



Asphalt Reinforcement

A guide to the selection
and specification of
ABG Rotagrid Asphalt
Reinforcement System.



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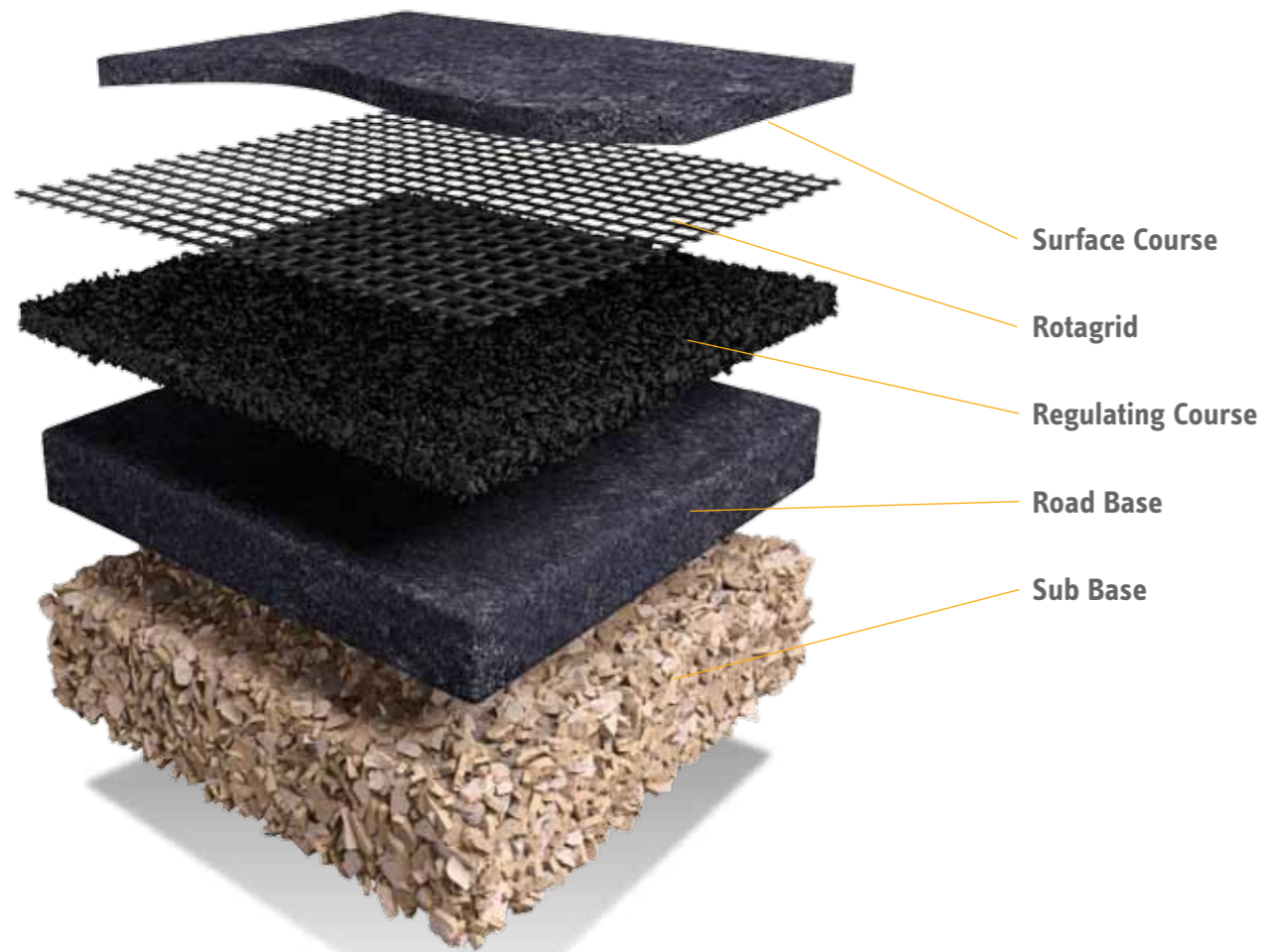
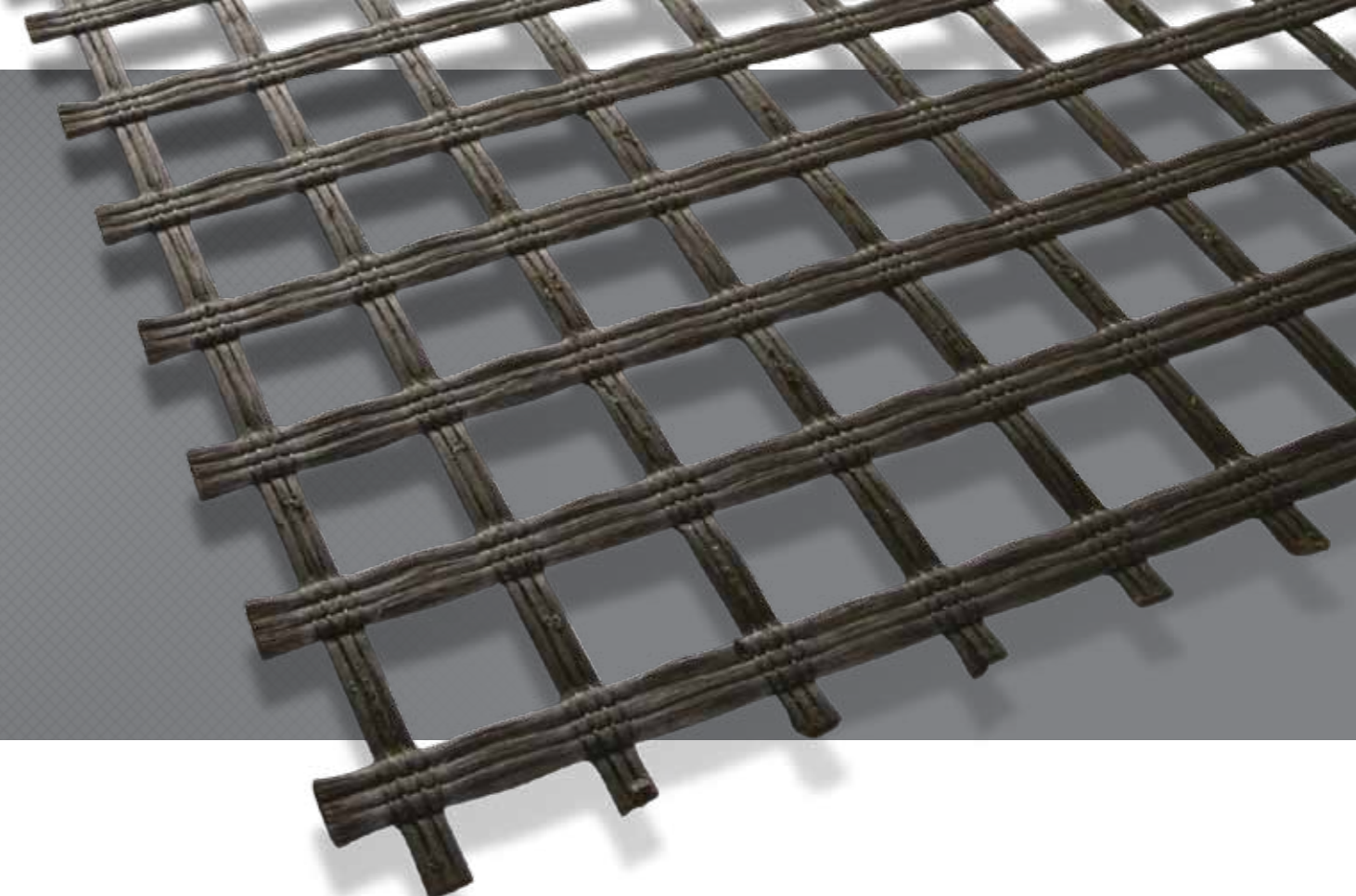
Rotagrid

Rotagrid is a self-adhesive pavement reinforcement system manufactured from high strength glass fibres with a specially formulated protective polymer coating. It is used to control cracking where lean mix, jointed concrete or cement bound macadam is overlaid with an asphalt wearing course. Rotagrid also has applications in the construction of flexible roads.

The glass fibres in Rotagrid exhibit high tensile strengths at low elongations, typically these are below 4%; this is essential as bituminous pavements can crack at elongations as low as 1%.

Rotagrid allows the use of thinner overlays removing the need for undesirable deep planing or expensive and time consuming kerb lifting. Rotagrid is compatible with all modern surfacing materials and usually used in conjunction with a regulating course.

Rotagrid has a self-adhesive backing that makes it quick and easy to install. It can be applied either manually or with purpose designed plant before pressure is applied to ensure adherence to the pavement surface where it remains flat during asphalt surfacing.



Features and Benefits

- Can lower costs in both maintenance and new build projects.
- Quick and easy to install assisting in delivering projects on time, with minimum disruption.
- Allows thinner pavements to be designed, minimising the requirement for imported materials, reducing the carbon output and the environmental impact of the project.
- Extends the life expectancy of the project and reduces the maintenance burden offering savings in the whole-life costs

Typical Applications

- Control of reflective cracking
- Reduced thermal fatigue
- Rut prevention
- Road widening and haunching
- Reduced pavement thickness

Property	Unit	50	100	100/200
Material	Multifilament glass fibre in polymer protective coating			
Unit Weight	g/m ²	240	450	750
Thickness	mm	1.0	1.0	1.0
Aperture	mm	22 x 19	18 x 18	12.5 x 12.5
Tensile Strength (MC/DC)	kN/m	50/50	100/100	100/200
Max Strain	%	3	3	3
Melt Temperature	°C	>500	>500	>500
Spraying Rates				
K1-40 (C40 B4) Tack Coat	l/m ²	0.6	0.6	0.6
Extra for Porous Surfaces	l/m ²	0.25	0.25	0.25
Minimum Overlay Thickness	mm	35	40	50

The above data is for information; it is recommended that the full current product datasheet be consulted when selecting which grade of product should be used. Full product datasheet is available by contacting ABG Technical Department

This literature together with technical data, specifications, design guidance, technical advice, installation instructions or product samples can be obtained by contacting ABG Ltd. All information supplied in this brochure is supplied in good faith and without charge to enable a reasonable assessment of the practical performance of our products. Final determination of the suitability of information or material for the use contemplated and the manner of the use is the sole responsibility of the user. As design and installation is beyond our control (unless specifically requested) no warranty is given or implied and the information does not form part of any contract. The right is reserved to update the information at any time without prior notice. ©2013 ABG Ltd

About ABG

ABG is a market leader in the design, development, manufacture and technical support of high performance geosynthetic systems for use in a wide range of civil engineering, highway, structures, environmental and building projects.

Formed in 1988, based in Meltham, in the heart of the Pennines, ABG have developed an excellent reputation for developing quality products and delivering outstanding service. The ability for rapid product development ensures that the most innovative, up to date and cost effective solution can be found for many engineering problems.

ABG's involvement in highways goes back over twenty five years and they now have a complete range of products developed specifically for use in this project sector. During this period ABG have supplied major highways and associated structure projects throughout the United Kingdom.

Technical support on ABG systems is provided by our trained and experienced staff, many of whom are Chartered Civil Engineers. This extensive support extends to full design, design validation, feasibility studies, cost advice and advice on meeting regulatory requirements.

Part of this technical support includes developing and driving knowledge within our active markets including working with both international and local regulatory bodies on developing guidance and best practice in the use of innovative geosynthetics to solve complex engineering issues.

Other ABG Products available for use in highway applications include:

Asphalt Reinforcement Grids

Fin drains for highway edge drainage and use in embankment consolidation

Geogrids and Geotextiles

Structures - Protection and drainage

Erosion Control Systems

For details please contact ABG Highways.

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