

Cross-Laminated HDPE Self-Adhesive Waterproofing Membrane

Cross-Laminated Waterproofing Membrane

Product Overview

Quick reaction adhesive cross membrane waterproofing membrane is made of a homogeneous polymer sheet as the main material, with a self-adhesive compound coated on the surface. It is suitable for bonding with freshly poured concrete or cement mortar.

- The self-adhesive layer has self-healing properties. After reacting and solidifying with liquid concrete, it forms a gapless bond between the waterproofing layer and the concrete structure, eliminating the risk of water migration between layers and effectively improving the reliability of the waterproofing system.
- This product solves many difficulties and drawbacks in the application of polymer waterproofing sheets,while also addressing some performance weaknesses of modified self-adhesive rubberized asphalt membranes. As a result, it achieves a superimposed waterproofing effect, reaching a leading domestic level.material.

Product Features

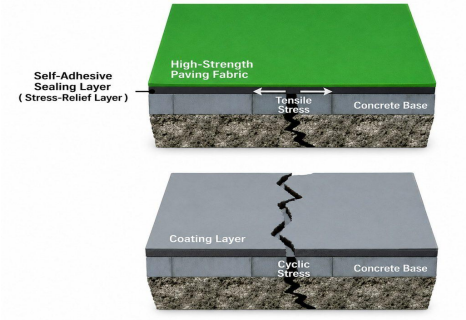
•Innovative pre-applied / wet-applied bonding technology. The membrane forms a permanent, integral bond with the structural concrete – no risk of water migration, significantly improving the reliability of the waterproofing layer.

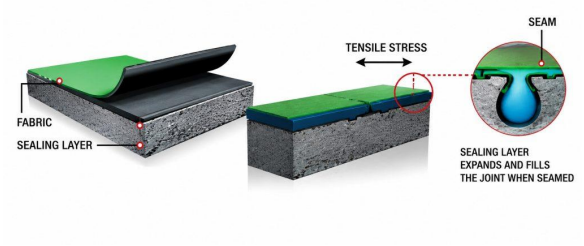
•Excellent impact and puncture resistance. Withstands construction loads and impact from rebar. When using pre-applied reverse bonding method, no extra protection is needed – concrete can be poured directly.

•Strong self-healing property of the specially formulated self-adhesive layer. Unique ability to self-repair minor construction damage.

•Chemical resistant. Highly resistant to alkaline water from concrete. Not subject to microbial attack, mold-resistant, and corrosion-resistant.

•Low requirements for substrate condition when wet-applied.Unaffected by substrate moisture. Obvious advantages for rainy- season construction and fast-track projects.





Application Method

Wet-applied method:

Clean substrate → Prepare cement paste → Detail treatment (reinforcement layers at attachments, various pipe openings, pile heads, etc.) → Apply and spread cement paste, then lay membrane → Lap and roll → Seal edges → Apply protection layer






- **Storage and Transport**

During storage and transport, products of different specifications and types shall be stacked separately and not mixed. Protect from sun and rain. Ensure ventilation. Storage temperature shall not exceed 45°C. When stacked flat, the height shall not exceed three rolls. When stored vertically, stack single layer only.

Performance

Complies with standard GB/T23457-2017 "Pre-applied waterproofing membrane".

No.	Parameter		Index		
			P	PY	R
1	Soluble content（g/m2） ≥		-	2900	-
2	Tensile properties	Tensile force (N/50mm) ≥	600	800	350
		Tensile strength / Mpa ≥	16	-	9
		Elongation at break of membrane（%）≥	400	-	300
		Elongation at max. tensile force（%）≥	-	40	-
		Phenomenon during stretching	No separation of adhesive layer from substrate or carrier		
3	Nail tear strength（N）≥		400	200	130
4	Elastic recovery rate /% ≥		-	-	80
5	Puncture resistance / N ≥		350	550	100
6	Impact resistance (0.5kg. m)		No leakage		

7	Static load		20 kg, no leakage		
8	Heat resistance		80°C, 2h – no displacement, flow, or drip	70°C, 2h – no displacement, flow, or drip	100°C, 2h – no displacement, flow, or drip
9	Low temperature bending		Substrate: -35°C, no cracks	–	Substrate: -35°C, no cracks
10	Low temperature flexibility		Adhesive layer: -25°C, no cracks	-20°C, no cracks	-
11	Oil migration (sheets) ≤		1	2	1
12	Water migration resistance (hydraulic gradient)		0.8 MPa/35mm, 4h – no migration		
13	Water impermeability (0.3 MPa, 120 min)		No leakage		
14	Peel strength to fresh concrete (N/mm)	Untreated ≥	1.5	1.5	0.8, cohesive failure
		After water immersion ≥	1.0	1.0	0.5, cohesive failure
		Sand-contaminated surface ≥	1.0	1.0	0.5, cohesive failure
		UV aged ≥	1.0	1.0	0.5, cohesive failure
		Heat treated ≥	1.0	1.0	0.5, cohesive failure
15	Shear strength to fresh concrete (N/mm) ≥		1.0	1.0	0.5, cohesive failure
16	Peel strength of membrane-to-membrane (overlap)/(N/mm)	Untreated ≥	0.8	0.8	0.6
		After water immersion ≥	0.8	0.8	0.6