

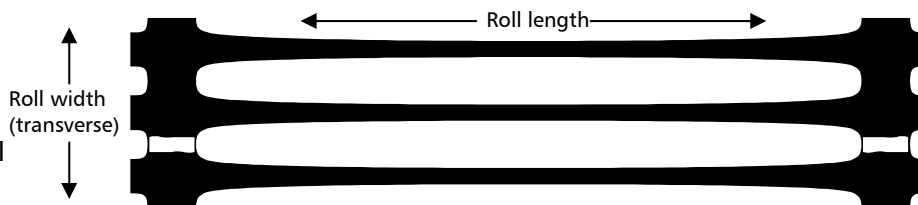


## Tensar RE500 series geogrids

### Product specifications



Tensar RE500 geogrids are used for the reinforcement of soils in the construction of structures such as retaining walls, bridge abutments, steep slopes, slip repairs and geocell mattresses.



Properties	Units	Tensar RE500 geogrids					
		RE510	RE520	RE540	RE560	RE570	RE580
Polymer		High density polyethylene					
Minimum carbon black(1)	%	2	2	2	2	2	2
Roll width	m	1.3	1.3	1.3	1.3	1.3	1.3
Roll length	m	75	75	50	50	50	50
Unit weight	kg/m <sup>2</sup>	0.29	0.36	0.45	0.65	0.87	0.98
Roll weight	kg	30.0	37.0	31.0	45.0	58.8	67.0
<b>Junction strength (2)</b>	%	95	95	95	95	95	95
<b>Long term strength (3)</b>							
ULS $P_c$ or $T_{CR}$ for 20°C (4)	kN/m	19.01	25.10	30.66	42.16	56.28	65.27
<b>Quality Control Strength</b>							
$T_{ult}$ (6)	kN/m	40.0	52.8	64.5	88.7	122.5	137.3
Typical load at 2% strain(6)	kN/m	9.5	12.7	16.1	23.7	26.9	38.0
Typical load at 5% strain(6)	kN/m	19.0	24.7	30.9	45.2	52.7	75.5
Typical strain at $T_{lt}$	%	11.0	11.0	11.0	11.0	11.0	11.0

- (1) Carbon black inhibits attack by UV light. Determined in accordance with BS 2782:Part 4:Method 452B:1993. Any section of grid fully exposed to sunlight can be expected to retain 90% of its quality control strength for periods in excess of 40 years in temperate climates and 20 years in tropical climates.
- (2) Determined in accordance with GRI Test Method GG2-87, and expressed as a % of the quality control strength.
- (3) ULS determined as a lower bound using standard extrapolation techniques to creep rupture data obtained following the test procedure in BS EN ISO 13431:1999 for 120 year design life.
- (4) In-soil temperature.
- (5) **Tensar RE500 geogrids** are inert to all chemicals naturally found in soils and have no solvents at ambient temperature. They are not susceptible to hydrolysis and are resistant to aqueous solutions of salts, acids and alkalis (pH 2.0 to 12.5) and are non-biodegradable.
- (6) Determined in accordance with BS EN ISO 10319:1996 and as a lower 95% confidence limit in accordance with ISO 2602:1980 (BS 2846:Part 2:1981).
- (7) **Tensar RE500 geogrids** are stiff monolithic geogrids with integral junctions and are manufactured in accordance with Quality and Environmental Management Systems which comply with the requirements of BS EN ISO 9001:2000 and BS EN ISO 14001:1996 respectively.
- (8) All quoted dimensions and values are typical unless stated otherwise.
- (9) **Tensar RE500 geogrids** accreditation includes:
  - The British Board of Agrément (BBA) has awarded Roads and Bridges Certificates: No 99/R109 and No99/R113.
  - The Geotechnical Engineering Office of the Civil Engineering Department of the Government of Hong Kong SAR has awarded Certificate RF1/09



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