

# DWI

DERMABIT®  
WATERPROOFING IND.

# ADESOBIT<sub>100</sub>

A pre-fabricated self adhesive waterproofing membrane



## GENERAL DESCRIPTION

**ADESOBIT 100** is a multi-ply prefabricated waterproofing membrane consisting of a highly elastic bituminous compound, internally reinforced with a 150g/m<sup>2</sup> non woven polyester mat and topped with a variety of films or material to suit every intended application. It also incorporates a quick release film to ensure clean adhesion.

## SPECIAL FEATURES

- Thickness: it comes in various thicknesses and is labeled as follows:
  - 1.6mm: labeled as **ADESOBIT 1600**.
  - 2.0mm, 3.0mm, 4.0mm labeled respectively as **ADESOBIT 2100**, **ADESOBIT 3100**, **ADESOBIT 4100**.
- Quick release silicon coated film. A release paper is also available on demand.
- Top:
  - Smooth PET film (SMOOTH) in tanking, protected roofing, wet areas, civil works, pile capping.
  - Sand (SAND): In inverted tanking and roofing when adhesion to subsequent concrete layer is desired.
  - Both sides self Adhesive (BSSA) with release film or paper covering both surfaces, as a bottom layer in two layer applications.
  - Natural grey or colored slates (SL): In above ground exposed applications or on parapets.
  - Aluminum sheet (AL): In above ground exposed applications or on parapets.
  - Aluminized PE (XAL): In above ground exposed applications.
  - Geotextile (GEO): As geomembrane and soil containment.
- Provided with a 100mm factory placed side selvedge for clean and strong overlapping.
- High puncture resistance and tensile strength.
- Excellent dimensional stability.
- Lagged adhesion to allow for adjustments during application.
- Excellent resistance to high methane and salinity environment, or other chemicals present in the soil.
- In tanking it is recommended to be used in combination with **ARMOPROOF** protection boards or **PROTECTOBIT** membranes to ensure proper protection from damage during backfilling.
- Accommodates structural movement with a high crack bridging capability.
- Self healing as water will not pass underneath and weaken the adhesion.

## APPLICATION

Concrete should be floated finish, clean, free of voids, honeycomb, laitance, coarse aggregates and sharp unevenness. Any traces of curing compound to be removed. It should be minimum 8 days old.

Coat the surface with **DERMAPRIMER** (solvent based bituminous primer according to ASTM D41) at the rate 4-5m<sup>2</sup>/l. Allow the primer to dry overnight.

Remove the release film by peeling back not more than 30cms at a time. Start to unroll the **ADESOBIT 100** membrane keeping the adhesive side face-down on the primed surface. Press down the membrane, working from the centre to the outer edges. This will expel all trapped air, ensuring good adhesion to the primed substrate.

For subsequent rolls align the adjacent roll along the factory designed selvedge of the first roll. Re-roll the membrane. Peel back the selvedge on the initial roll, then peel back the release film or paper from the second roll and place firmly. This should be done one meter at a time. The minimum end lap should be 150mm.

If any mistake immediately remove the second roll and replace it before it reaches its full adhesion power. It is important to press again the overlaps with a light wooden roller.

**ADESOBIT** membranes should always be protected in all applications. **ARMOPROOF** boards are highly recommended as a flexible, semi hard, easy to install protection mainly before backfilling on vertical surfaces in underground tanking work.

When application temperature drops below 10degC, it is essential to heat the primed surfaces before applying the membrane, either with a gas torch or hot air blower. At surface temperature below 5degC, care should be taken to ensure all surfaces are dry and free of ice, frost and condensation.

Material stored at temperature below 20degC should be left exposed to a warmer temperature for at least 24 hours. Ambient temperatures above 50degC may give rise to difficulty in removing the release film or paper. It will be better to wait until the temperature goes down.

## PACKING

**ADESOBIT 1600** and **2100** come as standards 1x15m rolls. **ADESOBIT 3100, 4100** come as standard 1x10m rolls. Other length may be provided on request. All rolls are packed vertical on pallets with special high strength shrink-wrap. **ADESOBIT** rolls must be transported and kept in stock always in a vertical position.

## 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%	15
Width			m	<-1%	1
Thickness		ASTM D5147	mm	-0.2mm	1.60
Membrane tensile strength	- long	ASTM D638	N/mm	min	10.4
	- trans	ASTM D638	N/mm	min	7.20
Resistance to tearing	- long	ASTM D1004	N	min	475
	- trans	ASTM D1004	N	min	275
Film tensile strength	- long	ASTM D638	N/mm <sup>2</sup>	min	120
	- trans	ASTM D638	N/mm <sup>2</sup>	min	120
Film elongation	- long	ASTM D638	%	min	25
	- trans	ASTM D638	%	min	28
Adhesion to primed concrete		ASTM D1000	N/mm	min	1.80
Adhesion to self		ASTM D1000	N/mm	min	1.80
low temperature flexibility		ASTM D5147	C	min	-15
Water Absorption		ASTM D5147	%	mlv	<0.15
Water vapour transmission		ASTM E154	g/24hr/m <sup>2</sup>	mlv	0.10
Puncture resistance		ASTM E154	N; mm	mlv	970; 80
<b>CE</b>					
Visible defects		EN 1850-1	N%/m <sup>2</sup>	0	0
Length		EN 1848-1	m	<-1%	15
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%	1.70
Thickness		EN 1849-1	mm	-0.2mm	1.60
Watertightness to liquid Water		EN 1928-1	mlv	>60kPa	pass
Tensile properties: max. tensile force	- long	EN 12311-1	N/5cm	-20%	650
	- trans	EN 12311-1	N/5cm	-20%	450
Tensile properties: elongation	- long	EN 12311-1	%	-15	55
	- trans	EN 12311-1	%	-15	75
Resistance to static loading (method A)		EN 12310-1	N	min	20
Resistance to impact		EN 12691	mm	mlv	700
Flexibility at low temperature		EN 1109	C	min	-15
Reaction to fire		EN 13501-1		Euroclass	F



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