



# Eurogrip 4500

## High Friction Wearing Course

Eurogrip 4500 is a three-component, high performance solvent free polyurethane coat and scatter system .

The components of Eurogrip 4500 combine to create a tough and flexible adhesive slurry that bonds high friction aggregates and grits to concrete, asphalt, timber, steel, aluminium and GRP substrates.

The system offers good adhesion to suitably prepared substrates and a hardwearing, high friction surface finish.

Coloured or contrasting grits provide clear markings for safety and hazard areas. Natural aggregates offer an aesthetically pleasing finish for landscaping, driveways, paths, garden areas, car parks etc.

To protect coated surfaces against staining and help with ease of cleaning they can be sealed with clear sealcoats such as Optiseal AL or Resicote WB.



### Benefits

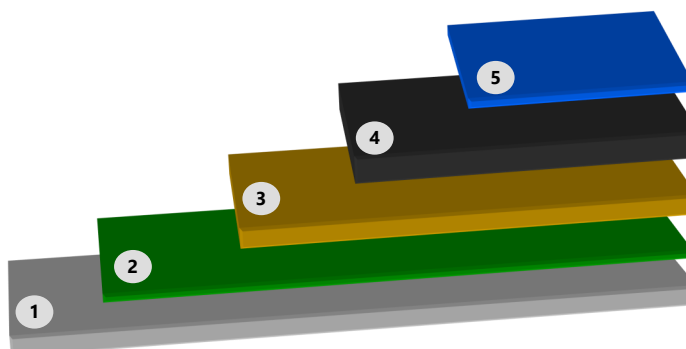
- Capable of withstanding vehicle traffic and heavy pedestrian footfall
- Has excellent high friction qualities for reducing the frequency of accidents
- Durable system with a long service life
- Seamless and aesthetically pleasing alternative to concrete or asphalt.
- Cold applied using electric hand mixer and squeegee
- Fast curing for minimal traffic disruption
- Suitable for a wide range of substrates (asphalt, concrete, timber, steel, etc.)
- Low hazard materials
- Resistant to oils and solvents
- Low initial and whole life cost

### Areas of use

- Roads
- Bridges
- Footpaths
- Car parks
- Railways platforms
- Cycle tracks
- Forecourts
- Ramps
- Commercial premises
- Surfaces requiring slip resistance

### System

- 5 Sealcoat (Optional)
- 4 High Friction Aggregate
- 3 Eurogrip 4500
- 2 Primer (dependant on substrate)
- 1 Substrate



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### Pedestrian coverage

Resin 4-5kg/m<sup>2</sup> (ave. 5.5m<sup>2</sup>/unit)  
 Aggregate 14-15kg/m<sup>2</sup> (3-5mm)  
 (After excess removed)

Always ensure that there is excess grit available on site to ensure full coverage prior to removal of excess by sweeping.

### Potlife

15 min @ 20°C

### Cure

Initial set: 1 hour @ 20°C  
 Open to traffic: 2 ½ hours @ 20°C

### Finished weight of system

19kg/m<sup>2</sup>

### Temperature

Both coverage and cure depend on ambient and surface temperatures, the type and condition of the substrate and the aggregate temperature and size.

Recommended temperature range for storage, transport and application is: 5°C and 28°C. Please contact Optus for other conditions.

### Technical information

Tensile (BS EN ISO 178:2003)	
Tensile strength	10 N/mm <sup>2</sup>
Elongation at break	20% min
Adhesion (BS EN ISO 4624:2003) - 5 Day pull off test	
Timber - cohesive failure	2 N/mm <sup>2</sup>
Concrete - cohesive failure	2 N/mm <sup>2</sup>
Bitmac - cohesive failure	<2 N/mm <sup>2</sup>
Steel	5 N/mm <sup>2</sup>
For other substrates, contact Optus.	
Relative density of resin mix, not including aggregate	1.65 @ 20°C

### Aggregates

The most commonly used aggregate is a buff coloured calcined bauxite or naturally grey emery, depending on the friction requirements of the aggregate a pigmented granite or other aggregate type can be used for more vivid colours.

### Sealcoats

If the aggregate you require is not available because of colour or size, a coloured finish of your choice can be achieved by using a coloured sealcoat.

### Packaging

Eurogrip 4500 is supplied as a 3 components, 25kg unit

Pack A - Hardener: 2.5L pot  
 Pack B - Resin: 10L pot  
 Pack C - Filler: 15kg bag



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### Surface preparation

Ambient temperatures should be between 5°C and 28°C during application and cure. **Dry weather conditions and a dry substrate are essential.** For low temperature application or application on to a sloping surface refer to Optus Technical Department.

SUBSTRATE	PREPARATION	PRIMING
<b>CONCRETE</b>	Concrete surfaces must be at least 30 days old. Remove all contamination and detritus including oils and greases, laitance, algae, moss, etc. Lightly texture the surface by vacuum blasting /or other mechanical means, remove residue by vacuum. Deep oil contamination to be removed using hot compressed air. Existing thermoplastic markings to be removed or worked around. Dry thoroughly.	Apply EuroPrime CT, and allow to cure tack free (on average 2 hours). Apply Eurogrip within 24 hours of tack free failing which the area must be re-primed. If left longer than 3 days the surface should also be lightly abraded.
<b>BITUMEN BOUND MATERIALS</b>	The surface must be in reasonable condition and of sufficient strength to accept the surfacing (must not soften at high temperatures), not excessively smooth*, rutted, cracked or subject to aggregate ravelling, etc. It must be at least 30 days old and have a surface texture that will provide a good mechanical key eg/SMA or open graded materials (refer Optus). Sand carpet or materials using high penetration bitumen are generally unsuitable as substrates. Remove all contamination including oils and greases. Existing thermoplastic markings to be removed or worked around. Sweep clean to remove all dust. Allow to dry thoroughly. *Depending on the condition of the surface it may need to be lightly textured.	No primer required
<b>TIMBER</b>	Timber must be completely dry throughout before considering treatment. Timber contaminated by oils and greases, etc, is not suitable for treatment. Lightly sand and sweep/vacuum clean. If possible timber products should be sealed all round.	Apply EuroPrime CT, and allow to cure tack free (on average 2 hours). Apply Eurogrip within 24 hours of tack free failing which the area must be re-primed. If left longer than 3 days the surface should also be lightly abraded.
<b>STEEL</b>	Remove all rust, mill scale and surface contamination by grit blasting and other mechanical means to a bright rust free surface (SA2½ blast profile 90µ-120µ). Remove oil and grease contamination with a suitable cleaning fluid/degreaser and flush with water. Allow to dry thoroughly. Small or inaccessible areas must be prepared by disc abrading to ST3, followed by wiping down with a light hydrocarbon solvent, eg xylene.	Apply EuroPrime FM within 4 hours of surface preparation. Allow to cure tack free (on average 2 hours). Eurogrip 4500 should then be applied during the following 10 hours failing which the area should be re-primed.
<b>Galvanised</b>	Before coatings a galvanised surface, it is advisable to blast to SA2½ blast profile 90µ-120µ. If blasting is not possible, a mordant wash solution should be used, All areas will turn black, a second coat may be required if all areas have not changed colour. Wash down area with water and allow to dry.	Apply EuroPrime FM within 4 hours of surface preparation. Allow to cure tack free (on average 2 hours). Eurogrip 4500 should then be applied during the following 10 hours failing which the area should be re-primed.
<b>ALUMINIUM</b>	For Non-anodised aluminium thoroughly clean and degrease the surface. Use commercial detergents, steam cleaners or pressure washers. Be sure all detergent residue is rinsed from the surface. Solvent wipe and allow to dry thoroughly.  For anodised aluminium thoroughly clean and degrease the surface. Use commercial detergents, steam cleaners, or pressure washers. Be sure all detergent residue is rinsed from the surface, abrade the surface by using 80-120 grit paper to 'break' the anodised surface to ensure adhesion of the primer/coating. Solvent wipe and allow to dry thoroughly.	No primer required, if applying Eurogrip 4500 immediately.  If application is going to be delayed, apply EuroPrime FM to avoid oxidation. Allow to cure tack free (on average 2 hours). Eurogrip 4500 should then be applied during the following 10 hours failing which the area should be re-primed.

**Note: before use on slopes and other substrates, please contact Optus for advice**



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### Application

Strict compliance with the mixing and laying procedure is critical - mixing times must not be exceeded.

Materials include Eurogrip 4500, a 3 component polyurethane resin. It is used in conjunction with the customer's chosen high friction grit.

Pour the contents of Pack B into a suitable mixing vessel and mix using a drill and paddle until homogeneous. Whilst still mixing, add the contents of Pack A and continue mixing for a further 20 seconds.

Pour the mixed material onto the surface and immediately spread using a serrated squeegee — do not spread too thinly (refer to coverage rates). No areas of the substrate should show through.

Broadcast the chosen aggregate onto the surface ensuring that there is no resin showing through. Remove any tape when the resin starts to gel and excess aggregate after the surface has become stable. This will vary with both product and ambient temperature.

### Cleaning

Safesolve should be used for cleaning tools, etc.

### Health and Safety

Gloves, overalls and barrier cream should be used when working with Eurogrip 4500.

For full details please refer to the appropriate Health and Safety Data Sheet.

The information given in this product, technical and application data sheet is given in good faith, based on current knowledge and experience but we have no control over the quality or the conditions of the substrate or the many differing factors affecting the use and application of the product. It relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of the company's knowledge and belief, accurate as of the date indicated. It is the user's responsibility to satisfy themselves as to the suitability and application of such information for their own use.