

MACDRAIN™ W 1091 DRAINAGE COMPOSITE

Geocomposite for planar drainage (GCD), realized by thermobonding a draining core in extruded monofilaments (GMA) with two filtering nonwoven geotextiles that may also be working as separation or protecting layers. The draining three dimensional core will have a $\%W$ -configuration as longitudinal parallel channels.

	Standard	Unit	Value	Tolerance
EXTERNAL FILTERS (GTX)				

Structure: needlepunched and thermotreated nonwoven geotextiles

Raw Material: UV stabilized polypropylene

Mass per unit area	EN ISO 9864	g/m ²	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 ² .s)	100	-30%
Characteristic opening size O ₉₀	EN ISO 12956	micron	90	+/-30%

DRAINAGE CORE (GMA)

Structure: three dimensional geomat made by extruded monofilaments set in longitudinal parallel channel configuration

Raw Material: polypropylene UV stabilized by carbon black

Mass per unit area	EN ISO 9864	g/m ²	750	+/-10%
Width		cm	415	+/-2%

GEOCOMPOSITE (GCO)

Thickness at 2 kPa	EN 9863-1	mm	9.0	-10%
Thickness at 20 kPa	EN 9863-1	mm	8.0	-10%
Mass per unit area	EN ISO 9864	g/m ²	1010	+/-10%
Tensile strength MD	EN ISO 10319	kN/m	19	-2
Strain at max load MD	EN ISO 10319	%	50	+/-20%
In plane flow capacity MD	EN ISO 12958	l/(m.s)		-20%

	gradient i =	0.03	1.0	
soft/soft contact	20 kPa	-	3.30	
rigid/rigid contact	20 kPa	0.53	3.60	
	100 kPa	0.37	2.65	
	200 kPa	0.30	2.20	
	400 kPa	0.24	1.80	

STANDARD DIMENSIONS OF GEOCOMPOSITE

Width ⁽¹⁾		cm	415	average value
Length		m	50	average value
Roll area		m ²	207.5	+/-4%
Roll diameter		cm	75	average value



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

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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with SINCERT's and UKAS's accreditation.