



## TREMproof® FBM

Pre-Applied, HDPE, Fully Bonded Membrane

### DESCRIPTION

TREMproof FBM is a 1.2mm pre-applied, fully bonded HDPE waterproofing membrane. It consists of multi-layer composite waterproofing material for superior waterproofing performance, including a layer of high-density PE film, self adhesive polymer layer and a unique particulate layer that bonds integrally to poured concrete.

### BASIC USES

- Waterproofing of all below grade concrete structures.
- Protection of concrete foundations in contaminated and aggressive ground conditions.
- Waterproofing of cut and cover tunnels for MRT, Subway, Metro.
- Prevents coal gas and methane gas leakage in underground layers.

### FEATURES & BENEFITS

- Forms a unique integral seal to concrete poured against it. This prevents lateral water migration and waterproofing performance is unaffected by ground settlement beneath slabs.
- Dual Adhesive Seams are utilized to enable an adhesive-to-adhesive bond at the edge of membrane, providing exceptional performance in challenging environments, without requiring specialized equipment.
- Provides complete barrier to water, moisture and gas.
- Physically isolates the structure from the surrounding ground.
- Zero permeance to moisture.
- Very easy and efficient to install, does not require primer.
- Easy to install on permanent formwork – allowing efficient use of confined sites.
- Self-protecting – reinforcement can start immediately after installation.
- Unaffected by wet conditions.

- HDPE is highly chemical-resistant and effective in all types of soils and waters – protects structure from chlorides, sulphates and aggressive ground conditions.

### PACKAGING

- Roll Size: 1.2m x 20m roll
- Roll Weight: 33kg/roll
- Minimum Side Lap = 80mm
- Minimum End Lap = Butt Joint using TREMproof FBM Butt Adhesive Tape

### COLOURS

White

### INSTALLATION

Refer to the appropriate method statement for the system being installed for the required application techniques, application rates, etc. The techniques involved may require modification to adjust to the jobsite conditions. Consult your Tremco Sales Representative or Tremco Asia Technical Service for site conditions requirements.

### LIMITATIONS

- Must be applied to uniform and regular surfaces
- While the surface does not necessarily need to be dry, be sure to eliminate any standing water.
- Curved or rounded substrates should be avoided
- Do not apply at temperatures below -5°C

## WARRANTY

Tremco warrants its Products to be free of defects in materials but makes no warranty as to appearance or colour. Since methods of application and on-site conditions are beyond our control and can affect performance. Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to Tremco Membranes.

Tremco's sole obligation shall be, at its option, to replace, or refund the purchase of the quantity or Tremco Membranes proved to be defective and Tremco shall not be liable for any loss or damage.

| PROPERTY  | TEST METHOD        | TYPICAL VALUE                |
|---|--------------------|------------------------------|
| Membrane Thickness (mm)                                       | ASTM D3767         | 1.2mm                        |
| Low Temperature Flexibility (-29°C)                           | ASTM D1970         | Pass                         |
| Tensile Strength, N/mm <sup>2</sup>                           | ASTM D412-2016     | 27N/mm <sup>2</sup>          |
| Elongation at Break, %  | ASTM D412-2016     | 500%                         |
| Resistance to Puncture, N                                     | ASTM E154-2008     | 1000N                        |
| Hydrostatic Pressure Resistance                               | ASTM D5385-1993    | 70m                          |
| Lateral Water Migration Resistance                            | ASTM D5385-1993    | 70m                          |
| Water Vapour Transmission ng/(m <sup>2</sup> .S.Pa)           | ASTM E 96/E 96M-16 | < 0.80 ng/Pas*m <sup>2</sup> |
| Methane Permeance, ml/day.m .atm                              | ASTM D 1434        | 41 ml/day.m .atm             |
| Peel Strength to Concrete, N/m (On Concrete Block)            | ASTM D903-1998     | 1700N/m                      |
| Lap Adhesion Strength, N/m                                    | ASTM D1876-2001    | 1700N/m                      |
| Change in Tensile Strength, % with effect of liquid           | DIN 16726-2017     |                              |
| a) 5% H <sub>2</sub> SO <sub>3</sub> (Longitudinal direction) |                    | -4.2%                        |
| b) Milk of lime Ca(OH) <sub>2</sub> (Longitudinal direction)  |                    | -4.1%                        |
| c) 10% NaCl (Longitudinal direction)                          |                    | -3.2%                        |
| d) 5% H <sub>2</sub> SO <sub>3</sub> (Transverse Direction)   |                    | -4.0%                        |
| e) Milk of lime Ca(OH) <sub>2</sub> (Transverse Direction)    |                    | -4.2%                        |
| f) 10% NaCl (Transverse Direction)                            | -2.9%              |                              |
| Change in Elongation at break, % with effect of liquid        | DIN 16726-2017     |                              |
| a) 5% H <sub>2</sub> SO <sub>3</sub> (Longitudinal direction) |                    | -3.0%                        |
| b) Milk of lime Ca(OH) <sub>2</sub> (Longitudinal direction)  |                    | -3.1%                        |
| c) 10% NaCl (Longitudinal direction)                          |                    | -2.5%                        |
| d) 5% H <sub>2</sub> SO <sub>3</sub> (Transverse Direction)   |                    | -2.8%                        |
| e) Milk of lime Ca(OH) <sub>2</sub> (Transverse Direction)    |                    | -2.9%                        |
| f) 10% NaCl (Transverse Direction)                            | -2.1%              |                              |

To find your local office address and contact details, visit

[www.tremcocpg-asiapacific.com](http://www.tremcocpg-asiapacific.com)

REV21/06/24