



PROSHIELD - P

APP Modified Elasto - Plastic WP Membrane with Non-woven Polyester Reinforced

Product composition

PROSHIELD – Pis a high performance water proofing membrane made of distilled bitumen modified with elasto-plastic polymers and Atactic Polypropylene (APP) providing the membrane excellent aging performance. Its non-woven polyester inlayer provides the membrane with high mechanical characteristics as well as giving excellent dimensional stability.

Usage area

PROSHIELD – P can be applied in single layer roofing system as well as for water barrier and ideal for waterproofing of roofs, reservoirs, basements, terrace garden, car parking, tunnels and bridge decks.

METHOD OF APPLICATION

For the application of the membrane the use of heat is generally used by means of gas torch or specific hot air machine.

Co-ordinate the operations in a way to not cause damage to the construction elements and underground structure.

Avoid leaving the structure for the night or for long periods of work interruptions without having the membrane properly sealed.

The application surface must not have depressions, to avoid the ponding of rain water and must have sufficient slope to guarantee a regular rain runoff. Normally this is obtained with a slope of 1.5%.

The water drainage spouts should be sufficiently big to allow rain water to be eliminated in an efficient way.

Prepare cementations substrate, including verticals and details, with Proshield Primer@0.30 L/m^2 and allow it to hard dry for 12 - 24hrs.

The membrane must be unrolled and laid aligned to the lowest point of the slope of the roof and progress towards the higher point of the roof.

Each roll should overlap the next by 100mm on the side laps and 150mm at the end laps for below ground application and 75mm and 100 mm overlaps for above ground application respectively.

The membrane must be applied to the substrate fully bonded. In any case, when in the proximity of the head laps, the membrane must be applied for at least 100 mm, furthermore all details, perimeters, verticals, change of slope as well as projecting area must be fully bonded.

Health and Environment

The membrane does not contain any substance which is likely to be detrimental to health or to the environment. It complies with generally admitted health and safety requirements.





PROSHIELD - H

APP Modified Membrane with Dual Hybrid Non-woven Composite Reinforced

Product composition

PROSHIELD – H is a high performance water proofing membrane made of distilled bitumen modified with elasto-plastic polymers and Atactic Polypropylene (APP) providing the membrane excellent aging performance. It has dual hybrid (Polyester & FG combined) non-woven composite reinforcement which provide the membrane with high mechanical characteristics as well as giving excellent dimensional stability.

Usage area

PROSHIELD – H can be applied in single layer roofing system as well as for water barrier and ideal for waterproofing of roofs, reservoirs, basements, terrace garden, car parking, tunnels and bridge decks.

METHOD OF APPLICATION

For the application of the membrane the use of heat is generally used by means of gas torch or specific hot air machine.

Co-ordinate the operations in a way to not cause damage to the construction elements and underground structure.

Avoid leaving the structure for the night or for long periods of work interruptions without having the membrane properly sealed.

The application surface must not have depressions, to avoid the ponding of rain water and must have sufficient slope to guarantee a regular rain runoff. Normally this is obtained with a slope of 1.5%.

The water drainage spouts should be sufficiently big to allow rain water to be eliminated in an efficient way.

Prepare cementations substrate, including verticals and details, with Proshield Primer $@0.30 \text{ L/m}^2$ and allow it to hard dry for 12 - 24 hrs.

The membrane must be unrolled and laid aligned to the lowest point of the slope of the roof and progress towards the higher point of the roof.

Each roll should overlap the next by 100 mm on the side laps and 150 mm at the end laps for below ground application and 75 mm & 100 mm overlaps for above ground application respectively.

The membranes must be applied to the substrate fully bonded. In any case, when in the proximity of the head laps, the membrane must be applied for at least 100mm, furthermore all details, perimeters, verticals, change of slope as well as projecting area must be fully bonded.

Health and Environment

The membrane does not contain any substance which is likely to be detrimental to health or to the environment. It complies with generally admitted health and safety requirements.





PROSHIELD - F

Fibre Glass Reinforced APP Modified Membrane

Product composition

PROSHIELD – F is uniquely formulated and designed pre-fabricated membrane made of distilled bitumen modified with elasto-plastic polymers and Atactic Polypropylene (APP) with Fiber Glass reinforcement as its centre core, which provide the membrane with high mechanical characteristic and excellent dimensional stability and resistance to weather and ageing. It also provides the membrane excellent tensile strength, elongation and superior lap joint strength.

METHOD OF APPLICATION

For the application of the membrane the use of heat is generally used by means of a gas torch or specific hot air machine.

Co-ordinate the operations in a way to not cause damage to the construction elements and underground structure.

Avoid to leaving the structure for the night, or for periods of prolonged work interruptions without having the membrane properly sealed.

The application surface must not have depressions, to avoid the ponding of rain water and must have a sufficient slop to guarantee a regular rain off. Normally this is obtained with a slope of 1.5%.

The water drainage spouts should be sufficiently big to allow for rain water to be eliminated in an efficient way.

Prepare cementations substrates, including verticals and details, with solvent based bituminous primer. Allow this preparation layer to dry before proceeding with any other operation.

With prefabricated constructions, apply a suitable reinforcing strip along all joints. In the presence of construction joints, prefabricated panels or metal decks, suitable expansion joints are to be considered.

The membranes must be applied to the substrate fully bonded. In any case, when in the proximity of the head laps, the membrane must be applied for at least 100 mm ,furthermore all details, perimeters, verticals, change of slop as well as projecting area must be fully bonded.

Health and Environment

The membrane does not contain any substance which is likely to be detrimental to health or to environment and complies with generally admitted' health and safety requirements'. For more detailed information, please refer to the relevant safety data sheet.

TECHNICAL DATA

SL	PARAMETERS		UNIT	PROSH	IELD-P	PROSHIELD-H		PROSHIELD-F		TEST METHOD
1	Roll Thickness		mm	3 & 4	2	3 & 4	2	3 & 4	2	EN 1849-1/ASTM D 5147
2	Roll Length		m	10	15	10	15	10	15	EN 1849-2/ASTM D 5147
3	Softening Point		°C	> 150	> 150	> 150	> 150	> 150	> 150	EN 1427/ASTM D 36
4	Heat Resistance, 120°C, 2 hrs		°C	No Flow	No Flow	No Flow	No Flow	No Flow	No Flow	EN 1110 ASTM D 5147
5	Penetration at 25°C		dmm	> 20	> 18	> 20	> 18	> 20	> 18	EN 14023/ASTM D 5
6	Tensile Strength	Longitudinal	N/5 cm	700	500	750	650	650	450	EN 12311-1 ASTM D 4073
		Transverse		450	400	550	350	450	350	
7	Elongation at Break	Longitudinal	In %	45	35	15	15	13	12	EN 12311-1 ASTM D 5147
		Transverse		47	50	12	12	7	9	
8	Tear Resistance	Longitudinal	N	450	300	450	400	400	350	EN 12310-2 ASTM D 4073
		Transverse		400	400	400	300	350	300	
9	Cold Flexibility		°C	-2	-2	-2	-2	-2	-2	EN 1109/ASTM D 5147
10	Water Absorption		%	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	ASTM D 5147
11	Puncture Resistance	Static Indentation		L-3	L-3	L-3	L-3	L-3	L-3	
		Dynamic Indentation		I-3	I-3	I-3	I-3	I-3	I-3	

Unique Features

- Easy to apply (by propane torch).
- High tensile strength and tear resistant.
- High dimensional stability.
- Absolute impermeability to water.
- Excellent resistance to ageing and weathering.
- Excellent high temperature performance.
- Highly resistant to impact, puncture and substrate movement.
- Excellent adhesion and seam integrity on any surface.
- Excellent cold flexibility.
- Environment friendly.

Packaging

All types of membranes are available in $(1m \times 10m)$ in 3mm & 4mm thickness and $(1m \times 15m)$ in 2mm thickness.

Storage

All types of PROSHIELD membranes should be kept vertically in an upright position under covered shed, away from all sources of direct sunlight.