

Resin binder for bonded aggregate paving

I Product Description

- 1.1 Coldgrip is a flexible two-part solvent-free polyurethane resin bonding system.
- 1.2 Coldgrip can be used as a high friction highway surfacing in conjunction with highly skid-resistant calcined bauxite aggregates or used pigmented as part of a coloured traffic calming system in conjunction with colour coated or natural aggregates.
- 1.3 Coldgrip is also suitable for industrial skid-resistant surfacing applications.

2 Surface Preparation

- 2.1 Ensure both the Technical Data and Safety Data sheets have been read and understood.
- 2.2 Ensure that the substrate is sound, clean, contamination-free and suitable for the purpose.
- 2.3 It is important that any dust and foreign matter is removed.
- 2.4 Make good depressions/pot holes etc. with suitable repair materials and tamp/roll thoroughly to ensure good compaction.
- 2.5 Remove oil, grease and similar contamination by washing with a suitable degreasing agent, followed by flushing with water.
- 2.6 After preparation, ensure that the surface is dry. The use of hot compressed air lance is advised since this will also serve to warm the surface and accelerate curing.
- 2.7 Ensure that any salt on the road surface is thoroughly removed by high-pressure water jetting, followed by drying.
- 2.8 All edges, both longitudinal and transverse, should be masked with a suitable tape, together with existing road markings, detector loops, ironwork and road studs, unless otherwise directed by the Engineer. Any masking must be removed before the product has cured or the tape will be bonded to the road surface. It is recommended that Primer C is used to reduce absorbency on porous surfaces such as concrete.

3 Application

3.1 Application to Road Surfaces

- 3.1.1 Using a drill and paddle, mix base material (container A) on its own, to ensure no segregation of components. Whilst still mixing, pour the total contents of hardener (container B) slowly into container A. Mix both components until homogenous (2-3 minutes). Thorough mixing is essential.
- 3.1.2 Once the hardener has been mixed into the base the curing process will start, giving a pot life of about 30 minutes.
- 3.1.3 Pour mixed material onto surface in rows and immediately squeegee out, using a serrated squeegee at a rate of 2kg/m2.
- 3.1.4 Having squeegeed out all of the contents of the container, broadcast aggregate onto the surface ensuring that no wet resin remains visible.
- 3.1.5 If an adjoining area is to be treated, leave a wet edge.
- 3.1.6 When the material has set, which is normally after approximately I hour at 20°C, the excess aggregate 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.

3.2 Application to Steel

- 3.2.1 Pre-treatment of steel substrates is confined to those techniques that provide mechanical abrasion.
- 3.2.2 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.
- 3.2.3 Wire brushing is not considered adequate since this will not scratch the surface sufficiently well enough to obtain the required key.
- 3.2.4 No priming is necessary, and in all other respects, the Coldgrip is applied in the same manner as road surfaces. The work should be programmed to ensure that the newly prepared steel is overlaid as soon as is possible, since any traces of moisture will cause flash rusting which will ultimately impair adhesion.

4 Aftercare

4.1 No aftercare is necessary other than the maintenance of appearance by occasional wet scrubbing with a stiff broom. If you are unsure with regard to the application of Coldgrip please consult Complete Streets before.