



ULTRABASE PA

Pre-applied HDPE membrane that bonds to poured concrete

PRODUCT DESCRIPTION:

ULTRABASE PA is a high-performance pre-applied HDPE membrane designed for waterproofing of foundations, tunnels and other engineering structures. The material represents composite sheets of thick HDPE film with a special adhesive compound that reacts with a wet mortar and gives an excellent integral bonding. The waterproofing membrane bonds directly to the concrete, thus sealing it and preventing any ingress of water around the structure, even in cases of soil sedimentation. ULTRABASE PA membrane does not require protection before backfilling.



AREA OF APPLICATION:

Pre-applied HDPE membrane ULTRABASE PA is used for waterproofing of foundations, tunnels, underground parts of buildings and structures in pre-applied systems with liquid concrete pouring on top of the material.

ADVANTAGES:

- Highly reactive adhesive ensures complete and reliable adhesion to the concrete surface.
- Exceptional dimensional stability, puncture, and tear resistance.
- The membrane does not require protection before backfilling.
- Can be used as a barrier to water, moisture, and gas.
- Versatile area of application.
- Suitable for different soil conditions.
- Weather and UV resistant.
- Strong resistance to industrial chemicals.

PERFORMANCE OF WORKS:

The surface must be solid and aligned; it should not have gaps, cracks, sharp protrusions or other irregularities above 12 mm. The substrate must be stable to avoid its movements due to traffic or concrete pour. It is possible to install the membrane over the wet surface but standing water to be removed.

Unroll and align the membrane to the application area HDPE film facing the substrate and liner side facing the concrete pour, cropping the material when necessary. The overlaps along edges joints and sheet ends overlaps should be not less than 75 mm. The spacing between sheet ends overlaps should be at least 500 mm. Ensure the overlapping area is clean and free from contamination, then remove the plastic release liner from between the overlaps as the two sheets are bonded together. Use ULTRABASE PA TAPE to seal the overlapped areas of the two sheets, press the place firmly with a heavy roller and remove the plastic release liner of the tape. After that carefully remove the rest disposable plastic release liner of the membrane to expose the adhesive coating for concrete pouring.

When installing the membrane on vertical surfaces fix it with appropriate fasteners at the required height. Remember to place the membrane HDPE film facing the substrate and liner side facing the concrete pour. Additional mechanical fixation can be done at the selvedge by means of low-profile head fasteners to ensure the membrane lays flat and to increase the quality of overlaps. All fasteners must be covered by an overlapping layer of the subsequent roll. Carefully remove the disposable plastic release liner of the membrane, then perform the sealing of overlaps with the use of ULTRABASE PA TAPE and technology given above.

NOTE: ULTRABASE PA HDPE membrane should not be applied when the ambient temperature is below -2°C. At temperatures below +10°C the material to be heated slightly with the means of a hot air gun to improve the initial adhesion and restore characteristics of the membrane.


MAIN CHARACTERISTICS:

Properties		Performance
Thickness, mm		1.2; 1.5; 1.8
Length x width, m		20 x 1.2 20 x 1.5 20 x 2.0
Tensile strength, MPA (ASTM D 412 -2016).		>25±2
Elongation, % (ASTM D 412 -2016)		≥620
Nail tear resistance, N (as per ASTM E154).		≥400
Shock performance (diameter 10±0.1 mm)		No leakage
Puncture resistance, N (as per ASTM E 154)		>950
Heat resistance at 70°C for 2 hours		Pass
Foldability at low temperature, °C		≤-25
Lap Adhesion, N/m (ASTM D 1876)		>1500
Resistance to Hydrostatic pressure, m (ASTM D 5385)		>70
Peeling strength with post-cast concrete, N/m (As per ASTM D 903)		≥1500
Thermal aging (70°C for 168 hours):		
	Tensile retention, % Elongation	≥90
	rate retention, %	≥80
	Foldability at low temperature, °C	≤-23
Thermal stability:	Appearance Size change, %	No wrinkles, sliding and flow ≤2.0

STORAGE:

Rolls of the material should be stored indoors in a dry place in their original packaging and taken to the construction site ready to use. Rolls should be stored upright on pallets in a 1-row height. Falls or other mechanical impacts should be avoided during transportation and storage. Roll's packaging should not be damaged. Shelf life in indicated conditions – 12 months.

HEALTH AND SAFETY

- For information and advice on the safe handling, storage and disposal of chemical products, users shall contact company personnel and refer to the Safety Data Sheet.
- Complete rolls should be handled by a minimum of two persons.