Choose the Pavement Interlayer System That is Right for Your Application

The GlasGrid® Pavement Reinforcement System provides additional support to resist the migration of reflective cracks in pavement applications, thus reducing maintenance and life cycle costs. The GlasGrid System has proven to be effective in every geographical area and climate – from desert environments to near arctic conditions. Manufactured by Saint-Gobain ADFORS in Albion, New York, this interlayer system is composed of series of fiberglass strands coated with an elastomeric polymer and formed into a grid structure. Each strand has a remarkably high tensile strength and high modulus of elasticity, which is particularly important as asphalt concrete typically cracks at low strains. And now GlasGrid TF, the newest product in the GlasGrid System, is the only pavement interlayer to include a pre-installed tack film that offers faster installation, improved performance and savings on labor, time and material costs.

A hybrid geosynthetic paving material, GlasPave® is a unique combination of fiberglass mesh embedded into high performance polyester mats. The non-woven matrix structure of GlasPave allows for an asphalt binder to penetrate and fill voids within the fabric to limit moisture infiltration into a pavement structure. The fiberglass matrix in a GlasPave paving mat coated with an elastomeric polymer provides significantly greater tensile strength at low strains when compared to conventional paving fabrics and other paving mats. This high strength helps extend pavement life by delaying reflective cracking, which is a common contributor to costly repairs and the eventual failure of asphalt overlay applications. Even in the harshest environments, GlasPave can provide significant improvement to the service life of the overlay.

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With proper design and placement, interlayers can add traffic capacity to the asphalt pavement.

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Selection of Geosynthetic Pavement Interlayers

Geosynthetics interlayers are a cost-effective and easy solution to extend the service life of asphalt overlay applications. Tensar International Corporation (Tensar) offers unique features in their geosynthetic interlayer systems that improve the performance of asphalt layers in new construction and pavement rehabilitation. The stress absorbing GlasPave® pavement reinforcement system offers superior stiffness characteristics along with an open aperture to ensure through-hole bonding of asphalt layers. This unique combination of features makes the GlasPave System the optimum choice for heavy- and medium-duty overlay projects in areas of performance and total life-cycle cost savings. The GlasPave® Waterproofing Paving that combines the stress- dissipating ability of a geosynthetic interlayer with high- modulus fibers setting to yield a cost-effective reflective crack mitigation system for light- to medium-duty pavement overlay projects.

TWO TYPES OF INTERLAYERS ARE AVAILABLE TO MEET YOUR REQUIREMENTS.

<table>
<thead>
<tr>
<th>Product</th>
<th>Roll Width</th>
<th>Roll Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>GlasPave 50</td>
<td>56 in. (142 cm)</td>
<td>495 yd (451 m)</td>
</tr>
<tr>
<td>GlasPave 25</td>
<td>56 in. (142 cm)</td>
<td>495 yd (451 m)</td>
</tr>
</tbody>
</table>

GlasPave® Product Selection Guide

This guide is intended to offer guidance on product selection. The interlayer types have been arranged into four main categories: the first three types cater for non-heavy traffic and the last two cater for heavy traffic. The exact of the distress types referenced in FHWA-TSP-03-031, "To reduce HMA layer thickness by 0.5 in. (12.5 mm) in heavy-traffic areas with high potential for traffic induced rutting, then the minimum compacted overlay thickness must be increased to 2 in. (51 mm)."

**LEGEND**

- **Custom barrier for Tar Fogliaf® (modified asphalt)**
- **To increase pavement life by 40%**
- **Each option is typically found worthwhile**
- **Superior to asphalt, offers cost savings.**
- **Intermodal Facilities**
- **Industrial Ports or Rail Terminals**
- **Interstate Highways**
- **Inter-Urban Roads or Connector Roads**
- **Country or Regional Contact for Roads**
- **Inter-Urban Roads or Interstate Highways**
- **Airports - Private/Municipal**
- **Airports - Regional/International**
- **Industrial Parks or Intermodal Facilities**

**Product Selection Table by Crack Distress Type**

<table>
<thead>
<tr>
<th>Pavement Type</th>
<th>Traffic (BAK)</th>
<th>Full Width</th>
<th>Lane Widening</th>
<th>Detail Repair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-Urban Roads or Interstate Highways</td>
<td>&gt; 10% Heavy Veinage</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
</tr>
<tr>
<td>Inter-Urban Roads or Interstate Highways</td>
<td>&gt; 5% Heavy Veinage</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
</tr>
<tr>
<td>Airports - Private/Municipal</td>
<td>General Air Traffic</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
</tr>
<tr>
<td>Airports - Regional/International</td>
<td>Commercial Traffic</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
</tr>
<tr>
<td>Industrial Parks or Intermodal Facilities</td>
<td>&gt; 200 lb</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
<td>GlasPave25 G7GB11TF</td>
</tr>
</tbody>
</table>

**LEGEND**

- **GlasPave50**
- **GlasPave25**
- **GG8502**
- **GG8511**
- **GG8512**
- **GG8501**

**Detailed Repair**

- **Cracks**
- **Reflective**
- **Cracking**
- **Block**

**Cracking**

- **> 0.25 in.**
- **< 0.25 in.**

**Thermal Expansion**

- **Cooling**
- **Thermal**

**Aging**

- **Reflective**
- **Cracking**

**Region**

- **Cold**
- **Warm**

**Product**

- **Product**
- **Required Waterproofing**
- **Code**

**Applications**

- **Type 1. GlasPave 50 is designed to meet ASTM D7239, ‘Hybrid Geosynthetic Paving Mat for Highway Applications’ Type 1.**

**GlasPave 50**

- **GG8511 TF**
- **GG8501 TF**

**GlasPave 25**

- **GG8502**
- **GG8511**
- **GG8512**

**GG8501**

- **12.5 mm x 12.5 mm**
- **25 mm x 25 mm**
- **100 m**

**GG8502**

- **12.5 mm x 25 mm**

**GG8511**

- **25 mm x 19 mm**

**GG8512**

- **25 mm x 19 mm**
Selection of Geosynthetic Pavement Interlayers

Geosynthetics interlayers are a cost-effective and low-maintenance method to extend the life of asphalt overlay applications. Tensar International Corporation (Tensar) offers a variety of geosynthetic interlayer systems that improve the performance of asphalt layers in new construction and pavement rehabilitation. The stress-relieving GlasPave® Paving Reinforcement System offers superior stiffness characteristics along with an open aperture to ensure through-hole bonding of asphalt layers. This unique combination of features makes the GlasPave System the optimum choice for heavy- and medium-duty overlay projects in terms of performance and total life-cycle cost savings. The GlasPave Waterproofing Paving Mat combines the waterproofing ability of a polyester mat with the high modulus of fiberglass netting to yield a cost-effective reflective crack modification solution for light- to medium-duty pavement overlay projects.

TWO TYPES OF INTERLAYERS ARE AVAILABLE TO MEET YOUR REQUIREMENTS:

1. General Assistance in Product Selection
   - GlasPave Waterproofing Paving Mat
   - GlasGrid Pavement Reinforcement System

2. Product Selection Table by Crack Distress Type
   - Inter-Urban Roads or Interstate Highways
   - Airports
   - Industrial Ports or Intermodal Facilities

GlasGrid® and GlasPave® Product Selection Guide

### GlasPave Paving Reinforcement System

<table>
<thead>
<tr>
<th>Product</th>
<th>Roll Width</th>
<th>Roll Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>GlasPave 50</td>
<td>120 in. (3.05 m)</td>
<td>120 yd (109.73 m)</td>
</tr>
<tr>
<td>GlasPave 25</td>
<td>120 in. (3.05 m)</td>
<td>120 yd (109.73 m)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Aperture Size</th>
<th>Roll Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>GG8501F</td>
<td>12 in. x 12 in.</td>
<td>360 ft (109.73 m)</td>
</tr>
<tr>
<td>GG8501TF</td>
<td>6 in. x 6 in.</td>
<td>360 ft (109.73 m)</td>
</tr>
</tbody>
</table>

### GlasGrid® Waterproofing Paving Mat

<table>
<thead>
<tr>
<th>Product</th>
<th>Roll Width</th>
<th>Roll Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>GlasGrid</td>
<td>120 in. (3.05 m)</td>
<td>120 yd (109.73 m)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Aperture Size</th>
<th>Roll Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>GG8502</td>
<td>12 in. x 12 in.</td>
<td>360 ft (109.73 m)</td>
</tr>
<tr>
<td>GG8502</td>
<td>6 in. x 6 in.</td>
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</tr>
</tbody>
</table>

**Legend**

- **GlasPave** for reflective cracking remediation
- **GlasGrid** for lateral support and rut control

**Product Selection**

- **GlasPave 50** for heavy-duty overlays
- **GlasPave 25** for medium-duty overlays

**Inter-Urban Roads or Interstate Highways**

- Airports
  - General Traffic
- Industrial Ports or Intermodal Facilities
  - Airport Traffic

**Fatigue Life**

- Increase HMA Thickness
- lane widening

**Crack Distress**

- Reflective PCC Joint
- Lane Widening

**Crack Type**

- Alligator
- Block
- Spalling
- Edge

**Crack Width**

- < 0.25 in.
- > 0.25 in.

**Region**

- Warm

**Traffic**

- < 300K
- > 1M
- > 20kip

**Load Transfer Efficiency**

- > 60% using falling weight deflectometer

**Thermal Movement**

- 49°F (60 m)
- 99°F (100 m)

**Time to achieve 90% consolidation**

- < 6 months

**Additional Information**

- Tensar Representative or calling 800-TENSAR-1 for more detailed information or for help designing your application.

**Interstate Highways**

- Connector Roads
- County or Municipal
- Streets, Parking Lots, Minor Arterials
- Tennis Courts, Bike Trails, Industrial Parks
- Residential Streets, Vacant Lots

**Intermodal Facilities**

- Warehouses, Rail Yard or Terminal
- Intermodal Terminals
- Container parks

**Airports**

- General Traffic
- Private/Municipal
- Airline Traffic

**Industrial Ports or Intermodal Facilities**

- Airex Loaders
- Rail Loaders

**Subgrade**

- Distress Types
- Crack (Sand Lane Widening)
- Crack (Clay Lane Widening)
- Crack (Rocky Lane Widening)
- Crack (Soil Lane Widening)

**Fatigue Life**

- Increase HMA Thickness
- Lane Widening

**Crack Distress**

- Reflective PCC Joint
- Lane Widening

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