



ULTRAFLEX GREEN

Description:

SBS-modified bitumen membrane ULTRAFLEX GREEN is designed for waterproofing of green roofs and underground engineering structures. The material has an additional mechanical protection on top, which makes it resistant to damage caused by roots of plants and ensures reliable waterproofing. Special chemical compound prevents roots penetration, but at the same time does not have a negative effect on plants or environment.

ULTRAFLEX GREEN can be used both for construction of green roofs and for foundation waterproofing with additional protection from roots of plants located nearby.

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, the material is covered by a thick polymer film.

Benefits of the green roof:

Environmental:

- Increases biodiversity in urban areas.
- Regulates temperature and humidity in the building and in the environment itself.
- Purifies the air and the rainwater.
- Serves as sound insulation.

Social:

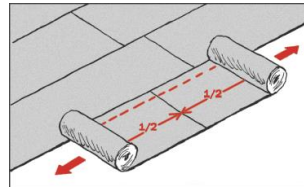
- Creates aesthetically attractive landscape.
- Creates recreational spaces.
- Could be used as a place for communication and education.

Economic:

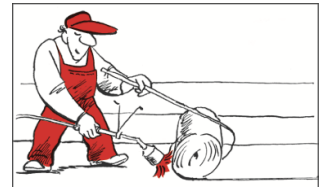
- The average expected life of the roof is more than 40 years.
- Real estate value increases.
- Reduces energy costs.
- Green roof maintenance costs could be lower than maintenance costs of the traditional roof.
- May be supported by the government via grants or reduced taxes.

Installation:

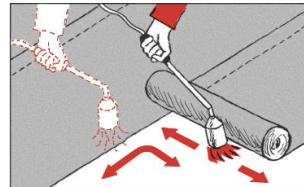
FLAT SURFACE



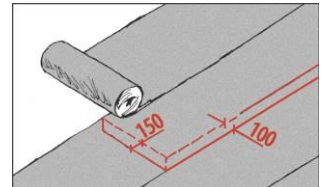
Roll out and align the membranes, then re-roll them tightly from both sides towards the centre.



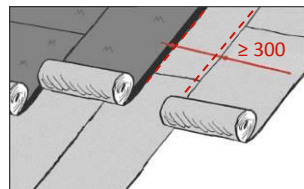
Heat the base and the bottom side of material at the same time to get a small bitumen flow.



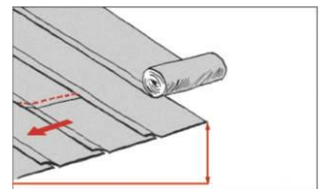
Heat the material and the base on all width of the roll, overlaps must be not heated additionally.



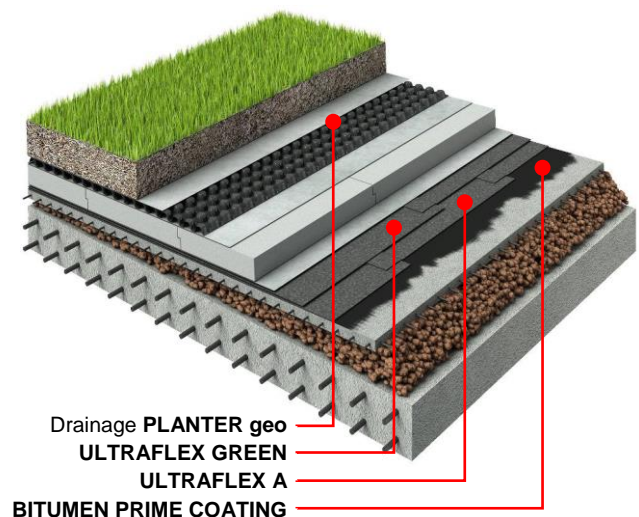
Longitudinal overlaps should be 100 mm; end overlaps should be not less than 150 mm.



Cap sheet membrane should be positioned at a distance of min. 300 mm from overlaps of underlay membrane.



On roofs with a slope <15% membranes are rolled out perpendicularly to the water flow, ≥15% - along the water flow.





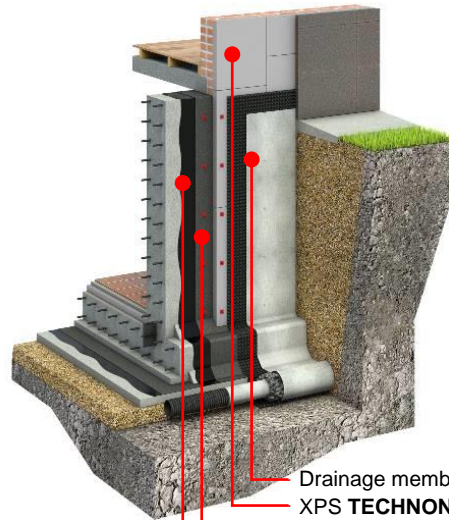
General requirements:

- 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 on pallets in a 1-row height.
- Falls or other mechanical impacts should be avoided during transportation and storage. Roll's protective film should not be damaged.
- 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.

NOTE: Green roof can be installed on any roof that has a sufficient resistance to construction load and slope > 2%.

System solution:

- **FOUNDATION WITH THERMAL INSULATION**



Drainage membrane **PLANTER geo**
XPS **TECHNONICOL CARBON**
ULTRAFLEX A + ULTRAFLEX GREEN
BITUMEN PRIME COATING

Declared performance:

Essential characteristics	Test method	Performance	Essential characteristics	Test method	Performance
Protection of the top side	-	thick polymer film	Softening point, °C	ASTM D36	≥ +110
Protection of the bottom side	-	polymer film	Flexibility at low temperature, °C	EN 1109-1	≤ -25
Length, m	EN 1848-1	≥ 10.0	Flow resistance at elevated temperature, °C	EN 1110	≥ +100
Width, m	EN 1848-1	≥ 1.0	Watertightness at 0.3 MPa for 24 hours	EN 1928	Pass
Straightness	EN 1848-1	≤ 10 mm / 5 m	External fire performance	EN 13501-5	Broof (t2)
Mass per unit area, kg/m ²	EN 1849-1	4.0±0.25	Reaction to fire	EN 13501-1	Euroclass E
Thickness, mm	EN 1849-1	3.1±0.20	Dimensional stability, %	ASTM D5147	1.0
Type of carrier	-	polyester	Adhesion of granules, %	EN 12039	NPD
Tensile properties: maximum tensile force L / T, N/50mm	ASTM D5147	700±100 / 500±100	Visible defects	EN 1850-1	Pass
Tensile properties: elongation L / T, %	ASTM D5147	50±25 / 50±25	Water vapor transmission properties	EN 1931	μ=20000
Tear resistance L / T, N	ASTM D4073	180±30 / 180±30	Dangerous substances	Does not contain dangerous substances	

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

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