



# Shildon Thermoplastics

*Manufacturers Of Thermoplastic Road Markings,  
High Friction & Coloured Surfacing And Bituminous Products*

## TECHNICAL DATA SHEET

### Thermogrip Type 1

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#### DESCRIPTION

Thermogrip Type 1 is a hot screed, specialist hand applied, thermoplastic skid resistant surface treatment consisting of a plasticized and polymer modified resin binder encapsulating high polished stone value calcined bauxite (PSV 70+) and mineral extenders. It is available in buff and dark grey, and can be pigmented for specialist applications.

The product is a BBA HAPAS approved Type 1 High Friction Surfacing material (BBA Certificate No.12/H193) and can only be applied by installers approved to the same scheme.

The system, which conforms to Clause 924 of the Specification for Highway Works, can be installed all year round onto asphalt surfaces, with texture depths between 0.5-2mm, and provides a highly durable textured matrix typically 5mm thick.

#### APPLICATIONS

Thermogrip Type 1 is suitable for all classes of road where high skid resistance and durability are required. It is ideal for use on bends, junctions, roundabouts, approaches to pedestrian crossings and other hazard sites.

#### BENEFITS

- Can be laid all year round
- Less weather sensitive than some aggregate 'drop-on' systems
- Suitable for new and old road surfaces
- Rapid setting to ambient temperatures, typically 30-50 minutes @ 20°C

#### BINDER

The binder consists of hot melt resin specially modified with plasticizer and polymers to enhance softening point, flow resistance and flexibility characteristics.

#### AGGREGATE

The aggregate consists of either buff or dark grey calcined bauxite with a minimum Polished Stone Value (PSV) of 70 and a typical Aggregate Abrasion Value (AAV) of 4 which is blended with a special grading of mineral extenders.

#### PACKAGING

Thermogrip Type 1 is supplied in low melt polythene bags (nominal mass 25kg) usually on 1 tonne pallets (40 bags per pallet) which are stretched wrapped for protection.



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#### PREPARATION, INSTALLATION AND AFTERCARE

The area to be treated shall be clearly defined and marked. The road surface shall be clean, dry and free from ice, frost, loose aggregate, oil, grease, road salt and other loose matter using a hot compressed air lance. In some cases, it may be necessary to clean the road surface, prior to lancing, by grit blasting, high pressure water jetting or other suitable means. Unless otherwise directed by the Client or Representative, all existing road markings, ironwork, boundaries of the area to be treated and road studs shall be suitably masked.

The material shall be loaded into a temperature controlled preheater / boiler fitted with a suitably designed agitator, and shall be carefully mixed and heated to the application range of 200-220°C. When molten and homogenous, the material shall be poured into an appropriately sized screed box, using a metal bucket, and shall be screeded transversely across the road surface allowing the aggregate to be evenly distributed. On road surfaces having texture depths between 0.5 and 2.0mm, the coverage rate should be 11.0-12.5kg/m<sup>2</sup> (80-90m<sup>2</sup>/tonne) which will provide an even, well textured, durable skid resistant surface with a minimum Skid Resistant Value (SRV) of 65.

Masking tape shall be progressively removed during installation but before the material has cooled. A visual check of the applied surfacing shall be made to determine any faults which shall be rectified. The applied surfacing must be allowed to fully harden before any disturbance or trafficking can be permitted, typically 30-50 minutes, which may need to be extended in hot weather. New sites should be monitored for any excess shed aggregate and swept if required.

For more detailed information, reference should be made to the Method Statement which is available on request.

#### PERFORMANCE

If the product has been installed correctly, the material will conform to the following properties.

	Property	BBA HAPAS Specification
Initial	Texture Depth (mm)	≥ 1.4
	Skid Resistance Value (SRV)	≥ 65
	Tensile Adhesion @ 20°C (N/mm <sup>2</sup> )	≥ 0.5
Wear After 100,000 Wheel-passes	Texture Depth (mm)	≥ 1.1
	Skid Resistance Value (SRV)	≥ 70
	Erosion Index	≤ 3

#### HEALTH AND SAFETY

Reference should be made to the Safety Data Sheet (SDS) which is available on request.