

Certificate of acceptance of a geosynthetic material

Product: Tensar RE500 Series Grades RE510, RE520, RE540, RE560, RE570, RE580

Expiry date: 29/08/2026 subject to the conditions of expiry of the certificate below

Certificate history

| Certificate no. | Issue no. | Date | Issue history |
|-----------------|-----------|------------|---|
| 4 | 1 | 21/03/2017 | First accepted for use |
| | 2 | 26/03/2019 | Updated ISO certificates for manufacturing plants |
| | 3 | 05/08/2020 | Resubmission accepted for use |
| | 4 | 11/11/2020 | Updated ISO certificates for manufacturing plants |
| | 5 | 21/05/2021 | Updated ISO certificate for UK manufacturing plant |
| | 6 | 16/06/2023 | Updated ISO certificate for China manufacturing plant |
| | 7 | 31/07/2023 | Renewal accepted for use |
| | 8 | 08/03/2024 | Updated certificate information |

Manufacturers

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Product description

Tensar RE500 series geogrids are uniaxial geogrids for soil reinforcement. The Tensar RE500 series are manufactured from high-density polyethylene sheet oriented in one direction.

Product appearance



Material properties

Refer to the appended Tensar RE500 series geogrids product specifications.

Packaging

The manufacturer shall identify each roll of the product with the manufacturer's name and plant, product specification number, grade and batch identification, date code, and nominal dimensions. Labels shall be permanently fixed to each roll.

The manufacturer shall furnish complete written instructions for the storage, handling and installation of the product with the conditions of this warranty.

Refer to appended Tensar RE500 series geogrids product specifications for packaging dimensions.

Basis and scope of acceptance

Review of the Geofabrics New Zealand Ltd submission dated 31 July 2023.

Scope of acceptance

The products above are accepted for use on Waka Kotahi projects within the defined scope of acceptance and any specific conditions of this certificate. Failure to abide by the certificate requirements may lead to the Waka Kotahi acceptance and the certificate becoming invalid.

This acceptance is issued in accordance with clause 6.8.1 of the 3rd Edition of the Waka Kotahi Bridge Manual and applies only to product sourced from the stated manufacturer.

This acceptance excludes any mechanically stabilised walls facing systems and connection between the facing system and the composite geotextile. Facing systems and connections, where applicable, shall be specifically designed on a project by project basis.

This acceptance relates to the Tensar RE500 series geogrid only when used on Waka Kotahi projects for the specific use mentioned in the type of acceptance stated below. It does not remove the requirement for detailed design of the product.

Type of acceptance

Accepted for specific use: Soil reinforcement

~~Accepted for provisional use~~

~~Not accepted / rejected~~

Product details supplied with the manufacturer / supplier's submission

Refer to the BBA HAPAS Certificates 13/H201, 13/H202 and the appended Tensar RE500 series geogrid product specifications for product details.

Specific Conditions of Use

1. Users of the product are responsible for ensuring compliance with the certificate conditions. If a condition is not understood, guidance should be sought from Waka Kotahi.
2. The supplier shall provide product specifications and user manuals to purchasers / users of the product
3. The supplier shall notify Waka Kotahi within 20 working days of any deficiencies affecting the product quality, functionality and safety integrity (including corrective actions undertaken or proposed)
4. The supplier shall notify the Waka Kotahi within 20 working days of any intended change of the certified product including but not limited to:
 - a change of the product configuration (to the actual product or its application)
 - a variation to or addition of manufacturing locations or process
 - a change in the name or ownership of the manufacturing company.
5. Renewal of this certificate will be required if product specifications, product parameters, manufacturing standards or the manufacturer / supplier of the product change
6. Users receiving this product are responsible for ensuring that it is fit for purpose and that application of use complies with the scope from the Waka Kotahi acceptance
7. Anyone aware of any defect of the certified product (manufacture fault or any other defect) should notify the supplier immediately and Waka Kotahi in writing within 10 working days
8. Anyone becoming aware of a change to the product configuration (to the actual product or its application) and a variation to or addition of manufacturing locations or processes, should inform Waka Kotahi in writing within 10 working days
9. This acceptance is given for the specified product and its use as specified in the product configuration section of this certificate only
10. The product must be used / installed in accordance with the product installation specifications and relevant Waka Kotahi specifications. Where there is discrepancy between the product manual(s) and Waka Kotahi specifications and standards, the users must notify Waka Kotahi and seek resolution
11. Reference to this acceptance certificate should be given in project drawings and specifications.

Construction Quality Assurance Requirements

Installers must ensure that they are familiar with relevant conditions, requirements and limitations of the product.

Verification of conformance of geosynthetics delivered to Waka Kotahi project sites with the manufacturer / supplier's specifications and the geosynthetic parameters advised by the manufacturer / supplier is the contractor's responsibility. Procedures specified in *ASTM D4759 Standard practice for determining the specification conformance of geosynthetics* can be used for this purpose.

The users shall review and verify submittals and sample information from the supplier. The users shall proceed with ordering the product only after the submittals have been reviewed.

The product delivered to the site shall be visually inspected by the users to check that the delivered product complies with the product description given in supplier's submittals and that labelling on the product confirms this. If changes in the product occur prior to the acceptance of the product by the user, the product shall be tested and evaluated with respect to the requirements of the contract documents. Product not meeting the requirements shall be removed from the site and replaced.

The manufacturer shall certify the quality of the rolls of the product. As a minimum, the manufacturer shall provide quality control certificates for each batch of product and each shift's production. These quality control certificates shall be signed by an officer of the manufacturer and provided to the user at least three weeks prior to the installation of the product.

The quality control certificate shall include:

- roll numbers and identification
- sampling procedures
- result of quality control tests, including a description of test methods used.

Expiry of Acceptance

This acceptance expires on **29 August 2026** and replaces any previous acceptance.

The current ISO9001:2015 certification expires on **26 April 2026** for the China manufacturing plant, **24 May 2024** for the UK manufacturing plant, and on **15 October 2026** for Geofabrics NZ Ltd. This acceptance expires for the respective plants for the product manufactured after the expiry date unless the respective certificates are renewed and provided to Waka Kotahi. This acceptance shall be reviewed in the event of cancellation of BBA HAPAS Certificate 13/H201 or 13/H202.

The accepted product must not be deployed on state highway projects after the expiry date of acceptance unless a further period of acceptance is granted or the product has been formally included in relevant Waka Kotahi specifications. Failure to submit a renewal as required will void the product from the Waka Kotahi accepted product list.

Should the Transport Agency discover that information on material composition and properties (including test data), manufacturing and quality assurance procedures or any other material information supplied with the submission were flawed, or that in-service performance of the product reveals unacceptable problems, or that the product being supplied and / or marketed differs significantly from the product that was approved, it reserves the right, at any time, to modify or revoke its acceptance of the product.

Authorised by the Lead Advisor Structures

Transport Services

Waka Kotahi NZ Transport Agency