

CE **ISO 9001-2008** **ISO 14001:2004**
OHSAS 18001:2007 **ISO 17025:2005**

PMH-3041

HDPE Based Self Adhesive Waterproof Membrane

Description

YUHONG PMH-3041 HDPE based Self Adhesive Waterproof Membrane, is specially designed for side wall and deck of underground waterproofing with advanced technology, cold and post applied, fully stuck to the existing concrete construction. The carrier of PMH-3041 is a special made polyethylene and high pressure sensitive adhesive as bonding layer and covered with PET film as releasable layer. PMH-3041 is pre-applied for underground basement, PMH-3041 is used for wall and deck underground construction with cold self adhesive applied method, which forms an integrity waterproofing envelope.

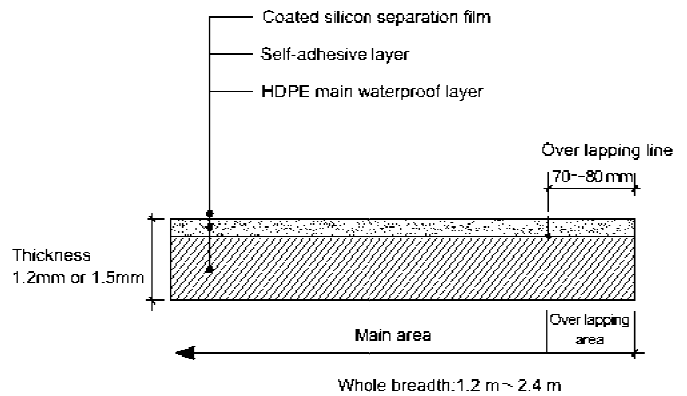
PMH-304 is executing enterprise standard HDPE self adhesive waterproofing membrane(Q/JBRL001), in which the Technique Data is at the same level or even higher than the same product abroad.

Where to use

- Waterproofing underground projects ,such as caves, tunnels, subways .
- Civil constructions side walls and deck of underground

Advantages

- High tensile strength, elongation, excellent impact resistance, tear resistance, chemical corrosion, thermal aging dimension stability ect.
- The adhesive layer bonds permanently with the precast concrete, after membrane bonds to concrete, possible water leakage will be blocked between the membrane and concrete. PMH-3041 membrane isolates and protects the structure against the ground water and gases.
- The under top of the membrane can bear the construction load, no additional protection needed.



- Excellent resistance to chemicals, especially the alkali water from concrete and the household garbage and microorganism corrosion.
- The overlapping area is quite stable and bonding strong, no adhesion tapes and welding needed.
- Cold applied method, self adheres to the concrete, simple and easy to install.
- Safe and eco-friendly, no pollution to the water and environment, and stable and no harmful substances release during production, storage, transportation and application.

Typical Properties

No.	Test Item	Specification	
		I Type	II Type
1	Tensile force, N/50mm \geq	500	800
2	Elongation strength, % \geq	400	450
3	Resistance to tearing, N \geq	400	500
4	Tear strength, N/mm \geq	60	
5	Resistance to impact	d (10 \pm 0.1) mm, No leakage	
6	Resistance to static loading	20kg, no leakage	
7	Heat resistance	70°C, 2h No displacement, flow, dripping	
8	Flexibility at Low Temperature	-25°C, No cracking	
9	Anti-water flow between layers	0.6MPa, No water flow	
10	Peeling Strength, N/mm \geq	2.0	
11	Peeling Strength after soaking, N/mm \geq	2.0	
12	Mechanical property of joint between membranes	Shear strength, N/50mm	500 or body damage
		Peel strength, N/mm	1.2
13	Alkali resistance (Saturated Ca (OH) ₂ solution, normal temperature 168h)	Tensile retention, % \geq	90
		Elongation retention, % \geq	80
		Flexibility at Low Temperature	-18°C, No cracking
14	Heat aging (70°C, 168h)	Tensile retention, % \geq	90
		Elongation retention, % \geq	80
		Flexibility at Low Temperature	-18°C, no cracking
15	Heat stability	Appearance	No wrinkles, sliding and flowing
		dimensional change, % \leq	2.0

Packing, transportation and storage

- The membrane is curled with hard core, packed by woven bag. It can not be put in more than 5 layers.
- During transport and storage, pay attention to the package, store the membrane in a dry, ventilated place, and prevent from contacting acid, alkali, oil and organic solvent. Storage temperature should not exceed 45°C.
- The membrane should be prevented from the tilt or transverse pressure during transport. Cover with felt if necessary

Available thicknesses : 1,0 mm, 1,2mm, and 1,5 mm

Available Width in Rolls : 1,2m and 2,4m

Application of PMH-3041 Polyethylene Self-Adhesive Waterproof Membrane

Application System

Application preparation → substrate preparation → primer → joints treatment → Set up the baseline → Apply on horizontal base → Exhaust compaction by steel roller → Compact the overlaps and seal up edges → Inspection → Backfill/ Concreting. (welding or hanging) → Overlaps process → Joints(node) process → Take out the protection film → Reinforcing bar installation → Casting concrete.

Application method

● **Construction preparation:** including the main material and auxiliary equipments; Technical solution, operation condition and waterproof substrate.

Application equipments: shovel, broom, soot blower, hammer, steel chisel; special cutting knife, tapeline, scraper, roller brush, roller etc.

● **Substrate preparation:**

All the substrates should be firm, dense, smooth and without bumps, cracks and holes. Irregularities and cracks should be filled up with polymer mortar. Inspection and acceptance are necessary before construction. Clear the base when it is qualified. Use vacuum cleaner or high pressure dust-blowing machine when necessary. Yuhong tailored substrate sealant may be needed according to flatness and moisture content.

● **Construction on details** of additional waterproof layer: It is necessary to process details of additional waterproof layer timely in line with design requirements after primer or sealing coat dried.

● **Large-area construction**

Horizontal substrate: Set up the baseline and adhere the membrane timely when primer dried. Spread the membrane from the fixed end, meanwhile take off the release linear; apply from the bottom to the top.

Vertical substrate: same as above, full bonding is necessary for membrane/base and membrane/membrane.

The overlap area along the length direction of each HDPE membranes is 70mm. Take the release liner off to make two membranes attach to each other. Then use a roller to press membranes, press the air out and bond membranes tightly to ensure overlap well.

Lap processing between membrane and pre-laid PHM-3040 membrane: Post the reversed edge of PMH-3040 over the side wall. Clean the concrete and dust and so on. 10 cm in width of lap between PMH-3040 and edge. Press the air out with roller.

For Best Performance

Minimum application temperature is 5°C. For the applications at lower temperatures, please contact with manufacturer. PMH membranes should only be applied by trained applicators. Spikes wearing people should be avoided from the application areas. When doing the lapping process along the length direction, adhesive planes should be clean and press should be tight to ensure good bonding abilities. Smoking is not allowed at the application area.