



SOUTHERN CALIFORNIA LOGISTICS AIRPORT VICTORVILLE, CALIFORNIA

Application: The City of Victorville operates the Southern California Logistics Airport (SCLA) at the site of the former George Air Force Base. The SCLA is a dedicated air cargo facility that includes



Installation of the GlasGrid System at the Southern California Logistics Airport.

an 8,500-acre, multi-modal business complex. It is located in the Mojave High Desert 90 miles northeast of Los Angeles.

The Challenge: The desert climate produces sudden and severe temperature shifts with the average high temperature being 99°F in July and the average low being 31°F in January. Over time,

the resulting high thermal stresses produce serious surface cracking and degradation of the composite pavement surfaces.

Site Conditions: Due to the harsh climate, the main 15,050-foot runway had become extremely oxidized and brittle. The surface layer distresses included thermal, alligator, transverse and longitudinal cracks. The owner had recently applied a new leveling course but remained concerned that defects in the underlying surface would eventually reflect through to the surface and affect aircraft operations.

Alternative Solution: The airport's management considered adding an 8-inch overlay to the runway, however, it was determined that this approach would not be the most cost effective or longest lasting solution.

Solution: The GlasGrid® Pavement Reinforcement System was recommended as a lower cost, longer lasting alternative to installing a very thick overlay. Reinforcing the runway with the GlasGrid 8501 product would produce a strong interlayer solution capable of resisting the migration of reflective cracking. The GlasGrid System is designed to redirect vertically migrating cracks horizontally, thereby dissipating them and extending the service life of an asphalt overlay.

PROJECT HIGHLIGHTS

Project:

Southern California Logistics Airport (SCLA)

Location:

Victorville, California

Installation:

July-August 2001

Product/System:

GlasGrid® 8501, GlasGrid Complete Road System

Quantity:

51,000 square yards

Owner/Developer:

City of Victorville

Design Engineer:

Dan Haynes, City Engineer

General Contractor:

Vance Corp., Rialto, California

Materials Supplier:

Road Solutions



REINFORCED ASPHALT OVERLAY

A return site visit in 2007 showed that the GlasGrid reinforced pavement had experienced only minor cracking after more than 6 years of use and thermal exposure. Feedback from airport staff indicates complete satisfaction with the outcome of the project. In fact, management is recommending that the GlasGrid System be included on another runway rehabilitation project that is currently in the planning stage.

System Advantage: Introduced in 1989, the GlasGrid System consists of stiff environmentally friendly fiberglass material coated with an elastomeric polymer. The grid is rolled out over a thin leveling course placed before the main asphalt overlay. With its pressure sensitive adhesive backing, installation of the GlasGrid mesh for reinforcement is easy and generally considered the most expedient installed interlayer system available. The GlasGrid System has been successfully used within asphalt overlays throughout the world to combat reflective cracking initiated by one or more of the following:

- Concrete pavement longitudinal and transverse joints
- Thermal loading
- Lane widening
- Cement treated or stabilized layer shrinkage cracks
- Block cracks
- Asphalt construction joints



The GlasGrid System is a longer lasting alternative to installing a thick overlay.

Additional Information and Services:

Tensar International Corporation, the leader in geosynthetic soil reinforcement, offers systems for improving structures such as roadways, railroads, construction platforms and parking lots. Our products and technologies, backed by the most thorough quality assurance practices, are at the forefront of the industry. Highly adaptable, cost-effective and installation-friendly, they provide exceptional, long-term performance under the most demanding conditions. Our support services include site evaluation, design consulting and site construction assistance.

For innovative solutions to your engineering challenges, rely on the experience, resources and expertise that have set the industry standard for more than two decades.

For more information on the GlasGrid System or other Tensar Systems, call **800-TENSAR-1**, e-mail info@tensarcorp.com or visit www.tensar-international.com.

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