masonry may be used subject to the approval of the Deputy Director (PD&C) CLF. Split-face masonry blocks **shall not** be used.

### 8.04 Applied Finishes

Applied finish on external walls shall be a three coat roller applied membrane coating system comprising a primer and two finishing coats equivalent to the 'Rockcote Armour Flex' system.

Membrane coating on concrete masonry block walls shall be applied over a 6mm minimum thick cement render coat equivalent to 'Rockcote Q Render PM100 High Build'.

The render and membrane coating systems shall sourced from the same manufacturer and applied strictly in accordance with the relevant manufacturer's technical specifications by accredited applicators to ensure validity of the manufacturer's guarantees. The membrane coating and render system shall have a minimum ten (10) year unconditional guarantee.

Sprayed applied membrane coatings on external surfaces are not permitted.

Ceramic tiles may be used as a finish on walls not exposed to prolonged direct sunlight. Tiles shall be fixed using a rubberised flexible adhesive suitable for the application strictly in accordance with the manufacturer's technical specification and instructions, including surface preparation. Adequate expansion joints shall be provided.

Tiles shall not be adhesive fixed direct to concrete masonry walls. All masonry walls to receive tiling shall be rendered with a 12mm minimum thick cement and sand render with a wood float finish suitable to achieve maximum tile adhesion.

### **8.05 Colours**

Colours for use on the building are to be submitted to CLF for review and comment prior to the preparation of a colour board to be presented to the Project User Committee for formal approval.

The external colour selections shall be in accordance with the colour palate contained in the campus Master Plan (if appropriate).

### **8.06 Sun Shading & Screening**

Sunshading and screening shall be provided as required by the project to minimise the life cycle costs of air conditioning and to eliminate the need for curtains and blinds as sun control measures.

Consultants are to produce Solar Charts illustrating shadow angles resulting from proposed sun control devices to be used on the project at Schematic Design stage.

The effectiveness of the proposed devices shall be further tested during design development by producing floor plans which indicate the sunlight penetration into the building. These floor plans shall incorporate the indicative furniture layouts.

### **8.07 Provision for Building Signage**

Provision shall be made in the design of the facade around the main entry to the building for the installation of the building name and number.

Building identification signage shall be in accordance with the requirements of the GU Signage Manual.

### **8.08 Sealants**

Sealants shall be selected to be appropriate for their application and shall be colour matched to the finished surface. Only sealants with no VOC emissions or levels of VOCs below 420g/L are to be used.

### **8.09 External Protection**

Provide approved bollard protection to all external areas of buildings liable to vehicle damage.