



ULTRABASE PA Sand Finish (Heat weld)

Pre-applied HDPE membrane (Sand Finish) heat weld that bonds to poured concrete

PRODUCT DESCRIPTION:

ULTRABASE PA sand finish (Heat Weld) 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 pressure sensitive adhesive compound protected with sand 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.



AREA OF APPLICATION:

Pre-applied HDPE membrane ULTRABASE PA sand finish (Heat weld) 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 along with sand 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 resistant.
- Strong resistance to industrial chemicals.
- Trafficable during reinforcement during pouring of concrete.

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 side facing the substrate and pressure sensitive adhesive along with protective layer of sand side facing the concrete pour, cropping the material when necessary. The overlaps along edges joints and sheet ends overlaps should be minimum 80mm. The spacing between the two sheets at the end overlaps should be at least 300-500 mm (staggered). Ensure the overlapping area is clean and free from contamination, then the two sheets are bonded together by heat welding. The lapped area shall be bonded by double seam hot-air automatic welding, consisting of two parallel weld seams each 15–20 mm wide, executed within the overlap using an approved automatic hot-air welding machine of Liester or equivalent.

In confined area, when installing the membrane on vertical surfaces fix it with appropriate fasteners at the required height. Remember to place the HDPE film, with sand 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 overlapping layer of the subsequent roll. In verticals, overlaps of HDPE membrane are welded with single seam automatic welding machine of Liester or equivalent

ULTRABASE PA Sand finish (Heat weld) can be temporary exposed to weather and UV, however, effort should be taken to prevent mechanical damage of the membrane. Any punctured or damaged areas should be repaired with patches of ULTRABASE PA (Heat weld) membrane with minimum overlapping of 100 mm in every direction from the place of damage. All patch edges to be sealed with ULTRABASE PA TAPE.

NOTE: ULTRABASE PA Sand Finish (Heat weld) 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 Standard	Performance	
Composite thickness, mm	ASTM D 3767	1.5	1.8
Bare HDPE film thickness, mm	ASTM D 3767	0.9	1.2
Length x width, m		20 x 1.5	20 x 1.5
		20 x 2.0	20 x 2.0
		20 x 2.4	20 x 2.4
Tensile strength, MPa	ASTM D 412 -2016	25±2	28±2
Elongation, %	ASTM D 412 -2016	≥500	≥500
Puncture resistance, N	ASTM E 154	>1000	>1500
Foldability at low temperature, °C	ASTM D 1970	≤-25	≤-25
Peel strength of joint, N/m	ASTM D 6392	≥15000	≥15000
Resistance to Hydrostatic pressure, m	ASTM D 5385	>70	>70
Crack cycling,	ASTM C1305	Pass	Pass
Peeling strength with post-cast concrete, N/m	ASTM D 903	1000 (±15%)	1000 (±15%)
UV Exposure, 45 days	Internal test method	Pass	Pass
Dimensional Stability, %	ASTM D 1204	< 0.5	< 0.5

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. Shelf life in indicated conditions minimum – 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 people.