

Roofdrain 40S1RXSSh

ROOFDRAIN 40S1RXSSh is a geocomposite drainage and water attenuation layer comprising a perforated cusped HDPE (High Density Polyethylene) core with selected geotextiles thermally bonded on each side. It is primarily intended for use under thin soil layers where the plant roots can reach down to the water in the core reservoirs. The core is perforated to allow excess rainwater to flow into the underside and away through the ROOFDRAIN to the outlets. The upper textile is optimised for drainage performance and the lower textile protects the waterproofing system. Its major application is in extensive roof garden drainage where ROOFDRAIN provides a lightweight drainage layer and water reservoir to sustain plant growth. ROOFDRAIN makes extensive use of recycled polymers in its construction.

Geocomposite Properties				
Thickness at 2kPa	(mm)	45	nominal	EN ISO 9863-1
Tensile strength MD / CMD	(kN/m)	45 / 40	-10%	EN ISO 10319
Elongation at peak MD / CMD	(%)	45 / 45	nominal	EN ISO 10319
Mass per unit area (dry)	(g/m ²)	2 500		EN ISO 9864
Mass/unit area (saturated)	(g/m ²)	16 500	(indicative)	
Water reservoir volume	(l/m ²)	14		
Water flow normal to the plane	(l/m ² -s)	1.4	-15%	EN ISO 11058
In-plane water flow MD and CMD		10%	3%	1%
at 20kPa confining pressure	(l/m-s)	7.0	3.4	1.8
with hard contact surfaces to simulate installation on rigid surfaces				
Resistance to weathering	The geotextile has high UV stabilisation which may allow exposure up to 12 months depending on location			EN 12224
Resistance to microbes	Excellent			EN 12225
Design life	120 years (manufacturer's declaration)			
Geotextile Properties				
Mass per unit area	(g/m ²)	250	-13%	EN ISO 10319
Breakthrough head	(mm)	0	nominal	
Pore size O ₉₀	(µm)	70	±30%	EN ISO 12956
CBR puncture resistance	(N)	3 400	-20%	EN ISO 12236
Dynamic perforation cone drop	(mm)	17	+20%	EN ISO 13433
Type and material	Non-woven needle-punched and heat-treated long staple fibre polypropylene			
Product Dimensions				
Standard roll dimensions	0.92 x 20 m. The product is normally rolled with the lower textile inward and will require to be turned over during installation.			

Notes

- The values given are indicative and correspond to nominal results obtained in our laboratories and testing institutes. In line with our policy of continuous improvement the right is reserved to make changes without notice at any time.
- The tolerance on roll length is ±1.5% and on roll width is ±1.0%.
- Guidance on interface shear strength, creep and certain other parameters is available. Site specific tests are strongly recommended.
- Final determination of the suitability of any information is the sole responsibility of the user. ABG will be pleased to discuss the use of this or any other product but responsibility for selection of a material and its application in any specific project remains with the user.
- Non-load bearing walls can be built off Roofdrain.
- The hydraulic performance of the lower face textile does not influence overall product performance.