

# Specification: High Friction Surfacing

## Hot & Cold applied Type 1

**hms**  
Specialist Surfacing



**Reducing road accidents by over 50%**



Certificate number 5020

HMS's HAPAS/BBA Approved High Friction Surfacing Type 1, comprises of a two-component, modified epoxy binder or MMA and up to 100% road grade calcined bauxite.

Type 1 hot or cold high friction surfacing systems are the most effective road safety surfacing measures used to prevent accidents caused by skidding.

### Typical uses

- Accident prone hotspots
- Sharp bends
- Junctions and crossroads
- Roundabouts
- Pedestrian crossings
- Cycle Lanes

- Suitable for existing and brand-new asphalt surfaces.
- Low odour, low toxicity binder system.
- Tough and durable with a long service life.
- Fast installation- can be laid directly onto suitable existing surface.
- Can be colour coated to create a bright surface to draw attention to a particular road hazard.
- Fully compatible with line market for accident blackspots or hazard identification.
- Satisfies Highways England specifications for high friction surfacing.

**hms**  
Specialist Surfacing

**High Friction Surfacing**

# Specification: High Friction Surfacing

## Hot & Cold applied Type 1

**hms**  
Specialist Surfacing

### Cold-applied Type 1

#### Specification

- Specific gravity Part A  $1.15 \pm 0.05$   
Part B  $1.00 \pm 0.05$
- Pot life @ 23°C: 30 mins
- Curing time @ 20°C: 2-3 hours
- Road surface temperature range: 0-35°C dependant on application
- 100% calcined bauxite aggregate.
- HAPAS/BBA certificate is based on use of a graded nominal 1 – 3mm calcined bauxite aggregate.

Cold Type 1 HAPAS/BBA-approved high friction surfacing is applied using epoxy or MMA resin to an existing surface and then dressed in 1 - 3mm calcined bauxite aggregate.

BBA specify a minimum of 1.35kg of binder per square metre based on a surface porosity and/or negative texture depth of up to 2.5mm.

Temperatures for laying are 5°C for epoxy resin or 0°C for MMA resin.

For coloured surfacing, the aggregate is coated using a colour of your choice and for more brighter colours, we can also add pigment to the resin itself.

### Hot-applied Type 1

Thermoplastic resin-based material containing calcined bauxite aggregate that is then heated to a safe working temperature between 180 – 200°C.

Laying criteria is between 11 – 12.5kg per square metre with surface and surrounding temperatures between 0 – 35°C.

For hot-applied coloured surfacing, we can colour coat the product by adding pigment pellets into the molten material while heating in the boilers.

#### Specification

- Relative density:  $2.00 \pm 0.1 \text{ g/cm}^2$
- Road temperature range: 0-35 °C
- Material application temp:  $190 \pm 10 \text{ °C}$
- Maximum safe heating temp: 230 °C
- Setting time: Typically 15-20 mins
- Incorporating high percentage calcined bauxite aggregate between 50 – 60%
- HAPAS/BBA certificate is based on use of a graded nominal 1 – 3mm calcined bauxite aggregate.

**hms**  
Specialist Surfacing

**High Friction Surfacing**



**Additional information**

Without approval from the BBA whilst simultaneously using products approved by them, road safety cannot be guaranteed.

To meet these criteria, all HMS operatives hold an NVQ Level 2 in High Friction surfacing and have a valid CSCS site card. We are also approved to lay BBA Type 1 surfacing to motorways and trunk roads.

HMS can give you that peace of mind, from minor repairs to major roadworks, all jobs completed by HMS will satisfy safety regulations ensuring safer roads for the UK.

**We wouldn't hesitate to recommend HMS**

**“HMS have been working with Leicester City Council for over 20 years’ providing highways preventative maintenance services such as joint sealing, pothole repairs and high friction surfacing, as well as cycle and bus lane demarcation. Over the years, they have also installed decorative surfacing to footpaths, parks and gardens across the city. All work is completed to an excellent standard, on time and within budget. What I especially like, is they arrange their own traffic management, meaning less hassle and few delays.”**

Prafull Shukla, Area Manager,  
Leicester City Council



**“They always go the extra mile to deliver with our project programmes. The quality of their workmanship is very good, which is evident when you walk around the city.”**

Danaher and Walsh

**Get in touch**

Visit [www.hmslimited.co.uk](http://www.hmslimited.co.uk) for more information or call 01858 881111

**HMS Specialist Surfacing**

Unit 1, Evergreen Field Farm  
Pincet Lane, North Kilworth, Leicestershire LE17 6NE

Care is taken to ensure that all information provided is accurate and up to date; however, HMS accepts no responsibility for inaccuracies or changes to information.

