

# NEOFLEX A4180

APP Modified Bituminous Membrane

Polymer (APP) modified bituminous membrane, reinforced with non-woven polyester mat. The Polyester combines high tensile strength with an elongation above 40%. A high performance elastomeric waterproofing membrane which combines that ability to withstand high ambient temperature with the usual characteristics of an APP membrane of high flexibility at low temperature that makes it easy to apply at sub-zero temperature.

### ADVANTAGES

- Cold flexibility
- Heat stability
- Thermal ageing resistance
- UV resistance
- Resistance to foot traffic

#### SURFACE FINISH

It is covered either with polyethylene film or sand at the back and comes in a variety of surface finishes; sand, polyethylene film, slated or aluminium. The slate can be natural grey, white, black or green or any other colour depending on stock availability.

#### THICKNESS, ROLL SIZE & PACKING

It is produced 4mm thick in rolls of  $1 \times 10$  meters. The rolls are palletized and shrink wrapped.

#### **STORAGE & MATERIAL HANDLING**

The rolls should always be stored vertically in a shaded area. Normally the pallets should not be stacked one over the other. However, if a wooded board is used in between, two pallets may be stacked one over the other.

#### **SPECIAL FEATURES**

- Positive vapour barrier
- Excellent resistance to atmospheric agents.
- High flexibility during application at sub-zero temperature with no physical strains
- High malleability making it entirely suitable for difficult basement and foundation works.
- High softening point allowing it to maintain shape stability at high temperatures.
- Withstands thermal shocks.
- Accommodates structural movements.
- Resistant to chemical attacks.

#### **FUNCTIONS**

Used in one or two layers to roofs, foundations works, basement tanking, where high flexibility and malleability are required.



# PREPARATION

Where the membrane is to be laid directly on to a one-layer system on concrete, tiles or an existing roofing system, a coat of bituminous primer should first be applied and allowed to dry thoroughly.

## **APPLICATION INSTRUCTIONS**

The membrane must be unrolled and laid down on the area to which it is to be applied. Check the orientation carefully. Adjacent rolls should then be laid, each overlapping the one next to it by 10cms on the side and 15 cms at the ends. Taking care not to change to orientation of each roll, reverse the process until each has been re-rolled. When laying the roll, the lower surface should be heated with a propane torch, using sweeping left to right movements. This will melt the lower surface to the membrane and allow it to stick to the substrate. On slated membranes you should either remove the special selvedge paper or on sand bottom rolls torch the special polypropylene selvedge. Continue this process for each subsequent roll, remembering that the overlaps must be 10cms for the edges and 15cms at the ends. When the process is complete, carry out an inspection to ensure total adhesion.

# **TECHNICAL CHARACTERISTICS**

CHARACTERISTICS		TEST METHOD	UNIT	NOMINAL VALUES
Visible defects			visible	Without defects
Length			m	10.00
Width			m	1.00
Nominal Thickness		UEAtc	mm	4.0
Reinforcement base		UEAtc	gms/ m <sup>2</sup>	180
Straightness			mm	20 mm x 10 m
Nominal Unit Weight (Plain)			Kg/ m <sup>2</sup>	4.46
Nominal Unit Weight (Mineral)			Kg/ m <sup>2</sup>	4.50
Bitumen Softening Point		ASTM D-36	°C	>150
Tensile Strength,	Longitudinal Transversal	ASTM D5147 ASTM D5147	N/5cm N/5cm	850 700
Elongation at Break,	Longitudinal Transversal	ASTM D5147 ASTM D5147	%	45 50
Tear Resistance,	Longitudinal Transversal	ASTM D5147 ASTM D5147	N N	550 360
Lap Joint Strength,	Longitudinal Transversal	UEAtc M.O.A.T.30 & 27	N/5cm N/5cm	>800 >600
Puncture Resistance,	Static Dynamic	UEAtc		L₄ static @ 25kg I₄ Dynamic @ 9 Joules.
Cold Flexibility @ -10 °C		ASTM D5147UEAtc M.O.A.T.30 & 27	°C	No Cracking
Heat Resistance		UEAtc ASTM D5147UEAtc M.O.A.T.30 & 27	°C	135 ( No Flowing )
Water Vapour Permeability		ASTM E96		<0.2g / 24hr / m <sup>2</sup>
Water Absorption		ASTM D5147	%	<0.25 BPS
Resistance to Thermal Ageing.		UEAtc		No Deterioration
Resistance to Ageing due to UV-Radiation		UEAtc		Complies
Hydrostatic Pressure Resistance		DIN 1048	PSI	>100

All values are subject to 5-10 % tolerance

**NOTE:** The information contained in this DATA SHEET, as well as our advice, both written as oral or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must take them as simple orientations, provided strictly as information. We recommend to study deeply all information provided before proceeding to the use or application of any of our products, and strongly advise to conduct tests "on-site" in order to determine their convenience for a specific project. Our recommendations do not exempt of the obligation that installers have to deeply know the right application method for these systems before they use them, as well as to conduct as many preliminary tests as possible if there are any doubts about the appropriate system to use. The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. In consequence, the installer will be the only responsible of any damage or prejudice derived from the partial or total in-observation of our indications, and in general, of the inappropriate use or application of these materials.



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