



# SPY Spunbond Polyester



QMS Certified Firm

## SBS Modified Bitumen Membrane

### Introduction:

**SPY** is a highly elastic waterproofing membrane, torch applied, modified with Styrene Butadiene Styrene (SBS) to provide an extreme cold flexibility under severe cold weather, and reinforced with non-woven spunbonded polyester to insure exceptional strength for the membrane.

### Description:

**SPY** LAMA waterproofing membrane is manufactured from high quality distilled bitumen modified with the SBS to provide an extreme low cold flexibility. Reinforcement is provided by the nonwoven fabric spunbond polyester to give the ultimate elongation needed and to provide the membrane with the required resistance to heat aging, puncture and rotting.

The lower surface is covered with a burn-off polyethylene film, while the upper surface is covered with polyethylene film, fine sand, granules or colored slates when used as exposed top layer to guard from UV and surface with appealing decorating color.

### Advantages:

- ❑ Excellent elasticity.
- ❑ High flexibility at low temperatures.
- ❑ Resistance to aging.
- ❑ High puncture and tear resistance.
- ❑ Good resistance to acids, sulphates and chlorides.

### Uses:

- ❑ Lay down the rolls so that the lower face with polyethylene film is bonded to the substrate.
- ❑ To fix the sheet to the substrate, use a propane gas burner to melt off the polyethylene film and a thin layer of bitumen while unrolling and laying the membrane. Side laps 100 mm and end laps 150 mm.
- ❑ The membrane may be loosely laid, partially or fully bonded, depending on the structure and the specifications.

### Field of Application:

Due to its very low cold pliability, **SPY** is used in areas where severe weathering conditions are expected such as:

- ❑ Roofs (reinforced concrete, prefabricated concrete, metal and timber deck).
- ❑ Multi-story car parks.
- ❑ Underground foundations, basements, and retaining walls.
- ❑ Reservoirs, basins and canals.
- ❑ Swimming pools.

**SPY**



## Technical Specifications

Property	Result		Test Method
	SPY 180	SPY 200	
Dimension, m/roll	1x10		
Thickness, mm	4, or 5		ASTM D5147
Weight per roll, Kg	50 or 62		UEAtc MOAT 30
Reinforcement Nonwoven Polyester	180 g/m <sup>2</sup> .	200 g/m <sup>2</sup> .	BS 747
Penetration at 25°C, dmm	25±10		ASTM D5
Softening point, °C	≥130		ASTM D36
Heat Resistance No flowing after 2 hours	at 100 °C.		UEAtc MOAT 30
Cold Pliability	No cracking at -15°C	No cracking at -20°C	UEAtc MOAT 27
Tensile Strength, N/5cm    Long. Transv.	800 650	900 750	ASTM D5147 & D146
Ultimate Elongation,% Long. Transv.	40 45	45 50	ASTM D146
Lap Joint Strength, N/5cm. Long. Transv.	850 700	950 800	UEAtc MOAT 27
Static Indentation Resistance	Not perforated at 25 kg. (Class L4).		BS 747
Water Pressure Resistance	No leakage at 1000 mm water head/24 hrs.		UEAtc MOAT 27
Water Vapor Transmission	0.2 g/m <sup>2</sup> per day		ASTM E96
Chemicals Resistance.	Resistant to alcohol, salt solutions, dilute acids and alkalies.		

- Acceptable deviation according to UEAtc or ASTM D6222.
- This Technical Data are the average results of tests, measurements and trials carried out by LAMA's own laboratory and RSS laboratories according to international standards such as ASTM, B.S and UEAtc.
- This product data sheet supersedes all previous data publications pertaining to this product.
- This data may be changed, improved or modified by LAMA, in accordance with the Client's requirements, availability of raw material, without advance notice.