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MODEL CLAUSES FOR CIVIL ENGINEERING WORKS

SECTION 111 TIGHTLY BONDED SYSTEMS FOR UNDERLINE BRIDGES

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SECTION 111 TIGHTLY BONDED SYSTEMS FOR UNDERLINE BRIDGES

Surface finish - new concrete

111.001 All unformed surfaces to receive waterproofing shall comply with Clause 80.030 of Section 80: Structural Concrete and shall be free of any curing agents.

All formed surfaces to receive waterproofing shall be free from cavities caused by air entrapment and from release oils.

Sealing and securing at edges

111.002 For waterproofing systems that are required to be terminated into chases, these shall be provided at concrete perimeter upstands as shown on the Contract Drawings.

Surface preparation

111.003 All surface oil, grease, bitumen, laitance and other contaminants shall be removed as far as is reasonably practicable so that the waterproofing system can be uniformly bonded to the substrate. Surface preparation by grit blasting or, where shown to be appropriate, water jetting, shall be sufficient to remove laitance and any weak material on the surface.

Cavities, local damage and uneven concrete shall be made good with a resin or cementitious mortar in accordance with the Application Guidelines for the waterproofing system so that:

(i) a liquid-applied membrane is continuous and without defects at voids in the surface,

(ii) liquid-applied membranes and sheet membranes are fully supported by the substrate,

(iii) protective boards, if used, remain flat.

Concrete repair materials that are not specified in the manufacturer's Application Guidelines shall be compatible with the waterproofing system.

When specialised drying equipment is used for the removal of water and for drying the surface, it shall not damage the substrate.

Application of waterproofing system to concrete surfaces

111.004 The waterproofing system shall not be applied to a concrete surface until the minimum period specified in the Application Guidelines has elapsed from casting of the concrete, and the surface has cured and dried so that it will provide good adhesion.

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