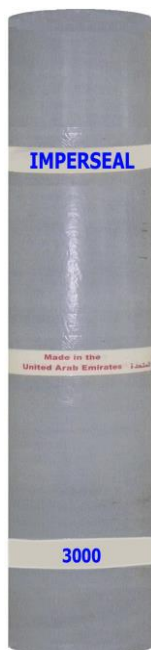


IMPERSEAL 3000 HDPE



IMPERSEAL 3000 HDPE membranes are factory fabricated waterproof sheets of predetermined thickness. These are produced by coating a robust rot proof core, with an impervious elastomer modified bituminous compound designed to provide substructure concrete surfaces with a high waterproofing protection.

SALIENT FEATURES

- Self-sealing to minor puncture caused by sharp objects.
- SBS modified elastomeric bituminous mix exhibits excellent elongation and recovery properties.
- Unaffected by corrosive salts and dilute acids formed in ground water.

USES

- Waterproofing the underside or topside of slabs-on-grade.
- Protection of Pre-stressed concrete panels or reinforced concrete cast-in-situ walls, below grade.
- Waterproofing of Foundation walls below as well as above grade.
- Tanking of basements.
- Damp-proofing of wet areas such as below shower basins.
- Waterproofing under tiles in kitchens and wet areas.
- Waterproofing of sewerage concrete manholes.
- As a vapour retarder.

QUALITY ASSURANCE & MATERIAL WARRANTY

Imperbit Membrane Industries' Management system is registered to ISO 9001:2015 standards.

SURFACE FINISH

The upper surface of **IMPERSEAL 3000 HDPE** is covered with HDPE film along with 10cm wide strip of siliconized release film for bitumen to bitumen contact at side seams. The lower surface is totally covered with siliconized release film, providing a flat surface for total bonding during application.

TOOLS FOR FIXING

Knife, Measuring tape, Roller, Marking aids and Gloves

APPLICATION METHOD

Surface Preparation: The surface to be waterproofed must be smooth, clean and should be free of depressions and loose aggregate. Any sharp protrusions such as nails, tying wire, etc., should be removed. Cracked concrete should be repaired and any depressions must be filled with mortar. External sharp edges must be chamfered. It is important that surface is free of oils, grease and dust. An appropriate slope towards drains should be provided to the slab, with drainage points installed at membrane level.

Priming: The cleaned concrete surface must be coated with IMI-Concrete-Primer. The solvent-based primer conforms to ASTM D41 and is compatible with the membrane.

Membrane Application: **IMPERSEAL 3000 HDPE** membranes are applied by positioning the roll over the area to be waterproofed and peeling the siliconized release film about one meter at a time, while pressing the adhesive surface to the primed substrate. The membrane is pressed from mid point to the edges in order to expel any trapped air and to ensure good contact. The adjacent roll is then positioned so as to overlap the fixed membrane by at least 80 – 100 mm along the edge. The selvedge strip provided at the edge of the fixed membrane is then peeled back one meter at a time while fixing the second roll in the same manner as the first. End laps must be min 150-mm wide. All seams must be pressed from the top using a suitable seam roller to ensure total contact and continuity at the seams.

Inspect the fixed membrane to ascertain that all joints are properly executed and all air is expelled from under the membrane.

Corners and Termination: Use fillets or cant strips at all internal corners and chamfer external corners before applying the membrane. Apply a 600-mm wide reinforcing strip of **IMPERSEAL 3000 HDPE** over the corners followed by the full membrane. Top edges of the membrane should be terminated in a chase on vertical surfaces, followed by a suitable bituminous mastic sealant.

Back Filling: Prior to back fills, the membrane should be protected. Protection Board/Sheet should be used to protect the membrane.

PROPERTIES		3000	METHOD OF TESTING
Reinforcing Core		Fibre Glass mat 50/60 gr/m ²	UEAtc MOAT: 31 Para F
Top Surface		HDPE film	-
Nominal Thickness (mm)		1.5, 1.6, 1.8 & 2.0	UEAtc, ASTM D 751
Tensile Strength (composite)	Longitudinal	300 N/5cm	UEAtc
	Transversal	200 N/5cm	
Elongation (composite)	Longitudinal	3 %	UEAtc
	Transversal	3 %	
Tear Strength (composite)	Longitudinal	200 N	ASTM D 5147
	Transversal	130 N	
Adhesion Strength		To primed concrete & self 2.0 N/mm	ASTM D 1000
Water Vapour Transmission (composite)		< 0.06 gr/m ² / 24 hrs.	ASTM E 96
Water Absorption	@ 24 hrs.	0.15 %	ASTM D 570
	@ 30 days	0.95 %	
Flexibility at low temp (composite)		< -20 °C	UEAtc, ASTM D 5147,
Capacity to Bridge Cracks (composite)		Will withstand substrate cracking > 1 mm width	ASTM C 836
Service Temperature (composite)		7 °C – 50 °C	

HANDLING PRECAUTIONS: IMPERSEAL 3000 HDPE 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: IMPERSEAL 3000 HDPE rolls are shipped upright on wooden pallets. The roll must be kept upright at all times. Storage of Imperseal rolls should be in a well-ventilated and covered storage area. Membranes should be stored away from a source 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 ease of application and good bond to the substrate. Do not stack more than 1 high. IMPERSEAL 3000 HDPE has a shelf life of 12 months from date of production, if stored in a cool, dry store in original unopened packing.

Indicative Loading Capacity for 1.5 & 1.6mm thickness:
660 Rolls per 40 ft Trailer / 620 Rolls per 20 ft Container
Indicative Loading Capacity for 1.8 & 2.0mm thickness:
550 Rolls per 40 ft Trailer / 522 Rolls per 20 ft Container

PACKING: IMPERSEAL 3000 HDPE membranes are palletised and shrink-wrapped at the factory.

Thickness (mm)	1.5 & 1.6	1.8 & 2.0
Rolls per pallet (Nos.)	30	25
Nominal Roll Length (mtrs)	15	15
Nominal Roll weight (kgs)	24-26	32-34

The technical data given here are the average results of tests carried out in our laboratory on the IMPERSEAL 3000 HDPE 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. IMPERSEAL 3000 HDPE membranes are warranted to be free from manufacturing defects for a period of 10 years. 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. IMPERSEAL 3000 HDPE membranes are not affected by chlorides, sulphates & phosphates as well as dilute acids found in ground water.

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