

Duodrain GM Range



Geosynthetics

Drainage geocomposite

Product Description: Duodrain GM Range are high-density polyethylene (HDPE) geonets with a Polypropylene (PP) geotextiles heat laminated to either both faces or one face and an impermeable geomembrane on the opposite face. The geonet is made with 2 overcrossed strands at 60°, whose geometry create channels with a high flow capacity, also under pressure and at very low gradients.

Function: Drainage, Filtration, Separation and Protection in only one product

Main Uses: Retaining structures, bridges, foundations, basements, canals, cut and cover tunnels and other underground structures, gardens and sport fields. Horizontal drainage and embankments and platforms of roads, railways, trams and other trafficked areas.

Characteristics		Standard	Unit	Duodrain GMG412	Duodrain GMFL4
Geonet Drainage					
Polymer				High-density polyethylene (HDPE)	
Thickness at 2 kPa/200 kPa		EN 964-1	mm	4.2 / 3.8	4.0 / 3.7
Geotextile filtration					
Polymer				Polypropylene (PP)	
Mass per unit area		EN 29073 / I	g/m ²	120	120
Cone drop		EN 918	mm	40	40
CBR		EN ISO 12236	kN	1.4	1.4
Opening size		EN ISO 129566	µm	90	90
Drainage geocomposite					
Roll Size			m	2 x 50	2 x 50
Mass per unit area		EN 965-95	g / m ²	740	880
Thickness at 2 kPa/200 kPa		EN 964-1-95	mm	4.9 / 4.2	4.8 / --
Peak tensile strength (RT _{MAX}), MD/CD		ISO 10319-1997	kN/m	21 / 20	19 / 13
Elongation at break, MD/CD		ISO 10319-1997	%	50 / 50	50 / 50
Flow capacity in their plane, MD		ISO 12958-1999 ⁽¹⁾	l/m · s		
i-1.0	σ = 20 kPa			0.60	1.33
	σ = 50 kPa			0.50	0.96
	σ = 200 kPa			0.35	0.52
	σ = 400 kPa			0.24	0.13

Duodrain standard roll format is 2 metres wide.

has 10cm overlap at each side; to ease the installation and prevents the soil intrusion.

has to be covered between 14 days after installation.

⁽¹⁾ISO 12958-1999 with 380*300mm specimens and rigid plates (hard-hard). The tolerance is ±30%.

MD: Machine direction (longitudinal)

CD: Cross machine direction (transversal)

i: Hydraulic gradient

σ: Normal stress



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