

# PRE APPLIED FULLY BONDED HDPE MEMBRANE WITH TOP RELEASE LINER

## Description

**Dr. Fixit Prebond R** is high density polyethylene membrane comprises of high performance pressure sensitive adhesive coated with UV resistance gel with top release liner.

Dr. Fixit Prebond R develops chemical bond when concrete poured against it, becomes fully bonded integral part of concrete encasement waterproofing layer, prevents water ingress even under high hydrostatic pressure and resist lateral water migration.

## Standard compliance / Specification

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

## Typical Application

- Basement rafts & confined retaining walls
- Subway and UG Metro Stations
- Cut & Cover tunnels
- Other Underground Civil structures

#### Features

- Fully bonded to concrete poured against it results in preventing the lateral water migration between concrete and membrane.
- Low flatness requirement to substrate; reliable overlapping, easy application.
- Water tightness under the circumstance of ground settlement below.
- Excellent UV Resistance for longer exposure up to 45 days.
- Resistant to aggressive ground water conditions.
- Lesser joints and overlaps, due to large roll widths.

## Method of Application

#### **1 SURFACE PREPARATION**

- It is essential to prepare sound and levelled substrate with no gaps, cavities or projecting ribs.
- Horizontal Surface Monolithic concrete blinding must be free of loose aggregate and sharp protrusions. The surface does not need to be dry. However, standing water must be removed.
- Vertical Surface Use concrete, sacrificial plywood, masonary with flush levelled joints or other approved facing to provide smooth, level and even support to the membrane.

#### 2 MEMBRANE INSTALLATION

• Dr. Fixit Prebond R membranes can be applied at ambient temperatures of -4 Degree C or above.

#### 3 HORIZONTAL SUBSTRATES

- Place the membrane with adhesive side facing the concrete pour and HDPE film side facing the substrate. End laps should be staggered to avoid a buildup of layers. Accurately position succeeding sheets to overlap the previous sheet by 75 mm along the marked selvedge.
- Peel back the plastic release liner from between the overlaps as the two layers are bonded together. Ensure a continuous bond is achieved without creases and roll firmly with a heavy roller.
- Ensure the underside of the succeeding sheet is clean, dry and free from contamination before attempting to overlap.
- Leave plastic release liner in position until overlap procedure is completed.
- As an additional protection any portion which may be opened up shall be bonded together using a hot air blower/ using additional tapes.

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• Completely remove the plastic liner to expose the protective coating. Any initial tack will quickly disappear.

## 4 VERTICAL SUBSTRATES

- Membrane can be vertically installed using Double Sided Adhesive tape or mechanically fasten the membrane vertically using low head fixings (i.e. fasteners or roundels) at selvedge portions only with the adhesive side facing towards the concrete pour.
- The membrane may be installed in any convenient length. Secure the top of the membrane using a batten such as a termination bar or fixing 50 mm below the top edge.
- Fixings can be made through the selvedge so that the membrane lays flat and allows firmly rolled overlaps.
- Immediately remove the plastic release liner. Any additional fixings must be covered with a patch of Pre-Bond Tape.
- Ensure the underside of the succeeding sheet is clean, dry and free from contamination before attempting to overlap. Roll firmly to ensure a watertight seal.

# Roll Ends and Cut Edges -

- Overlap all roll ends and cut edges by a minimum of 100 mm and ensure the area is clean and free from contamination.
- Apply Dr. Fixit Prebond Double sided Tape centered over the lap and roll firmly.

#### 5 CORNERS

• Internal and external corners should be pre formed as per manufacturer instruction overlapping the membrane a minimum of 100mm and sealing with Pre-Bond Tape (both Double side & Single Side tapes). Ensure that the apex of the corner is covered and sealed with tape and roll firmly.

## Technical Properties

PROPERTIES	TYPICAL VALUE	TEST METHOD
Colour	White/Off White	Visual Observation
Thickness of Bare HDPE membrane	0.90 mm	ASTM D 3767
Thickness of composite membrane	>1.2 mm	ASTM D 3767
Tensile strength (Bare HDPE film)	29 Mpa	ASTM D 412
Elongation of (Bare HDPE film)	500%	ASTM D 412
Low Temperature Flexibility	- 25°C Pass	ASTM D 1970
Resistance to Hydrostatic Head	70 M	ASTM D 5385
Peel Adhesion to Concrete	880N/m	ASTM D 903
Puncture Resistance	1000 N	ASTM E 154
UV Exposure	45 days	Internal Test Method
Dimension Stability	< 0.5 %	ASTM D1204

All test parameters are obtained under controlled Lab conditions.

# Limitations

- 1. 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.
- 2.Technical properties may vary by 5 % due to practical challenges like variation in UTM machines, type of loading, sample preparation, thickness measurement and other manual errors. Contact Pidilite Technical Services in such situations.

Note: Tensile strength & elongation has been tested longitudinally. Results in transverse direction may vary.



## Packaging

2.4 Mtr x 20 Mtr

Shelf Life

The shelf life is 12 months if stored as per the recommendations. In a covered and secured storage space.

# Other Products Categories available

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Pidilite Industries Limited Construction Chemicals Division Ramkrishna Mandir Road, Post Box No. 17411 Andheri (E) Mumbai 400059 INDIA Tel +91-22-2835 7000 • Fax +91-22-2835 7008 www.drfixit.co.in • info.drfixit@pidilite.com Dr. Fixit Advice Centre (Toll Free No.) 1800 209 5504 DISCLAIMER The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.