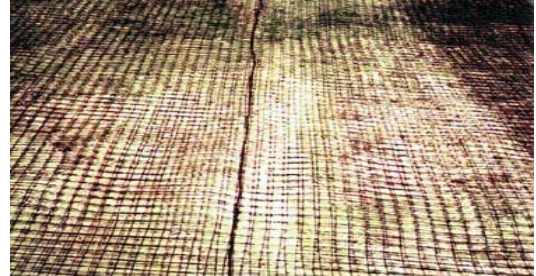


MS MULTI-LAYER GEOGRIDS IN THE FIELD: The Louisiana Transportation Research Center

*Louisiana Transportation Research
Technical Assistance Report:
Report No. 18*

*Case History: Use of Tenax and
Tensar Geogrids for Base Course
Stabilization*

*Geophysical Group
January 1999*



*Table 1
Stage two test section results*

| Station | Geogrid | Base thickness inches | Total area sq. yds. | Failed area sq. yds. |
|-----------------|---------------|--------------------------|------------------------|-------------------------|
| 139+00 - 140+45 | Tensar BX1100 | 8 | 548 | 50 |
| 140+45 - 141+24 | Tenax MS220 | 12 | 298 | 0 |
| 141+24 - 142+06 | Tensar BX1200 | 12 | 261 | 0 |
| 142+06 - 150+05 | Tensar BX1100 | 12 | 2937 | 82 |
| 150+05 - 181+89 | Tenax MS220 | 12 | 11,912 | 166 |
| Total | | | 15,956 | 298 |

A field inspection of the project two years after completion indicated all pavement sections to be performing adequately. There is no evidence of any subgrade or base failures. Figure 2 shows the completed project.

The Louisiana Transportation Research Center (LTRC) comprehensive research and analysis indicated...

1. This LTRC report states that “There was a concern that the individual layers of Tenax multilayer geogrid were failing independently and not acting as a single unit. To investigate this, several holes were excavated in the areas of pumping subgrade to expose the geogrid. This investigation did not reveal any separation of the geogrids – page 8”.
2. This LTRC report further concludes that “Tenax MS220 and Tensar BX1100, geogrids of similar tensile modulus, performed equally in the field when exposed to similar conditions - page 12”.
3. The performance of MS220 is actually better than BX1100, failure rate 1.4% vs. 2.8% (Table 1).



*Figure 2
Completed Project*

Multilayer Geogrids are manufactured by Tenax Corporation, 4800 E. Monument Street, Baltimore, MD 21205; represented exclusively by Syntec, LLC