

## Product description

Enkadrain Findrain 5006H is a flexible, lightweight three-dimensional geocomposite, consisting of a polypropylene drainage core, wholly enclosed in a heat bonded non-woven filter. The edges are thermally sealed, which prevents the inflow of silt particles. The filter is spotwelded to the drainage core.

Enkadrain Findrain 5006H is provided with a draw cord to simplify in-situ placing of the pipe (not included). This pipe is installed between the drainage core and the filter at the toe of the findrain. It collects the infiltration water and transports it longitudinally to transverse discharge pipes or outfalls.

Enkadrain Findrain 5006H can accept pipes of 125 mm to 200 mm diameter.

Enkadrain Findrain 5006H is available in effective heights of 0.5 m and 1.0 m.

## Application

Enkadrain Findrain 5006H is used:

- ~ as an edge drain skirting paved roads for the drainage of motorway pavements;
- ~ for the interception of infiltration water and groundwater in slopes, road embankments and banks of ditches to improve their stability.

## 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	0.5	-0.1	EN ISO 12958

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

Soil pressure against both filter sides was simulated by foam layers.

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

### Hydraulic properties of the filter T110PP

		Mean value	Tolerance value	
Water permeability, $V_{I_{H50}}$	mm/s	70	-15	EN ISO 11058
Opening size, $O_{90}$	$\mu m$	140	+/-25	EN ISO 12956

### Mechanical properties of the filter T110PP

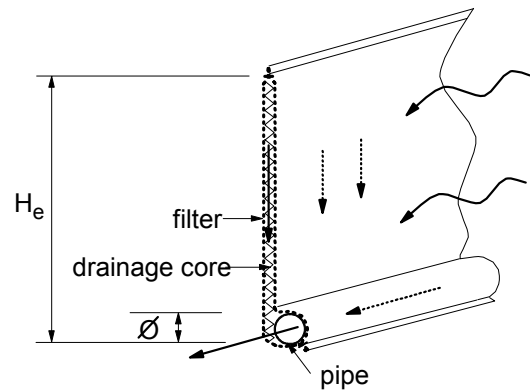
		Mean value	Tolerance value	
Polymer		PP		
Mass per unit area	$g/m^2$	110	-10	EN 965
Thickness	mm	0.4	-0.1	EN 964-1
Tensile strength MD	kN/m	7.3	-0.8	EN ISO 10319
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Elongation at break MD	%	60	-10	EN ISO 10319
Resistance to static puncture	kN	1.1	-0.18	EN ISO 12236
Dynamic perforation resistance	mm	36	+7	EN 918

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

### Discharge capacity of ribbed, flexible, perforated pipes:

Hydraulic gradient	Discharge capacity in l/s at nominal pipe diameter in mm		
%	125 mm	160 mm	200 mm
0.1	1.3	2.5	4.7
0.5	4.0	7.6	13.0
1.0	4.4	8.3	15.0
2.0	11.0	21.0	40.0

The allowable distance between the outfalls has to be calculated based on the expected groundwater flow towards the findrain and the specified drainage capacities of findrain and pipe.



"Findrain" type of drain composite

### Dimensions and weights

Enkadrain	Findrain	Mattings			Rolls		
Type	Thickness mm	Weight g/m <sup>2</sup>	Height eff. H <sub>e</sub> m	Length m	Ø m	Length m	Gross- weight kg
Findrain 5006H/0.50+200*	6	620	0.50	50	0.70	0.70	18
Findrain 5006H/1.00+200*	6	620	1.00	50	0.70	1.20	34

\* Findrains accept pipes with diameters 125 mm to 200 mm.

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 Findrain 5006H is CE-certified by an independent notified body (0799-CPD).