

IKO GRID CARBO G/GV

Description:

Pre-bituminised asphalt reinforcement grid made of carbon and glass fibres for local and/or complete surface reinforcement of bituminous surfaces

Use:

- Used against cracking
- Prevents crack reflection
- Increases the durability of asphalt surfaces
- Increases the load bearing capacity of asphalt surfaces
- The pre-bituminisation guarantees the required layer bonding between old and new road surfaces

Characteristics:

- Increases the load-bearing capacity
- Measurable improvement of the structural value due to high tensile strength at small elongation
- Minimises crack formation and prevents crack reflection
- Reduces fatigue and thermal cracks
- Grid structure freely moveable through heat application (no fixed knots)
- Local application on existing cracks/joints or complete surface application
- No waiting time - immediate road construction possible
- Lower consumption of tack coat thanks to the pre-bituminised grid
- Easy and efficient application with unrolling equipment (also in curves)
- Effectiveness at a cover layer of min. 2 cm
- Can be milled and recycled without problems

Characteristics:

Mechanical properties Unit Glass fibre Carbon fibre Tensile modulus (N/mm²)

- Longitudinal $\geq 73\ 000$
- Transversal $\geq 265\ 000$

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Elongation at rupture (%)

- Longitudinal ≤ 4.5
- Transversal ≤ 1.9

Tensile force (kN/m)

- Longitudinal 120 at $\leq 3\%$ Elongation
- Transversal 200 at $\leq 1.5\%$ Elongation

Fibre cross section (mm²/m)

- Longitudinal 46 (50 fibre strands)

Implementation:

Surface Preparation

- Clear substrate of any dust, loose material (e.g. stones) and grease/oil.
- Apply polymer modified emulsion on dry surface. Pre-tack coat
- 250 - 300 g/m² polymer modified emulsion 60% depending on type and substrate, at high application temperatures with a softening point $> 53\ ^\circ\text{C}$.
- Apply **IKO grid Carbo G/GV** on dry surface, either by machine or manually, and if possible immediately before the installation of the road surface.
- Apply at temperatures $> 3\ ^\circ\text{C}$. Observe relevant norms for application of layers.
- Ensure overlapping lengths of 10 - 20 cm are observed. • Overlapping of the reinforcement mesh should be optimised, according to the nature and location of joints/cracks, as well as wheel loading.
- If the mesh is applied only on local areas, it shall be covered manually with an asphalt layer. This prevents cracking caused by passing vehicles.
- Minimum covering of 2 cm above **IKO grid Carbo G/GV**.



- Transversal 47 (52 fibre strands)

CE-marking According to EN 15381:2008

Dimensions Roll

- width: 0.97 m / 1.50 m / 1.95 m
- Roll length: 50 m

Appearance

- Black pre-bituminised carbon/glass fibre mesh

Mesh opening

- 15 mm x 15 mm