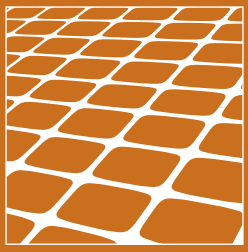
SPECTRA®
ROADWAY IMPROVEMENT SYSTEM

GET IN, GET OUT
AND GET THE JOB DONE ON TIME!

This access road near Mobile, Alabama was a contractor's nightmare. The unpaved road, built with fabrics, rapidly failed as the trucks were delivering fill. Look inside to see the "stiff" Tensar BX Geogrid solution.

Tensar®



Tensar® Geogrids

The Spectra System owes its strength and durability to **Biaxial (BX) Geogrids,** Tensar's patented reinforcement geogrids. BX Geogrids stand the test of time, performing better than other commercially available geosynthetics due to their stiff interlocking capability. For more information, visit www.tensarcorp.com.

Whatever materials you use on a job, the measure of their success or failure is your bottom line. For more than two decades, our geogrids have been helping contractors save time, money and materials.

Tensar BX Geogrids help improve your bottom line.

This is the same site shown on the cover with the same soil conditions. But there's an important difference — this time, the road was built with Tensar BX Geogrids and held up under repeated truck traffic. That's the Tensar difference!

Tensar BX Geogrids Deliver What Contractors Need

Almost every contractor has faced this problem: you're ready to go to work, but you can't get onto the site because of poor site conditions or bad weather. The site is wet and sloppy, so you can't start the job. Equipment and manpower downtime is costing you time and money while you wait for the site to dry. The result – additional costs and scheduling problems, especially if your equipment is needed elsewhere.

You have options. You can over-excavate and import fill, but you know how expensive that is. You can try to lay down a layer of fabric and aggregate fill to help you get out on the site. But if the soil is too soft, installation may be impossible. What do you do?

There's a better answer – Tensar BX Geogrids! Some sites are just too tough for fabrics to handle. Some areas where fabrics are used need so much maintenance after installation, or require such a large fill thickness, it hardly seems worth it to have used them in the first place. Plus, fabrics can be difficult to install. Who needs the complication?

Tensar BX Geogrids offer a better solution. When faced with the cost of losing equipment time or wasting valuable man-hours, BX Geogrids can be the best investment you make in your profitability. Since they are easier to install, use less aggregate fill and require no skilled labor or specialized equipment, BX Geogrids help you get in, get out and get the job done on time!

Just imagine trying to sew this fabric, if you can get it installed.

Look at the same site again. You can see the fabric on the left of the photo. To install Tensar BX Geogrids, simply roll them out with an overlap – there is no sewing required.

Improve Site Access. Tensar BX Geogrids help you get onto the site, even with bad weather or poor soil conditions. On sites you can barely walk on, simply roll out the geogrid and push out a layer of aggregate. Now you've got a firm, free-draining platform or a reliable access road. With BX Geogrids, bad sites and poor weather won't be a challenge anymore.

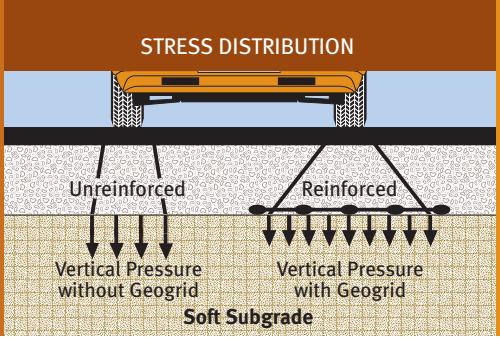
Reduce Cut and Fill. Removing bad soils is getting more and more expensive. Contaminated areas require special (and costly) disposal. Now you can work on top of weak soils by adding a layer of BX Geogrid and aggregate fill. The result – less undercutting, backfilling and disposal costs. And don't forget, Tensar Earth Technologies has the experience to help you determine the right fill thickness for your projects.

Reduce Aggregate Fill Thickness. In test after test, Tensar BX Geogrids have proven their value by enabling a thinner, reinforced aggregate fill layer to have the identical bearing capacity and serviceability as a thicker, unreinforced aggregate fill layer – or even a layer underlaid by a fabric. A reduction in aggregate thickness can be achieved through the use of BX Geogrids, with no change to the road's performance.

Value Engineer for Profit. You can Value Engineer (VE) for profit by using BX Geogrids to construct thinner fill layers. When curbs determine the final pavement grade or existing utilities limit undercutting, it is possible to construct a reliable but thinner base course without sacrificing durability and without expensive reconstruction or utility re-routing. BX Geogrids can help in fast track projects and those with high costs associated with aggregate fill, over-excavation or haul off.

Whether you're in the field or in the office, you can quantify the thickness and cost savings of using Tensar BX Geogrids with the Spectra Subgrade Improvement Slide Rule. This simple and precise tool shows solutions for a wide range of real-world, soft-soil scenarios. It also features a cost analysis function that lets you make bottom-line economic comparisons no matter how thicknesses are established. To order your free slide rule, call 800-TENSAR-1 or contact your local Tensar BX Geogrid representative.

To put it simply, for reinforcing aggregate, especially over weak subgrades – "Stiff is Good."



Reduce Maintenance. BX Geogrids have saved time and money on thousands of jobs. A key advantage is reliability. Once installed, the surface needs less maintenance than a surface underlain by fabric. On jobs across the U.S., access roads built with BX Geogrids have stood up to repeated passes of fully loaded haul trucks with little or no maintenance, even on sites where roads containing fabric had already failed.

Simplify Installation. Our lightweight rolls are easy to handle and easy to cut in the field. They make it simple to adapt to curves and utility projections. The biggest advantage in installation – you can roll Tensar BX Geogrids out onto the subgrade and walk on them, even in the weakest soil conditions. Adjacent rolls of Tensar Geogrids normally don't require any connection, since aggregate fill simultaneously interlocks with overlapping geogrid apertures. A simple overlap is sufficient and no sewing is required.

Note: Before beginning any project, please consult the current Installation Guide to ensure optimum performance and to verify fill specifications.

Report DOT/FAA/RD-92-25. *(Sponsored by the USDOT/FAA)* Researchers at the U.S. Army Corps of Engineers Waterways Experiment Station (WES) concluded that, in evaluating geogrids for aggregate base reinforcement, "Stiffer is better." That's why Tensar BX Geogrids outperform all their competitors. Over weak subgrades, BX Geogrids act to distribute the loads over a wider area reducing the applied pressure.

Tensar BX Geogrid Roll Characteristics

Product	Roll Width		Roll Length		Roll Weight		Roll Area	
	(m)	(ft)	(m)	(ft)	(kg)	(lbs)	(m^2)	(sy)
BX110047	3	9.8	75	246	45.6	100.5	225	268
BX110075	4	13.1	75	246	61.2	135	300	358.6
BX120040	3	9.8	50	164	46.3	102	150	179.3
BX120060	4	13.1	50	164	62.6	138	200	239.1
BX130060	4	13.1	50	164	50.5	111.5	200	239.1

How Stiff are Tensar BX Geogrids? See for Yourself.

Take a piece of Tensar BX Geogrid and place it over the mouth of a coffee cup. Press down and feel the resistance. Then try that with another grid or any geotextile. You can feel the difference. Now just imagine the support that Tensar BX Geogrids provide when placed on soft soils!

Take a piece of fabric and a piece of Tensar BX Geogrid. Push them over the edge of the table, as illustrated below. The BX Geogrid does not sag. It is much more rigid than the geotextile. That stiffness strengthens the performance of Tensar BX Geogrids. Stiff geogrids create a "snowshoe effect," spreading the load over a wider area of subgrade just as a snowshoe spreads a person's weight over a wider area of snow. It's easy to claim a product performs "just like" Tensar Geogrids but actually proving it is a whole different job!

Tensar Geogrids

The First Geogrids, The Best Geogrids™

For more information on the Spectra System,
please call 800-TENSAR-1, e-mail info@tensarcorp.com,
or visit www.tensarcorp.com.

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