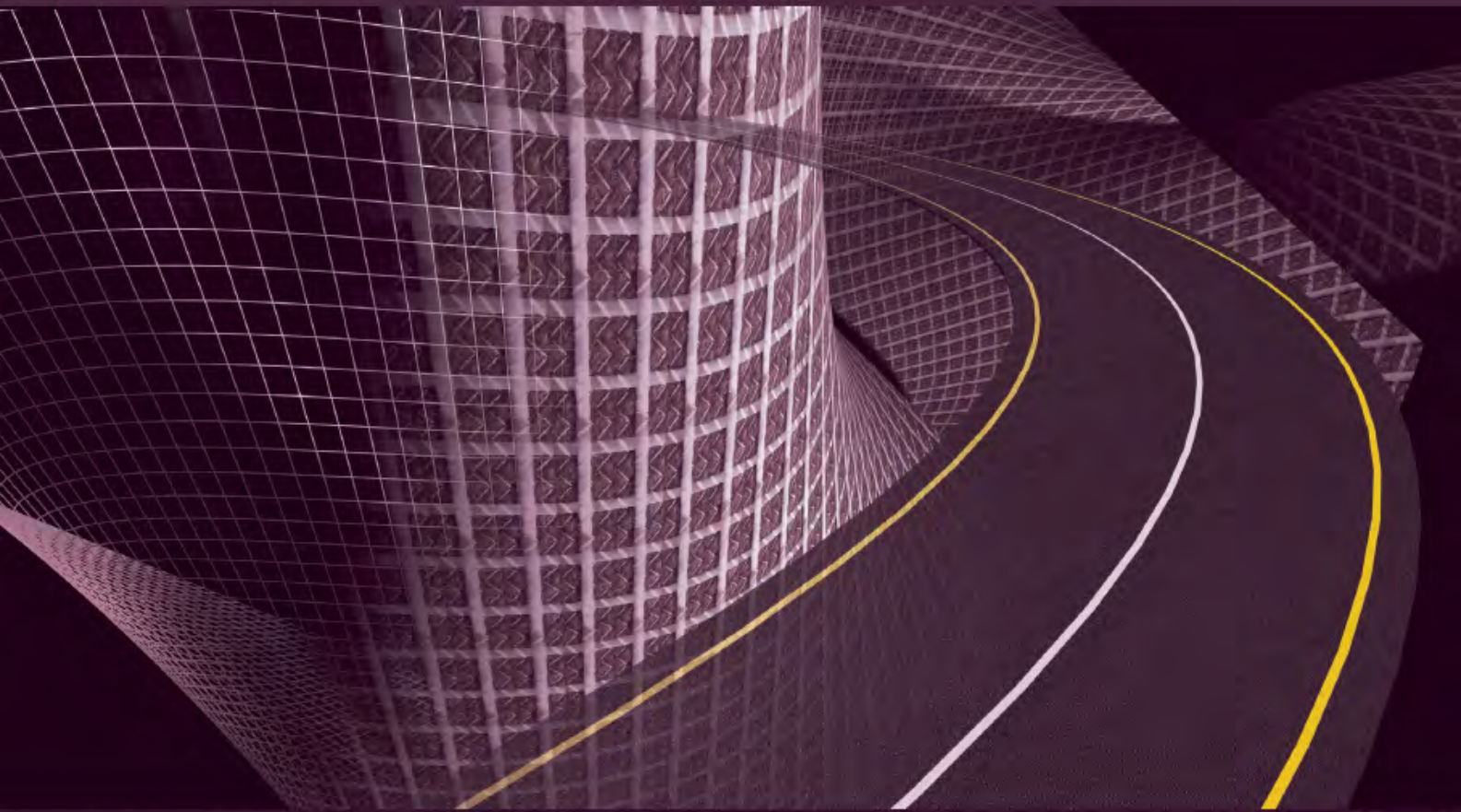


SealGrid[®]

Composite Asphalt Reinforcement Interlayer



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Properties



SealGrid® consists of high strength glass fibre roving knitted to a paving fabric to form a reinforced composite paving fabric.

The reinforcing effect of the low strain glass filaments in combination with the waterproofing, stress relieving and bonding properties of the paving fabric leads to a dramatic reduction of reflective cracking under asphalt overlays.

Properties of glass fibre roving:

- Strength = 50 x 50 kN/m or 100 x 100 kN/m
- Strain < 5 %
- Knitted to the paving fabric in a grid pattern.
- Flat weave intersections prevent crushing at nodes
- Unaffected by most chemicals and high temperatures (>1 000 °C)

Properties of Paving Fabric:

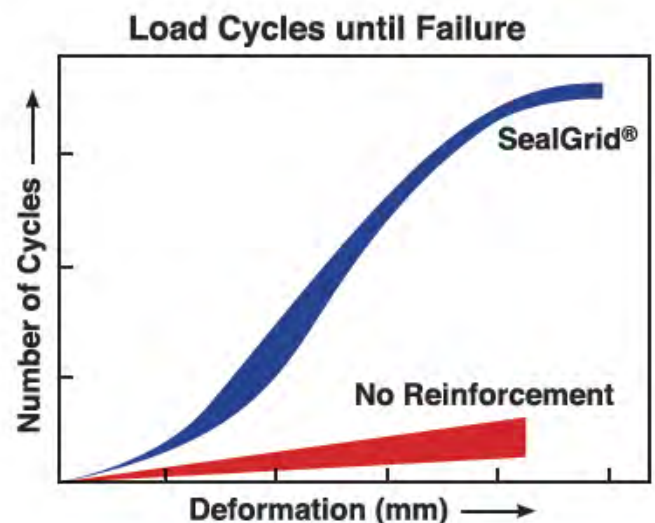
- Provides a waterproofing interlayer
- Ensures a constant thickness bitumen SAMI interlayer
- Provides a stress relieving interlayer
- Unaffected by most chemicals and high temperature (>260 °C)

Economic Benefit

SealGrid® can reduce traffic induced crack propagation by a factor of greater than 7. This equates to either a considerable saving in overlay thickness or an increased life cycle.

Product Benefits

- The glass fibre roving provides a high strength interlayer at very low strain, which effectively stitches cracks together
- The bitumen impregnated paving fabric component of the **SealGrid®** provides a waterproof barrier and a stress absorbing underlayer
- **SealGrid®** provides an excellent adhesion bond to existing surfaces, ensuring strong interlock between the existing surface and the new overlay
- No levelling layer is required over shallow milled surfaces as **SealGrid®** is flexible and conforms around milled irregularities, while the paving fabric acts as a padding between the milled surface and glass grid

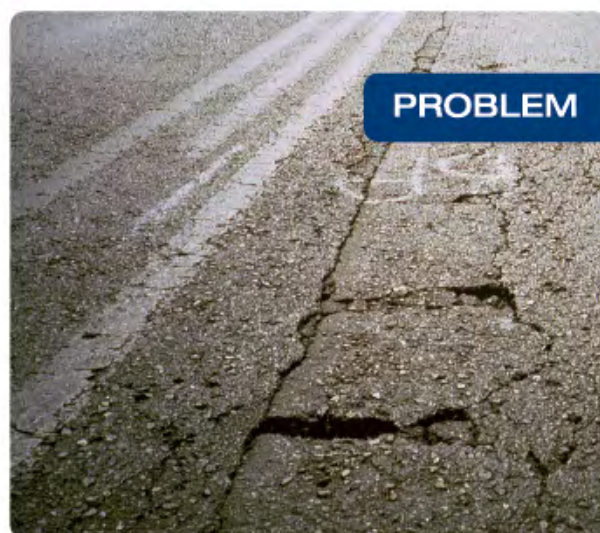




Application Areas of SealGrid®

UNDER OR BETWEEN ASPHALT LAYERS

- Where high horizontal or vertical stresses occur
- On road widening schemes with differential settlement
- Where extremely high traffic stresses occur, such as airport runways, docklands or heavy vehicle parking areas
- Where stress cracking is possible, such as over expansive clay sub-grades
- On chemically stabilised bases such as cement treated bases (CTB)
- On roads constructed over fill embankments
- Over joints in concrete carriageways
- Where wide temperature fluctuations occur
- On milled surfaces where cracks are still evident



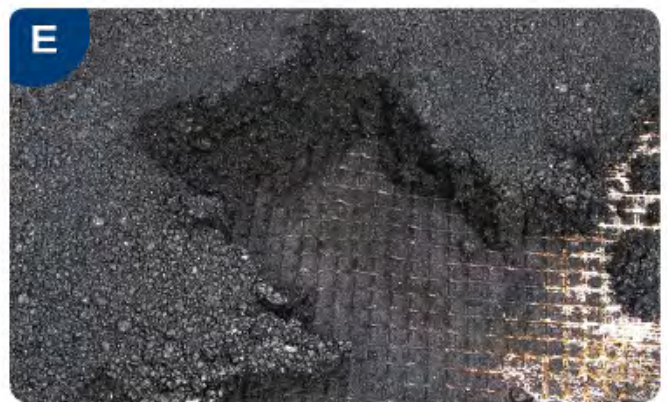
Installation Instructions



1. Clean road surface of all dirt, dust and vegetation.
2. Fill cracks and potholes with a crackfiller, cold or hot asphalt mix or other suitable material. An alternative for severely cracked and faulted pavements is the application of a levelling course.
3. Spray on a uniform application of bituminous tack coat, either a latex modified emulsion or hot applied. The necessary amount of tack coat is 0.9-1.1 ℓ/m^2 of residual bitumen. A modified cationic emulsion with a minimum of 65 % residual bitumen content is preferable. Avoid cutters or solvents.
4. Emulsion – allow to break before installing **SealGrid**[®].
5. Hot bitumen – install **SealGrid**[®] immediately using a mechanical laydown machine.
6. **SealGrid**[®] may be laid mechanically or by hand (A). **SealGrid**[®] should be laid free of wrinkles, using a squeegee or the reverse of a hard broom to smooth out any

wrinkles. Stubborn folds are to be cut and smoothed and tacked together. Overlaps should be 100–150 mm and adhered by applying additional binder (0.9 ℓ/m^2 residual bitumen) (B).

7. Allow for a minimum 3–4 passes of a PTR (pneumatic tyred roller) once tack coat has set sufficiently to prevent pick up (C). Do not use a steel drum roller. Minimise trafficking over the installed **SealGrid**[®]. **SealGrid**[®] can be laid with the glass grid facing down onto smooth surfaces where temporary trafficking is urgently required. Speed, braking and turning restrictions should be applied in these areas.
8. Paving of the asphalt overlay can proceed immediately after the successful rolling of **SealGrid**[®] (D). Application of additional bitumen is not necessary as the bitumen tack coat pulls through when the asphalt is laid (E).



Mechanical Laying: Information on mechanical laying equipment and suppliers is available on request.



For more detailed information and a copy of our **SealGrid**[®] Installation Guidelines, contact our nearest branch office or visit our website, www.kaytech.co.za

DISCLAIMER: The application, handling and conditions of use of our products are critical and beyond our control. Information given by us in our documentation or orally, or by any employee or agent and any advice, recommendation or assistance, is given in good faith but without creating any obligation or warranty.

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