



**PRODUCT DESCRIPTION :**

**INTERDRAIN GMG 412** is a high-density polyethylene (HDPE) geonet with two Polypropylene (PP) geotextiles heat laminated. The geonet is made with 2 overcrossed strands at 60°, whose geometry creates channels with a high flow capacity, also under high pressures and at very low gradients.

**FUNCTION:** DRAINAGE, FILTRATION, SEPARATION and PROTECTION in only one product.

**MAIN USES:** Landfill cappings, new landfills, water reservoirs, horizontal drainage in embankments and platforms of roads, railways, trams and other trafficked areas, retaining structures, bridges, foundations, basements, canals, cut-and-cover tunnels, tunnels and other underground structures, gardens and sport fields.

Characteristics	Value	Unit	Standard
<b>Geonet</b>			
Polymer	High-density polyethylene ( HDPE )		
Carbon black	1.2 - 2.5	%	ASTM D 4218
Density	> 0.94	g / cm <sup>3</sup>	ASTM D1505
Thickness at 2 kPa / 200 kPa	4.2 / 3.8	mm	ISO 9863-1
<b>Filter Geotextile</b>			
Polymer	Polypropylene ( PP )		
Mass per unit area	120	g / m <sup>2</sup>	ISO 9864
Cone drop	30	mm	ISO 13433
CBR	1.4	kN	ISO 12236
Waterflow normal to the plane	90	l / m <sup>2</sup> s	ISO 11058
Opening size	< 170	µm	ISO 12956
<b>Drainage geocomposite</b>			
Mass per unit area	740	g / m <sup>2</sup>	ISO 9864
Thickness at 2 kPa / 200 kPa	4.8 / 4.2	mm	ISO 9863-1
Peak tensile strength (RT <sub>MAX</sub> ), MD / CD	19 / 17	kN / m	ISO 10319
Elongation at break, MD / CD	40 / 50	%	ISO 10319
Flow capacity in their plane, MD		l / m·s <sup>(1)</sup>	ISO 12958 <sup>(2)</sup>
i = 1,0	σ = 20 kPa	0.62	
	σ = 50 kPa	0.51	
	σ = 100 kPa	0.43	
	σ = 200 kPa	0.35	
i = 0,1	σ = 50 kPa	0.10	

**INTERDRAIN:**

- Standard roll format are 2 or 4 meters-wide.
- Has 10 cm overlap at one side; which eases installation and prevents soil intrusion.
- Has to be covered within 14 days after installation.

<sup>(1)</sup> l / m·s = 10<sup>-3</sup> m<sup>2</sup> / s

<sup>(2)</sup> Average values according to ISO 12958 using aluminum plates. Tolerance is ±30%.

MD : Machine direction (longitudinal)

CD : Cross machine direction (transversal)

i : Hydraulic gradient

σ: Normal stress



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