

Product description

Enkadrain B10 is a light and flexible composite matting made up of a drainage core of looped polypropylene filaments, which gives it a high drainage capacity, provided on one or both sides with a nonwoven filter fabric. The components are thermally bonded together over the entire contact area. Each of the nonwoven filters extends 100 mm to one side of the core in opposite directions. This ensures that the joint is covered when lanes of Enkadrain are laid adjacent to one another.

Application

Enkadrain B10 is used in the building industry to protect underground structures such as cellars, basements and car parks against seepage. Enkadrain B10 is placed vertically against the wall with the filter fabric towards the soil and the drainage core (or the second nonwoven) facing the wall.

Enkadrain B10 can also be used as horizontal drainage layer in lightweight, environment friendly green roof constructions.

To avoid damage caused by UV radiation or wind, we advise to cover Enkadrain immediately after installation, but at least within two weeks.

Performances

Properties of the composite

Applied stress in kPa	Hydraulic gradient i in -	Water flow capacity in-plane* $q_{\text{stress/gradient}}$ in l/(s·m)**		
		Mean value	Tolerance value	
20	1.0	2.0	-0.6	EN ISO 12958

* Test results by Colbond Geosynthetics Laboratory according to EN ISO 12958, opt. rigid/flexible.

Soil pressure against one filter side was simulated by a foam layer.

** $l/(s·m) = 10^{-3} \text{ m}^2/\text{s}$

Hydraulic properties of the filters

		Mean value	Tolerance value	
Water permeability, $V_{I_{H50}}$	mm/s	100	- 30	EN ISO 11058
Opening size, O_{90}	µm	170	+/- 60	EN ISO 12956

Mechanical properties* of the filters

		Mean value	Tolerance value	
Polymer		PET, PP		
Mass per unit area	g/m ²	90	- 10	EN 965
Thickness	mm	0.4	- 0.1	EN 964-1
Tensile strength MD	kN/m	5	- 1.0	EN ISO 10319
Tensile strength CMD	kN/m	6	- 1.0	EN ISO 10319
Elongation at break MD	%	33	- 6	EN ISO 10319
Resistance to static puncture	kN	0.8	- 0.12	EN ISO 12236
Dynamic perforation resistance	mm	48	+ 2	EN 918

* Data given are mean values corresponding with the CE marking.

Dimensions and weights

Enkadrain Standard	Mattings					Rolls		
	Thickness	Weight	Width	Length	Area	Ø	Length	Gross-weight
	mm	g/m ²	m	m	m ²	m	m	kg
B10/1-1s	9	440	1.0	45	45	0.80	1.02	22
B10/1-2s	9	540	1.0	45	45	0.80	1.02	27

-1s means one nonwoven filter, -2s means two nonwoven filters.
Individual values may vary from above mentioned data.

Quality Assurance



The Quality Management System of Colbond bv, at Arnhem (development and sales) and Obernburg (production), has been approved by Lloyd's Register Quality Assurance Limited for the ISO 9001:2000 quality management system standard (Certificate No. 935136).



Enkadrain B10/1-1s and B10/1-2s are CE-certified by an independent notified body (0799-CPD).