RESERVE

Green roof drainage and water storage sheet

RESERVE is a green roof drainage and water storage sheet made from recycled HDPE with formed water reservoirs. The RESERVE 20 and RESERVE 25 series are supplied in rolls with different compressive strength options. A filter geotextile is laid separately over the sheet. The product forms part of the green roof build-up together with the protection layer, filter geotextile and growing medium. System selection takes account of the roof slope, loads from the overlying layers and drainage arrangement.

≈20 / ≈25 mm

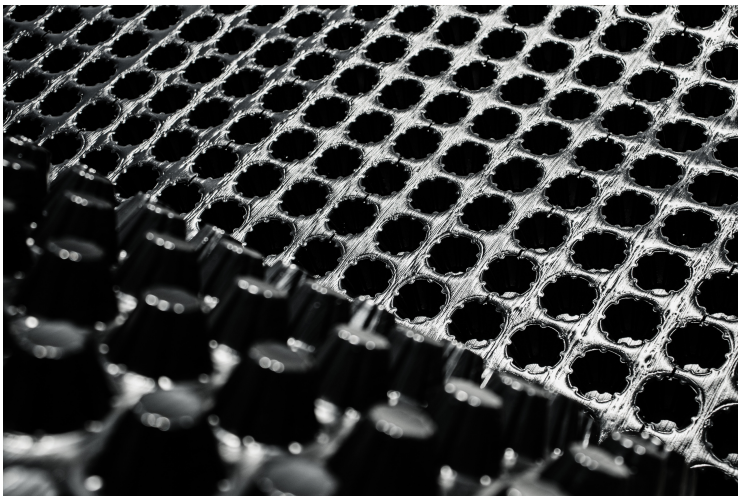
Dimple height

150 - 450 kN/m²

Compressive strength range

RESERVE 20, RESERVE 25

Series





System benefits

It combines water storage and drainage functions in the same layer. It retains water in its reservoirs while allowing excess water to move through the voids beneath the sheet towards the discharge points. The separate filter layer above limits the migration of fine particles from the growing medium into the drainage voids. Within this build-up, RESERVE serves to retain water and remove the excess. Layer joints and connections to roof outlets are considered together as part of the way the system operates.

Applications

It is used on green roofs and terrace gardens as the drainage and water storage layer specified in the project.

RESERVE

Component	Technical property	Method / conditions	Unit	RESERVE 20		RESERVE 25			
				20/150	20/200	25/200	25/250	25/300	25/450
SHEET	**Raw material**	Manufacturer declaration	-	Recycled high-density polyethylene (HDPE)					
	Colour	Product description	-	Black					
	Filter layer	Product configuration	-	Unlaminated; filter geotextile installed separately above.					
	Dimple height	Geometrical measurement	mm	≈20		≈25			
	Nominal compressive class	EN ISO 25619-2	kN/m²	150 (±10%)	200 (±10%)	200 (±10%)	250 (±10%)	300 (±10%)	450 (±10%)
	Reference water storage	Volume measurement	L/m²	≈7.2		≈8.5			
	Reference roll dimensions	Dimensional measurement	m	2 (±1%) × 20 (±1%)		2 (±1%) × 12.5 (±1%)			
	In-plane water flow	EN ISO 12958-2 i:1 20 kPa	L/(s·m)	≈1.1	≈1.1	≈1.5	≈1.5	≈1.5	≈1.5
	Air void volume	Volume determination	L/m²	≈12.5		≈16.5			
	Tensile strength MD/CMD	EN ISO 10319	kN/m	MD 9 (-2) CMD 7 (-2)	MD 10 (-2) CMD 8 (-2)	MD 12 (-2) CMD 8 (-2)	MD 13 (-2) CMD 8.5 (-2)	MD 14 (-2) CMD 9 (-2)	MD 15 (-2) CMD 9.5 (-2)