

10.3.2 Preparation of Concrete Surfaces

1. Concrete surfaces to be protected with coatings, membranes in-situ GRP lamination or waterproof membrane shall be a minimum 30 days old and be prepared as follows.
 - a. Concrete surfaces to receive coating/membrane/lining /waterproofing shall be prepared by sand blasting or as otherwise recommended by the product manufacturer with the surface being uniformly roughened but not damaged by excessive sand blasting.
 - b. In locations where the Engineer determines that sand blasting is not practical the surface shall be etched with a solution of muriatic acid and the surface subsequently cleaned to the approval of the Engineer.
 - c. Prepared surfaces shall be dry, clean and free of oil, grease and loose materials. Surface protrusions and offsets shall be removed.
 - d. Any previously applied coatings or surface treatments must be removed.
 - e. Surface repairs shall be carried out with the appropriate repair system prior to the application of coating/membrane/lining /waterproofing as specified in Section 03500 of the specification.

10.3.3 Application of Epoxy Coatings

1. Coatings shall be mixed and applied in strict accordance with the manufacturer's recommendations.
2. Special attention shall be given to ensure that edges, corners, crevices and other areas receive a film thickness at least equivalent to that of adjacent coated surfaces.
3. The penetrating solvent containing two component epoxy amine primer shall be applied over the whole area to be coated by suitable nylon bristle brush or spray. The primer shall soak into the concrete and shall not leave a resin rich layer on the surface. Primers containing fillers or pigments shall not be used. A minimum of 24 hours shall lapse before filling the surface.
4. The surface of the primed concrete shall be scraped with approved two component solvent free epoxy filler supplied by the coating manufacturer. The filler shall be squeezed into blowholes. The filler shall have the property of being resin rich such that the finished surface shall look semi glossed when finished.
5. There shall be strict control of surface cleanliness between coats. Dust and sand shall be used by vacuuming and any dust embedded in the coated surface shall be