

### ***Product description***

Enkamat 7010W/5/80.30PP is a flexible lightweight geocomposite, consisting of a 4.90 m wide, three-dimensional (random) polyamide grip layer and a 5.10 m wide woven reinforcing fabric. Both components are firmly sewn together with stitches at 35 mm centers in seams at 100 mm centers. The woven fabric extends approximately 0.20 m to one side of the grip layer. This ensures that the joint is covered when lanes of Enkamat are laid adjacent to one another.

The long term allowable tensile strength of the fabric has to be calculated taking into account the ultimate tensile strength and the correction factors for mechanical damage ( $F_m$ ) and creep ( $F_c$ ).

### ***Application***

Enkamat 7010W/5/80.30PP can be used as a reinforced grip layer on geomembranes of landfill capping layers, retention/balancing ponds and lined impounding reservoirs. Geomembranes need a soil cover to protect them against UV radiation and mechanical damage and for aesthetic reasons. Where the friction between the soil cover and the geomembrane is too low to achieve an acceptable slope angle, Enkamat 7010W/5/80.30PP can be used to ensure stability. The retention of the soil within the matrix of the griplayer is such that the angle of friction ( $\delta$ ) at the soil/grip layer interface is 0.9-1.0 times the angle of internal friction ( $\varphi$ ) of the soil itself. The friction at the interface geomembrane/Enkamat 7010W/5/80.30PP depends on the reinforcing fabric and the type of membrane.

To avoid damage caused by UV radiation or wind we advise to cover Enkamat 7010W/5/80.30PP immediately, but at least 2 weeks after installation.

### ***Performances***

#### **Properties of the grip layer**

		Mean value	Tolerance value	
Polymer		PA6		
Polymer density	kg/m <sup>3</sup>	1140		
Melting point	°C	214		
Mass per unit area	g/m <sup>2</sup>	260	-7	EN 9864
Thickness	mm	9	-0.6	EN 9863-1

#### **Properties of the composite**

		Mean value	Tolerance value	
Polymer		PA/PP		
Mass per unit area	g/m <sup>2</sup>	510	+/-32	EN 965
Thickness	mm	10	-0.6	EN 964-1
Tensile strength MD	kN/m	85	-5	EN ISO 10319
Tensile strength CMD	kN/m	32	-4,2	EN ISO 10319
Elongation at break MD	%	17,5	+/-4	EN ISO 10319
Elongation at break CMD	%	8,5	+/-2	EN ISO 10319
Resistance to static puncture	kN	5	-1	EN ISO 12236
Dynamic perforation resistance	mm	8	+2	EN 918

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

## Dimensions and weights

Enkamat Reinforced	Mattings					Rolls		
	Thickness	Weight	Width	Length	Area	Ø	Length	Gross-weight
	mm	g/m <sup>2</sup>	m	m	m <sup>2</sup>	m	m	kg
7010W/5/ 80.30PP	10	510	4.9	95	465.5	1.10	5.20	

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).



0799-CPD

Enkamat 7010W/5/80.30PP is CE-certified by an independent notified body (0799-CPD).

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