

TARFLEX 4000

TARFLEX 4000 membranes are SBS modified bitumen waterproofing membranes designed to provide sub-structure concrete surfaces with perfect waterproofing protection.

SALIENT FEATURES

- General purpose torch-applied membrane protection for sub-grade concrete.
- Excellent elongation and recovery properties.
- Superior flexibility and pliability.
- High bonding strength to self and substrates.

DESCRIPTION

TARFLEX 4000 membranes are made by saturating and coating a reinforcement core with a homogenous thermoplastic blend of SBS (Styrene-Butadiene-Styrene), distilled bitumen and stabilizers. The elastomeric compound is carefully produced under controlled conditions to ensure its thermal stability at atmospheric temperatures and flexibility at very low temperatures. **TARFLEX 4000** membranes are impermeable to water, very flexible and easy to work around contours and protrusions.

QUALITY ASSURANCE

Imperbit Membrane Industries' Management system is registered to ISO 9001 standards.

STANDARDS

TARFLEX 4000 membranes are tested in accordance with UEAtc MOAT 27-1983 & ASTM D 5147.

SURFACE FINISH AND SIZE OF ROLL

The top surface of the membrane is covered with a thin layer of PE film or fine sand. The bottom surface is covered with printed IMI design film. The membranes are produced in thickness of 2.0, 2.2, 3, 4, 4.5 & 5mm and in a standard length of 10 mtrs and 1 mtr width.

USES

TARFLEX 4000 Basesheet membranes are ideal for general use in the civil construction as damp-proof layer or as a base sheet under cap sheets in exposed or inverted roofing systems. **TARFLEX 4000** are available in thickness of 2.0mm, 2.2mm & 3.0mm reinforced with 60 Gr/m² fiber glass.

TARFLEX 4000 membranes are used for waterproofing of foundations and basement tanking. They are used to dress pile caps, tie beams and for the waterproofing of rafts. They are easily workable around contours and protrusions. **TARFLEX 4000** membranes are also used in the waterproofing of roof slabs in inverted roof systems.

TARFLEX 4000 (250) membranes are recommended for heavy duty applications.

TOOLS FOR FIXING THE MEMBRANE

Gas torch for welding, related cylinder, knife for trimming the membrane, a trowel with a rounded tip, marking aids, gloves, and safety goggles.

APPLICATION

The surface to be waterproofed must be completely cleaned and should be free of dust, oil, protruding nibs, nails etc. A coat of IMI CONCRETE primer is then applied to the concrete surface at the rate of 200-300 gr/m². The primer must be allowed to dry completely before application of the membrane. **TARFLEX 4000** membranes are fixed by torch welding. SBS membranes are generally soft, and therefore care should be taken when applying heat to the underside or when making a lap joint, which should be heated from the top to produce a thin bead of molten bitumen at the seam, which should then be smoothed out with the trowel, ensuring a properly welded joint.

EXPOSED ROOFING SYSTEM

For exposed application, skirting and flashings, **TARFLEX 4000** mineral membranes are used. These are produced with a self-protecting layer of natural or colored slate flakes. The membranes are provided with a selvedge 10 cms wide that is granule-free. This facilitates the forming of lap joints. End of roll joints are made by scraping off 15cm of mineral flakes or heating 15 cms of the mineral surface sufficiently to press-in the slate and expose the bitumen. The next roll is then torched to the bitumen of the exposed area.



TECHNICAL DATA FOR TARFLEX 4000



Properties		FG	150	180	DR	200	250	Method of Testing
Reinforcement Core (Gr/m ²)		60 glass fiber	150 Polyester	180 Polyester	200 polyester +60 glass fiber	200 Polyester	270 Polyester	UEAtc, MOAT 31: Para F
Nominal thickness of membranes		2,2.2, 3 & 4 mm	3 & 4 mm	3 & 4 mm	4 & 5mm	3, 4 & 5 mm	4 & 5mm	UEAtc, ASTM D 5147
Tensile Strength N/5cm	Longitudinal	320	600	750	900	900	1000	UEAtc
	Transversal	200	400	500	600	650	750	
Elongation, %	Longitudinal	3	40	40	35	42	45	UEAtc
	Transversal	3	45	45	40	47	50	
Tear Strength, N (Notch Method)	Longitudinal	250	400	400	500	470	500	ASTM D 5147
	Transversal	150	300	300	400	370	450	
Puncture Resistance, N		120	600	700	850	800	900	ASTM E 154
Puncture Resistance	Static Indentation	L ₃			L ₄			UEAtc
	Dynamic Indentation	I ₃			I ₄			
Resistance to hydrostatic pressure, bars (M)		> 4 (40)	> 7 (70M)					ASTM D 5385, DIN 1048
Flexibility at low temperature, °C		- 5					UEAtc	
Heat resistance @ 80 °C		No Flow					UEAtc	
Resistance to thermal ageing		Passes					UEAtc, ASTM D 5147	
Softening Point, °C *		110					UEAtc, ASTM D 36	
Penetration @ 25°C, dmm *		25					UEAtc, ASTM D 5	

* Compound Properties (Tested during manufacturing process)

The technical data given here are the average results of tests carried out in our laboratory on the **TARFLEX 4000** membrane. IMI reserves the right to change or modify the data without prior notice. All reasonable care has been taken in compiling the data that to the best of our knowledge is accurate and true. All recommendations are made in good faith. No responsibility can be accepted by us and no warranty is implied with regard to any of the recommendations made in this data sheet, since the conditions of actual use and the labour involved are beyond our control. **TARFLEX 4000** membranes are not affected by chlorides, sulphates & phosphates as well as dilute acids found in ground water.

Packing Configuration:

TARFLEX 4000-3P-PBS/SAND 28 rolls per pallet
 TARFLEX 4000-4P-PBS/SAND 23 rolls per pallet
 Nominal roll length for all above products = 10 mtrs

Indicative loading capacity for 4mm thickness:

552 rolls per 40ft Trailer/ 468 rolls per 20ft Container

Product generic name

SBS TE -3P-PBS/SAND
 SBS TE -4P-PBS/SAND
 SBS TE -4P-MINERAL
 SBS TE -5P-PBS/MINERAL

HANDLING PRECAUTIONS: **TARFLEX 4000** membranes have no health hazard when used with our standard application recommendations. IMI CONCRETE primer contains a flammable solvent with flash point of 42°C. Use primer in well ventilated areas away from sources of direct heat or ignition. Inhalation must be avoided and the use of protective clothing, rubber gloves, goggles and barrier cream is recommended. Do not use solvent to clean skin. After work clean hands with soap and warm water or suitable mild detergent. Obtain immediate medical advice if redness or skin irritation appears. In case of mouth or eye contact, flush immediately with fresh water and seek medical advice.

Storage:

Rolls must be kept up right at all times, in a covered well-ventilated storage area, away from sources of direct heat. If ambient temperatures at storage site fall below 10°C, the rolls should be exposed to warmer temperatures of 10°C to 40°C for periods of upto 2 hours prior to use to facilitate unrolling of the membranes. If stacking is necessary, ensure that rigid sheet of plywood is placed between the pallets. Do not stack more than 2 high. **TARFLEX 4000** membrane has a shelf life of 12 months from the date of production, if stored in a cool, dry store in original unopened packing.

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* This technical data sheet supersedes all previous publications pertaining to this product

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