



Tensar TriAx[®] stabilisation geogrid component of Tensar Spectra Pavement Optimisation system Model Specification – TX8

This model specification is intended for use where the specifier wishes to specify a "Tensar Spectra Pavement Optimisation" system with the stabilisation geogrid component identified by name or may require the option to specify without use of proprietary product names or trademarks.

- The stabilisation geogrid component of the Spectra Pavement Optimisation system shall be Tensar TriAx TX8 [OPTIONAL CLAUSE]
- 2. The stabilisation geogrid component of the Spectra Pavement Optimisation system shall have European Technical Assessment (ETA) Certification for the intended use of <u>stabilisation of unbound layers by way of interlock with the aggregate</u>, issued in accordance with European Organisation for Technical Assessment (EOTA[®]) European Assessment Document (EAD) 080002-00-0102.
- **3.** The stabilisation geogrid shall be manufactured in accordance with a management system which complies with the requirement of BS EN ISO 9001:2008. If required by the Engineer, the Contractor shall provide evidence of the manufacturer's certification of its Quality Assurance System.
- **4.** The stabilisation geogrid shall be manufactured from polypropylene.
- 5. The stabilisation geogrid class shall be 'punched and stretched'.
- **6.** The stabilisation geogrid shall have a minimum of 2% finely divided carbon black, well dispersed in the polymer matrix to inhibit attack by ultra violet light, determined in accordance with ASTM D1603-06.
- 7. The minimum working life of the stabilisation geogrid is assumed to be 100 years in natural soils with a pH value between 4 and 9 and in soil temperatures less than 15°C, and is expected to be 50 years in natural soils with a pH value between 4 and 9 and in soil temperatures less than 25°C, when covered within 30 days. Determined in accordance with EN 12224, EN 13438, and EN 14030
- **8.** The stabilisation geogrid shall have a hexagonal structure with ribs oriented in three directions. The resulting triangular-shaped apertures are defined by ribs of rectangular cross section having a high degree of molecular orientation which is continuous through the node.
- **9.** The thickness of the stabilised layer of the Spectra Pavement Optimisation system incorporating the stabilisation geogrid has been determined to meet or exceed project specific traffic performance targets and is based on the predicted performance of the stabilised layer incorporating the referenced geogrid.
- **10.** The geogrid effect used in the traffic performance analysis must be obtained from an extensive programme of research studies including full scale accelerated pavement testing where products in the same geogrid family have been included and where the traffic load imposed has reached or exceeded 800,000 equivalent standard axle loads.
- **11.** The suitability of research data and design methodology and associated design software used to determine the Spectra Pavement Optimisation system must be validated by an independent third party.
- **12.** It should be noted that index properties or performance characteristics for the geogrid component in isolation, such as tensile properties measured "in-air" or quality control data will not be accepted as an adequate demonstration of performance.

Tensar TriAx[®] stabilisation geogrid component of Tensar Spectra Pavement Optimisation system Model Specification – TX8

For product identification purposes the following characteristics shall be used.

- a. The Radial Secant Stiffness measured at 2% strain shall be 205kN/m (within a tolerance of 65kN/m), measured in accordance with EOTA[®] Technical report TR41 B.1.
- b. The Hexagon Pitch of the geogrid shall be 66mm (within a tolerance of ±4mm). Where hexagon pitch is the distance between alternate parallel ribs, measured in accordance with EOTA[®] Technical report TR41 B.4.
- c. Weight of the product shall be 0.180 kg/m² (within a tolerance of -0.030kg/m²) Measured in accordance with EOTA[®] Technical Report TR41 B.3.

Notes

The values declared are expressed as a nominal value and a tolerance in such a manner that the nominal value + or - the tolerance represents 99.7% of the population, i.e. a 99.7% 'tolerance interval'

DISTRIBUTED BY



01942 218597 SALES@TCS-GEOTECHNICS.CO.UK WWW.TCS-GEOTECHNICS.CO.UK

Tensar,

Tensar International Limited Units 2-4 Cunningham Court Shadsworth Business Park Blackburn BB1 2QX United Kingdom

Tel: +44 (0)1254 262431 Fax: +44 (0)1254 266867 e-mail: info@tensar.co.uk tensar-international.com The information in this document supersedes any and all prior Model Specifications for the product(s) designated above, is of an illustrative nature and supplied by rensar International Limited free of charge for general information purposes only. Tensar reserves the right to amend product descriptions, properties and specifications at any time and without prior notice. This document does not form part of any contract or intended contract. Tensar International Limited excludes to the fullest extent lawfully permitted any and all liability whatsoever for any loss or damage howsoever arising out of the use of and reliance upon this information. It is your sole responsibility and you must assume all risk and liability for the final determination as to the suitability of any Tensar International Limited product and/or design for the use and in the manner contemplated by you in connection with a particular project.

Tensar and TriAx are registered trademarks. Copyright © Tensar International Limited 2017

