

MACDRAIN® W1051
DRAINAGE COMPOSITE



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

GEOCOMPOSITE (GCO)	Standard	Unit	Value	Tolerance
Thickness at 2 kPa	EN 9863-1	mm	5.0	-10%
Mass per unit area	EN ISO 9864	g/m ²	620	+/-10%
Tensile strength MD ⁽¹⁾	EN ISO 10319	kN/m	18	+/-20%

IN PLANE FLOW CAPACITY MD ⁽¹⁾ in l/(m.s) according to EN ISO 12958 (+/- 30%)				
		Load	i ⁽³⁾ = 0.1	i ⁽³⁾ = 1.0
	soft/soft contact	20 kPa	-	1.0
	rigid/soft contact	20 kPa	0.22	1.1
		100 kPa	0.16	0.8
		200 kPa	0.12	0.5

EXTERNAL FILTER (GTX)	Standard	Unit	Value	Tolerance
Structure: nonwoven geotextiles				
Raw Material: UV stabilized polyolefin				
Mass per unit area	EN ISO 9864	g/m ²	120	+/-15%
Thickness at 2 kPa	EN ISO 9863-1	mm	0.75	+/-20%
Tensile strength MD ⁽¹⁾ & CMD ⁽²⁾	EN ISO 10319	kN/m	8.0	-1.3
Static puncture resistance	EN ISO 12236	N	1400	+/-20%
Dynamic puncture resistance	EN ISO 13433	mm	33	+15%
Flux perpendicular to the plane	EN ISO 11058	l/(m ² s)	100	-30%
Characteristic opening size O ₉₀	EN ISO 12956	micron	110	+/-50%

DRAINAGE CORE (GMA)				
Structure: three dimensional geomat made by extruded monofilaments set in longitudinal parallel channel configuration				
Raw Material: polypropylene UV stabilised by carbon black				
Mass per unit area	EN ISO 9864	g/m ²	380	+/-10%

Note: Sizes may vary depending on stock. Verify availability with our commercial department. Other sizes are available on request.

- ⁽¹⁾ MD: longitudinal direction
⁽²⁾ CMD: transversal direction
⁽³⁾ i: Hydraulic gradient



As part of our partners' ISO 9001 Management Systems and guided research and development programmes, information contained herein is continuously updated. Above technical values are mean values and are indicative. The right is reserved to make changes without notice at any time. Please confirm with African Gabions the latest version of the product specification available.