



## ECOPLAST APP

### Description:

APP-modified bitumen membrane ECOPLAST APP is designed for installation as the bottom layer in double-layer roofing system on buildings and constructions, for waterproofing of foundations and engineering structures. Can be used as an underlay for bitumen shingles on pitched roofs. Used for new construction or repair.

The material withstands temperature fluctuations and high mechanical loads providing a long-term, reliable and effective waterproofing. APP polymer provides additional flow resistance that makes it possible to use the material in a very hot climate.

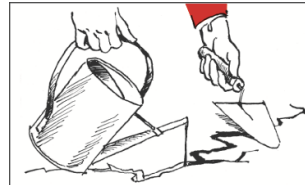
On the bottom side, the material is covered by a polymer film with special graphic elements, melting of which indicates the proper material heating. On the top side, the material is covered by a polymer film.

### 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.
- Keep the rolls upright and do not stack pallets.
- 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.
- Surface must be treated with primer before installation of waterproofing material.

### Installation:

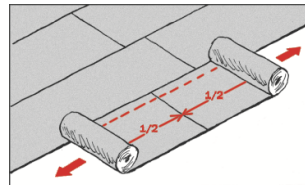
#### FLAT ROOF



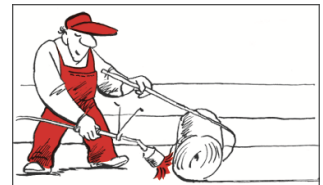
Clean the surface and repair any gaps, cracks, etc. It should be aligned and dry.



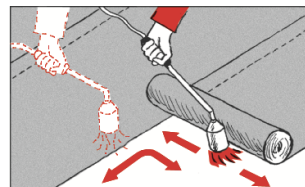
Treat the surface with bitumen primer to increase the adhesion of bitumen membrane.



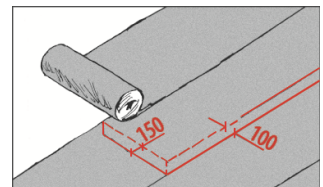
Roll out and align the membranes, then re-roll them tightly from both sides towards the centre.



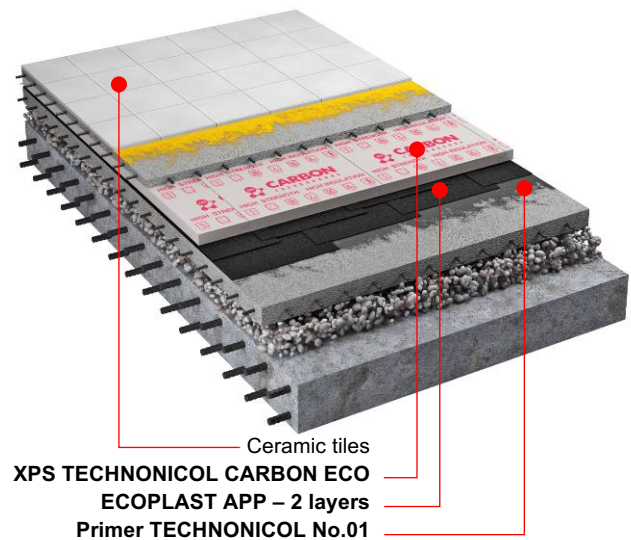
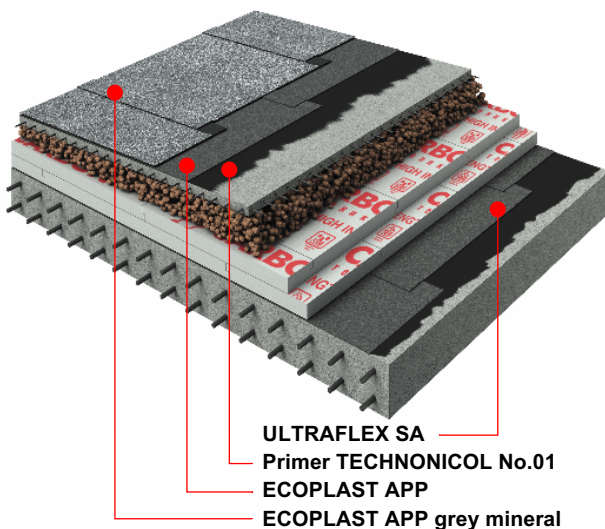
Heat the base and the bottom side of material at the same time to get a small bitumen flow.



Heat the material and the base on all width of the roll, overlaps must be heated additionally.



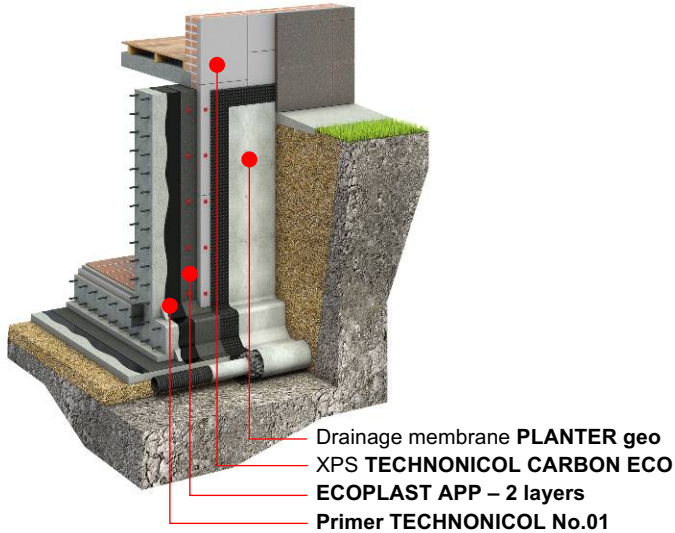
Longitudinal overlaps should be 100 mm; end overlaps should be not less than 150 mm.



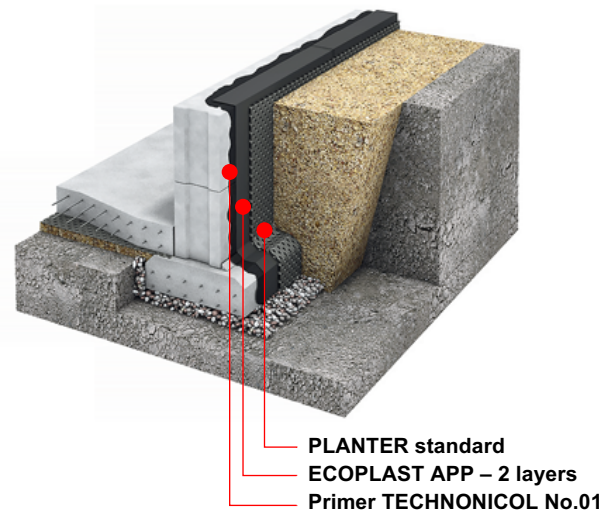


### System solutions:

#### ■ FOUNDATION WITH THERMAL INSULATION



#### ■ FOUNDATION WITHOUT THERMAL INSULATION



### Declared performance:

Essential characteristics	Test method	Performance	Essential characteristics	Test method	Performance
Protection of the top side	-	<b>Polymer film</b>	Softening point, °C	ASTM D36	<b>≥ +140</b>
Protection of the bottom side	-	<b>Polymer film</b>	Flexibility at low temperature, °C	EN 1109-1	<b>≤ 0</b>
Length, m	EN 1848-1	<b>≥ 10</b>	Flow resistance at elevated temperature, °C	EN 1110	<b>≥ +130</b>
Width, m	EN 1848-1	<b>≥ 1.0</b>	Watertightness at 0.1 MPa for 24 hours	EN 1928	<b>Pass</b>
Straightness	EN 1848-1	<b>≤ 10 mm / 5 m</b>	External fire performance	EN 13501-5	<b>NPD</b>
Mass per unit area, kg/m <sup>2</sup>	EN 1849-1	<b>3.9±0.39</b> <b>5.2±0.52</b>	Reaction to fire	EN 13501-1	<b>Euroclass E</b>
Thickness, mm	EN 1849-1	<b>3.0±0.20</b> <b>4.0±0.20</b>	Dimensional stability, %	ASTM D5147	<b>1.0</b>
Type of carrier	-	<b>Polyester</b>	Adhesion of granules, %	EN 12039	<b>NPD</b>
Tensile properties: maximum tensile force L / T, N/50mm	ASTM D5147	<b>500±100 / 300±100</b>	Visible defects	EN 1850-1	<b>Pass</b>
Tensile properties: elongation L / T, %	ASTM D5147	<b>25±10 / 30±10</b>	Water vapor transmission properties	EN 1931	<b>μ=20000</b>
Tear resistance L / T, N	EN 12310	<b>220±100 / 220±100</b>	Dangerous substances	Does not contain dangerous substances	

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

### Storage:

Polymer-bitumen APP materials must be stored in a vertical position in one row in height, sorted by brand, under conditions that ensure protection from moisture and sun exposure, at a distance of at least 1 m from heating devices, at temperatures from -35 to +35°C. The guaranteed shelf life of the material is 12 months from the date of manufacture.