

PRODUCT CODE 5483

SmartCare EPDM Membrane

Single Ply Elastomeric Membrane

Construction

PRODUCT DESCRIPTION

SmartCare EPDM Membrane is a preformed elastomeric waterproofing membrane made up of high quality EPDM rubber. This membrane exhibits high tensile strength, elongation, tear strength and is also resistant to weathering, heat ageing, ozone, UV rays, acids, alkalis & oxygenated solvents. SmartCare EPDM Membranes demonstrates much higher elongation after ageing as compared to other types of membranes and hence provides long service life.

USES

It is used for waterproofing:

- > Medium to Large sized Residential Terraces
- > Basements, Foundation and Podiums and Raft Slabs
- > Lakes, Reservoirs, Canal and Tunnel linings
- > Swimming Pools
- > Terrace Gardens

CHARACTERISTICS/ ADVANTAGES

- > Long Service Life
- > High Elongation - More than 400 %
- > High tensile and tear strength
- > Zero maintenance cost provided, it is fixed as per the recommendation
- > Resistant to ozone, weathering, heat ageing, ultra-violet, acids, alkalis & oxygenated solvents
- > Additional dead load – Negligible

TESTS

APPROVAL / STANDARDS

ASTM D 4637 & ASTM D 6134

PRODUCT DATA

FORM

APPEARANCE/ COLOURS

Black Colour textile finish rubber sheets

PACKAGING

1.2 x 20 m Rolls
Tolerance +/- 10%

STORAGE CONDITIONS/ SHELF-LIFE

The membranes must be stored in a shaded area covered by a HDPE cover and tied securely in a manner that will minimize exposure to sunlight and UV. The membranes shall be protected from all sources of heat and extreme temperatures. The membrane rolls should be stored vertically and no staking during transport or storage. The shelf life is 24 months under above storage conditions.

HANDLING PRECAUTIONS

The membrane is non-hazardous, non-flammable and therefore can be disposed of in any regular disposal areas. All membranes however should be disposed off only after wrapping with paper, plastic or cloth. Seek medical assistance immediately in case of any allergy.

TECHNICAL DETAILS

CHEMICAL PROPERTIES

- A. Chemical Base:** EPDM
- B. Thickness mm:** 1.3 ± 10%
- C. Unit Weight kg/m²:** 1.42

MECHANICAL AND PHYSICAL PROPERTIES

- A. Tensile Strength, MPa:** Min 10 MPa
- B. Elongation at break (L/T)%:** Min 400
- C. Tear Strength (lbs/ inches):** Min 160
- D. Adhesion Strength, (N/mm):** Min 9
- E. Hydrostatic water pressure, Bars:** Passes 7
- F. Shore 'A' Hardness:** Min 60
- G. Elastic Recovery:** Min 90

APPLICATION METHOD/ TOOLS

The surface must be sound, fully cured concrete free from dust, oil and other foreign materials. The surface should be mechanically prepared to get best adhesion of the membrane. Any pot holes/ hollow portion should be repaired with polymer modified mortar which should be cured for minimum 72 hrs. Expansion joints must be treated using Asian Paints Smart Care Hybrid PU Sealant

Mark out datum lines with chalk so that the membranes can be aligned according to them.

Then arrange to lay the membrane from one side of the roof, and fold back to half its length.

Before applying Asian Paints SmartCare Rubber Adhesive, stir it in the container to achieve uniform consistency. Mix Asian Paints SmartCare Rubber Adhesive and Asian Paints SmartCare Hardener in the recommended proportion and apply a uniform thin coat using brush/rubber spreader on the substrate as well as back side of the membrane (pot life after mixing the two components for the adhesive is 2-3 hrs).

Wait till the solvent evaporates and adhesive becomes surface dry (tacky). The surface dry condition can be achieved in 10 min depending on ambient temperature. Stick the membrane on the surface using roller or rubber spreader making sure that no wrinkles are left on the membrane. Care must be taken that adhesive is not applied on the area that has to be overlapped. To achieve this, use masking tape to demarcate the area to be overlapped (Splicing Area).

An overlap of minimum 50 mm must be maintained between adjacent membranes. Once the membrane has properly adhered with the substrate, remove the masking tape and use the same adhesive to adhere the overlapped membrane portions. The overlap joint should follow the path towards rain water drain pipe so that localised stagnation of water is avoided.

In case the membrane gets damaged during application, repair using patch of membrane cut to the size so that it is 2 inches longer on all the sides of the area to be repaired.

PRECAUTIONS

Substrate must be fully dry. In case any moisture is present, dry the substrate using blow torch. Substrate voids/ hollow concrete must be repaired and cured using polymer modified mortar.

Adhesive is solvent based and combustible.

Keep away from live flame/other source of ignition.

Both the components of adhesive must be handled with care. Do not touch with bare hands.

Store adhesive at ambient temperature away from direct sunlight.

Store membrane under ambient condition.

Do not apply at temperature below 20 deg centigrade.

SHELF LIFE

AP Smart Care EPDM Membrane stored under closed ambient condition: 24 months

AP Smart Care Rubber adhesive stored under closed ambient condition: 6 months