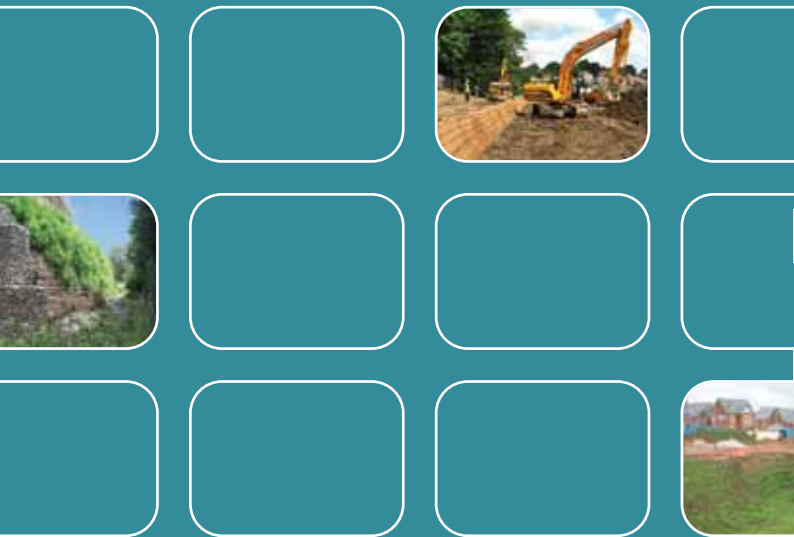


Tensartech™
SYSTEMS



Tensar*tech* GreenSlope

TENSAR technology

Tensar*tech* Earth Retaining Systems
for Slopes



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

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



Building in confidence with the *Tensartech* GreenSlope Earth Retaining System

The result of over 30 years of evolution in construction techniques, the *Tensartech* GreenSlope Earth Retaining System is used for building soil structures with a slope face up to the angle of 70°. By specifying *Tensartech* GreenSlope, the engineer and client are selecting a system which is both economical and attractive for steep slope construction.

The stability of the structure is provided by the geogrid reinforced soil mass with durable steel units positively connected at the face using Tensor's high efficiency bodkin connection. The facing units are lined during installation with an appropriate erosion mat, which will help establish the chosen vegetative cover to the slope, whether that be suitable ground cover, climbing plants or simply grass.

The facing units are delivered to site, stacked and tied on self-off-load vehicles ready to be lifted into position. During installation the appropriate geogrid is connected using the Tensor bodkin. Brace bars are then fixed into position to hold the face at a constant angle allowing the contractor to place topsoil and structural fill easily behind the face.

Alignment is simplicity itself with no need for the costly and time consuming formwork necessary to maintain accurate alignment when using techniques such as wraparound.

The designer is able to choose a continuous 70° slope face structure or a terraced structure with step-backs built into the face to allow irrigation of the chosen vegetation at the face.

Typically structures such as these are considered to have a 60 year design life. However, designers may rest assured that there are Tensor 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.



By adopting a vegetated face to a retaining structure, significant savings of up to 75% can be achieved over more traditional forms of construction.

Tensar *tech* GreenSlope for proven construction of structures for highways, infrastructure or any building development

The cost effectiveness and versatility of **Tensar *tech* GreenSlope** offers clients, specifiers and contractors many advantages over traditional methods, such as reinforced concrete. For the construction of retaining structures, **Tensar *tech* GreenSlope** is generally considered more attractive than gabions or crib walling.

- A low cost earth retaining structure at a fraction of the cost of a reinforced concrete solution
- Rapid and economical construction procedure
- Often no specialist construction skills necessary
- Simple to build using established earth embankment construction techniques
- Allows possible use of site won fill including cohesive or contaminated materials
- Can be designed using BBA certified geogrids
- Tolerant to differential settlement
- Helps maximise land-take more economically
- High resistance to earthquake loading
- Low bearing pressure may avoid expensive foundation treatment
- Ready for immediate use upon completion



Construction using standard equipment and materials keeps cost and time to a minimum.



*With construction successfully completed, the Tensar *tech* GreenSlope can be prepared for the vegetation stage.*



*By selecting the vegetation to suit local conditions, the Tensar *tech* GreenSlope will be attractive and low maintenance.*

Independent assessment and approval

Selected Tensar geogrids have been awarded British Board of Agrément (BBA) Roads and Bridges certificates allowing their design and specification in highways structures and bridge abutments with a 120 year design life and also a 120 year design life for strengthened embankments. The BBA certificates are evidence that the certified Tensar geogrids have been evaluated independently as fit for their intended use.



TENSAR 40RE, 55RE, 80RE, 120RE AND 160RE GEOGRIDS FOR REINFORCED SOIL EMBANKMENTS



TENSAR 40RE, 55RE, 80RE, 120RE AND 160RE GEOGRIDS FOR REINFORCED SOIL RETAINING WALL AND BRIDGE ABUTMENT SYSTEMS

Unsurpassed experience and reliability

Tensar International is a world leader in geogrid technology and the provision of high performance reinforced soil solutions, with over 30 years experience. Many thousands of reinforced soil structures, in many varied geotechnical and climatic conditions, have been designed and built using Tensar Technology around the world.

Independent assessment and approval offering cost effectiveness and versatility

Savings of up to 75% over conventional construction methods such as reinforced concrete can be achieved by constructing with the *Tensar^{tech}* GreenSlope System. In addition construction time may also be significantly reduced.



Steel facing units are securely connected to the geogrid reinforcement.



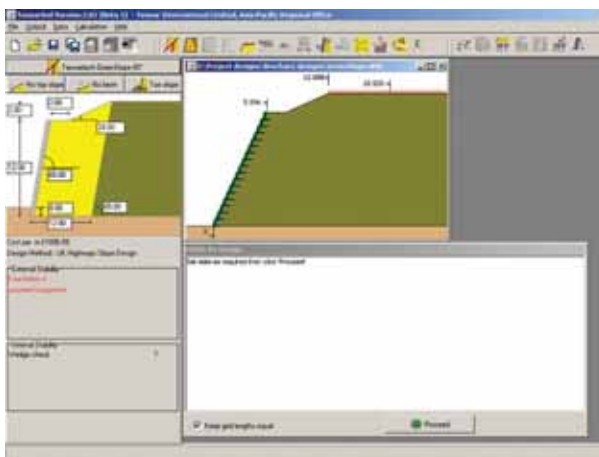
As vegetation becomes established the durable steel units begin to blend in with the landscaping offering an attractive alternative to traditional retaining walls.

Many Tensar*tech* GreenSlope systems are in service - a proven success.

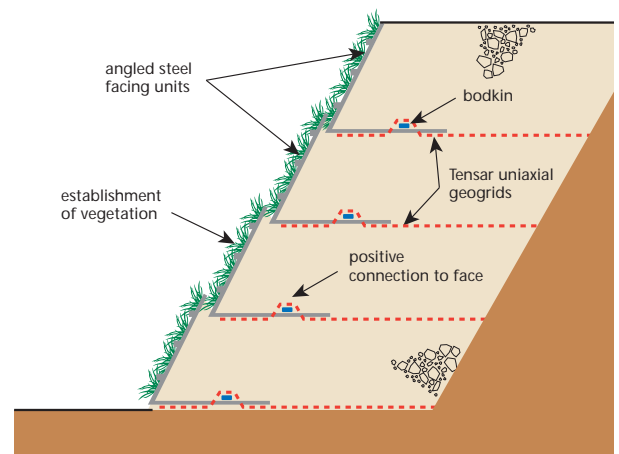


Design service

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.



Tensar software delivers safe, economic design solutions.



The face may be stepped to allow irrigation of rainwater.

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.



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 the products and their applications
- **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
- **Tensartech Earth Retaining Systems**
- **Foundations over Piles** Constructing over weak ground without settlement
- **Basal Reinforcement** Constructing embankments over weak ground
- **Railways** Mechanical stabilisation of track ballast and sub-ballast
- **Asphalt Pavements** Reinforcing asphalt layers in roads and trafficked areas
- **Erosion** Controlling erosion on soil and rock slopes

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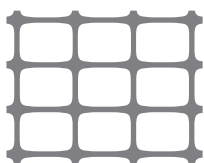
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EMS 86463
ISO 14001:2004

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Printed August 2009, Issue 2

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