SAFETRACK® HW, NON-HAPAS APPLICATIONS

Type 1 Certified BBA/HAPAS High Friction Surfacing

Description

SAFETRACK® HW is a liquid applied, rapid cure system based on GCP, previously Stirling Lloyd's unique ESSELAC® advanced resin technology and extensive experience in the development of high performance high friction surfacing systems. The system consists of a tough resin binder and an aggregate overscatter.

SAFETRACK® HW is a Type 1 certified BBA/HAPAS High Friction Surfacing System that also conforms to Clause 924 of the UK Specification for Highway Works (March 1998) for Resin Based High Skid Resistant Surface Treatments.

Uses

SAFETRACK® HW was designed to provide greater safety for all classes of roads in a wide variety of situations. In addition to providing a safer surface, the protection afforded by this tough seamless surfacing will ensure an extended life for the substrate.

SAFETRACK® HW can be supplied in a range of colours with specific high Polished Stone Value (PSV) aggregates for HAPAS approval work or general-purpose aggregates for non-HAPAS type work to provide the required skid resistant properties in a variety of trafficked areas including:

- Deceleration approach areas
- Traffic calming / Gateways
- Fast bends
- Accident remedial schemes
- Traffic segregation
- Bus lanes
- Cycle lanes
- Car Parks and Ramps
- Pedestrian areas such as footbridges, stairways, stadiums, ship decks and quaysides.

Features

- BBA/HAPAS Type 1 Approved System
- Quick, easy and economical to apply
- Excellent adhesion to a variety of substrates
- Cold applied
- Good long term ageing properties
- Excellent abrasion, impact and chemical resistance
- The speed of application and cure ensures the minimum of disruption, essential on busy routes.
- Applied only by authorised and trained contractors

Technical Data

SAFETRACK® HW is CE Marked under EN 1504-2 for which a Declaration of Performance is available on request.

PROPERTY	VALUE
Application Temperature Range[1]	0 to +40°C
Typical Cure Time	
40°C	20 minutes
20°C	40 minutes
10°C	50 minutes
0°C	90 minutes
Tensile Adhesion Requirement	
Concrete	> 1MPa
Asphalt	> 0.5MPa
Steel	> 2MPa

Surface Preparation

It should be stressed that the success of any surfacing system is dependent on the thoroughness of the surface preparation.

All substrates must be clean, dry and structurally sound. They must be free from laitance, oils and other surface contaminants.

Concrete

New concrete decks should be a minimum of fourteen days old. If additives, cement replacement or curing agents have been used please contact our Customer Services Department.

All concrete decks must be prepared by suitable mechanical means[2] such as vacuum blasting to provide a sound surface.

Where the use of a non-structural screed or a lightweight concrete substrate is proposed, please seek advice from our Customer Services Department as these materials often have low cohesive strength or retain water in open pores.

Asphalt

It is advisable to carry out tensile adhesion on all asphalt substrates prior to installation[3]. SAFETRACK® HW may be applied once the required tensile adhesion has been achieved.

Heavily textured or porous asphalt surfaces may require levelling with Metaset Scratchcoat to reduce SAFETRACK® HW consumption rates.

[1] For application at temperatures outside this range please contact us.
[2] Water Jetting is not an acceptable method of mechanical preparation
[3] Based on an unfilled asphalt substrate with a texture depth of 0.5mm. Still need this but number change

Note: Guidance on the Specification for Highway Works - NG924 High Friction Surface states "…on occasion cracking which extends into the wearing course can be induced by the application of high friction surfacing. The risk of this occurring is much greater when the wearing course is newly applied and un-trafficked. Provided the high friction surfacing is well bonded to the substrate and with the agreement of the Overseeing organisation, the cracking may be sealed using a suitable epoxy or similar resin and the high friction surfacing made good."

Steel

All rust, dirt and contamination should be removed to expose bright metal to achieve a surface finish complying with Swedish standard Sa2½.

For all other substrates please contact us.

Application

Primer

No primer is required on concrete or asphalt surfaces.

Steel substrates must be primed with ZED S94 primer within three hours of blast cleaning. Please refer to the ZED S94 product datasheet for further information.

Binder

Consists of a pail of binder resin, bag(s) of BPO powder catalyst (BPO), a bag of thixotrope and, where preferred a bag of pigment powder. Some settlement may occur in storage so prior to use stir the resin component thoroughly using a mechanical mixer. If the binder requires colouring, the pre-weighed bag of pigment powder can be added at this stage. One bag is sufficient for each pail of resin. Stir in the pigment powder until a uniform resin colour is achieved.

Then and immediately prior to use add one full bag of thixotrope along with the required amount of BPO. This initiates the working life during which time the product should be used.

Apply the material by pouring it onto the substrate and spreading it out using a rubber squeegee with notched triangular teeth. The size of the notches will determine the thickness of binder applied.

Before the binder is allowed to gel it should be completely 'blinded' with dry aggregate ensuring no bare patches of resin are visible. The aggregate must be applied in such a manner that individual particles are allowed to fall vertically onto the binder. Once applied remove all masking tape before the binder starts to gel.

Once the binder has cured the excess aggregate should be removed either by hand or mechanical sweeper. Provided the excess aggregate has not been contaminated it may be re-used. The system can then be trafficked.

Limitations

Do not apply SAFETRACK® HW over surface dressings, line markings, Bitmac surfacing, temporary or deferred set bitumen's or poured bitumen.

Do not apply SAFETRACK® HW on to ramps with a gradient in excess of 1 in 8. A 'Ramp Grade Additive' can be supplied, for addition on site, to allow application onto gradients greater than 1 in 8 and up to 1 in 4.

Coverage

Binder[4]	1.8kg/m²
BPO Powder Catalyst	1 – 4 bags per kit, depending on Temperature
1-3mm Aggregate	8kg/m²
0.9-1.7mm Aggregate	4kg/m²

The coverage rates shown are based on a typical substrate rather than being minimum coverage rates. They may vary with surface texture and porosity. The coverage rate must be checked regularly during application by calculating the quantity of the material used against the area treated.

METASET® Scratch Coat is available for use on coarse macro textures, porous and new asphalt to reduce consumption

Aggregates & Colour

All aggregates must be clean, dry and free from excessive dust. The current aggregates acceptable for use under the BBA/HAPAS approval scheme are 1-3mm Chinese, Guyana or Indian Bauxite. Guyanan Bauxite is supplied in Dark Grey, Chinese Bauxite is supplied in its natural colour of buff yellow whilst Indian Bauxite is almost black in colour. Colour coated bauxites can also be provided.

Suitable aggregates for non-HAPAS type work include Dynagrip and Granite. Use of any type of other aggregate is prohibited unless approval has been granted by us.

The SAFETRACK® HW binder resin can also be pigmented to match the aggregate, if required. Chrome Green, Dark Grey and Tile Red pigments are available for on-site addition. SAFETRACK® HW is also available in Sky Blue. Please note this colour comes pre-pigmented.

When choosing colours for road surfacing, consideration should be given to consistency within the road network, the purpose of the colour, the propensity and effect of fade, contrast with the "normal" road surfaces, the effect achieved at night under street lighting, if present, and environmental considerations.

Cleaning

All tools and equipment should be cleaned with Acetone before the material is allowed to cure.

Packaging & Storage

SAFETRACK® HW binder is supplied in 25kgs

The Thixotrope is supplied in 2kg bags, 12 bags per container. 1 bag is required per kit.

The BPO Powder Catalyst is supplied in 250g bags. 1 – 4 bags are required per kit, dependant on temperature.

The aggregate is supplied dried and bagged in 25kg bags.

The pigment is supplied in a 6kg box, containing 100 x 60g bags. When pigmenting the resin, one bag is required per kit.

All components of the SAFETRACK® HW system should be stored in cool, dry, protected conditions, out of direct sunlight and in accordance with the relevant Health & Safety regulations. Storage temperatures must not exceed 25°C. Do not store near naked flames or foodstuffs.

Stored in unopened containers, under the correct conditions, the components have a minimum shelf life of twelve months. If your product is more than twelve months old you must contact GCP before use.

Health & Safety

Please refer to our safety datasheets for further information

[4] Based on an unfilled asphalt substrate with a texture depth of 0.5mm.

General Information

SAFETRACK® HW is just one of a wide range of specialist surfacing, waterproofing and repair materials manufactured and supplied by GCP. If you require any further information, please contact us or visit www.gcpat.com

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Certificate Number 15174
ISO 9001, ISO 14001