

3. Coating system shall have a proven track record of not less than 5 years in Abu Dhabi or in similar environmental conditions. Coating system shall be suitable for use in the climatic conditions prevailing in Abu Dhabi with regard to pot life, useable life of freshly mixed components and curing.
4. Intermediate coats shall be tinted to facilitate inspection of coverage for each coat.
5. UV resistant over coating for external applications shall be as recommended by the manufacturer.

10.2.3 Polyurethane Elastomeric Membrane

1. The polymer shall be two part solvent free polyurethane with the properties given in Table 10-2 below, unless otherwise approved by the Engineer.

Table 10-2: Polyurethane Elastomeric Membrane Requirements

Property	Requirement
Elongation at Break	Minimum of 250%
Tensile strength	Minimum of 8N/mm ²
Nominal hardness	Minimum of 80 (Shore A)
Nominal thickness	3mm
Average adhesion	Minimum of 1.0N/mm ²

2. Application shall be made with specialised spray equipment to produce a fast curing, seamless membrane in a single coat.
3. A penetrating primer must be utilised to assure permanent bond with substrate.
4. Abrasive for non-slip wearing surface shall be as recommended by the manufacturer.
5. UV resistant over coating for external applications shall be as recommended by the manufacturer.

10.2.4 PVC and HDPE Lining

1. Lining shall be manufactured from PVC or HDPE specially compounded to retain flexibility in manufacturing the lining. All joint, corner and welding strips shall be made from similar materials.
2. The actual resin used in the manufacture must constitute not less than 99% of the resin used in the formulation. Copolymer resins will not be permitted.
3. The lining shall be permanently and physically attached to the concrete with an anchoring system manufactured from the same material as the lining and shall be suitable for casting into concrete. The anchoring system shall withstand a pull out test of at least 18kN/m applied perpendicular to the concrete surface for a period of one minute without rupture of the anchors or withdrawal from the concrete.
4. All joints in the lining shall be sealed using appropriate welding techniques.