

SpecFloor Epoxy SF **Self Levelling**

Self-Levelling 1.0 – 4.0, smooth pigmented / broadcast with flakes

A 100% solids, two component low viscosity solvent free aliphatic amine cure self-levelling epoxy floor coating to create smooth, medium to heavy duty industrial & decorative floors indoors in wet or dry areas

Intended uses

Designed to be used with on suitably primed concrete, metal or ceramic surfaces to create smooth decorative industrial and commercial floors exposed to light/medium mechanical loads where easy to clean surfaces with a variety of coloured designs are possible.

SpecFloor Epoxy SF Self Levelling provides superior chemical resistance to inorganic acids, bases and solvents.

Used in the following applications for flooring

- Warehousing with forklift traffic
- Supermarkets & Retail stores
- Pharmaceutical facilities
- Salesrooms & Exhibition rooms
- Bakeries, cafes, beverage stores
- Offices, warehouses and storage rooms
- Firefighting equipment sheds, vehicle hangars
- Laboratories, pharmaceutical industry
- Printing shops, distribution centres, workshops
- Discothèques, gyms
- Changing rooms and sanitary facilities
- Zoo enclosures (indoors)
- Corridors (e.g. in schools, gyms, hospitals, nursing homes, public offices)
- Food processing facilities

Properties

- Flows and self-levels to a level, bubble free high gloss finish.
- Can take light traffic after 24 hours - hard in 72 hours at 25°C
- Coating possible at ambient temperatures of +10°C to +30°C
- Good wear resistance
- Seamless and watertight
- Good chemical resistance to acids, alkalis and many cleaning agents
- Solvent free – no odour during installation

Typical Interior System on concrete:

Primer is applied in 1 to 2 layers to ensure no substrate porosity, 24 hours drying @ 25°C

Layer	Product	Consumption
Primer	Epoxy WB Concrete Primer Clear	7 m ² / Lt @ 50um DFT
Body Coat	SpecFloor Epoxy SF Self Levelling	1.2 Lt / m ² @ 1.2mm DFT
Optional Topcoat	A satin or matt finish can be achieved by topcoating with SpecAqua 2K PU Topcoat of Glazetek	10m ² / Lt @ 50um DFT

Technical Data

Composition	Aliphatic Amine Cured solvent free epoxy
Colour	Pigmented
Pack Size	20 Lt • 12.5 Lt Comp. A (includes colourant) • 7.5 Lt Comp. B
Comp. A	SpecFloor Epoxy SF Self Levelling Comp. A
Comp. B	Epoxy Activator SF 1000-AC
Density Comp. A kg / Lt	1.58
Density Mixed Kg / Lt	1.40
Volume Solids Comp. A	100%
Pot Life @ 25°C	Approx. 30 minutes
Thin Film Set time @ 25°C	Approx. 3 hours
Light Foot Traffic @ 25°C	Approx. 24 hours
Vehicular Traffic @ 25°C	Approx. 72 hours
Full Cure @ 25°C	Approx. 7 Days
Thickness	A minimum thickness of 1.00 mm A maximum thickness of 4.00 mm
Coverage	At 1mm thickness 1.40 kg / m ² / mm or 1Lt / m ² / mm
Method of Application	Toothed rakes, trowels, Spike Roller
Storage	Store out of direct sunlight in dry conditions between 15°C and 25 °C
Shelf Life	12 months when stored as recommended in original un-opened containers
Clean Up Solvent	SA65 Thinner

Surface Preparation

In general, the following guidelines for preparation should be adhered to

- The areas to be coated should be dry, firm, solid and free from dust, oil, fats and other contaminants.
- Laitance and loose particles must be removed thoroughly i.e. grinding / abrasive blast cleaning.
- New (concrete) substrates must be at least 4-6 weeks old.
- Mechanical strength subfloor should be: Compression Strength $\geq$ 25 MPa; Tensile Strength $>$ 1.5 MPa. Resp. ASTM C39 & C1583.
- The moisture content (CM-method) of the concrete / cementitious subfloor must be $< 3 - 4 \%$, $< 0.2\%$ Anhydrite, $< 2 - 4 \%$ Magnesite before a floor coating can be applied.
- Old resin flooring compounds that adhere well to the substrate need to be cleaned & sanded thoroughly. If there are doubts about their adhesion onto the substrate, adhesion tests should be carried out.
- Chemical residues, grease/oil etc. need to be removed (chemical cleaning, steam, detergents, flame-blasting).
- The substrate needs to be free from any loose /crumbly components. Gaps, cracks, holes etc. must be repaired prior to laying the first coat.
- If there are doubts about adhesion onto a substrate, an adhesion test must be carried out prior to the application.
- Porous and absorbent substrates require the use of a pore primer, to improve surface strength and to reduce capillary action of substrate pores. They also form a moisture barrier and improve Intercoat adhesion. Two-component epoxy-based primers & scratch coats etc. are commonly used for this purpose. Their suitability in terms of adhesion and overcoat-ability time however must be tested beforehand.
- Subfloor temperature should be at least 3 degrees above the dew point and not below 10 degrees Celsius

PRIMING:

Substrate	Product	Thickness	Description
Concrete	Epoxy WB Concrete Primer	50-100um	Applied in 2 coats to achieve pinhole free surface
Damp Concrete	Epoxy SF Primer Fast Cure	>400um	Applied in 2 coats to achieve pinhole free surface
Metals	Epoxy Multi Prime	100um	Applied in 1 coat
Ceramic Tiles	Epoxy WB GP Primer	50um	Applied in 1 coat

Mixing:

SpecFloor Epoxy SF Self Levelling is supplied as a kit in 2 components. The temperature of the material should be above 15°C for optimal flow & performance.

Agitate Comp. A with electrical agitator until uniform. Add Comp. B to Comp. A and mix for 2 minutes scraping sides of the container.

Transfer mixed material to a new container and mix well for 1 minute.

Care should be taken to avoid air entrainment.

Application:

SpecFloor Epoxy SF Self-Levelling should be promptly poured onto surface and spread with a toothed rake, the rake selected to achieve correct thickness (a 5mm rake will pull a 2mm thick floor, "40% of tooth").

Mixed material should be used well within the pot life.

Surface can be smooth immediately if necessary, with a steel trowel.

The surface should be allowed to level out for 10 minutes and the surface spike rolled to break any air bubbles.

Do not mix more material than can be poured on the floor within 15 minutes after mixing. Mixed material must not be allowed to stand and build up exothermic temperature. After de-aerating, the surface will level out, gel and cure.

During this time, while the surface is still wet, the surface must be protected from dust contamination and water wetting.

At 25°C the floor will take light traffic after 24 hours but is still vulnerable to damage for the next 24 hours

Caution:

No direct sunlight during application

Application always requires a suitable primer

Don't work from the bucket, empty entire contents

Always consult with technical department if unsure

Refer to product MSDS for health & safety prior to using products

Always wear safety clothing / protection. Respirators, eye protection and skin protection.