Choose the Pavement Interlayer System That is Right for You

GlasGrid® Pavement Reinforcement System

The GlasGrid® Pavement Reinforcement System provides added load support to resist the migration of reflective cracks in roadway 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 Technical Fabrics in Albin, New York, this interlayer system is comprised of a 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 at low elongation; this is particularly important as asphalt concrete typically cracks at low strains. This combination makes GlasGrid stronger than steel, pound for pound.

GlasPave™ Paving Mat System

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 provides significantly greater tensile strength at low strain when compared to conventional paving fabrics and other paving mats. This higher 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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Selection of Geosynthetic Pavement Interlayers

Geosynthetic interlayers are a cost-effective and easy solution to extend the service life of asphalt overlay applications. Tensar International Corporation offers two geosynthetic interlayer systems to meet a variety of needs of local asset owners and designers to improve the performance of asphalt layers in new construction and for pavement rehabilitation. The stress absorbing GlasGrid 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 GlasGrid the optimum choice for heavy- and medium-duty overlay projects in terms of performance and total life-cycle cost savings. The strain absorbing GlasPave Waterproofing Paving Mat combines the waterproofing ability of a polyester fabric with the high modulus of fiberglass netting to yield a cost-effective reflective crack mitigation solution for light- to medium-duty pavement overlay projects.

GlasPave25 is available in:

- Roll widths of 46 in. or 78.75 in.
- Roll lengths of 750 ft and 3,000 ft

<table>
<thead>
<tr>
<th>Roll Width</th>
<th>Roll Length</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 in.</td>
<td>750 ft</td>
<td>GG8511</td>
</tr>
<tr>
<td>78.75 in.</td>
<td>750 ft</td>
<td>GG8512</td>
</tr>
<tr>
<td>46 in.</td>
<td>3,000 ft</td>
<td>GG8511</td>
</tr>
<tr>
<td>78.75 in.</td>
<td>3,000 ft</td>
<td>GG8512</td>
</tr>
</tbody>
</table>

Legend:
- **Waterproofing**
- **Reflective Crack Mitigation**
- **Detail Repair**
- **Lane Widening**
- **Industrial Ports or Airports – Regional/International**
- **Tennis Courts, Bike Trails, Golf Cart Paths, Paved Pathways, Water Quality Projects, Boat Launches, Water Country Roads**
- **Central Europe and the Mediterranean Basin**
- **Southern N. America, S. America**
- **Western Europe**
- **Central Asia and the Middle East**
- **Australia and Southern Pacific**
- **Northeast N. America, Canada, including areas with extreme daily thermal fluctuations**
- **Time to achieve 90% consolidation >6 months**
- **Time to achieve 90% consolidation <6 months**
- **Product Selection Table by Crack Distances Type**
- **Route Type**
- **Traffic (Daily)**
- **Alligator Cracking (Inches)***
- **Rock Cracking (Inches)**
- **Alligator Cracking (Inches)***
- **Crack healing (Inches)**
- **Edge Creep (Inches)**
- **Lane Widening (Inches)***
- **Industrial Ports or Airports – Regional/International**

<table>
<thead>
<tr>
<th>Route Type</th>
<th>Traffic (Daily)</th>
<th>Alligator Cracking (Inches)*</th>
<th>Rock Cracking (Inches)</th>
<th>Alligator Cracking (Inches)*</th>
<th>Crack healing (Inches)</th>
<th>Edge Creep (Inches)</th>
<th>Lane Widening (Inches)***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennis Courts, Bike Trails, Golf Cart Paths, Paved Pathways, Water Quality Projects, Boat Launches, Water Country Roads</td>
<td>200,000 – 2,000,000</td>
<td>&lt; 1/8 in.</td>
<td>&lt; 1/4 in.</td>
<td>&lt; 1/8 in.</td>
<td>&lt; 1/4 in.</td>
<td>&lt; 1/4 in.</td>
<td>&lt; 1/4 in.</td>
</tr>
<tr>
<td>Central Europe and the Mediterranean Basin</td>
<td>100,000 – 1,000,000</td>
<td>1/16 in. – 1/4 in.</td>
<td>1/16 in. – 1/4 in.</td>
<td>1/16 in. – 1/4 in.</td>
<td>1/16 in. – 1/4 in.</td>
<td>1/16 in. – 1/4 in.</td>
<td>1/16 in. – 1/4 in.</td>
</tr>
<tr>
<td>Southern N. America, S. America</td>
<td>20,000 – 100,000</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
</tr>
<tr>
<td>Western Europe</td>
<td>2,000 – 20,000</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
</tr>
<tr>
<td>Central Asia and the Middle East</td>
<td>2,000 – 20,000</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
</tr>
<tr>
<td>Australia and Southern Pacific</td>
<td>2,000 – 20,000</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
</tr>
<tr>
<td>Northeast N. America, Canada, including areas with extreme daily thermal fluctuations</td>
<td>2,000 – 20,000</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
<td>&gt; 1/16 in.</td>
</tr>
</tbody>
</table>

This guide is intended to offer general assistance in product selection. The interlayer types have been selected for a severity rating of the distress types referenced in this guide as only “Fair to Poor.” A The extent of the distress is considered to be 75% of full coverage. Tensar International Corporation highly recommends the user contact their local Tensar Representative or call 800-TENSAR-1 for more detailed information.

GlasPave25 in available in:

- Ball lengths of 750 ft and 3,000 ft
- Ball widths of 46 in. or 78.75 in.

GlasPave25 is typically used full width

- Used transfer efficiency of 64% using falling weight deflectometer (FWD)
- Southern N. America, S. America
- Northern N. America, Canada, including areas with extreme daily thermal fluctuations
- Time to achieve 90% consolidation >6 months
- Time to achieve 90% consolidation <6 months
- Time to achieve 90% consolidation <6 months

GlasPave25 is available in:

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GlasGrid® Pavement Reinforcement System

Geosynthetic interlayers are a cost-effective and easy solution to extend the service life of asphalt overlay applications. Tensar International Corporation offers two geosynthetic interlayer systems to meet a variety of needs of road asset owners and designers to improve the performance of asphalt layers in new constructions and for pavement rehabilitation. The unique interlayer GlasGrid® Pavement Reinforcement System offers superior applications. Tensar International Corporation offers a unique combination of features makes GlasGrid® the optimum choice for heavy- and medium-duty overlay projects in terms of performance and total life-cycle cost savings.

Two types of interlayers are available to meet your requirements: GlasPave® Waterproofing Paving Mat

![GlasPave® Waterproofing Paving Mat](image)

Selection of Geosynthetic Pavement Interlayers

Proper selection of a pavement interlayer is critical to ensure the asphalt overlay service life is realized for the intended design. This selection guide offers assistance for choosing the appropriate interlayer system depending upon:

- Pavement Type
- Anticipated Traffic
- Need for Waterproofing
- Existing Distress Type
- Moisture barrier for fatigued and cracked asphalt
- Crack pattern is typically full width
- Load transfer efficiency ≥ 40% using falling weight deflection beam (FWD)
- Southern N. America, S. America
- Northern N. America, Canada, including areas with extreme daily thermal fluctuations
- Time to achieve 90% consolidation <6 months
- Time to achieve 90% consolidation ≥6 months

This guide is intended to offer general assistance in product selection. The interlayer types have been selected for a severity rating of the distress types referenced in this guide as only “Fair to Poor” or “Very Poor.”

GLASGRID® AND GLASPave™ PRODUCT SELECTION GUIDE

Legend:
- Moisture barrier for fatigued and cracked asphalt
- Crack pattern is typically full width
- Load transfer efficiency ≥ 40% using falling weight deflection beam (FWD)
- Southern N. America, S. America
- Northern N. America, Canada, including areas with extreme daily thermal fluctuations
- Time to achieve 90% consolidation ≤ 6 months
- Time to achieve 90% consolidation > 6 months

This grid is intended to offer general assistance in product selection. The interlayer types have been selected for a severity rating of the distress types referenced in this guide as only “Fair to Poor” or “Very Poor.”

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GLASGRID® and GLASPave™ Interlayer Selection Table by Crack Distress Type

<table>
<thead>
<tr>
<th>Route Type</th>
<th>Traffic [PSV]</th>
<th>Waterproofing Required</th>
<th>Interlayer Type</th>
<th>Material Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate Highways</td>
<td>&gt;5% Heavies</td>
<td>100,000 – 1,000,000</td>
<td>GlasPave®25</td>
<td>GG8501</td>
</tr>
<tr>
<td>Country or Municipal Collector Roads</td>
<td>&gt;300,000 – 1,000,000</td>
<td>&lt; 1% Heavies</td>
<td>GlasPave®25</td>
<td>GG8501</td>
</tr>
<tr>
<td>Inter-Urban Roads or Interstate Highways</td>
<td>&gt;100</td>
<td>&gt;1% Heavies</td>
<td>GlasPave®25</td>
<td>GG8501</td>
</tr>
<tr>
<td>Airports – Private/Municipal</td>
<td>General Aviation Traffic</td>
<td>GlasPave®25</td>
<td>GG8501</td>
<td></td>
</tr>
<tr>
<td>Airports – Regional/International</td>
<td>Commercial Traffic</td>
<td>GlasPave®25</td>
<td>GG8501</td>
<td></td>
</tr>
<tr>
<td>Industrial Parks or Industrial Facilities</td>
<td>Axle Loads ≥ 30 kips</td>
<td>GlasPave®25</td>
<td>GG8501</td>
<td></td>
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