

Geolon®

Robulon PE 1000, the ultimate high strength 3D solution for slope erosion prevention



TenCate Geolon® Robulon PE

TenCate Geolon® Robulon PE1000: your 3D solution

TenCate Geolon® Robulon PE 1000 is a high strength 3 dimensional loop mat to support soil on steep slopes, preventing erosion. Robulon PE 1000 has the perfect balance between soil particle retention to prevent wash out of soil in the early installation stage, and at the same time being open enough to allow roots of any kind of vegetation to grow through.

The structure of the base layer is fully optimized for penetration of water, and there is no risk that very fine particles build up a silt layer closing the mat reducing its functionality.

Proven performance

TenCate Geolon® Robulon PE 1000 has a proven performance in any kind of climate, from the extremes of Russia to heat of Africa, keeping soils in place. Projects have been in place for over 15 years.

High tensile strength, a stable structure, UV stability are only a couple of features which ensure durable solutions in erosion control.

To the contrary of many other erosion control products which are always a composite of separate materials with a vulnerable method of connection, TenCate Geolon® Robulon PE 1000 is one single product where base layer and the 3D loops can never be separated. Especially on very long slopes, this feature creates 100% safety against a major slide as no defects are possible inside the product itself.

Features and Benefits

- ✓ One product → easy to install, no failures possible
- ✓ High strength → suitable for application on long slopes
- ✓ Stable structure → ensures good fixation
- ✓ Soil particle retention → no wash out
- ✓ Open structure → Highly permeable, no risk of silting, ability to establish strong rootzone
- ✓ Wide width of 5 m → efficiency in installation, less joints overlaps
- ✓ Highly UV stable → in case vegetation is not established or harmed and the product is exposed to UV
- ✓ 100% recyclable PP and PE → not hazardous to the environment



1999



2000



2014



Robulon PE Technical Data

TenCate Geolon® Robulon PE 1000 is a high strength geocomposite for slope erosion control purposes. The product is made of a highly durable combination of PP and PE, and has a 3 dimensional structure for optimum soil retention purposes. The woven base layer, which has a very stable pattern, has openings large enough to allow roots to establish. At the same time the voids are not too large, preventing wash out of fine soil particles in the early stages of installation, before vegetation has reached its optimum situation.



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Characteristics <small>[Standard]</small>	Unit	PE 1000
Type of product		Geocomposite made of 100% recyclable combination of PP and PE, consisting of a high strength woven base layer featuring inseparable loops for soil, gravel or concrete retention.
Product Properties		
Mass per unit area <small>[EN ISO 9864]</small>	g/m ²	510
Thickness under 2kPa <small>[EN ISO 9863-1]</small>	mm	10
UV resistance (retained tensile strength) <small>[EN ISO 12224]</small>	%	> 80
Base Layer Properties		
Tensile strength <small>[EN ISO 10319]</small>	MD* kN/m CD* kN/m	40 35
Elongation at maximum strength <small>[EN ISO 10319]</small>	MD* % CD* %	30 20
CBR Puncture Resistance <small>[EN ISO 12236]</small>	kN	3.5
Dynamic Perforation <small>[EN ISO 13433]</small>	mm	12
Forms of supply		
Width	m	5
Length	m	50
Roll diameter	m	0.8
Roll weight (± 10%)	kg	140

* MD = Machine Direction CD = Cross Direction

The values given are average values obtained in our laboratories and in testing institutes. The right is reserved to make changes without notice at any time.

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