

Product description

Enkadrain CK20 is a flexible, three-dimensional composite matting consisting of a polyamide drainage layer provided on one side with laticence tight PVC layer and on the other side with a thermally bonded nonwoven filter. The three layers are thermally bonded together over the entire contact area.

Both, the PVC layer and the nonwoven filter extend 100 mm to one side of the core in opposite directions. This ensures that the joint is covered when lanes of Enkadrain are layed adjacent to one another.

The 0.1 m overlap of the PVC layer can be thermally bonded to the adjacent lane by means of hot air.

Application

Enkadrain CK20 is used as an interposing layer between a vertical support - such as bored pile walls, existing structures and excavation faces - and a new concrete wall. It therefore functions as permanent formwork, a vertical drain and a flexible separation layer.

Performances

Properties of the composite

Applied stress in kPa	Hydraulic gradient i in -	Water flow capacity in-plane* $q_{\text{stress/gradient}}$ in $l/(s \cdot m)^{**}$		
		Mean value	Tolerance value	
20	1.0	2.8	-0.8	EN ISO 12958

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

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

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

Hydraulic properties of the filter T125PET/PA

		Mean value	Tolerance value	
Water permeability, V_{H50}	mm/s	150	- 40	EN ISO 11058
Opening size	μm	160	+/- 25	EN ISO 12956

Mechanical properties of the filter T125PET/PA

		Mean value	Tolerance value	
Polymer		PET/PA		
Mass per unit area	g/m^2	125	- 10	EN 965
Thickness	mm	0.6	- 0.1	EN 964-1
Tensile strength MD	kN/m	9	- 1	EN 10319
Tensile strength CMD	kN/m	8	- 1	EN 10319
Elongation at break MD	%	33	- 6	EN 10319
Resistance to static puncture	kN	1.6	- 0.2	EN 12236
Dynamic perforation resistance	mm	34	+ 5	EN 918

Mean value + tolerance value correspond to the 95% confidence level.

Dimensions and weights

Enkadrain CK	Mattings					Rolls			
	Type	Thickness mm	Weight g/m ²	Width m	Length m	Area m ²	Ø m	Length m	Gross- weight kg
CK20		22	2425	1.0	15	15	0.70	1.25	38

Individual values may vary from above mentioned data.

Quality Assurance



The Quality Management System of Colbond Geosynthetics, 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 CK20 is CE-certified by an independent notified body (0799-CPD).

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