

Prefabricated HDPE waterproofing Membrane for Basement, Below Grade or Above Grade concrete

INTRODUCTION:

MULTIGUARD[®] **HYDROFAB**[®] **PES** are a thick prefabricated high-density polyethylene membrane, an aggressive, sand finish as well as pressure-sensitive adhesive and a weather-resistant protective coating. Unlike conventional non-adhering membranes, which are vulnerable to water ingress tracking between the un-bonded membrane and structure, the unique **HYDROFAB**[®] **PES** seal to concrete prevents any ingress or migration of water around the structure.

HDPE membrane with pre-applied pressure sensitive adhesive with either liner or sand finish, which bonds integrally to poured concrete, remaining in place in case of settlement of substrate. It is an ideal product for water and damp proofing of terrace, roofs, sunken slab, and basement etc. where structural movement or future crack is expected.

Unique Features:

- Forms a unique, integral seal to concrete poured against it. This prevents water migration and makes it unaffected by ground settlement beneath slabs.
- Fully-adhered watertight laps and detailing.
- Provides a barrier to water, moisture and gas, physically isolates the structure from the surrounding ground.
- Superior flexibility
- Long term crack resistance
- Superior freeze/thaw resistance
- Very low shrinkage
- Non-toxic
- Chemically resistant, effective in all types of soils and waters protects structure from salt or sulphate attack.

APPLICATION AREAS:

The membrane creates a continuous bond to poured concrete, unaffected by ground settlement. The membrane acts as an impermeable barrier to water, moisture and gas while providing good puncture resistance during placement of reinforcement bars. The membrane is inert and is resistant to chemicals, acids, bases, alkalis and salts – providing excellent corrosion resistance.

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Suitable across applications:

- 1. Basements
- 2. Podiums
- 3. Parking Areas
- 4. Retention Walls
- 5. RC Members
- 6. Tunnels, Underpasses & Culverts
- 7. Water Retaining Structures
- 8. Sewage Treatment Plants
- 9. Underground Metro Stations
- 10. Service Rooms
- 11. Pier & Harbour protection

TECHNICAL DATA:

PROPERTIES	Hydrofab PES-S- S→Sandfinish		Hydrofab PES-A- A→Adhesive	Unit
S→Single Selvedge, D→Dual Selvedge, W→Weldable	S/D/W			
Туре	PES 1.2	PES 1.5	PES 1.8	
Thickness	1.2 mm	1.5 mm	1.8 mm	mm
Puncture Resistance,	1000 min	1200 mir	n 1400 min	N
Tensile Strength	25 MPa			МРа
Elongation at break	500 min			%
Resistance to hydrostatic head	71			m
Peel adhesion to concrete	1500 min			N/m
Lap peel adhesion strength	1500 min			N/m
Low Temperature flexibility	<(-25°C)			°C
Screw rod tear strength	400 N			N

Typical test values represent average values from samples tested.

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APPLICATION DATA:

PREPARATION

HYDROFAB® PES membranes are supplied in rolls 1.2m/2m wide, with a selvedge on one side to provide self-adhered laps for continuity between rolls. The rolls of **HYDROFAB® PES** membrane and Tape are interwoven with a disposable plastic release liner which must be removed before placing reinforcement and concrete.

It is important I to create a sound and solid substrate to eliminate movement during the concrete pour. Substrates must be regular and smooth with no gaps or voids. Grout around all penetrations such as utility conduits, etc. for stability.

PROTECTION

The membrane shall be protected from damage due to ongoing site activities or from aggregates during backfilling by a tough, weather, warp and rot proof protection board (**MultiBoard/MultiStick**) Alternatively, on horizontal areas the membrane can also be protected by laying a cement sand screed (50mm). **MultiBOARD** can be fixed with a double-sided adhesive bitumen tape (**MultiSTICK**).

CLEANING

All tools should be cleaned with water immediately after use.

STORAGE:

Store in dry, frost-free conditions at moderate temperature not greater than 25 °C.

PACKAGING:

Pack Size: 1.2 m x 20 m 2 m x 20 m

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SAFETY DATA:

- Irritating to eyes, respiratory systems and skin.
- Risk of serious damage to eyes.
- Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.
- After contact with skin, wash immediately with plenty of clean water.
- Wear suitable protective clothing, cloves and eye/face protection.

Please consult our technical department for further information.

WARRANTY

Multichem warrants Multiguard[®] HYDROFAB PES to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of Multiguard[®] HYDROFAB PES.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of Multiguard[®] HYDROFAB PES.

Because of constant improvement of manufacturing techniques and formulations, the Company reserves rights to change this datasheet and its contents without prior notice.

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