



IS 16532: 2017 APP Modified Bituminous Waterproofing and Damp-Proofing Membrane with Polyester Reinforcement-Specification

APP modified bituminous waterproofing and damp-proofing membrane is a durable roofing material which use **Atactic polypropylene (APP)** as the primary modifier to impart plasticity to the bitumen and **reinforcing it with polyester**, designed to effectively prevent water infiltration and moisture damage in structures.

These membranes are intended for use as a base sheet in the fabrication of **waterproofing and damp-proofing systems** and has the potential to overcome cracks which leads to leakage. The membranes can be of **different thicknesses ranging from 1.5 mm to 5 mm**, with both plain and mineral finishes. The membranes provide the following key properties such as **Impermeability**, Resistance to aging and weathering, Bonding with the base surface, **High temperature stability**, Resistance to impact and puncture and **Cold flexibility**.

A crucial safety consideration is that membranes less than 3mm thick are not suitable for torch application due to potential damage risks. **For UV protection**, the membranes can be finished with aluminum foil, bituminous aluminum paint, acrylic coating, or natural mineral granules.

The standard specifies three finishing options for APP membrane polyester: (a) Plain finish (b) **Mineral finish** and (c) **Aluminium finish**.

This standard highlight the physical requirements for the above three finishes and specified the dimensional requirements for thickness, weight, and width. Performance requirements are specified for parameters like **cold flexibility**, softening point, tensile strength, elongation, tear strength, heat resistance, water absorption, and **dimensional stability**. **Pressure head test** is specified to ensure there is no sign of leakage in the membrane.

The standard addresses various important parameters of waterproofing and damp-proofing membranes, covering both material composition and physical/mechanical properties. It provides a comprehensive specification and guide to **ensure the quality and suitability of APP-modified bituminous membranes** for the intended applications.