



ULTRABASE PA (release liner)

Self-adhesive HDPE membrane that bonds to poured concrete

PRODUCT DESCRIPTION:

ULTRABASE PA (release liner) 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 smooth, 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 self-adhesive surface facing the concrete pour. The overlaps of the material sheets should be not less than 75 mm. The spacing between end overlaps should be at least 500 mm. Remove the protective film and press the overlap of the two sheets together.

When installing the membrane on vertical surfaces there are two options of installation. One as a pre-applied system and the other as a self-adhesive membrane on cured concrete. When using the pre-applied system, the membrane is installed and mechanically fixed inside the formwork. After installation of the membrane the protective film is removed. An overlap of 75 mm must be maintained between adjacent sheets. After pouring the concrete the membrane bonds to it.

When applying the ULTRABASE PA HDPE on a cured concrete, the proper surface preparation is required. The substrate must be firm, smooth, clean and free of dust. The laitance and other contaminants must be removed. The material is cropped according to the height of the structure to be waterproofed. The membrane is mechanically fixed at the top of the structure, the protective film is removed at a length of 25-30 cm, the membrane is aligned and installation is performed downwards with preliminary removal of the protective film and pressing of the membrane to the substrate by a roller. The adjacent sheet is installed in the analogous manner with an overlap of 75mm.

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	Test Method	Performance
Thickness, mm	-	1.2, 1.5, 1.7, 2.0
Length x width, m	-	20 x 1.0 20 x 2.0
Tensile strength, MPa	ASTM D 412 -2016	≥ 23
Elongation, %	ASTM D 412 -2016	≥ 550
Puncture resistance, N (as per ASTM E 154)	ASTM E 154	≥ 1100
Foldability at low temperature, °C	-	≤ -25
Lap Adhesion, N / m	ASTM D 1876	≥ 1400
Resistance to Hydrostatic pressure, m	ASTM D 5385	≥ 71
Peeling strength with post-cast concrete, N/m	ASTM D 903	≥ 1000

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 at a 1-row height. Falls or other mechanical impacts should be avoided during transportation and storage. Roll's packaging should not be damaged.

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.