

AMPHIBIA 3000 GRIP 1.3



HYDRO REACTIVE WATERPROOFING MEMBRANE

Description

Dr. Fixit AMPHIBIA 3000 GRIP 1.3 is Pre-applied 1.3 mm thick light weight, self-healing and self-sealing waterproofing membrane based on EPDM+FPO technology which is self-fastening to the concrete. This is composed of a co-extruded, multi-layer, polymer, continuous coat, with differentiated function for total water tightness of underground structures against water seepage.

It is composed of 3 layers with expansive capacity differentiated by the following features:

TIGHT BARRIER - WATERTIGHT layer

CORE - Self-sealing expansive safety layer, even in the event of a puncture

ACTIVE BARRIER - Hydro-reactive layer with controlled expansion, prevents side water seepage and seals the overlaps

Moreover, it is provided with a calibrated non-woven fabric on the inner face side in contact with fresh concrete which allows the mechanical adhesion of the membrane to the structure.

Standard compliance / Specification

- Complies with IS 16471:2017 & BS 8102:2009 recommendations for providing Type A protection
- BBA Certification

Areas of Application

Waterproofing and protection of concrete underground structures such as.

- Basement Raft & Grade Slab
- Basement Confined Retaining walls
- Subway and UG metro projects
- Other underground civil structures
- Residential and industrial buildings

Features

- Self-sealing & Self-healing
- Self-fastening (no dependency over concrete pressure)
- Light weight membrane(ease of handling and installation)
- Absolute impermeability with no lateral migration of water
- Excellent adhesion to the reinforced concrete structure
- Resistance to aggressive natural agents contained in the ground
- Usable in the presence of salt water
- Easy and quick application
- Easily adapts to the different configurations of the structure
- Compatible with other waterproofing systems like HDPE membranes etc.
- Protection against radon and methane gases
- BBA Certified

Method of Application

- Surfaces that are to be waterproofed can be damp, must not have great protrusions, cavities or continuous water flows that could compromise the continuity and sealing process of the overlaps.

Horizontal Substrates

- The AMPHIBIA side stamped with "CONCRETE SIDE" is always installed in contact with the concrete structure that needs to be waterproofed.



- End laps should be staggered to avoid a buildup of layers. Accurately position succeeding sheets to overlap the previous sheet by 50 mm.
- Membrane side and end overlap shall be minimum 50 mm. Use Dr. Fixit Bi Mastic - High performance elastic adhesive mastic for joining overlaps consumption @ 8-10 rmt/600 ml sausage and roll it firmly to ensure watertight joint without any air-voids.
- Ensure the underside of the succeeding sheet is clean, dry and free from contamination before attempting to overlap.
- Then lay the reinforcements, formwork and related concrete casting.
- For special design or execution situations, contact the Dr. Fixit Technical Service.

Vertical Substrates (Confined Retaining Wall Areas)

- The AMPHIBIA side stamped with "CONCRETE SIDE" is always installed in contact with the concrete structure that needs to be waterproofed.
- Dr. Fixit Amphibia 3000 GRIP 1.3 membrane can be vertically installed using staples or nails.
- Ensure the underside of the succeeding sheet is clean, dry and free from protrusions, contamination before attempting to overlap.
- If Dr. Fixit Prebond membranes are installed below raft and Amphibia over retaining walls overlap of 100 mm between two membrane needs to be carried out below raft using Dr. Fixit Bi-Mastic sealant keeping minimum 200-300 mm distance from inner face of the confined retaining walls.
- Membrane side and end overlap shall be minimum 50 mm. Use Dr. Fixit Bi Mastic - High performance elastic adhesive mastic for joining overlaps consumption @ 8-10 rmt/600 ml sausage and roll it firmly to ensure watertight joint without any air-voids.
- For special design or execution situations, contact the Dr. Fixit Technical Service.

Technical Information

| PROPERTY | TEST METHOD | TYPICAL VALUE |
|---|--|--|
| Thickness (Composite) | ASTMD5147 | 1,3 mm ± 10% |
| Thickness(Bare film) | ASTMD5147 | 1.0 mm ± 10% |
| Water tightness | UNI EN 1928 B (700 KPa/24 hrs) | No passage |
| Impact resistance | UNI EN 12691(Method A: 250 mm) | No leakage |
| Resistance to chemical agents and later tightness | UNI EN 1928 B (CaOH ₂ - 28days) | Test Passed |
| Resistance to artificial ageing and water tightness | UNI EN 1296 (12 weeks 70°C)UNI EN 1928 B | Test Passed |
| Resistance to tear | UNI EN 12310-1 | Longitudinal: >300 N Transversal: >250 N |
| Tensile strength | UNI EN 12311-2 (A method) / ASTM D 412 | Longitudinal: >300 N/50mm Transversal: >250 N/50mm 6 N/mm ² |
| Elongation at breaking point | UNI EN 12311-2 (A method) / ASTM D412 | Longitudinal: > 250% Transversal: > 250% 600 % |
| Puncture Resistance | ASTM E154 | 800 N |
| Resistance to static puncture | UNI EN 12730 (method C/24 h) | 20 kg |
| Water vapour permeability | UNI EN 1931 | 0.1 g/m ² /day |
| Shear Strength of Joints with BI MASTIC | UNI EN 12317-2 | 233 N |



| | | |
|-------------------------------------|--------------------|------------|
| Fire resistance | UNI EN 13501-2 | Class E |
| Peeling for concrete | ASTM D 903 mod. | > 1.5 Kn/m |
| Side transmigration | ASTM D 5385 mod. | No leakage |
| Watertightness on overlaps | UNI EN 1928-B mod. | No leakage |
| Low temperature Flexibility(-25 °C) | ASTM D1970 | No Crack |
| Dimension Stability | ASTM D1204 | 0.1 % |
| Crack Cycling | ASTM C1305 | Pass |

Precautions & Limitations

- Product is approved for uses only those specifically detailed in this product data sheet. Contact Pidilite Technical Services where any other use is anticipated or intended.
- Technical properties may vary by 5% due to practical challenges like variation in UTM machines, rate of loading, sample preparation, thickness measurement and other manual errors. Contact Pidilite Technical services in such situations.

Packing

Dr. Fixit Amphibia 3000GRIP 1.3 : 20 mtr x 1.8 mtr roll @ composite thickness of 1.3 mm

Dr. Fixit Bi Mastic : 600 ml sausage

Dr. Fixit AKTI VO 201 : 320 ml cartridge

Shelf Life & Storage

The shelf life is typically 12 months if stored as per the recommendations in a covered and secured storage space. The products must be stored in a dry place preferably horizontally protected from sun and humidity.

Health & Safety

- This is a non-toxic product.
- Refer to the related Safety Data Sheet.

Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals



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