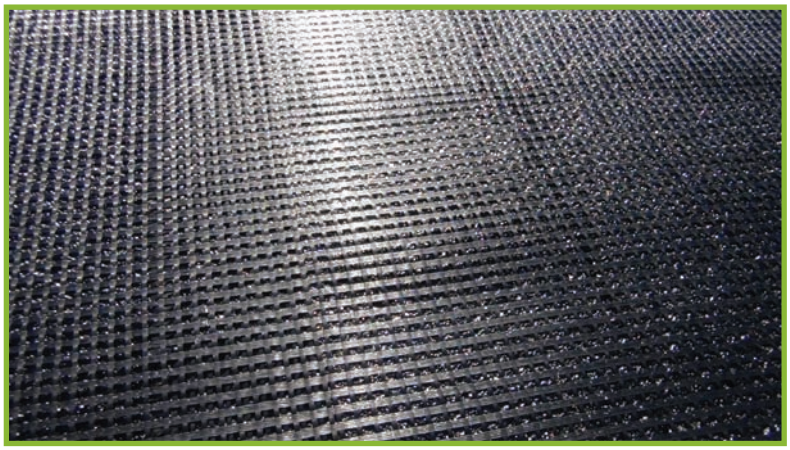
QUINIROAD

ROADS WITH A FUTURE

GEOGRIDS FOR ROAD REINFORCEMENT



WAYS TO FOLLOW

QUINIMAR

Nowadays, communication routes are of the utmost importance in the social-economic development of a country or region.
Communication routes are perhaps, on the other hand, the hardest structures to project with accuracy, given the numerous variables that are associated to its calculation. They include the difficulty in estimating traffic for the next ten, fifteen or twenty years, the base soil variation that they cross and its application under very diverse and unstable weather conditions. All these factors contribute, decisively, to higher or extra costs than initially projected for the structures service life.

QuiniRoad®, as a fibreglass geogrid with a high elasticity modulus, positively contributes to the reinforcement of the bituminous layers and delays the surfacing of various forms of cracking. It's an economic solution with a residual cost, when compared to the total cost of the structure, whereas the beneficts are undeniable, whether they are rehabilitations or recharges, or a new construction.
QuiniRoad®, fibreglass geogrids have therefore became very important allies to all parties involved, from the developer to the user, to the constructor.

Where is it applied?
- **Airports:**
  Runway
  Taxiways
- **Roads**:
  Highways
  Freeways
  National and regional roads
  Urban roads
- **Parking facilities**

It is applied on bituminous pavements, (flexible) over old rigid or semi-rigid pavements (concrete slabs). It is also extremely effective in road widening.

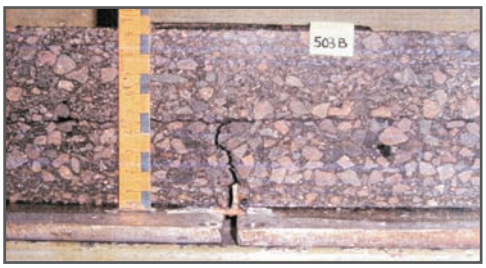
How is it applied?
1 - Bond coating application
2 - Manual or mechanical unrolling of QuiniRoad®
3 - Wearing surface course application

QuiniRoad® characteristics:

- High elastic modulus (70000 MPa) about fourteen times higher than a 5cm layer of bituminous concrete
- Low strain (máx. de 3 a 5%) adapted to the roads performance
- Elastic performance, absorbing tension, vibration and shock to contradict the visco elasticity in the bituminous layers
- Extremely high mechanical resistance (up to 200 KN/m)
- Chemical resistance to all products used in the construction
- Resistant to high temperatures
- Adapted fibreglass coatings (oxidised bitumen, styrene-butadiene or PVC)
- Mesh adapted to application
- Possibility of coupling a nonwoven geotextile for waterproofing between layers

Advantages:

- Reinforcement of bituminous concrete structures
- Delays the emergence of reflexive cracking of old bituminous pavements
- Delays the emergence of cracking derived from concrete slab joints of old rigid pavements
- Delays cracking common to widened roads
- Delays permanent deformations to wheel paths
- Increases road durability
- Avoids or decreases milling
- Easy to apply
- Cost-effective



QuiniRoad® is the solution for typical road problems!

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QUÍMICOS PARA PLÁSTICOS E DERIVADOS LDA.

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