

Shieldproof AR

Anti Root Waterproofing Membrane



Description

Shieldproof AR is a torch-applied waterproofing membrane, treated to resist plant root penetration and designed for use in planted roofs.

Uses

- Areas where the plantation can damage the waterproofing layers such as:
- Roof gardens.
- Top of underground garages.
- Green oasis in houses.

Characteristics/ Advantages

- Excellent elasticity.
- Plant root resistance.
- Rot resistant.
- Flexible at low temperatures.
- Resistance to ageing.
- Good resistance to acids, sulphates and chlorides.
- High puncture and tear resistance.
- High dimensional stability.

Application Instructions

- To fix the sheet to the substrate, use a propane gas burner to melt off the polyethylene film and a thin layer of Bitumen while unrolling and laying the membrane.
- Side laps 100 mm and end laps 150 mm.
- The membrane can be applied onto the vertical walls and must extend at least 10 cm above the top level of the soil to ensure that no overflow of irrigation water passes behind the waterproofing layer.

Typical Properties

Dimension	1 * 10 m/ roll
Thickness (ASTM D5147)	4 – 5 mm
Weight per roll	48 or 58 mm
Reinforcement	Non-woven Polyester 180 g/m ²
Penetration of coating (ASTM D5)	10 – 30 dmm
Softening Point (ASTM D36)	140 – 160 °C
Cold Pliability (BS EN 1109)	No cracking at - 10 °C
Tensile Strength Long. Transv.	900 N/5 cm 600 N/5 cm
Ultimate Elongation Long. Transv.	40% 45%
Tear Strength Long. Transv.	450% 350%
Water Absorption (ASTM D5147)	< 1%
Static Indentation Resistance	Not perforated at 25 kg (L4)
Wear Pressure Resistance	No leakage at 1000 mm water head at 24 hours
Water Vapor Transmission	0.20 g/m ² per day
Resistance to UV	No deterioration
Chemical Resistance	To alcohol, salt solutions, dilute acids and alkalis