



ULTRAFLEX SA HDPE

Description:

Self-adhesive carrier-less SBS-modified bitumen membrane ULTRAFLEX SA HDPE is designed for waterproofing of foundations and engineering structures.

The material is produced by placing a special self-adhesive polymer-bitumen binder on a cross-laminated HDPE (high-density polyethylene) film that covers the material on top. The bottom surface of the material is covered with an easy-removable protective film.

Advantages:

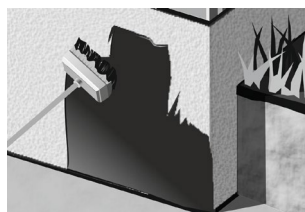
- Cross-laminated HDPE film grants additional dimensional stability to the material.
- Outstanding elongation properties prevent the material from damage caused by movements of the substrate.
- The self-adhesive lateral overlapping strip on the top surface provides maximum reliability to the joints sealing.
- High speed of application.
- Safety and cheap application – the membrane is applied without the use of gas and flame.
- No need for any additional equipment and skills.
- High reparability.

General requirements:

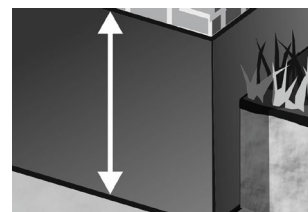
- Rolls of the material should be stored indoors in a dry place in their original packaging and taken to the construction site ready to use.
- Rolls should be stored upright in a 1-row height.
- Falls or other mechanical impacts should be avoided during transportation and storage.
- The application surface must be cleaned of dust, debris, grease, leaves, oil and should not have gaps and cracks or other irregularities to ensure proper adhesion of the membrane.
- The application surface must be treated with a primer with the flow resistance not less than the flow resistance of the self-adhesive membrane.
- The material is installed on a primed surface after at least one hour from the primer complete drying.

Installation:

■ FOUNDATION WATERPROOFING



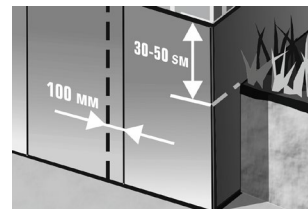
Clean the surface and treat it with BITUMEN-POLYMER PRIME COATING by TN.



Measure the depth of the foundation and cut the material to the required length.



Apply the material from top downward by gradual removing the protective film, unrolling the membrane and smoothing it to the surface.

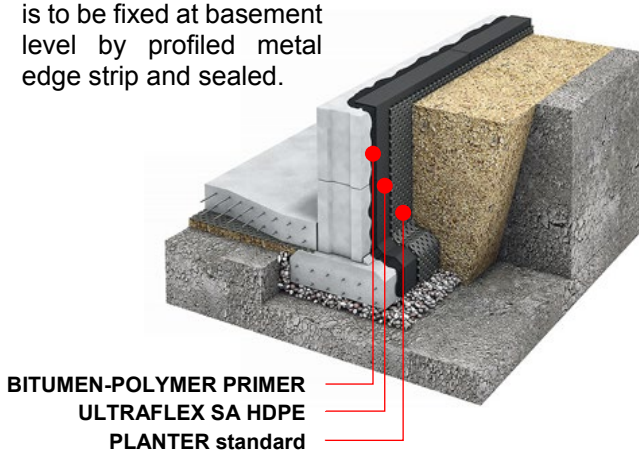


The material is to be installed to the height of 30-50 cm above the ground level. Longitudinal overlaps should be 100 mm, sheet end overlaps - 150 mm.



The top end of the waterproofing membrane is to be fixed at basement level by profiled metal edge strip and sealed.

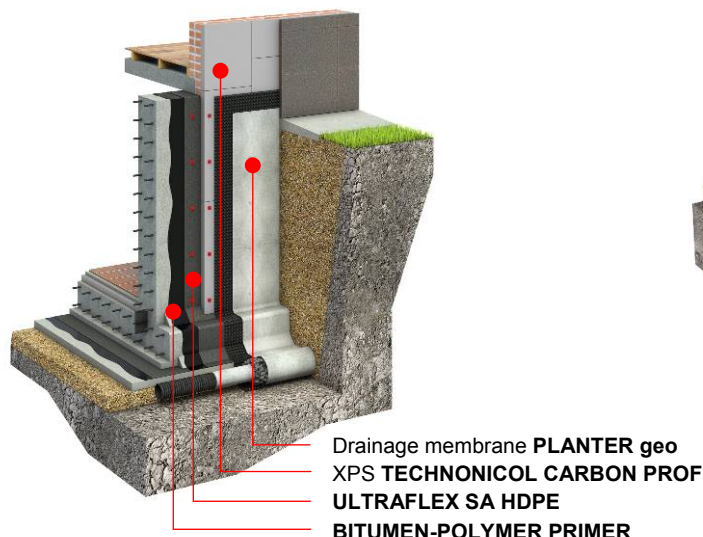
Protect the membrane from mechanical damage by means of XPS TECHNONICOL CARBON or PLANTER standard / geo profiled HDPE membrane.



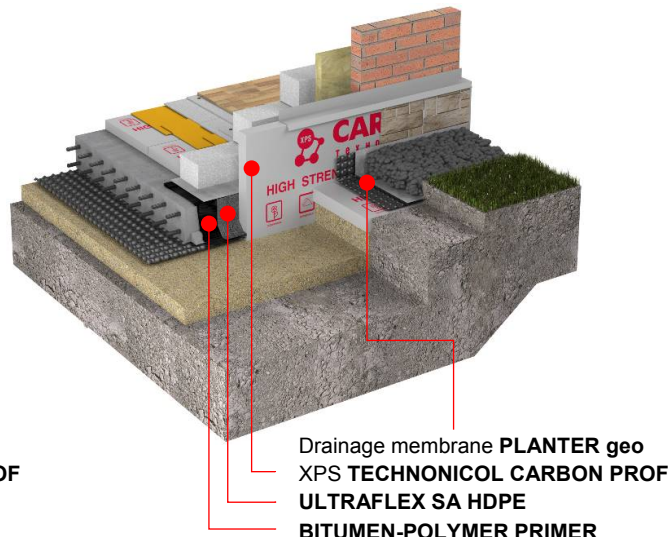


System solutions:

■ FOUNDATION WITH THERMAL INSULATION



■ SLAB ON GRADE FOUNDATION



Directions for use:

Self-adhesive bitumen membranes in cold periods tend to harden resulting in decreased adhesion. Installation of self-adhesive materials should be performed within the favorable climatic conditions i.e. dry weather and temperatures above +10°C. At temperatures below +10°C and high air humidity the adhesion of the membrane could be compromised and therefore it is necessary to use the hot air to restore characteristics of the material.

Declared performance:

Essential characteristics	Test method	Performance	Essential characteristics	Test method	Performance
Protection of the top side	-	cross-laminated HDPE film	Softening point, °C	ASTM D36	≥+100
Protection of the bottom side	-	self-adhesive binder / anti-adhesion film	Flexibility at low temperature, °C	EN 1109-1	≤-15
Length, m	EN 1848-1	≥20.0	Flow resistance at elevated temperature, °C	EN 1110*	≥+85
Width, m	EN 1848-1	≥1.0	Visible defects	EN 1850-1	Pass
Straightness	EN 1848-1	≤10 mm / 5 m	External fire performance	EN 13501-5	Froof
Mass per unit area, kg/m²	EN 1849-1	1.75±0.15	Reaction to fire	EN 13501-1	Euroclass F
Thickness, mm	EN 1849-1	1.5±0.10	Watertightness at 60 kPa	EN 1928	Pass
Type of carrier	-	carrier less	Adhesion of granules, %	EN 12039	NPD
Tensile properties: maximum tensile force L / T, N/50mm	ASTM D5147	220±80 / 220±80	Peel resistance of joints: overlap to overlap / overlap to film, N/50mm	EN 12316-1	≥25 / NPD
Tensile properties: elongation L / T, %	ASTM D5147	≥300 / ≥250	Water vapour transmission properties	EN 1931	μ=90000
Determination of shear resistance of joints, kN/m	EN 12317-1	≥2.0	Dangerous substances	Does not contain dangerous substances	

*The samples have to be stuck to the solid base (a piece of plywood, OSB or fiber cement board) before the testing.

Footnotes: L / T – Longitudinal / Transverse; NPD – No Performance Determined.

Shelf life if all storage requirements are met: 12 months from the date of production.