

1 Product Description

1.1 GeoGripX is a flexible two-part solvent-free polyurethane

hybrid resin system for use in conjunction with selected aggregates to provide a decorative yet durable surface with enhanced underfoot safety. A variety of colours, textures and shades is achievable.

2 Equipment & Materials Checklist

- Suitable personal protective equipment (PPE) as dictated by product labelling and specific site requirements
- GeoGripX packs containing Parts A & B
- The correct grades of aggregates
- Algaecide/fungicide if necessary
- Degreasing agent if necessary
- Primer C if necessary
- Lance or gas torch for drying damp areas
- An adequate power supply for the mixer
- Plastic sheet to protect the surface where mixing is carried out
- High torque plaster/mortar type mixer with spiral blade attachment
- Serrated squeegee
- Complete Streets Cleaning Solvent for the cleaning of tools
- Cleaning cloths and rags
- Masking tape
- Flashlight/torch
- Cones (or similar means of preventing access)
- Vessels for reclaimed aggregate
- Bass brooms/brushes
- Shovels (for broadcasting aggregate)

3 Aggregate

- 3.1 The normal size range is between 1 and 3mm approx. Larger or smaller sized aggregates can be used with a corresponding adjustment to resin film thickness.
- 3.2 Aggregates must be sound enough to withstand the loads envisaged and it is vital that aggregates are clean, dry and free from dust.
- 3.3 Some aggregates have a greater resistance to crushing when subjected to heavier vehicles or by the repeated turning action of vehicles. If you are unsure about the suitability of a particular aggregate, it is recommended that you contact Complete Streets for advice.
- 3.4 The customer should ensure that any slip/skid resistance requirements are addressed. Complete Streets can supply a range of aggregates selected for their appearance and performance.
- 3.5 Complete Streets have a range of pigment packs which can be added to the GeoGripX Part A prior to mixing with Part B, which can further enhance the appearance of the finished system.

4 Preparation

- 4.1 Ensure both the Product Information and Safety Data Sheets have been read and understood.
- 4.2 Ensure that the substrate is sound, clean, contamination-free and suitable for the purpose.
- 4.3 Concrete surfaces must not be sealed or have been treated with curing agents. To test for this, mix a little detergent with clean water and place a drop onto the concrete substrate. If it is absorbed, there should be no problem but if it sits on the surface, it is likely that a curing agent is present. The substrate must be abraded to remove the layer containing the curing agent until it is absorbent.
- 4.4 It is important that any dust and foreign matter are removed.
- 4.5 Make good depressions/pot holes etc. with suitable repair materials and tamp/roll thoroughly to ensure good compaction.
- 4.6 Remove oil, de-icing salt, grease and similar contamination by washing with a suitable degreasing agent, followed by flushing with water.

- 4.7 After preparation, ensure that the surface is dry. The use of hot compressed air lance is advised since it will also serve to warm the surface and accelerate curing, especially in winter conditions.
- 4.8 Rough tamped concrete or similar highly textured substrates can be regulated by scraping a coat of GeoGripX over the surface and allowing it to cure prior to commencement.
- 4.9 In most instances GeoGripX is self-priming. However, on highly absorbent concrete and weathered timber, it is advisable to prime first with Primer C.
- 4.10 The substrate must be even and have little texture (surface roughness). Because a resin bonded aggregate surface using GeoGripX is thin, imperfections in the substrate may show through the finished surface.

5 Application

- 5.1 Once applied, GeoGripX is unaffected by any rainfall that may occur during cure.

5.2 Application to road, pathway, driveway etc. surfaces.

- 5.2.1 ~~Do not apply to substrate inside of the temperature~~ Do not apply to substrate inside of the temperature suitably protected surface, to prevent contamination. Using a drill and paddle blend the total content of activator (small container) into the base material. Mix both components thoroughly until homogenous (2-3 minutes) ensuring all material from the sides and bottom of the drum is included. Aggregate bags should be placed at regular intervals along the edge of the installation site.
- 5.2.2 Pour mixed material onto surface in rows and immediately squeegee out, using a serrated squeegee or foam to achieve a spread rate of approximately 1kg/m² (dependent upon porosity and texture). On textured or deeply pitted areas it is recommended that the surface is lightly over-rolled with a 25mm nap paint roller to ensure even application.
- 5.2.3 Having applied the resin, broadcast aggregate onto the surface ensuring that the resin is totally blinded by aggregate. If an adjoining area is to be treated, leave a wet edge and apply the contents of the next pack as soon as possible to avoid "day joints". Under particularly cloudy or dull conditions, areas which have not been completely blinded by aggregate are not always immediately apparent. Use of a torch or flashlight will help to highlight these areas. This area should be constantly checked for evidence of areas which will

still require additional aggregate to be broadcast. Masking tape should be removed immediately after the aggregate has been broadcast onto the wet resin. Failure to do this increases the difficulty of removal.

- 5.2.4 When the material has set, which is normally after approximately 1 hour at 20°C, the excess aggregates can then be removed by light brushing. After 2-3 hours, more rigorous hand brushing can be employed or a vacuum suction method used. Mechanical sweeping should only be used after full cure, which would normally be 24 hours.
 - 5.2.5 Deep depressions or potholes will result in the formation of mounds or ridges in the final surface. It is essential that these are made good prior to overlayment with GeoGripX. Very rough or deeply tamped concrete may require an additional application of GeoGripX resin to even out irregularities.
 - 5.2.6 Once the hardener has been mixed into the base the curing process will start, giving a pot life of about 20 minutes.
 - 5.2.7 Tools and equipment should be cleaned immediately after use using Complete Streets Bitex Cleaning Solvent.
- ### **5.3 Application to Stone Mastic Asphalt (SMA)**
- 5.3.1 The surface draining properties of SMA will lead to excessive absorption of GeoGripX and may result in insufficient material remaining on the surface to adequately anchor the applied aggregate. It is therefore advised to fill the surface voids with sharp grit in order to minimise resin demand.
- ### **5.4 Application to Steel and Aluminium**
- 5.4.1 Pre-treatment of steel and aluminium substrates is confined to those techniques that provide mechanical abrasion. The most commonly employed method is to shot-blast the surface to the recognised Swedish Standard SA 21/2, whereby most of the steel has been made bright and the surface is pitted. Alternatively, on flat areas, a good bond can be achieved from coarse grinding with an angle grinder. Wire brushing is not considered adequate since this will not abrade the surface well enough to obtain the required key.
 - 5.4.2 No priming is necessary, and in all other respects, the GeoGripX is applied as aforementioned. The work should be programmed to ensure that newly prepared steel is over-laid as soon as is possible, since any traces of moisture will cause flash rusting which may ultimately impair adhesion. Similarly, any aluminium substrates should be over-coated immediately to reduce the effects of atmospheric oxidation.

5.5 Application to Wood

- 5.5.1 GeoGripX demonstrates excellent adhesion to wood on new timber. No preparation is required other than a light sanding.
- 5.5.2 However, untreated exposed wood that has turned grey has been denatured by the action of UV light, resulting in weakness at the surface. These areas should be sanded back to reveal fresh wood prior to overcoating with GeoGripX. Alternatively if the area concerned is too large the surface should be stabilized by first applying Primer C.
- 5.5.3 If both priming and application of GeoGripX cannot be completed on the same day, it will be necessary to abrade the Primer prior to application of GeoGripX.
- 5.5.4 Tools and equipment should be cleaned immediately after use using Complete Streets Bitex Cleaning Solvent.

6 Aftercare

- 6.1 It is normal for the surface to shed loosely bonded aggregate for a period of time after application. This aggregate is surplus to the bonded layer and can be swept or lightly pressure washed off. Sweeping should be carried out several times in the first few weeks after installation until no further loose aggregate can be recovered.
- 6.2 Loose detritus such as leaves and mud can be removed by light pressure washing, ensuring that the nozzle is held more than 15cm (6") away from the surface.
- 6.3 Oil staining can be treated with a stiff brush and a strong solution of detergent and water. This should be flushed away with clean water afterwards.