



CENTRALIA AIRPORT EXETER, ONTARIO, CANADA

Application: The Ontario Development Corporation operates Centralia Airport at the site of a former Royal Canadian Air Force training base. The base was converted to civilian aviation use in 1966. In 1992 the Ontario Development Corporation, which had recently acquired the airport, decided to undertake a rehabilitation effort to bring the facility up to current standards.

The Challenge: A combination of irregular maintenance and harsh weather was causing serious cracking of the airport's paved surfaces.

Site Conditions: The airport apron was becoming extremely oxidized and brittle due to the harsh

climate. Centralia's highest recorded monthly average temperature was 80°F in July while the lowest was 15°F in January. The surface layer included thermal, alligator, transverse and longitudinal cracks. Further surface degradation was likely to affect aircraft movement and safety.

Alternative Solution: The owners could have considered adding a thicker overlay to the apron, however this approach would have proved very expensive. Experience also suggested that an overlay without reinforcement would provide only a temporary solution since thermal stresses were likely to cause the cracks to eventually reflect back through to the surface.

Solution: The GlasGrid® Pavement Reinforcement System was recommended as a lower cost, longer lasting alternative to installing a thicker overlay. Reinforcing the apron with GlasGrid 8501 would produce a strong interlayer solution capable of resisting the migration of reflective cracking.

A return site visit in February 2007 revealed that the GlasGrid System reinforced pavement had experienced only minor cracking after more than 13 years of post-rehabilitation service.

Brad Pryde, the design engineer of record on the project stated, "We incorporated GlasGrid 8501 into Centralia Airport's concrete apron rehabilitation to mitigate the reflective cracking

Severe cracking of the airport apron at the Centralia Airport was likely to affect aircraft movement and safety.



PROJECT HIGHLIGHTS

Project:

Centralia Airport

Location:

Ontario, Canada

Installation:

1993

Product/System:

GlasGrid® 8501, GlasGrid Pavement Reinforcement System

Owners:

Ontario Development Corporation

Design Engineer:

Paragon Engineering

General Contractor:

Cox Construction

Distributor/Licensee:

Terrafox Geosynthetics



that was anticipated to reoccur in the proposed 3 in. thick asphalt pavement overlay. After 13 years of Canadian weather, the cracking is minimal. We are satisfied with the performance of the GlasGrid product in this application.”

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



The GlasGrid System has proven its effectiveness after more than 13 years of use.

backing, installation of the GlasGrid System for reinforcement is easy and generally considered the most expedient installed interlayer system available. GlasGrid 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

Additional Information and Services:

Tensar International Corporation, the leader in geosynthetic soil reinforcement, offers systems for improving structures such as roadways, railyards, 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.

Authorized Representative:



Tensar International Corporation
5883 Glenridge Drive, Suite 200
Atlanta, GA 30328
800-TENSAR-1
www.tensar-international.com

*Exclusive distributors
in the Americas for:*



©2007, Tensar International Corporation, Limited LLC, Inc. Certain products and/or applications described or illustrated herein are protected under one or more U.S. patents. Other U.S. patents are pending, and certain foreign patents and patent applications may also exist. Trademark rights also apply as indicated herein. Final determination of the suitability of any information or material for the use contemplated, and its manner of use, is the sole responsibility of the user. Printed in the U.S.A.