

Product Technical Information

ITA/ATEXP/421

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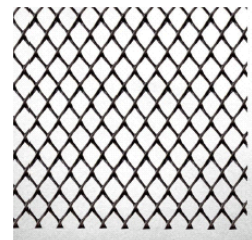
GEOFLOW

Drainage geocomposites

PRESENTATION AND SCOPE OF APPLICATION

GEOFLOW is a drainage geocomposite range which consists in the combination of a geogrid and non-woven geotextiles:

- **GEOFLOW 44**: HDPE geogrid presenting a high flow rate capacity,
- **GEOFLOW 44 1F**: HDPE geogrid with a polypropylene geotextile bonded on one side,
- **GEOFLOW 44 2F**: HDPE geogrid with a polypropylene geotextile on both sides.



GEOFLOW has a large range of applications, such as in:

- Landfills: drainage of biogases and leachates,
- Basins: drainage of underground waters to eliminate hydrostatic pressure,
- Civil works: drainage of underground waters and rainwater when laid vertically on walls and other buried structures,
- Etc.

The **GEOFLOW** range is commercialised in 2 and 4 meter wide and 50 m long. **GEOFLOW 44 1F** and **GEOFLOW 44 2F** present a 10 cm geotextile strip on both sides to allow overlapping.

PHYSICAL AND MECHANICAL CHARACTERISTICS

	Standard	Unit	GEOFLOW 44	GEOFLOW 44 1F	GEOFLOW 44 2F
Geogrid:					
Thickness under 20 kPa / 200 kPa	EN 964-1	mm	4.2 / 3.8	4.2 / 3.8	4.2 / 3.8
Compressive creep (after 1000 h under 200 kPa)	EN 1897-1	%	< 3	< 3	< 3
Nominal weight / m ²	EN 965-95	g/m ²	500	500	500
Geotextile:					
Nominal weight / m ²	EN 29073-1	g/m ²	/	120	120
Cone drop test	EN 918		/	40	40
CBR puncture test	EN ISO 12236	kN	/	1.4	1.4
Water flow rate normal to the plane	ISO 11058	l/m ² .s	/	100	100
Opening size	EN ISO 12956	µm	/	90	90
GEOFLOW:					
Nominal weight / m ²	EN 965-95	g/m ²	500	620	740
Thickness under 20 kPa/ 200 kPa	EN 964-1-95	mm	4.2 / 3.8	4.5 / 4.0	4.9 / 4.2
Tensile stress at break MD / CMD	ISO 10319-97	kN/m	7.0 / 3.0	13 / 12	21 / 20
Elongation at break MD / CMD	ISO 10319-98	%	20 / 80	50 / 50	50 / 50
Compressive resistance	ASTM D 1621	kPa	> 1250	> 1250	> 1250

MD: Machine Direction CMD: Cross Machine Direction

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Flow rate capacity in their plane (ISO 12958)					
Hydraulic gradient	Normal pressure	Unit	GEOFLOW 44	GEOFLOW 44 1F	GEOFLOW 44 2F
<i>i</i> = 0.5	σ = 20 kPa	L/(m·s)*	1.04	0.83	0.38
	σ = 50 kPa		0.95	0.72	0.30
	σ = 200 kPa		0.77	0.50	0.20
	σ = 500 kPa		0.49	0.14	0.15
<i>i</i> = 1	σ = 20 kPa		1.50	1.15	0.60
	σ = 50 kPa		1.35	1.05	0.50
	σ = 200 kPa		1.05	0.80	0.35
	σ = 500 kPa		0.71	0.26	0.24

(*): 1 L/(m·s) = 10⁻³ m²/s

PACKAGING

	Length (m)	Width (m)	Nominal weight / m ² (g/m ²)	Weight per roll (kg)	Roll diameter (cm)
GEOFLOW 44	50	2 or 4	500	50 or 100	50
GEOFLOW 44 1F	50	2 or 4	620	62 or 124	60
GEOFLOW 44 2F	50	4	740	74 or 148	70

GEOFLOW 44 1F and GEOFLOW 44 2F rolls are protected by a black plastic film.

GEOFLOW 44 1F is available in strips of 0.5 m wide and 50 m long.

Our company reserves the right to modify products composition as a result of technologic improvements. This product data sheet supersedes the previous edition. To obtain the updated technical data sheet, please contact our technical department. This product is not classified as dangerous according to the international regulation (ADR, RID, IATA, RTMDR).