

Product description

Enkamat 7010W/5/200.50PET is a flexible lightweight geocomposite, consisting of a 4.90 m wide, three-dimensional (random) polyamide grip layer and a 5.00 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 in account the ultimate tensile strength and the correction factors for mechanical damage (F_m) and creep (F_c).

Application

Enkamat 7010W/5/200.50PET may 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/5/200.50PET can be used to ensure stability. The retention of the soil within the matrix of the grip layer is such that the angle of friction (δ) at the soil/grip layer interface is 0.9-1.0 times the angle of internal friction (ϕ) of the soil itself. The friction at the interface geomembrane/Enkamat 7010W/5/200.50PET 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/5/200.50PET immediately, but at least 2 weeks after installation.

Performances

Properties of the grip layer

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

Properties of the composite

| | | Mean value | Tolerance value | |
|--------------------------------|------------------|------------|-----------------|--------------|
| Polymer | | PA/PET | | |
| Mass per unit area | g/m ² | 730 | -10 | EN 9864 |
| Thickness | mm | 10 | -0.6 | EN 9863-1 |
| Tensile strength MD | kN/m | 200 | -20 | EN ISO 10319 |
| Tensile strength CMD | kN/m | 45 | -5 | EN ISO 10319 |
| Elongation at break MD | % | 12 | -6, +3 | EN ISO 10319 |
| Elongation at break CMD | % | 12 | -6, +3 | EN ISO 10319 |
| Resistance to static puncture | kN | 2 | -0.6 | EN ISO 12236 |
| Dynamic perforation resistance | mm | 15 | +3 | 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 ² | m | m | m ² | m | m | kg |
| 7010W/5/ 200.50PET | 10 | 730 | 4.9 | 100 | 490 | 1.15 | 5.20 | 385 |

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/5/200.50PET is CE-certified by an independent notified body (0799-CPD).

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