

DWI

DERMABIT®
WATERPROOFING IND.

ECOGUM

An APP type modified bituminous membrane



GENERAL DESCRIPTION

ECOGUM is a quality roofing and waterproofing membrane, reinforced either with a core of non woven polyester of 160g/m² nominal weight (referred to as P) or a 50g/m² fiberglass fleece (referred to as F). It is suitable for a variety of applications among them; roofs, large slabs, terraces, bathrooms, wet areas, foundations, basements, tanking and others.

SPECIAL FEATURES

- Positive barrier to water and dampness.
- Excellent resistance to ageing and atmospheric agents.
- Remains flexible even in cool weather.
- Maintains shape stability at high temperatures.
- Reasonably accommodates structural movements.
- Withstands thermal shock and can be left exposed if coated with a reflective coat.
- May be torched directly over old shingles or old bituminous membranes.
- The membrane comes in various types according to the surface top:
 - SAND: The top surface is covered with fine sand.
 - PBS: The top surface is covered with a thin easy torched Poly-ethylene film.
 - SL: The top surface is covered with reflective slates either in natural gray or pigmented in various colors.
- The bottom surface is covered with a thin easy torched Poly-Ethylene film.
- Resistant to water-borne chemical attack.

COATING MIXTURE OF THE MEMBRANE

The waterproofing capability is provided by the coating mix of the **ECOGUM** membrane. The reinforcement is impregnated with this mix and then coated to factory regulated thickness. The mix is made up of bitumen, modified with Amorphous Poly-olefins, thermoplastic resins and stabilizers giving the membrane its excellent resistance to atmospheric agents and ageing, maintaining shape stability at high temperatures, improving adhesion strength and making the membrane easy to apply saving on time and labor.

PACKING

ECOGUM is manufactured in a standard size of 1x10m for thickness of 3mm and 4mm and 1x20m for 2mm, however special length can be done on request. All rolls are sold on pallets and covered with a shrink-wrap.

TOOLS & EQUIPMENT

The application of the **ECOGUM** membrane requires very limited tools like propane gas torches and cylinder, a knife for cutting the membranes to size and a trowel with rounded end. Various torch heads are sold separately by **DWI** on request.

METHOD OF APPLICATION

The application of **ECOGUM** is both easy and quick. For applications on concrete, tiles or any other porous surface, coat the substrate with **DERMAPRIMER** (solvent based bituminous primer according to **ASTMD41**) at the rate of 4-5m²/litre. Allow this coating to dry thoroughly. In time of high humidity we recommend it should be left overnight.

The **ECOGUM** should first be unrolled and positioned correctly. Each roll should overlap the adjacent roll by 10cm. Once the roll has been positioned correctly, the membrane should be rolled up again, taking care not to change its orientation. Using left to right movements, heat the lower surface of the membrane with a propane gas torch. This will cause slight surface melting and the molten bitumen will adhere to the surface.

You then torch on the side overlap to the recommended size of 100mm. Continue the above method for consecutive rolls remembering end-laps must be minimum 150mm. Inspection of lap joints must be carried out to ensure total adhesion.

TECHNICAL DATA

DWI products are tested at random intervals by independent laboratories to international standards and the results of these tests are available on request. In addition, each batch manufactured is subject to strict quality control procedures to ensure it meets appropriate and applicable standards and/or norms.

	PROCEDURE	UNITS	TOLERANCE	VALUE	
Reinforcement: non-woven polyester		g/m ²	+/- 5%	160	
ASTM					
Length		m	<-1%	10	
Width		m	<-1%	1	
Thickness	ASTM D5147	mm	-0.2mm	4.00	
Tensile properties: max, tensile force	- long - trans	ASTM D5147 ASTM D5147	N/50mm N/50mm	-20% -20%	700 500
Tensile properties: elongation	- long - trans	ASTM D5147 ASTM D5147	% %	-15 -15	40 40
Resistance to tearing	- long - trans	ASTM D5147 ASTM D5147	N N	min min	600 450
Lap joint strength	- long - trans	ASTM D5147 ASTM D5147	N/50mm N/50mm	-20% -20%	700 500
Low temperature flexibility*		ASTM D5147	C	min	0
Dimensional stability at +80C	- long - trans	ASTM D5147 ASTM D5147	% %	mlv mlv	-0.5 -0.5
Water Absorption (n/a slate)		ASTM D5147	%	mlv	<0.15
CE					
Visible defects	EN 1850-1	N%/m ²	0	0	
Length	EN 1848-1	m	<-1%	10	
Width	EN 1848-1	m	<-1%	1.00	
Straightness	EN 1848-1	mm	<20mm	pass	
Mass per unit area	EN 1849-1	kg/m ²	+/- 10%	4.70	
Thickness	EN 1849-1	mm	-0.2mm	4.00	
Watertightness to liquid Water	EN 1928-1	mlv	>60 kPa	pass	
Tensile properties: max. tensile force	- long - trans	EN 12311-1 EN 12311-1	N/5cm N/5cm	-20% -20%	700 500
Tensile properties: elongation	- long - trans	EN 12311-1 EN 12311-1	% %	-15 -15	40 40
Resistance to tearing (nail shank)	- long - trans	EN 12310-1 EN 12310-1	N N	min min	190 180
Shear resistance of joint	- long - trans	EN 12317-1 EN 12317-1	N/5cm N/5cm	-20% -20%	700 500
Resistance to static loading (method A)		EN 12730	kg	min	15
Resistance to impact (h=300mm)		EN 12691	mm	mlv	>300
Flexibility at low temperature*		EN 1109	C	min	0
Dimensional Stability	- long	EN1107-1	%	max	-0.5
Flow Resistance less than 2mm		EN1110	C	mlv	100
Reaction to fire		EN 13501-1		Euroclass	F

* Different cold flexibility values can be supplied to special order.



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