



# gt Roofdrain 20mm

gtRoofdrain 20mm 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 gtRoofdrain 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 gtRoofdrain provides a lightweight drainage layer and water reservoir to sustain plant growth. gtRoofdrain makes extensive use of recycled polymers in its construction.

Geocomposite Properties	Unit	Value	Tolerance	Test
Thickness at 2kPa	(mm)	24.3	nominal	EN ISO 9863-1
Tensile strength MD/CMD	(kN/m)	25 / 28	-10%	EN ISO 10319
Elongation at Peak MD/CMD	(%)	45 / 45	nominal	EN ISO 10319
Mass per unit area (dry)	(g/m <sup>2</sup> )	1720		EN ISO 9864
Mass per unit area (saturated)	(g/m <sup>2</sup> )	7220	(indicative)	
Water reservoir volume	(l/m <sup>2</sup> )	5.5		
Water flow normal to the plane	(l/m <sup>2</sup> .s)	2.5	-15%	EN ISO 11058
Resistance to weathering		To be covered in 14 days		EN 12224
Resistance to microbes		Excellent		EN 12225
Design Life		120 years (manufacturer's declaration)		

Green-tech endeavour to ensure that the information given on this technical data sheet is accurate, but accept no liability for its use or its suitability for particular application.

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In plane water flow MD & CMD		10%	3%	1%	Hydraulic gradient
at 20kPa confining pressure	(l/m.s)	3.95	1.88	0.85	EN ISO 12958
with hard contact surfaces to simulate installation on rigid surfaces					

Geotextile Properties	Unit	Upper Face	Lower face	Tolerance	Test
Mass per unit area	(g/m <sup>2</sup> )	120	300	-13%	EN ISO 10319
Breakthrough Load	(mm)	0	Not determined		BS 6906 pt 3
Pore size O <sub>90</sub>	(µm)	120	Not determined	±30%	EN ISO 12956
CBR puncture resistance	(N)	1600	1500	-20%	EN ISO 12236
Dynamic perforation cone drop	(mm)	32	Not determined	+20%	EN ISO 13433
Type & Material	Upper: Non-woven needle-punched & heat-treated long staple fibre polypropylene Lower: Non-woven felt of polypropylene and other recycled polymers				

### Standard Roll Dimensions:

0.92 x 50 m. The product is normally rolled with the lower textile inward and will require to be turned over during installation.

### Notes

1. 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.
2. The tolerance on roll length is 1.5% and on roll width is 1.0%.
3. Guidance on interface shear strength, creep and certain other parameters is available. Site specific tests are strongly recommended.
4. Final determination of the suitability of any information is the sole responsibility of the user. Green-tech 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.
5. Non-load bearing walls can be built off Roofdrain.
6. The hydraulic performance of the lower face textile does not influence overall product performance.
7. A COSHH certificate is available on request.

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