

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	ASTM D5147	N/50mm	-20%	700
- long	ASTM D5147	N/50mm	-20%	500
- trans				
Tensile properties: elongation	ASTM D5147	%	-15	40
- long	ASTM D5147	%	-15	40
- trans				
Resistance to tearing	ASTM D5147	N	min	600
- long	ASTM D5147	N	min	450
- trans				
Lap joint strength	ASTM D5147	N/50mm	-20%	700
- long	ASTM D5147	N/50mm	-20%	500
- trans				
Low temperature flexibility*	ASTM D5147	C	min	0
Dimensional stability at +80C	ASTM D5147	%	mlv	-0.5
- long	ASTM D5147	%	mlv	-0.5
- trans				
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	EN 12311-1	N/5cm	-20%	700
- long	EN 12311-1	N/5cm	-20%	500
- trans				
Tensile properties: elongation	EN 12311-1	%	-15	40
- long	EN 12311-1	%	-15	40
- trans				
Resistance to tearing (nail shank)	EN 12310-1	N	min	190
- long	EN 12310-1	N	min	180
- trans				
Shear resistance of joint	EN 12317-1	N/5cm	-20%	700
- long	EN 12317-1	N/5cm	-20%	500
- trans				
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	EN1107-1	%	max	-0.5
- long				
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.



DWI, DERMABIT WATERPROOFING INDUSTRIES COMPANY LIMITED

Head Office P.O.Box: 10308 – Jubail Industrial City 31961 – Saudi Arabia
 Tel.: +966 3 341 0464 – Fax: +966 3 341 0481
 E-Mail: dermabit@dermabit.com.sa
 Website: www.dermabit.net

Riyadh Branch P.O.Box: 5945 – Riyadh 11432 – Saudi Arabia
 Tel.: +966 1 464 5988 – Fax: +966 1 463 4100

Jeddah Branch P.O.Box: 3589 – Jeddah 21481 – Saudi Arabia
 Tel.: +966 2 697 3309 – Fax: +966 2 697 6374

Al-Khobar Branch P.O.Box: 153 – Al-Khobar 31952 – Saudi Arabia
 Tel.: +966 3 882 3986 – Fax: +966 3 887 8025

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