

# DWI

**DERMABIT®**  
WATERPROOFING IND.

# DERMABIT 4170 SL

Also available as 3170 SL, 5170 SL - An APP type modified bituminous membrane



## GENERAL DESCRIPTION

**DERMABIT 4170 (3170, 5170) SL** is a high performance roofing and waterproofing membrane, produced with a layer of natural slate flakes embedded on the top surface, to protect the membrane from UV radiation and ageing, protecting the membrane layers beneath, while providing an aesthetically pleasing finished waterproofed surface.

## SPECIAL FEATURES

- Positive barrier to water and dampness.
- Excellent resistance to ageing and atmospheric agents.
- Remains flexible at low temperatures.
- Maintains shape stability at high temperatures.
- Accommodates structural movements.
- Withstands thermal shock and is designed for use as an exposed system.
- Provided with a lap strip for continuity at seams.
- May be torched directly over old shingles or old bituminous membranes.
- Attractive colors in natural grey, green, white, red, black, brown, tan or any other color on demand.
- Resistant to water-borne chemical attack.

## COATING MIXTURE OF THE MEMBRANE

The waterproofing agent is provided by the coating mix of the **DERMABIT** membrane. The reinforcement made of nominal 200gm/m<sup>2</sup> non-woven polyester mat is impregnated with this mix and then coated to factory regulated thickness. The mix is made up of bitumen, heavily 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.

## METHOD OF APPLICATION

The application of **DERMABIT 4170 (3170, 5170) SL** is both easy and quick.

### TWO LAYER APPLICATION

The recommended system is two layers in connection with Ecovent and Aerators.

- Coat the substrate with **DERMAPRIMER** (solvent based bituminous primer according to **ASTMD41**) at the rate of 4-5m<sup>2</sup>/litre. Allow this coating to dry thoroughly. In time of high humidity we recommend it should be left overnight.
- Place the Aerators at a minimum radius of 5m from each other.
- Place the Ecovent loose on the surface with butt joints.
- The **DERMABIT 4170 SL** should first be unrolled and positioned correctly on the Ecovent. 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 seep through the holes of the Ecovent for a spot adhesion.

Then torch the selvedge making sure that the overlaps are correctly covering the whole selvedge. Continue the above method for consecutive rolls remembering end-laps must be minimum 20cm.

Inspection of lap joints must be carried out to ensure total adhesion.

### SINGLE LAYER APPLICATION

**DERMABIT 4170 (3170, 5170) SL** may be torched directly in a single layer over old roof, on pitched roofs or where the use of the Ecovent and Aerators is not judged necessary. Dust and dirt is brushed off and the old roofing is coated with **DERMAPRIMER**. The membrane is then torched directly onto the roofing beginning at the lower end of the roof and working upwards. Lap joints must be in the direction of the slope.

In re-roofing non-traffic flat roofs, **DERMABIT 4170 (3170, 5170) SL** may also be torched directly to cleaned and primed old tiles. Care should be taken to ensure that a proper slope is maintained and that water pooling is eliminated. The same method of application as described above should be adopted.

## 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
<b>ASTM</b>					
Length			m	<-1%	10
Width			m	<-1%	1
Thickness		ASTM D5147	mm	-0.2mm	4.10
Tensile properties: max. tensile force	- long	ASTM D5147	N/50mm	-20%	960
	- trans	ASTM D5147	N/50mm	-20%	700
Tensile properties: elongation	- long	ASTM D5147	%	-15	45
	- trans	ASTM D5147	%	-15	45
Resistance to tearing	- long	ASTM D5147	N	min	625
	- trans	ASTM D5147	N	min	425
Lap joint strength	- long	ASTM D5147	N/5mm	-20%	960
	- trans	ASTM D5147	N/5mm	-20%	700
Low temperature flexibility*			C	min	0
Dimensional stability at +80C	- long	ASTM D5147	%	mlv	-0.5
	- trans	ASTM D5147	%	mlv	-0.5
Water Absorption		ASTM D5147	%	mlv	n/a
<b>CE</b>					
Visible defects		EN 1850-1	N/m <sup>2</sup>	0	0
Length		EN 1848-1	m	<-1%	10
Width		EN 1848-1	m	<-1%	1
Straightness		EN 1848-1	mm	<20mm	pass
Mass per unit area		EN 1849-1	kg/m <sup>2</sup>	+/- 10%	4.90
Thickness		EN 1849-1	mm	-0.2mm	4.10
Watertightness to liquid Water		EN 1928-1	mlv	>60kPa	pass
Tensile properties: max. tensile force	- long	EN 12311-1	N/5cm	-20%	960
	- trans	EN 12311-1	N/5cm	-20%	700
Tensile properties: elongation	- long	EN 12311-1	%	-15	45
	- trans	EN 12311-1	%	-15	45
Resistance to tearing (nail shank)	- long	EN 12310-1	N	min	220
	- trans	EN 12310-1	N	min	240
Shear resistance of joint	- long	EN 12317-1	N/5cm	-20%	900
	- trans	EN 12317-1	N/5cm	-20%	700
Resistance to static loading (method A)		EN 12730	kg	min	20
Resistance to impact		EN 12691	mm	mlv	>700
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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