



VYHDPE-PA

Pre-Applied HDPE Waterproofing Membrane

DESCRIPTION

VYHDPE-PA is a high-performance pre-applied waterproofing membrane designed for below-grade structures. It consists of a robust HDPE film laminated with a pressure-sensitive adhesive layer and a protective layer.

The system forms a full and permanent bond with poured concrete, preventing water migration between the membrane and the structure, even in the event of local damage.

BENEFITS

- Pre-applied system – installed before concrete placement
- Full bonding to concrete – prevents lateral water migration
- Excellent chemical resistance – suitable for aggressive soil conditions
- High puncture and tear resistance – robust for jobsite conditions
- Self-sealing performance – around penetrations and minor damage
- No need for post-applied protection layers (in many cases)
- Reliable waterproofing for critical structures

APPLICATIONS

- Basements and foundations
- Underground slabs and retaining walls
- Tunnels and underground structures
- Pile caps and raft foundations
- Blind-side waterproofing applications

INSTALLATION

- Install on compacted soil, blinding concrete, or suitable substrate
- Overlaps: typically 70–100 mm, self-adhesive edge sealing
- Ensure clean and dry surface before installation
- Remove release liner and firmly press overlaps
- Reinforce details (corners, penetrations) with compatible accessories
- Place reinforcement and pour concrete directly onto membrane

STORAGE & SHELF LIFE

- Store in a dry, ventilated area
- Protect from direct sunlight and moisture
- Store vertically on pallets
- Shelf life: 12 months in unopened packaging



DIMENSIONS & PACKAGING

Parameter	Value		
Total thickness	1.2 mm	1.5 mm	1.7 mm
Thickness of HDPE sheet	0.8 mm	1.0 mm	1.2 mm
Width	1 m / 2 m		
Length	15 m / 20 m		
Upper surface	Sand		
Middle layer	Pressure sensitive adhesive		
Under side	High performance HDPE		

TECHNICAL DATA

Property	Value	Test Method
Tensile strength, MD/CD	≥ 15/15N/mm ²	EN 13967:2012
Elongation at break, MD/CD	≥ 400/400%	EN 13967:2012
Tear resistance, MD/CD	≥ 400/400N	EN 13967:2012
Watertightness	Pass	EN 13967:2012
Resistance to static loading	20kg no leakage	EN 13967:2012
Tensile strength, MD/CD	≥ 20/20Mpa	ASTM D412
Elongation at break, MD/CD	≥ 500/500%	ASTM D412
Low temperature flexibility	- 25°C, no crack	ASTM D1970-01
Peel adhesion to concrete	≥ 1.0N/mm	ASTM D903
Puncture resistance of HDPE sheet	≥ 1000N	ASTM E154
Hydrostatic pressure resistance	0.7MPa, 1h no leakage	ASTM D5385
Water channeling resistance	0.8MPa, 35mm, 4h no water channeling	GB/T 23457-2017
Peeling strength of the overlap	≥ 0.8N/mm	GB/T 23457-2017