

## MACDRAIN™ M 1121 DRAINAGE COMPOSITE

Geocomposite for planar drainage (GCD), realized by thermobonding a draining mat in extruded monofilaments having a biconical cusped shape (GMA) with two filtering geotextiles (GTX) that may also be working as separation or protecting layers.

	Standard	Unit	Value	Tolerance
<b>EXTERNAL FILTERS (GTX)</b>				
Structure: needlepunched and thermotreated geotextiles				
Raw Material: UV stabilized polypropylene				
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	130	average value
Thickness at 2 kPa	EN 9863-1	mm	0.80	+/-15%
Tensile strength MD & CMD	EN ISO 10319	kN/m	10.0	-1.3
Static puncture resistance	EN ISO 12236	N	1600	-20%
Dynamic puncture resistance	EN ISO 13433	mm	26	+20%
Flux perpendicular to the plane	EN ISO 11058	l/(m <sup>2</sup> .s)	100	-30%
Characteristic opening size O <sub>90</sub>	EN ISO 12956	micron	90	+/-30%
<b>DRAINAGE CORE (GMA)</b>				
Structure: three dimensional geomat made by extruded monofilaments set in biconical cusped shape				
Raw Material: polypropylene UV stabilized by carbon black				
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	600	+/-10%
Width		cm	420	+/-3%
<b>GEOCOMPOSITE (GCO)</b>				
Thickness at 2 kPa	EN 9863-1	mm	14	-2.0
Thickness at 20 kPa	EN 9863-1	mm	12	-1.0
Mass per unit area	EN ISO 9864	g/m <sup>2</sup>	850	+/-10%
Tensile strength MD	EN ISO 10319	kN/m	18	-3
Strain at max load MD	EN ISO 10319	%	80	+/-30%
In plane flow capacity MD	EN ISO 12958	l/(m.s)		-30%
	gradient i =	0.03	1.0	
	soft/soft contact 20 kPa	-	2.50	
	rigid/soft contact 20 kPa	0.38	2.80	
	50 kPa	0.12	1.00	
	100 kPa	0.03	0.30	
<b>STANDARD DIMENSIONS OF GEOCOMPOSITE</b>				
Width <sup>(1)</sup>		cm	415	average value
Length		m	35	average value
Roll area		m <sup>2</sup>	145.25	+/-4%
Roll diameter		cm	80	average value

(1) Material is available in submultiple of standard width; check feasibility with our commercial dpt.



MD : longitudinal direction  
CMD : transversal direction

The producer, for his optimisation and improving process of the product's technical characteristics, has the faculty to modify the standards and the characteristics of the product without any pre-advise. All the information are given in base to our experience; in any case no responsibility for an incorrect use could be referred to the producer or one of his distributors.

### Officine Maccaferri S.p.A.

Via Kennedy, 10 - 40069 Zola Predosa (BO) - Italy

Tel. (+39) 051-6436000 - Fax (+39) 051-6436201

E-mail: comes@maccaferri.com - Web site: www.officinemaccaferri.com

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