



MC-Plan 315 PA-IN

Pre-Applied, Fully Bonded HDPE Membrane for Waterproofing

Product Properties

- Pre-Applied Fully Bonded HDPE membrane with 1.5mm thick
- Provides unique bonding with concrete poured against it to prevent lateral water migration.
- It has zero permeability to moisture and gases.
- Easy to install and suitable for both confined and unconfined areas
- Good resistance for ground chemicals, salts, chlorides and sulphates etc.

Areas of Application

- Waterproofing of sub structure construction
- Protection of Underground concrete from any sub soil contamination
- Waterproofing lining for Cut and Cover Tunnel system
- High end waterproofing for the underground basement of the buildings as a pre-applied system.

Application Notes

General

MC-Plan 315 PA-IN is 1.5mm thick sand finished, fully bonded HDPE membrane consists of multi-layer composite waterproofing material for unique waterproofing experience, with its high-density PE film and self-adhesive polymer layer. **MC-Plan 315 PA-IN** can be installed on uniform and regular concrete blinding. Its unique self-adhesive layer and particulate layer prevents lateral water migration, while applied for the below ground waterproofing of the concrete structure.

Instruction for use

Surface Preparation

The concrete substrate should be sound and in good condition to provide **MC-Plan 315 PA-IN** a solid base and to eliminate the membrane movement during pouring of concrete over it. The surface should be smooth with No gaps or Voids greater than 12mm. The surface should be free from sharp objects. The surface should be free from Running or standing water.

Application

For horizontal areas **MC-Plan 315 PA-IN** is to be unrolled and placed properly with proper alignment. Lay the membrane with white HDPE fil side to the substrate. Overlap the membrane with each other by 75mm. For better bonding on over laps, peel back and completely remove the plastic release liner so that two layers will be bonded perfectly. Press and roll it with hand roller to ensure that there will not be any air bubble in between the overlap joint. Self-adhesive HDPE tapes should be used to ensure proper continuation of the membrane through corners and upstands. It is very important to ensure proper adhesion of the membrane in these areas.

For vertical confined areas apply **MC-Plan 315 PA-IN** with its Thick white plastic face against the leveled substrate like pointed block work, plum concrete wall or shuttering face. Fasten the membrane mechanically by using flat headed fixings. All the fixings should be fixed 600mm center to center in a zig zag manner to ensuring 100% flat-ness of the membrane to the surface. Overlap the

membrane by releasing the Plastic to ensure void free bonding. For unconfined areas Self-adhesive HDPE or SBS membranes should be applied on the cured concrete surface with above mentioned suitable overlapping.

Terminations

All the roll ends and cut edges should be overlapped by minimum 75mm by ensuring the bonding area, perfectly clean and free from any contamination. Depending on the requirement suitable fixers or tapes to be applied on the previous sheet along the 75mm non-selvedge joint. Depending on the site requirements edge termination should be carried out by using Suitable double adhesive tape or other suitable terminating accessories. To get site specific termination details please contact MC-Bauchemie India for more advise.

Damage Repair

If in case, the membrane is subjected to any damage or puncture, then it can be easily repaired with an oversized patch applied to a clean and dry surface fixed with adhesive Tape. It is always recommended to double check the membrane after finishing the reinforcement cage for the raft and rectified for any puncture or damage. If there is any damage visible then it should be repaired immediately before concreting.

Special Instructions

MC-Plan 315 PA-IN pre-applied waterproofing membrane can be installed at temperature of -5°C and above. Installation of membrane in cold weather application care should be taken to pre-heat the adhesive edge during overlapping by using hot air gun.



Technical Data For MC-PLAN 315 PA-IN

Characteristic	Unit	Value	Comments
Thickness of the membrane	mm	≥1.5	
Tensile Strength	N/mm ²	≥25	ASTM D412 - 2016
Elongation at Break	%	650	ASTM D412 - 2016
Puncture resistance	N	>1000	ASTM E154-2008
Peel Adhesion To the concrete	N/mm	1.5	ASTM D903-1998 at 7 Days
Resistance to Hydrostatic Pressure		No Water Leakage	At 100 psi/7 bar for 1hour as per DIN 16726-2011 / ASTM D5385-2000
Water Vapour Transmission	ng/m ² .s.Pa	0.4	ASTM E96
Lap Joint Strength	N/mm ²	1.5	ASTM D1876

Product Characteristics for MC-PLAN 315 PA- IN

Type	Pre applied Flexible HDPE membrane
Delivery	1.5mm with 1m X 20m Roll
Storage	Can be stored in original sealed packages in dry and cool conditions. The same requirements are valid for Transport

Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

Note: - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written form. The accepted engineering rules must be observed at all times.

Edition: - MC/IND/JUNE2024, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.