MILES MACADAM
CONSTRUCTION & SURFACING

HARDICRETE™

Technical Datasheet

HARDICRETE ™ is a BBA certified (Agrément Certificate Number 88/1969) Grouted Macadam surface course designed to withstand intense traffic loadings and fuel / leachate contamination. The company is certified to National Highways Sector Scheme 16 for Quality Management in Highways Works and is a member of the Road Surface Treatments Association (RSTA).

Hardicrete™ consists of an open graded receiving course with a controlled void content, typically laid at a 40mm depth, filled with a resin cementitious grout manufactured by Miles Macadam. It is a flexible, jointless, heavy duty surface course with fuel resistant properties and high load capabilities to minimise rutting or deformation.

Hardicrete's receiving course is a bespoke design of a single size 14mm aggregate with reduced binds and bitumen to allow more cementitious grout to penetrate the matrix. This enhances the overall durability of the material and allows for a higher percentage of grout than Hardipave™. PSV and AAV of the aggregate can be specified upon design.

HARDICRETE™ benefits

- Hybrid between asphalt and concrete
- High compressive strength
- Superior resistance to deformation and rutting
- High resistance to fuel/leachate contamination
- High resistance to temperature extremes
- Rapid installation

Ports **Industrial facilities** **Airports** **Waste Sites** **Bus Infrastructure**

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Carbon Neutral Organisation

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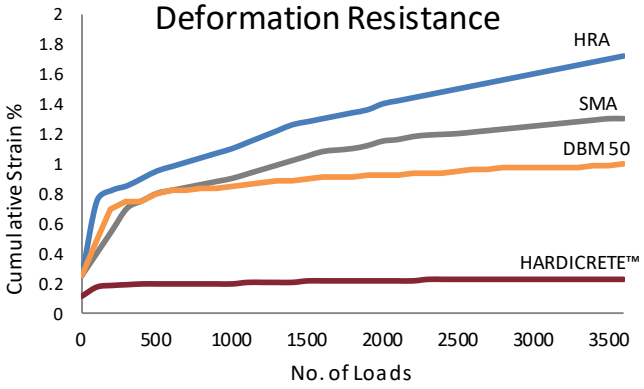
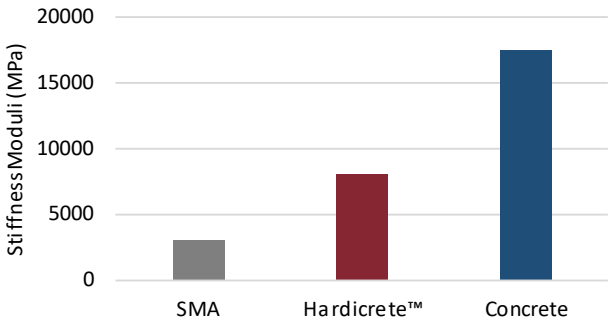
HARDICRETE™

Deformation Resistance



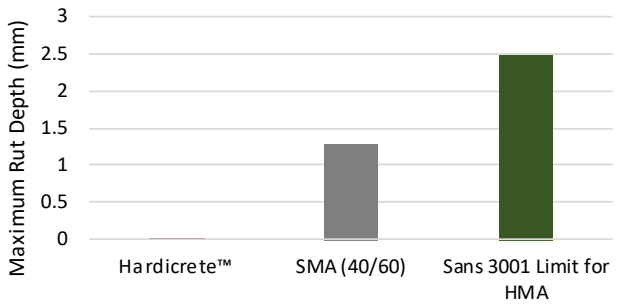
A Cyclic Compression Test under dynamic loading shows Hardicrete™ to have a far superior resistance to permanent deformation than conventional materials.

Indirect Tensile Stiffness Modulus



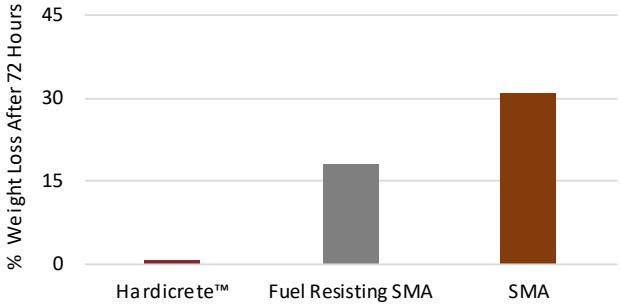
An Indirect Tensile Stiffness test shows deformation and temperature susceptibility. These results were recorded at 20° and show Hardicrete™ as a hybrid between asphalt and concrete.

Model Mobile Load Simulator Test



An MMLS Test is designed to imitate real world conditions of accelerated loadings. It measures the impact of moisture, resistance to deformation, longitudinal profile and visual surface condition.

Fuel Resistance



The Hardicrete system shows no degradation when subjected to a chemical attack from diesel or aviation fuel. It has a significantly higher tolerance to fuel than conventional SMA materials.

HARDICRETE™ technical data

Nominal Size	14mm
Layer Thickness	35-50mm
Stiffness (20°)	8657 MPa
Water Sensitivity (retained stiffness)	Minimum 90%
Curing Time	24-48 hrs
Wheel Tracking (BS EN 12697-22 – Procedure B in Air)	Exceeds requirements for surface course materials (PD 6691:2022)

Coloured aggregates can be supplied

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