



## Mirafi® FGC Paving Grid Asphalt Overlay Reinforcement

TenCate™ develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

### OUR PRODUCT

Mirafi® FGC paving grids are composed of a fiberglass grid that is bonded to a nonwoven paving fabric meeting AASHTO specifications. Mirafi® FGC paving grid products are specifically designed for use in the construction and repair of flexible (asphalt) and rigid (concrete) pavements such as roads, parking lots, airfields, and other paved surfaces.

The Difference Mirafi® FGC Paving Grid Geosynthetic Makes:

When placed with a suitable tack coat between the existing pavement and the asphalt overlay, Mirafi® paving grid helps extend pavement life by:

- Providing a waterproof barrier for subgrade foundation soil protection
- Improving the fatigue resistance of the new overlay to traffic loads by providing reinforcement

- Retarding the propagation of an existing crack through the new overlay (reflective cracking)
- Reinforcing the pavement system through high strength fiberglass or polyester yarns
- Extending the useful life of the overlay
- Strengthening the entire pavement system

Cracked pavements allow surface water to permeate to the subgrade soils, which then saturate and weaken the subgrade. Normal maintenance procedure with paving fabrics is to place with an asphalt overlay with a nonwoven paving fabric and a tack coat. The nonwoven paving fabric is specifically designed to act as a moisture barrier. The addition of a fiberglass grid with high tensile strength helps contain cracks before they cause harmful effects to the pavement overlay system.

Mirafi® FGC paving grid is specifically designed to provide high strength at very low strains (less than 2% strain). This product property, commonly referred to as modulus, is the key to adding reinforcement to your paved structure. The nonwoven paving fabric, with a properly applied tack coat, creates an excellent moisture barrier and provides good contact with the existing pavement.



### APPLICATIONS

Mirafi® FGC paving grid provides a long-term waterproofing and reinforcement layer that extends the pavement lifecycle in the following applications:

- Highways
- Streets
- Parking Lots
- Bridges
- Airport Runways

### OUR SERVICE

TenCate™ offers complete application technical assistance. Our comprehensive service includes assistance during design, specification and throughout the process. TenCate™ makes the difference.



## Mirafi® FGC Paving Grid Asphalt Overlay Reinforcement

| PROPERTIES                         | Test Method                   | Units                                     | FGC100        |
|------------------------------------|-------------------------------|---|---------------|
| Grid Properties                    |                               |   |               |
| Strength @ Ultimate                | ASTM<br>D6637 <sup>1</sup>    | kN/m<br>(lbs/in)                          | 100<br>(571)  |
| Elongation @ Ultimate              | ASTM<br>D6637 <sup>1</sup>    | %   | < 3           |
| Junction Strength                  | GSI<br>GG-2                   | N<br>(lbs)                                | 80<br>(18)    |
| Peel Strength <sup>2</sup>         | ASTM<br>D413-98               | kN/m<br>(lbs/ft)                          | 0.3<br>(20)   |
| Aperture Size <sup>3</sup> (MD/CD) | (centerline to<br>centerline) | mm<br>(in)                                | 18<br>(.7)    |
| MPV Nonwoven Properties            |                               |   |               |
| Grab Tensile Strength              | ASTM<br>D4632                 | N<br>(lb)                                 | 449<br>(101)  |
| Grab Tensile Elongation            | ASTM<br>D4632                 | %   | 50            |
| Asphalt Retention <sup>2</sup>     | ASTM<br>D6140                 | l/m <sup>2</sup><br>(oz/yd <sup>2</sup> ) | 0.9<br>(0.20) |
| Mass Per Unit Area                 | ASTM<br>D5261                 | g/m <sup>2</sup><br>(oz/yd <sup>2</sup> ) | 139<br>(4.1)  |
| Packaging Properties               |                               |   |               |
| Width                              |                               | m<br>(ft)                                 | 2.0<br>(6.6)  |
| Length                             |                               | m<br>(ft)                                 | 55<br>(180)   |
| Area                               |                               | m <sup>2</sup><br>(yd <sup>2</sup> )      | 110<br>(132)  |
| Weight                             |                               | kg<br>(lb)                                | 82<br>(180)   |

NOTE: All Mechanical Properties and Hydraulic Properties shown are Minimum Average Roll Values (MARV).

MD: Machine Direction, CD: Cross-Machine Direction  
All values are both MD and CD unless otherwise noted.

1 Modified test method. Tested at outside laboratory

2 Test run with grid adhered to fabric

3 Centerline to centerline

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materials that make a difference