

industrial and decorative flooring

coatings for concrete and steel

HIM Products B.V.

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Wearing courses for bridge decks and other constructions

Himgrip Fast

Fast curing, solventfree, lightweight, pourable wearing course based on epoxy/polyurethane resins

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Jses			
Himgrip Fast is used at low ambient temperature or for emergency repairs when fast curing is essential Himgrip Fast			
produces an abrasion resistant, non-slip wearing course. The system may be applied to concrete, steel, composite or			
wooden substrates. Himgrip Fast resin is dressed with selected hard wearing aggregates. Applications include bridge-			
decks, RO/RO link-spans, parking areas, garages, ramps, walkways and cycle paths.			
Product description			
limgrip Fast is a fast curing, solvent-free blend of epoxy and polyurethane resins, reinforced with chemically inert,			
graded fillers.			
Advantages			
▼ Fast curing			
 Lightweight – important in design considerations 			
▼ Hardwearing			
 Flexible – excellent flexural and tensile strength 			
▼ Non-slip, even when wet			
▼ chemical resistant			
 waterproof – provides a lightweight, chemical and corrosion resistant, water impermeable wearing course 			
Colors			
The final colour of the Himgrip Fast system will depend on the aggregate used as the surface dressing, normally			
Dynagrip. The colour of Dynagrip is dark grey/anthracite.			
System			
On concrete :			
1 coat of HIM Primer 30 (or HIM Primer 31), followed by 1 coat of Himgrip Fast, wet-in-wet, dressed with excess			
aggregate in the desired grain size. If it is not possible to apply wet-in-wet, the primer must be lightly sanded with fire			
dried sand.			
On steel :			
1 coat of HIM Primer NT (water based) or HIM Primer EP203 (solvent based), followed by 1 coat of Himgrip Fast, dressed with excess aggregate in the desired grain size.			
nin excess aggregate in the desired grain size. On wood :			
	<u></u>		
Himgrip Fast may be applied directly on the wood and dressed with excess aggregate in the desired grain size. For damp wood HIM advises to apply 1 coat of HIM Primer 36 first, lightly sanded for better adhesion.			
On composites :			
In general Himgrip Fast may be applied without a primer on the grinded and de-greased surface. However we recommend an adhesion test in all cases. The wet layer of Himgrip Fast is dressed with excess aggregate in the desired grain size.			

Technical data *)	Himgrip Fast
Mixing ratio base : hardener : filler (w/w)	20,6 : 7,9 : 71,5
Specific gravity (mixed)	App. 1,8
Volume of solids (mixed)	100%
Flexural strength (BS 6319 - 28 days)	39 N/mm ²
Compressive strength (BS 6319 – 28 days)	55 N/mm²
Shore-D hardness	75
Service temperature	80°C maximum
Material consumption (theor.)	1,8 kg/m ² per mm thickness
Potlife at 20°C	App. 20 minutes
Curing time at 20°C	Foot traffic after 4 hours, full traffic load 8 hours and fully cured after 3 days.
Chemical resistance	The cured layer of Himgrip Fast is resistant to petrol, diesel fuel, lubricating oil, hydraulic fluid, a number of aliphatic hydro-carbons, de-icing salts, cleaning fluids, jet fuel (kerosene), diluted mineral acids and alkaline solutions. For further information on chemical resistance please contact HIM

*) For detailed information contact HIM.



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<u>Temperature limitations</u>

Himgrip Fast shall not be applied at temperatures below 5°C, nor onto a substrate with a temperature lower than 3°C above the dewpoint. The maximum application temperature is 35°C.

Surface preparation

It is essential to thoroughly prepare the surface in order to achieve a sound, clean and dry substrate. *Concrete* : The concrete shall be clean, dry and free of laitance. Mechanical cleaning or abrasive blasting is recommended. The prepared concrete will be primed before the Himgrip Fast is applied wet-in-wet. *Steel* : The primer shall be applied on freshly blast steel (SA 2½) with an angular amplitude between 75 and 125 microns.

Wood : The surface shall be clean, dry and uncontaminated. Hardwoods may require abrasion in order to obtain a good mechanical key.

Composites : Light grinding and de-greasing. For recycled composites light flame-blasting is advised, followed by an adhesion test.

Limitations

New concrete floors should be at least 28 days old and contain no more water than 5% by weight. Care should be taken that no rising damp can take place through the substrate, resulting in blisters and/or adhesion failure of the system. The rubber mat test can help to predict rising damp.

Existing expansion joints must be repeated in the new Floor. The concrete substrate should have a compressive strength of minimal 25 MPa and must be pre-treated properly to achieve the required adhesion. At a water content of the concrete between 5% and 8% HIM Primer 36 should be used.

Primer

Concrete : Apply HIM Primer 30 (or HIM Primer 31) on the prepared substrate. Add the B-component to the A-component and mix till a homogeneous mixture is obtained. The primer should be applied immediately with a roller or brush in a thin continuous film. Care should be taken to avoid over-application or puddles. If the existing surface is very porous a second coat might be necessary. If the wearing course is not applied in the wet primer, the primer shall be lightly sanded with fire dried sand.

Steel: Apply HIM Primer NT (or HIM Primer EP203) on the prepared substrate. Add the B-component to the A-component and mix till a homogeneous mixture is obtained. The primer should be applied immediately with a roller or brush in a thin continuous film.

Wood : Apply HIM Primer 36 (only on damp wood). Add the B-component to the A-component and mix till a homogeneous mixture is obtained. The primer should be applied immediately with a roller or brush in a thin continuous film and lightly sanded with fire dried sand to achieve the required adhesion. *Composites :* No primer is required.

Composites Mixing

Proper mixing of the Himgrip Fast components is essential. Add the hardener to the base component and mix well. Add the filler slowly and continuously whilst still mixing for 3-5 minutes until a homogenous mix is obtained. **Do not add solvent!!** It is important that all components are intermixed thoroughly with a forced-action mixer or an approved spiral paddle in a slow speed heavy-duty drill so that no traces of the components remain unmixed.

Application

Immediately after mixing the Himgrip Fast shall be poured on the prepared surface and spread evenly with a steel trowel or squeegee. Care must be taken to ensure that where the material is applied against existing Himgrip Fast, there is total contact at the correct thickness. It is essential that a wet film thickness gauge is used, to ensure an even thickness is achieved.

Pot life at 20°C

Approximately 20 minutes.

Material consumption (theoretical)

The recommended coat thickness before scattering for medium to heavy traffic is 3,0-4,5 mm. For light traffic the minimum coat thickness is 2,0 mm. The material consumption is 1,8 kg/m² per mm thickness.

Aggregate

HIM recommends to use Mandurax. For heavy traffic the grain size is 3-5 mm, for medium to heavy traffic the grain size is 1-3 mm and for light traffic 0,25-1 mm. Also excellent test results have been achieved with Guyana Bauxite. The aggregate dressing must be applied immediately after the application of the slurry. The slurry has to be dressed until obliterated and no slurry is visible. The dressing is applied by methods that will ensure that it falls vertically down onto the slurry. If hand-thrown, there will be ridges created, that cannot be remedied later. The excess aggregate has to be removed after curing. If dry, clean and uncontaminated, this excess aggregate may be re-used in further application of the systems.

Joints

Expansion joints need to be continued in the Himgrip Fast.

Safety precautions

The components of Himgrip Fast are classified as dangerous goods. Consult the Material Safety Datasheet for additional information and the correct preventive measurements.



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Tool cleaning

Himgrip Fast should be removed from tools and equipment with **HIM Solvent 102** immediately after use. Hardened material can only be removed mechanically.

Shelf life

Himgrip Fast has a shelf life of 12 months if kept in a dry, cool store in the original, unopened packs.

Disposal

Disposal of spillage or empty packaging should be in accordance with local waste disposal regulations. For further information refer to the Material Safety Data Sheet.

Pack size

Himgrip Fast is supplied in sets of 25 kg and 50 kg. For large areas base and hardener may be supplied in steel barrels. Aggregates are supplied in 25 kg bags. Upon request big bags are possible.

Flash points

Himgrip Fast base> 100°CHimgrip Fast hardener> 100°C

Himgrip Fast hardener > 100°C For primer and solvent consult the relevant Technical Data Sheet.