ECOGUARD

QMS Certified Firm

APP Modified Bitumen Membrane

Description:

ECOGUARD waterproofing membrane 3, 4 or 5 mm thick is highly performing membrane.
ECOGAURD membranes are manufactured from bitumen, modified with atactic poly-propylene (APP).

The compound is a mixture of distilled bitumen, plastomers and elastomers which give the membrane excellent durability and flexibility at low temperatures, and ability to withstand high temperatures. The reinforcement is various types of nonwoven spunbonded polyester fabric to give the needed elongation and to provide the membrane with the required resistance to heat aging, puncture, and rotting.

ECOGAURD is manufactured with polyethylene film on the lower face to prevent sticking in the roll and which melts quickly when subject to heat during application, and gives a visual sign of the correct melting temperature of membrane. The upper face is covered with fine sand, granules or colored slates when membrane is used as exposed top layer.

Advantages:

- Single-ply waterproofing layer.
- Fast, easy and clean application.
- Can be applied on existing asphalt roofing systems.
- Highly resistant to weathering.
- Resistance to salt solutions, dilute acids, alkalies, sulfates and chlorides.
- Resistant to U.V.

Field of Application:

Due to its excellent resistance and elongation, **ECOGUARD** is used for a wide range of waterproofing applications such as:

- Roofs (reinforced concrete, prefabricated concrete, metal and timber decks).
- Roof gardens, terraces, kitchens, bathrooms, etc.
- Underground foundations, basements and retaining walls.
- Reservoirs, basins and canals.

Instruction for Use:

- Lay down the rolls so that the lower face with poly-ethylene film is bonded to the substrate.
- 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.
- Seams at overlaps should be properly secured and smoothed on with a hot round-tipped trowel.
- Side laps 100 mm and end laps 150 mm.
- The membrane may be loosely laid, partial or fully bonded, depending on the structure and the specifications.

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Technical Specifications

Properties	Results				Test Method
	ECO. 160	ECO. 180	ECO. 200	ECO. 250	
Dimension, m/roll	1x10				
Thickness, mm	3, 4	4 or 5			ASTM D5147
Weight per roll, Kg	39, 50	50 or 62			UEAtc MOAT 30
Reinforcement Nonwoven Polyester	150 g/m².	180 g/m².	200 g/m².	250 g/m².	BS 747
Penetration at 25°C, dmm	20 ± 10				ASTM D5
Softening point, °C	150 ± 10				ASTM D36
Heat Resistance	No flowing after 2 hours at 100 °C.				UEAtc MOAT 30
Cold Pliability	No cracking at -5 to -12 °C				UEAtc MOAT 27
Tensile Strength, N/5cm Long. Transv.	550 400	650 450	850 650	950 750	ASTM D5147 & D146
Ultimate Elongation,% Long. Transv.	30 35	35 40	40 45	45 50	ASTM D146
Lap Joint Strength, N/5cm. Long. Transv.	600 450	700 500	900 700	1000 800	UEAtc MOAT 27
Static Indentation Resistance	Not perforated at 25 kg. (Class L4).				BS 747
Water Pressure Resistance	No leakage at 1000 mm water head/24 hrs.				UEAtc MOAT 27
Water Vapor Transmission	0.2 g/m² per day				ASTM E96
U.V. Resistance	No Deterioration.				ASTM G53
Chemicals Resistance.	Resistant to alcohol, salt solutions, dilute acids and alkalies.				

- Acceptable deviation according to UEAtc.
- This Technical Data are the average results of tests, measurements and trials carried out by LAMA's own laboratory and RSS laboratories according to international standards such as ASTM, 6.S and UEAtc.
- This product data sheet supersedes all previous data publications pertaining to this product.
- This data may be changed, improved or modified by LAMA, in accordance with the Client's requirements, availability of raw material, without advance notice.

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