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MODEL CLAUSES FOR CIVIL ENGINEERING WORKS

SECTION 112 LOOSE-LAID SYSTEMS FOR UNDERLINE BRIDGES

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SECTION 112

LOOSE-LAID SYSTEMS FOR UNDERLINE BRIDGES

Surface preparation

112.001 Surface preparation shall be sufficient to prevent the waterproofing system from being punctured;

- (i) from below by protrusions in the substrate,
- (ii) from above by ballast.

Any loose fill over an arch shall be compacted before treating any voids and protrusions.

Where practicable, voids in the substrate shall be filled with a rapid curing cementitious or resin-based material so that the waterproofing membrane is uniformly supported: the material shall be allowed to cure sufficiently prior to the application of the waterproofing system. Where necessary, sharp protrusions shall be made smooth using the same or similar repair materials.

Substrate repair materials that are not specified in the Application Guidelines shall be compatible with the waterproofing system.

When sand is used to fill voids in the substrate, a non-integral protective layer shall be placed below the waterproofing membrane.

Steel substrates shall be prepared and receive a full protective treatment as specified in Appendix 112/1.

Non-integral protective layer below the waterproofing membrane

112.002 Where necessary, a compatible non-integral protective layer of the type specified in Appendix 112/2 shall be placed below the waterproofing membrane;

- (i) when sand is used to fill voids in the substrate,
- (ii) to reduce the risk of the membrane being punctured from below,
- (iii) to avoid contact between bitumen that is present on the existing substrate and a new waterproofing membrane that is not resistant to bitumen.

The overlaps of a sheet non-integral protective layer shall be not less than 100 mm or the value specified in the Application Guidelines.

Joints in a board or slab non-integral protective layer shall be sealed.