

### Product description

Enkagrid TRC 30 is a multifunctional geogrid composite, which fulfils the functions of reinforcement, separation and filtration in one easy-to-install product for subbase stabilization. Enkagrid TRC 30 consists of a coated Twaron<sup>®</sup> aramid mesh incorporated in between two layers of Colback<sup>®</sup>, a polyester/polyamid nonwoven. The aramid mesh is UV-protected by a black latex coating.

The Twaron<sup>®</sup> reinforcement, typically five times stronger than steel, has a unique blend of mechanical properties with high modulus and low elongation so that high tensile forces are mobilized with minimal deformation of the subbase. As a result, cracks propagate slower into the road surface, leading to extended service life.

The Colback<sup>®</sup> nonwoven performs as a separator and filter, extending the versatility of the product by preventing both mixing of fill and subsoil and pumping of fines from the subsoil into the base.

Enkagrid TRC 30 exhibits equal tensile strength in both longitudinal and transverse directions, making it most suitable for soil stabilization applications. It has to be covered on site within two weeks.

### Application

Enkagrid TRC 30 is used to stabilize soft, low bearing capacity soils. Enkagrid TRC 30 offers cost savings in construction and maintenance due to reduction of road base thickness, lower deformation and a longer service life. Examples of applications are:

- paved roads
- airport runways
- raft foundations
- building and structure foundations
- small embankments on weak subsoil

### Performances

#### Mechanical properties of the grid

	MD <sup>[2]</sup>		CMD <sup>[3]</sup>		
	Mean	Tolerance	Mean	Tolerance	
Tensile strength (kN/m) <sup>[1]</sup>	32	- 3.5	37	- 4.5	EN ISO 10319
Strength at 2 % strain (kN/m) <sup>[1]</sup>	28	- 4	19	- 2	EN ISO 10319
Strain at break (%) <sup>[1]</sup>	2.2	+/- 0.4	3.9	+/- 0.5	EN ISO 10319
Nominal grid aperture size (mm)	14 x 14				

#### Mechanical properties of the composite

	Mean value	Tolerance value	
Weight (g/m <sup>2</sup> ) <sup>[1]</sup>	145	- 5	EN 965
Resistance to static puncture (kN) <sup>[1]</sup>	1.2	- 0.2	EN ISO 12236
Dynamic perforation resistance (mm) <sup>[1]</sup>	50	+ 5	EN 918

#### Hydraulic properties

	Mean value	Tolerance value	
Pore size O <sub>90</sub> (µm) <sup>[1]</sup>	180	+/- 40	EN ISO 12956
Permeability (mm/s) <sup>[1]</sup>	190	- 40	EN ISO 11058

[1] 95% confidence level = mean + tolerance

[2] MD means Machine Direction

[3] CMD means Cross Machine Direction

## Dimensions and weights

Enkagrid TRC Type	Mattings			Rolls		
	Width	Length	Area	Ø	Length	Gross-weight
	m	m	m <sup>2</sup>	m	m	kg
Enkagrid TRC 30	5.00	100	500	0.35	5.12	91

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

Enkagrid TRC 30 is CE-certified by an independent notified body (0799-CPD).

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