



LeesonGrip 2:1

Installation Guide







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Installation of Anti-Skid System LeesonGrip 2:1 D3149/20

Introduction

The current Method Statement together with all necessary Health & Safety Data Sheets, and COSHH Risk Assessment for the Works shall be deposited with the Purchaser and maintained on-site.

Every batch shall be subject to visual quality control checks to ensure compliance with the System specification. Each component received on-site shall be logged and stored to prevent contamination or deterioration, in accordance with the Manufacturer's instructions.

The System is deemed suitable for use on Highways with existing bituminous surfaces and concrete with texture depths of between 0.5mm and 2.00mm, measured using the Sand Patch Test as defined in BS 598 : Part 105 : 1990.

The Purchaser should ensure that the pavement structure is adequate to support the traffic without undue cracking or deformation during the life of the System.

Surface Preparation

The areas to which the System is to be applied shall be clearly defined and marked by the Purchaser on the existing road surfacing prior to commencement of work on-site.

4All imperfections in the road surface not acceptable to the Installer shall be reinstated with a material approved by the Purchaser in consultation with the Installer.

The road surface shall be clean, dry and free from ice, frost, loose aggregate, oil, grease, road salt and other loose matter which may impair the adhesion of the System.

Where the road surface does not comply with Section 5.3 it shall either be cleaned by the Installer or others, by grit blasting, high pressure water jetting, low pressure water/abrasive blast cleaning, scarifying, scrabbling or other means approved by the Purchaser. To remove dust and other loose matter the road surface should be vigorously brushed or treated with hot compressed air. Any oil visible on the road surface shall be removed by washing and scrubbing with a suitable detergent solution followed by flushing with clean water or by other suitable means.

Existing road markings, ironwork, road edges or areas not to be treated and road studs shall be suitably masked.





Weather Conditions

Installation of the System shall only be carried out at a road surface temperature of 5°C to 35°C.

Ambient and road surface temperatures together with relative humidity shall be recorded at the start and if weather is variable during the installation process.

Road surfaces shall be dry before and during the installation of the System.

The Installer will notify the purchaser of the curing period of the system dependent upon the prevailing weather conditions.

Priming of surfaces

Bituminous Surfaces

The road surface should have a texture depth of between 0.5mm and 2.0 mm as determined by the sand patch test.

All imperfections in the road surface should be repaired prior to laying the product.

The surface to be treated must be clean, free from frost, ice and road salt. The surface should also be sound, dry and free from dust and any loose material. Any visible oil should be removed with a detergent solution, flushed with water and the surface allowed to dry.

Other methods of cleaning the road include grit blasting, high pressure jet washing, low pressure water/abrasive cleaning scarifying and scabbling. Dust and loose surface material can be removed by brushing or treated with hot compressed air. This will also remove any surface moisture.

Any areas which are not to be treated are to be masked with a suitable tape.

We also have available a cementitious scratch coat system (D5126), for filling porous asphalt to reduce topcoat consumption. Please consult our Technical Data Sheet for D5126 for further information.

Concrete and timber

Concrete is to be hot compressed air blasted then primed with primer PU3922 (see individual data sheet for more information) and this allowed to cure for a minimum of 2 hours and maximum of 12 hours before applying the finish coating. On timber, the surface should be primed with primer (PU3922) and conditioned as above.

Steel

It is to be shot blasted to SA2½ and primed with PU5015 metal primer and allowed to cure 1-2 hours' minimum, maximum 12 hours before finish coating.

Mixing and Application

Add 1 part by weight of Leesongrip D3149 Part B (curing agent) to 2.15 part by weight of Leesongrip D3149/20 Part A (resin) and mix until a mass of uniform colour is obtained. The surface is then coated with the blend within 10 minutes (@ 19°C) at a minimum coverage rate of 1.5 kg per m² dependant on surface porosity and then allowed to self-level to give total coverage. The non-slip aggregate (moisture content less than 0.4%) is then scattered over the resin within 5 minutes (@ 19°C) excess aggregate can be removed after 2 hours. The site can be reopened to traffic after 4 hours depending on ambient temperature or until the binder is hard to the touch.







A bulk container of D4860 Coating Accelerator (2k) can be supplied for addition to LeesonGrip D3149/20. 38g of D4860 Coating Accelerator (2k) should be added to reduce the pot life by half. A syringe or measuring pot should be used to measure quantity.

Colour additions can be added to change the base colour. Contact LPU for details of colour additions.

DO NOT USE IN TEMPERATURES BELOW 5° C

In some cases, particularly low temperatures, D4860 coating accelerator (2k) may need to be added to reduce the cure time.

D4860 Accelerator Addition Level	Approximate Cure Time at 20°C (min)
0% Accelerator	20
38cc Accelerator	10
76cc Accelerator	5





Maintenance Schedule for Anti-Skid Surfacing

Leeson Polyurethanes have been supplying anti-skid systems since the early 1990s. Over that time the systems have demonstrated their quality, durability and ease of maintenance. With some simple routine procedures, the surfacing can be kept in optimum condition.

General

If repair work is required to an established surface, the area to be treated should be cut back to firmly bonded material, cleaned with hot compressed air (or any other suitable means) and the high friction system applied to the original specification.

Aftercare

The masking shall be removed and the System allowed to cure. During the curing period no disturbance or trafficking of the System shall be permitted. Before opening to traffic at the end of the curing period the excess aggregate shall be removed by vacuum sweeper or other suitable means.

The Installer shall inspect the road after 24 hours and carry out any necessary remedial work, or further sweeping.





Periodic Cleaning

General cleaning of the surface can be carried out by cold pressure washing up to a maximum 150 bar rating to remove dirt and grime. The water should be applied using a fan type lance which should be kept 200mm above the installed surface. Care should be taken however to prevent damage to the surface with excessive water pressure. Pressure washing can also be used to remove tyre marks.

<u>Spillages</u>

Please note it is important that any spillages or contamination are dealt with promptly otherwise permanent staining, marking or physical damage to the surfacing and underlying materials may result.

Sand/Soil

Shovel up material and sweep surface clean with a stiff brush. Pressure washing up to 150 Bar can also be used to clean sand from the surface.

Chewing Gum

Removal of individual pieces of chewing gum, can be achieved by treating each piece with a freezing spray and then scraping off the gum with a suitable scraper. For more extensive gum removal, contact a specialist-cleaning contractor.

Ice and Frost

Salt can be used on the surface to help eliminate ice and frost. Once weather conditions return to normal the salt/grit needs to be washed off thoroughly to remove all salt traces.





Appendix

Leeson Anti-Skid Audit Sheet

(To be completed for each day and/or component laid)

Date	
Customer	
Site Reference & address	
Coverage Area (m ²)	

Site Preparation:

Installed on to an approved subbase? (As per method statement) Details of sub base construction. Concrete? – dry and primed?

Yes / No		

Anti-Slip Application

Application Time
Air Temperature (°C)
Relative Humidity (%RH)
Part A - Batch Number
Part B - Batch Number
If different batches on site, use one batch first
Ground Temperature
Mixing Check (if streaky mix for longer)
Number of Kits Used
Pot-Life Used (Record for First 5 Kits)
Cure temperature – catalyst to be used if overnight temperature likely to be 15C or less PU coverage / m ²
Aggregate Type Used
Aggregate grades
Supplier of aggregate

Start		En	d		
Start		En	d		
Start		En	d		
Yes / No					

Additional Comments:

Completed by (NAME)

Signed

