Tensartech
SYSTEMS

Tensar*tech* TR2 System

Tensar*tech* Earth Retaining Systems for Walls

TENSAR *technology*

Tensar Technology - proven practical solutions and the know-how to get them built

Tensar*tech* systems are based on Tensar Technology and the proven performance of Tensar geogrids. Tensar Technology is widely adopted for ground stabilisation problems and reinforced soil structures, delivering real savings in cost and time. We can help you apply Tensar Technology to deliver the best value on your project.

Building in confidence with the **Tensar***tech* TR2 System

The **Tensar***tech* TR2 system is mainly suited to temporary structures where practicality and economy are more important than aesthetics. Designed principally for contractor's temporary works situations, these simple to build, low cost structures have also been successfully adapted as thrust relief structures.

The steel mesh face lined with a durable heavy-duty geotextile is securely connected to Tensar uniaxial geogrid reinforcement using Tensar's high security bodkin joint. The system requires no formwork as the rigid steel face is fixed as the geogrid and reinforced fill materials are placed. Structures up to 18m have been constructed at a fraction of the cost of conventional methods. The face is normally vertical but inclined face angles can also be accommodated by the system.

The system has a design life up of 120 years. This is particularly attractive for thrust relief structures where the **Tensar***tech* TR2 System is constructed behind an existing retaining wall face, which can no longer take the lateral earth pressure being applied by the backfill. In this situation the steel face is normally supplied galvanised for greater corrosion resistance.

Designers may rest assured that there are Tensar geogrids available, providing the core stability, which have been independently assessed and certified for use in structures with a design life up to 120 years in the most demanding situations.

The **Tensar***tech TR2 can be built behind an existing structure to relieve lateral thrust, in this instance behind a canal retaining wall (UK).*

Tensar*tech* TR2 System for proven construction of retaining walls and bridge abutments

The cost effectiveness and versatility of the **Tensar***tech* TR2 System offers clients, specifiers and contractors many potential advantages over traditional methods such as reinforced concrete, mass gabion structures and temporary propping and support.

- **A low cost retaining wall at a fraction of the cost of a reinforced concrete solution**
- **Rapid and economical construction**
- **Often no specialist construction skills necessary**
- **Simple to build using established earth embankment construction techniques**
- **Possibility of using site-won including cohesive or contaminated materials**
- **Greater tolerance of differential settlement**
- **For Temporary Works it can either be easily dismantled or simply backfilled against**
- **High resistance to earthquake loading**
- **Ready for immediate use upon completion**

Tensar*tech TR2 System is used to relieve lateral thrust, in this case from a basement wall. The steel facing units are shown in place against the structure.*

Placing of the geogrid reinforcement and fill requires no special skills and is quick to complete. The void between the **Tensar***tech TR2 face and basement wall may be left or filled with self compaction pea-gravel.*

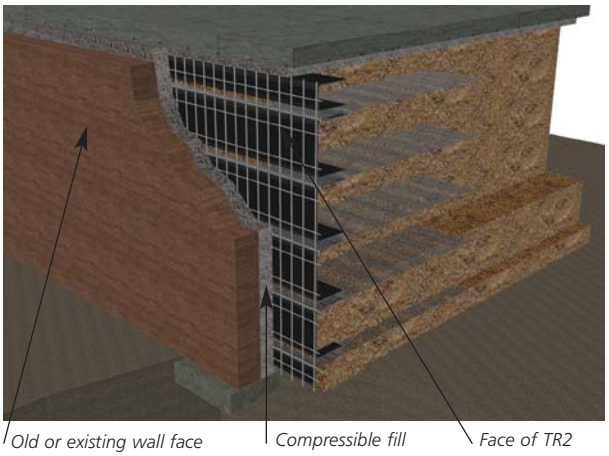
Upon completion the **Tensar***tech TR2 structure is completely buried and the building structure remains free of earth pressure from the surrounding fill and subsequent surcharge loading.*

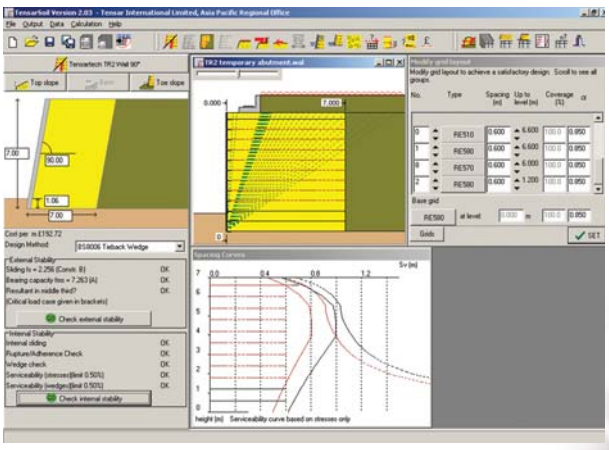
The **Tensar***tech TR2 is often used to build low cost, temporary bridge abutments.*

Design service

Tensar's experienced Civil Engineers and local distributors are available to help take your project to the next stage. They are able to provide an Application Suggestion to prove feasibility and help with planning costings. Tensar can provide all necessary certification, as well as all the crucial specification and installation details. Tensar can also provide a full design and supply service, including Construction Drawings backed up by our full Professional Indemnity Insurance cover, providing you with confidence in the reliability of both our products and design support.

Typical section showing a **Tensar***tech TR2 thrust relief structure behind a weak, existing retaining wall.*





Reinforced soil wall design software

For more than twenty five years Tensar has developed some of the most sophisticated reinforced soil design software in the world. This is used to provide clients with economically efficient, accurate and timely Application Suggestions and indemnified designs, assisting in scheme design from feasibility right through to construction.

BBA APPROVAL INSPECTION TESTING CERTIFICATION
TECHNICAL APPROVALS FOR CONSTRUCTION
ROADS & BRIDGES
CERTIFICATE No 99/R109

PRODUCT SHEET 1
TENSAR RE AND RE500 GEOGRIDS FOR REINFORCED SOIL RETAINING WALL AND BRIDGE ABUTMENT SYSTEMS

Contact Tensar International or your local distributor to receive further literature covering Tensar products and applications.

Also available on request are product specifications, installation guides and specification notes.

The complete range of Tensar literature consists of:

- **Tensar Geosynthetics in Civil Engineering** A guide to products, systems and services
- **Ground Stabilisation** Reinforcing unbound layers in roads and trafficked areas
- **TriAx™ A Revolution in Geogrid Technology** The properties and performance advantages of Tensar TriAx™ geogrids
- **Asphalt Pavements** Reinforcing asphalt layers in roads and trafficked areas
- **Tensar*tech* Earth Retaining Systems** Bridge abutments, retaining walls and steep slopes
- **Railways** Mechanical stabilisation of track ballast and sub-ballast
- **Foundations over Piles** Constructing over weak ground without settlement
- **Basal Reinforcement** Using Basetex high strength geotextiles
- **Tensar*tech* Geocell Mattress System**
- **Erosion** Controlling erosion on soil and rock slopes

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