

# Tenax Uni-axial Grids

## Tenax TT SAMP

Type: 045 - 060 - 090 - 120 - 160  
Mono-oriented geogrids



Tenax **TT SAMP** are mono-oriented geogrids especially designed for soil reinforcement. **TENAX TT SAMP** geogrids are manufactured with a unique extrusion technology using high quality polymers. **TENAX TT SAMP** geogrids have high tensile modulus, great interlock capacity and junction strength, as well as superior long term design strength and durability.

### Typical applications

Retaining walls; steep slopes reinforcement; landslides repair; embankments stabilisation; landfill side slopes reinforcement.

Physical Characteristics	Test Method	Unit	Data					Notes
Structure			Mono-Oriented Geogrids					
Mesh Type			Oval Apertures					
Standard Colour			Black					
Polymer Type			HDPE					
Carbon Black Content			Carbon Black					
Packaging			Rolls with Identification Label					
Dimensional Characteristics	Test Method	Unit	TT 045 SAMP	TT 060 SAMP	TT 090 SAMP	TT 120 SAMP	TT 160 SAMP	Notes
Aperture Size MD		mm	220	220	220	220	220	b, d
Aperture Size TD		mm	13/20	13/20	13/20	13/20		b, d
Mass Per Unit Area	ISO 9864	g/m <sup>2</sup>	300	400	600	800	1000	b
Roll Width		m	1.0	1.0	1.0	1.0	1.0	b, f
Roll Length		m	100.0	75.0	50.0	30.0	30.0	b
Roll Diameter		m	0.35	0.35	0.37	0.35	0.40	b
Roll Volume		m <sup>3</sup>	0.13	0.12	0.14	0.12	0.16	b
Gross Roll Weight		kg	30.0	30.0	30.0	24.0	30.0	b
Technical Characteristics	Test Method	Unit	TT 045 SAMP	TT 060 SAMP	TT 090 SAMP	TT 120 SAMP	TT 160 SAMP	Notes
Strength at 2% Strain	ISO 10319	kN/m	11.0	17.0	26.0	36.0	45.0	a, c
Strength at 5% Strain	ISO 10319	kN/m	25.0	32.0	50.0	72.0	90.0	a, c
Peak Tensile Strength	ISO 10319	kN/m	45.0	60.0	90.0	120.0	160.0	a, c
Yield Point Elongation	ISO 10319	%	11.5	13.0	13.0	13.0	13.0	b, c
Junction Strength	GRI-GG2	kN/m	36.0	50.0	80.0	110.0	130.0	b
Long Term Design Strength	ISO 13431	kN/m	21.2	28.3	42.4	56.5	75.4	a, e

Notes:

- a) 95% lower confidence limit values, ISO 2602
- b) Typical values
- c) Tests performed using extensometers at 100mm/min at 20°C
- d) MD: machine direction (longitudinal to the roll)  
TD: transverse direction (across roll width)
- e) Design strength based upon 120 years design life at 20°C and fill soil up to 40 mm size
- f) Upon request available 2 m wide

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