

## Product description

Enkadrain ST is a 1 m wide, light and flexible sandwich material, made up of a drainage core of looped, polyamide filaments, which gives it a high discharge capacity, covered on both sides with a nonwoven filter fabric. The three components are thermally bonded together over the entire surface. Each of the non-woven filters extend 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 ST is used as a drainage layer for horizontal and vertical applications.

## 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	2.8	-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·m) =  $10^{-3}$  m<sup>2</sup>/s

### Hydraulic properties of the filter T125PET/PA

		Mean value	Tolerance value	
Water permeability, $V_{I_{H50}}$	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 <sup>2</sup>	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 Premium	Mattings					Rolls		
	Type	Thickness mm	Weight g/m <sup>2</sup>	Width m	Length m	Area m <sup>2</sup>	Ø m	Length m
ST/1-2s	22	950	1.0	30	30	1.10	1.02	30

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 ST is CE-certified by an independent notified body (0799-CPD).

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