

## MAK MEMBRANE HDPE- P

Pre-applied HDPE pressure sensitive adhesive waterproofing membrane which bonds integrally to poured concrete slabs, remaining in place if settlement of substrate occurs.



### Description

Mak Membrane HDPE - P is a unique membrane HDPE film with pressure sensitive adhesive which allows poured concrete to bond fully with the membrane. It provides water, water vapour and gas protection to water excluding structures and protects concrete from aggressive ground salts, chemicals and hydrocarbons. Mak Membrane HDPE-P is supplied with a self- adhesive seldedge along one side of the roll to provide sealed laps and a comprehensive range of auxiliary products to simplify the application process.

### Uses and Advantages

- ◆ Basement waterproofing protection to grades 1,2 and 3 as defined in BS8102:2009.
- ◆ To provide a vapour and waterproof membrane in building and civil engineering structures.
- ◆ Resistant to attack from chemicals and aggressive ground salts.
- ◆ Forms a unique, integral bond to poured concrete by pressure sensitive adhesive and remaining in place if settlement of the substrate occurs.
- ◆ Simple application - no primers or protection material required.
- ◆ Inert product - no risk of a reaction with ponded waste prior to concrete being poured.
- ◆ Protects concrete from attack of chemicals, hydrocarbons and aggressive ground salts in contaminated sites.
- ◆ Facilitates Flexible construction programming.

### Specification Clauses

The waterproof tanking membrane shall be Mak Membrane HDPE-P, consisting of HDPE membrane which bonds integrally to freshly poured concrete by pressure sensitive adhesive bond.

The membrane shall be supplied with one self-adhesive seldedge to provide sealed laps and comply with British Standard 8102 2009 - Code of practice for "Protection of Structures Against Water from the Ground" to provide basement waterproofing protection to grades 1, 2 and 3.

### Application Procedure

#### Surface preparation

Horizontal application - the membrane must be applied to smooth, prepared substrate. Concrete blinding is preferred. The substrate shall be free from loose aggregate or other sharp protrusions.

Standing water must be removed to prevent contamination of overlaps and subsequent compromise of waterproof properties.

Vertical application - the membrane is applied to temporary or permanent formwork or adjoining structures. Mak Membrane HDPE-P must not be applied directly onto contiguous or secant piled walls. A plywood sacrificial shutter or spray concrete finish should be used prior to application.

## MAK MEMBRANE HDPE- P

Pre-applied HDPE pressure sensitive adhesive waterproofing membrane which bonds integrally to poured concrete slabs, remaining in place if settlement of substrate occurs.

### Membrane installation

Cut the membrane to a convenient length for installation. Carefully align the membrane and roll it out with sand finish side facing the concrete pour. Lay adjacent sheets accurately so they overlap the previous sheet 80mm along the adhesive selvedge. When laying adjacent full rolls there should be a stagger of half a roll length to avoid building up of end joints in one area.

All overlaps and joints should be firmly rolled to ensure complete adhesion between layers. Remove all release tapes with a short sharp pulling action, especially in hot weather.

### Penetrations

Penetrations e.g., pipe entries through Mak Membrane HDPE-P, require special attention to detail. Refer to M.K. Petro Products India Pvt Ltd for more information on details.

### Mak Membrane HDPE -Sealed Tape

Double-side Pressure Sensitive Adhesive Sealed tape is specially formulated double sided, reinforced pressure sensitive tape. The

tape has two layers of pressure sensitive adhesive which bond respectively to the sand and HDPE surface.

The specially developed Mak Membrane HDPE- P Sealed Tape work together to form a continuous and integral seal to the structure. Mak Membrane HDPE- P Sealed Tape is an 80mm wide tape used in detail areas including end laps and various tie-ins. It is also used to patch damaged areas in the Mak Membrane HDPE-P.

### Installation

#### End Overlaps

Keep Mak Membrane HDPE- P Sealed Tape clean and protect it from being contaminated from dust before use. After applying the Mak Membrane HDPE-P, unroll the tape and remove the release film and adhere to the sand surface side of the end laps of the membrane. Use heavy hand pressure or a hand roller to maximize adhesion. Then remove the PE release film and overlap with the second membrane. It is recommended that concrete be poured within 42 days in hot climates of application of the tape. The concrete must be placed carefully and consolidated properly to avoid damage to the membrane. Never use a sharp object to consolidate the concrete. Provide temporary protection from concrete over splash for areas of the tape that are adjacent to a concrete pour.

### Storage

Store in original unopened packaging, in cool dry conditions, away from sunlight, in a flat position.

### Estimating

#### Mak Membrane HDPE-P

Roll Sizes (W x L): 1.0m x 20m, 2m x 20m

## MAK MEMBRANE HDPE- P

Pre-applied HDPE pressure sensitive adhesive waterproofing membrane which bonds integrally to poured concrete slabs, remaining in place if settlement of substrate occurs.

### Technical Specifications

Properties	Values
Thickness	1.2mm/1.5mm
Elongation	Min 500% (ASTM D412 Modified)
Tensile strength, film	21 MPa (ASTM D412)
Puncture resistance	1000N (ASTM E154)
Peel Adhesion to concrete	880 N/m (ASTM D903 Modified)
Resistance to hydrostatic head	> 60m (ASTM D5385 Modified)
Low temperature flexibility	< -25°C, no crack (ASTM D1970)

#### M.K. PETRO PRODUCTS INDIA PVT. LTD

[ AN ISO 9001 Certified Company ]

Village Mujeri Road, Ballabhgarh, Faridabad

Ph: +91-9560096816

Toll-free: 1800-103-9664

Website: [www.makphalt.com](http://www.makphalt.com)

Email: [info@makphalt.com](mailto:info@makphalt.com)

