

Avoid Delays from the Cement and Lime Shortage with Tensar Geogrid



Industry associations are reporting that supply chain issues and increased demand are creating shortages with the cementitious materials typically used to chemically stabilize soft subgrades, including cement, lime and fly ash. Many suppliers report they are restricted to small allocations, with most cement going into concrete production. Contractors who depend on cement or lime stabilization for their projects are being forced to find an alternative or face costly delays.

Tensar Geogrid: A Reliable Soil Stabilization Solution

Tensar geogrid is readily available, can speed construction schedules and significantly cut construction costs. **By partnering with Tensar you get:**

- An expert site visit with our experienced staff, to evaluate conditions and assist with installation as needed
- Project specific design, to meet or exceed the performance of the chemically stabilized section
- A comprehensive alternate submittal to fast-track approvals from the engineer or owner, that we can help you present
- Product availability throughout the US and Canada through our comprehensive network of distributors, with delivery directly to your job site
- Proven long term performance to ensure client satisfaction and minimize warranty work



How do geogrids work?

Tensar geogrids enhance performance of poor soils by interlocking unbound aggregate materials. As the granular material strikes through the geogrid openings they become laterally restrained and obtain a higher degree of confinement. This stiffer, stabilized layer resists rutting and improves bearing capacity and increases traffic capacity.

How do they save time?

Chemical stabilization requires extra steps like soil testing for compatibility, specialized equipment, favorable weather conditions, and lengthy curing times. But these hurdles are avoided with Tensar geogrid. This chart gives a convenient side-by-side comparison of the pros and cons associated with chemical and geogrid stabilization through various stages of construction. Even when there is no raw material shortage, stabilization with Tensar geogrid is often the best option for addressing poor soils.

Chemical Methods vs. Geogrid for Stabilization

Here are just a few of the pros & cons associated with chemical and geogrid stabilization during construction:

Weather for Installation

Chemical



Above 40°F to 50°F and No Rain

Geogrid



All Weather

Traffic and Site Access

Chemical



3 to 7 days Curing Time

Geogrid



Immediate after Placement

Speed of Installation

Chemical



- Test Mix
- Blend Chemicals
- Grade
- Compact
- Mellow

Geogrid



- Unroll Geogrid
- Place Fill
- Compact

Required Equipment

Chemical



Specialized

Geogrid



No Special Equipment Required



PROVENSAVINGS

Tensor's innovative geogrid technology provides effective confinement of granular fill, resulting in a stiff mechanically stabilized layer (MSL) capable of controlling differential settlement and increasing bearing capacity. This efficiency results in less required aggregate to achieve the same performance. And less aggregate means less cost. Take a look at the chart to compare over-excavation, chemical and geogrid soil stabilization methods.

Compare Three Stabilization Alternatives to Support Traffic

Method	Over-Excavation	Chemical Stabilization	InterAx Geogrid
Cost	24 in. AGGREGATE SUBGRADE CBR = 1.3%	4 in. AGGREGATE 12 in. CEMENT/LIME SUBGRADE CBR = 1.3%	6 in. AGGREGATE SUBGRADE CBR = 1.3%
Installed cost (VARIES BY PROJECT SPECIFICS)	\$18 - \$36 per square yard	\$10 - \$25 per square yard	\$10 - \$15 per square yard
Availability	✓	?	✓

PROVENSUCCESS



Contractors around the globe have relied on Tensor geogrid when chemical stabilization caused issues on their job sites. Here are just a few examples of the value Tensor technology can bring to your project.

Project: State Route 2
Location: Lake County, Ohio

Cement stabilization was initially used on this project, however, heaving failure was observed immediately after paving in areas with high sulfate soils. Tensor geogrid was selected to re-stabilize these areas where cement stabilization had failed. The geogrid solution was used on the project moving forward to avoid the risk of encountering more high sulfate soils.



Project: Shadow Creek Subdivision
Location: Buda, Texas

A subdivision located in central Texas was constructed over very expansive clay soils (high PI - 30 to 60). Variable moisture conditions from the rainy and drought cycles created extreme shrinking and swelling of the clay subgrade. Initial construction phases included pavement sections that incorporated either lime stabilization or additional flex base to combat the expansive clays. However, the roadways still experienced significant movement, cracking lanes, and edge cracking within the initial years of operation which lead to unexpected high maintenance/repair costs.

Tensor offered a soil stabilization solution using multi-axial geogrid to optimize the pavement sections. Studies have shown that the use of multi-axial geogrid can mitigate the effects of expansive soils and increase long-term performance. The residential roads showed significant improvement and the Tensor solution was used in the design of the remaining construction phases.



PROVENTECHNOLOGY



Tensor geogrids are backed by decades of rigorous laboratory evaluations, in-situ field testing and validated by 3rd parties to ensure you get a proven, data-driven solution. This data allows us to quickly generate an alternate geogrid specification for contractors not able to access chemical methods.

Avoid costly delays by contacting us now. We will give you a free project review and fast-track an alternate geogrid design.

Visit: www.TensorCorp.com/Support
Call: 800-TENSAR-1