Geosynthetics Limited Tel: 01455 617 139 Fax: 01455 617 140 Email: sales@geosyn.co.uk

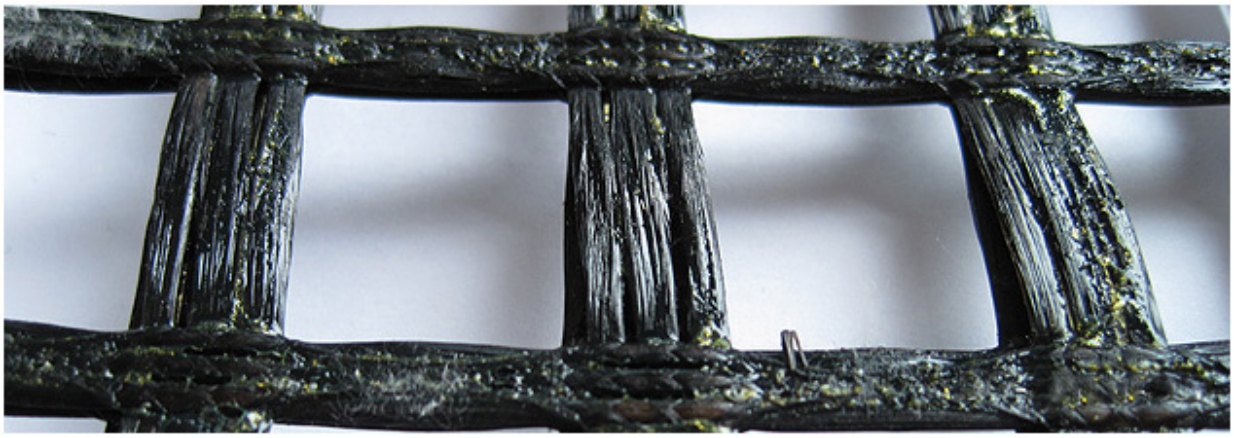
# What is Geoglas ?

Geoglas is a polymer coated glass-fibre grid for asphalt reinforcement. It's main application is in highway re-surfacing to prevent reflective cracking and extend the life of new bituminous layers. The installation of Geoglas reinforces the pavement and inhibits crack formation, so the durability of the pavement is extended.

Geoglas is produced in three grades ( 50/50, 100/100 and 120/200) to provide cost effective solutions to various types of reflective cracking on pavements.

## Properties of Geoglas

- Polymer impregnated glass fibre grid
- Maximum elongation 3.5%
- High temperature resistance (800deg C)
- High Tensile and tear resistance
- Creep resistant



# Installation

## Road Preparation

Level the surface of the existing asphalt or concrete pavement using a fine road mill and/or apply a regulating layer.

Complete all crack/joint sealing >5mm width with suitable filler, pothole filling with hot/cold asphalt mix and base repairs, as and where necessary, to ensure a uniform level surface.

Where the pavement surface is seriously damaged, uneven or has extensive cracking the best solution is to install a regulating course, preferably with a dense graded asphalt mix of minimum average thickness of 19mm.

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# Installation of Geoglas (Continued)

## Road Surface Condition

Prior to placing the Geoglas, the existing pavement shall be cleaned using a mechanical sweeper/vacuum and be free of oil, vegetation, sand, dirt, water, gravel and other debris. Surfaces must be 5°C (40°F) and 40°C (104°F).

## Application of Tack Coat

Apply uniformly K1-40 (or equivalent) bitumen road emulsion tack coat at a rate of 0.9 – 1.1 L/m2, ensuring a 100mm overspray for laps. On porous surfaces increase the application rate accordingly.

## Product Preparation

Rolls should be stored vertically in a clean, dry, dust free environment at the job site. Ensure product and packaging is not damaged during transportation and handling.

## Installation Method

1. Lay the grid flat by hand or mechanical applicator, the surface of the grid shall be under sufficient tension and pressure to eliminate ripples and bleed the emulsion. If hand laying , insert a steel bar through central core to assist with unwinding and to prevent bowing of the roll. Unroll Geoglas onto the sprayed surface applying light tension to ensure that wrinkles are not formed.

2. Should ripples occur, remove by pulling the grid tight or in extreme cases (on tight radii), by cutting and laying flat in the direction of construction. All laps must be fixed with bitumen emulsion.

3. Cut around ironworks with utility knife or cutting tool.

4. Transverse joints 75-150mm minimum overlap in direction of paving. Longitudinal joints 25-50mm minimum overlap.

5. Traffic should not be allowed on the exposed grid. Construction, emergency and/or restricted traffic may run on the grid, with extreme care and attention. Ensure damage is not caused to the grid by vehicles turning or braking etc. Any damaged sections must be removed and patched, taking care to completely cover the damaged area prior to overlaying. The grid must be kept clean of mud, dust and other debris.

6. Conventional pavement construction methods can be used. When placing the final surface the asphalt should have an installation temperature of about 160°C, or as specified by the responsible engineers. Asphalt should be installed with a minimum thickness of 40 mm.

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