

## Floortec 2C Floor Sealer 853

Floortec 2K-Epoxi-Versiegelung 853

**glossy, solvent-containing, two components, for interior use, with Floortec Epoxy Hardener 846**

### Properties

Solvent-containing, glossy, resistant, two-component sealer for interior use. Resistant to diluted lye and weak acids, oils, fuel, water and watery saline solutions (e.g. de-icing salt). Hard-wearing and resistant to mechanical stress. Easy to process and with good adhesiveness and covering capacity. By adding fine quartz sand in the intermediate coat, a slip-resistant surface can be produced. For alternative surface design, Dekochips can be added to the top coat.

### Field of Application

For resistant sealing of interior surfaces exposed to medium walking and vehicle traffic load, in particular floor coats exposed to chemical or mechanical stress, e.g. warehouses, refrigerated areas, sales rooms, garages as well as industrial flooring.

Also especially suitable for sealing slip-resistant checkered sheet metal for ramps, steps, and work platforms.

On intact mineral substrates, e.g. cement screed (CT), concrete (C), plaster on wall areas (MG PII, PIII), intact epoxy resin coatings, steel, non-ferrous metals, etc.

### Material description

#### Standard colors:

Scala Designation  
03.03.18 RAL 7030 stone grey  
Additional color design by adding Floortec Dekochips 843 possible.

**Gloss grade:** glossy

**Material basis:** epoxy resin, solvent-containing

**VOC:** EU limit for this product (Cat. A/j): 550 g/l (2007) / 500 g/l (2010). This product contains max. 500 g/l VOC.

**Density:** approx. 1.31 g/cm<sup>3</sup>

**Packaging:** 6 kg, adapted to 2 kg container Floortec Epoxy Hardener 846

### Use

#### Mixing

Floortec 2C Floor Sealer 853 with Floortec Epoxy Hardener 846 in the specified mixing ratio. Ensure that the hardener container is emptied completely. Mix the two components thoroughly until a smear-free, homogeneous mass is obtained. We recommend using a slow-running mixer (max. 400 rpm) with special two-component stirrer to avoid inclusion of air. Then pour the mass in another container and stir again thoroughly.

To obtain a slip-resistant surface, add up to 10 vol. % of Floortec Quartz Sand 1526 (0,1–0,4 mm) in the intermediate coat.

#### Mixing ratio

3 weight parts of Floortec 2C Floor Sealer 853 mixed with 1 weight part of Floortec Epoxy Hardener 846 (corresponds to a volume ratio of approx. 2.5:1).

**Pre-reaction time**

After mixing, allow for a pre-reaction time of at least 10 minutes.

**Thinning**

If required, dilute with Epoxy Thinner 854. Material should only be thinned after mixing. Depending on absorptive capacity of substrate, thin prime coat up to 15 %, intermediate and top coat up to approx. 5 %.

**Tinting**

No tinting.

**Compatibility**

May only be mixed with materials specified for this purpose in this data sheet.

**Application**

Apply Floortec 2-Component Epoxy Sealer 853 with a paint brush or roller, e.g. with Polyamide Paint Roller 1314 or Premium Short Fiber Paint Roller 1174. Ensure that the components are mixed thoroughly.

**Pot life (at +20 °C)**

Maximum 8 hours. After that time, do not dilute the material again nor continue to use it. A higher temperature will reduce the pot time.

**Consumption (per layer)**

on smooth, mineral surfaces:  
approx. 150–200 g/m<sup>2</sup>.

On rough, highly absorbing substrates: approx. 200–300 g/m<sup>2</sup>.

On prime-coated metal:  
approx. 120–150 g/m<sup>2</sup>.

Determine exact consumption by means of a test application on the object to be coated.

**Application temperature**

Do not apply below +10 °C (substrate and material temperature). Note dew point temperature. Make sure the temperature is at least 3 °C above the dew point. The relative atmospheric moisture must not exceed 80 %.

**Tool cleaning**

Clean immediately after use using Epoxy Thinner 854.

**Drying (+20 °C, 65 % relative humidity)**

Accessible and recoatable after approx. 8 hours. In order to obtain proper adhesion of the next layer without having to rub down the surface, the next coat must be applied within 48 hours. Fully cured and resistant after approx. 7 days. Allow longer drying times at lower temperatures and/or higher air humidity. Ensure proper ventilation during drying and curing.

**Storage**

Store in a cool and dry location. Reseal opened containers tightly.

**Declaration**

**Water pollution classification**  
Class 2, according to VwVwS.

**Product code**  
RE2.5.

The data in the current Safety Data Sheet applies.

## Floortec Epoxy Hardener 846

**Properties**

Special epoxy hardener. In container adapted to mixing ratio with floor coats Floortec 2C Floor Sealer 853 and Floortec 2-Component Epoxy Impregnating Agent 858.

**Field of Application**

Only to be used for mixing with Floortec 2C Floor Sealer 853 in the corresponding mixing ratio.

**Material description**

**Standard color:** colorless  
**Material basis:** epoxy resin, solvent-containing  
**Flash point:** +27 °C  
**Density:** approx. 0.94 g/cm<sup>3</sup>  
**Packaging:**  
2 kg for 6 kg Floortec 2C Floor Sealer 853

**Use**

Mix Floortec Epoxy Hardener 846 with Floortec 2C Floor Sealer 853 in the required mixing ratio. Comply with the further specifications relating to the base materials.

**Storage**

Store in a cool and dry location. Reseal opened containers tightly.

**Declaration**

**Water pollution classification**  
Class 2, according to VwVwS.

**Product code**  
RE2.5.

The data in the current Safety Data Sheet applies.

**Resistance list at +20 °C**

		1 hour	1 day	7 days
petrol		+	+	+
Glycerol	$\text{C}_3\text{H}_5(\text{OH})_3$	+	+	+
Ethanol	$\text{C}_2\text{H}_5\text{OH}$	+	+	+
Heating fuel EL + NaCl solution		+	+	+
Citric acid, saturated	$\text{C}_6\text{H}_7\text{O}_7$	+	+	+
Sulphuric acid (5%)	$\text{H}_2\text{SO}_4$	+	+	+
Sulphuric acid (10%)	$\text{H}_2\text{SO}_4$	+	+	+
hydrochloric acid (10 %)	HCl	+	+	+
hydrochloric acid (30 %)	HCl	(+)	(+)	(+)
Oleic acid	$\text{C}_{18}\text{H}_{34}\text{O}_2$	+	+	+
Lactic acid (5%)	$\text{C}_3\text{H}_6\text{O}_3$	+	+	+
Lactic acid (10%)	$\text{C}_3\text{H}_6\text{O}_3$	+	+	+
Nitric acid (5%)	$\text{HNO}_3$	+	+	+
Nitric acid (10%)	$\text{HNO}_3$	+	+	+
Sodium chloride (13%)	NaCl	+	+	+
Ammonia (10 %)	$\text{NH}_3$	(+)	(+)	(+)
Sodium hydroxide solution (10 %)	NaOH	+	+	+
Salt solution, saturated	NaCl	+	+	+
Distilled water		+	+	+
Detergent, biological		+	+	+
Urine		+	+	+
Hydrogen peroxide (3%)	$\text{H}_2\text{O}_2$	+	+	+
Ferric chloride, saturated	$\text{FeCl}_3$	(+)	(+)	(+)

**legend**

+ = resistant to common stress floors are exposed to.

(+) = limited resistance, possibly surface changes, e.g. color, gloss, or conglutination.

## Coating build-up

### Substrate preparation

The substrate must be solid, dry, clean, with good adhesiveness, load-bearing, dimensionally stable and free of separating agents or other intermediate layers affecting adhesion. The substrate must generally comply with the relevant technical construction standards. Depending on the degree of exposure, one of the following minimum substrate strengths is required. A strength category of at least CT 30, C 20/25 or CA 30 for minor stress, e.g., that result from a simple walking load or little traffic consisting of light vehicles with soft tires. A strength category of at least CT 40, C 30/37 or

CA 40 for medium stress, e.g. moderate walking load and passenger car traffic. A strength category of at least CT 50, C 35/45 or CA 50 for increased stress, e.g., due to forklift traffic. The substrate must be protected against rising damp, and all necessary horizontal barriers must be integrated. The residual substrate moisture of concrete and cement screed must not exceed 4 CM-%. Smooth surfaces, e.g., surfaces smoothed with a steel trowel, must be roughened to improve their adhesion. Any dirt, e.g. oils, fats, rubber abrasions, etc., and non-bearing layers, e.g., 1C and non-bearing 2C coatings must be removed by means of an appropriate

object-related procedure, e.g., paint stripping, milling, dust-free shot blasting. Intact, rigid, firmly adherent 2C coatings must be cleaned and sanded slightly or matt blasted. Fill smaller cavities and damaged areas in mineral substrate flush with the surface with a mixture of Floortec 2C Floor Sealer 853 and Floortec Quartz Sand 1526 that is suitable for filling. Fill larger damaged areas (depth > 5 mm) flush with the surface with the repair mortars of the Brillux concrete protection system. Degrease, derust and descale metal surfaces. See also VOB Part C, DIN 18 363, Section 3.

## System build-up Floortec 2C Floor Sealer 853

Standard design

Substrates	Prime coat	Intermediate coat	Top coat <sup>1)</sup>
untreated, normally absorbing floor surfaces, interior, e.g. concrete and screed floors	Floortec 2C Floor Sealer 853, thinned up to 15 %	Floortec 2C Floor Sealer 853	Floortec 2C Floor Sealer 853
untreated, highly absorptive interior floor surfaces	Floortec 2C Aqua Base 809		
intact, rigid interior two-component coats	if required, bare areas with Floortec 2C Floor Sealer 853, thinned up to 15 %		
stripped interior floor surfaces	2C Epoxy Primer 855		
untreated interior metal surfaces, e.g. iron, steel and galvanized steel			

<sup>1)</sup> For alternative surface design, Floortec Dekochips 843 can be added to the fresh top coat. Seal these areas additionally using Floortec 2C PUR Matt Sealer 844 or Floortec 2C PUR Gloss Sealer 845. For use with Dekochips, observe the specifications under Notes.

**System build-up Floortec 2-Component Epoxy Sealer 853, a slip-resistant surface**

Slip-resistant coating by addition of quartz sand in intermediate coat

Substrates	Prime coat	Intermediate coat	Top coat
untreated, normally absorbing floor surfaces, interior, e.g. concrete and screed floors	Floortec 2C Floor Sealer 853, thinned up to 15 %	Floortec 2C Floor Sealer 853, filled with 10 % Floortec Quartz sand 1526 (0.1–0.4mm)	Floortec 2C Floor Sealer 853
untreated, highly absorptive interior floor surfaces	Floortec 2C Aqua Base 809		
intact, rigid interior two-component coats	if required, bare areas with Floortec 2C Floor Sealer 853, thinned up to 15 %		
stripped interior floor surfaces	2C Epoxy Primer 855		
untreated interior metal surfaces, e.g. iron, steel and galvanized steel			

**Note**
**Contiguous surfaces**

Only coat contiguous surfaces with material from the same batch.

**Thin-layer application**

Apply the top coat uniformly and in layers that are thin as possible to achieve a surface that has a uniform color shade and degree of gloss.

**Dew point temperature**

If the dew point temperature limit is disregarded (especially during the hot summer months), patches of varied gloss may occur as a result of inadequate de-aerating and ventilation.

**Detrimental changes in appearance**

Constituents from organic substances (e.g. tea, coffee, red wine, plant parts, leaves, etc.) and chemicals such as disinfectants and acids may result in changes in the coating's color. Abrasive stress may result in scratches on the surface. The functionality is not affected by these changes in appearance.

**Slip-resistant configuration**

Slip-resistant coatings increase safety, but are easily soiled due to the increased roughness and are not as easy to clean as smooth surfaces.

**Remove existing floor coatings**

Stripping the paint of reversible, non-intact coatings alone is not always adequate when preparing a substrate and must be assessed for ecological reasons. Two-component (2C) coatings cannot be stripped. Almost all mechanical methods to remove non-intact coatings change the surface such that additional compensatory measures are required. If the strength of the substrate is sufficient, we recommend using thick-layered 2C floor coatings.

**Design with Decochips**

The field of application of this floor coating will not be extended by additionally applying Floortec Decochips 843 and Floortec 2C PUR Matt Sealer 844 or 2C PUR Gloss Sealer 845. Surfaces treated with Decochips and transparent sealer have the properties of the respective transparent sealer. In principle, they are not suitable for vehicular traffic and are only appropriate for areas with medium stress (simple walking load).


**Use and surface stress**

Sealers and coatings on floor areas are subject to use-related wear. The individual usage period depends primarily on the film thickness and the intensity of the surface stress. Abrasive stresses (e.g. from hard chair castors, sand, grit, metal shavings, etc.) can cause light-colored and even whitish scratches and score marks, and are detrimental to the appearance. The intensity and visibility of these marks depends on the chosen color shade. The technical functionality of the floor surfaces is not impaired by this.

**Further information**

Also comply with the information given in the data sheets of the other products used, the accident prevention regulations issued by the competent Berufsgenossenschaft (German Social Insurance Against Occupational Accidents) as well as the permissible MAK values.

## CE marking

	
<hr/> Brillux GmbH & Co. KG Weseler Straße 401 D-48163 Münster 11	
<hr/> 0853-13813-01 EN 13813:2002	
<hr/> Synthetic resin screed/coating for use in interiors  EN 13813: SR-B2,0-AR1-IR4	
Reaction to fire	E <sub>fl</sub>
Release of corrosive substances	SR
Wear resistance	AR1
Adhesive pull strength	B2,0
Impact strength	IR4

## Remark

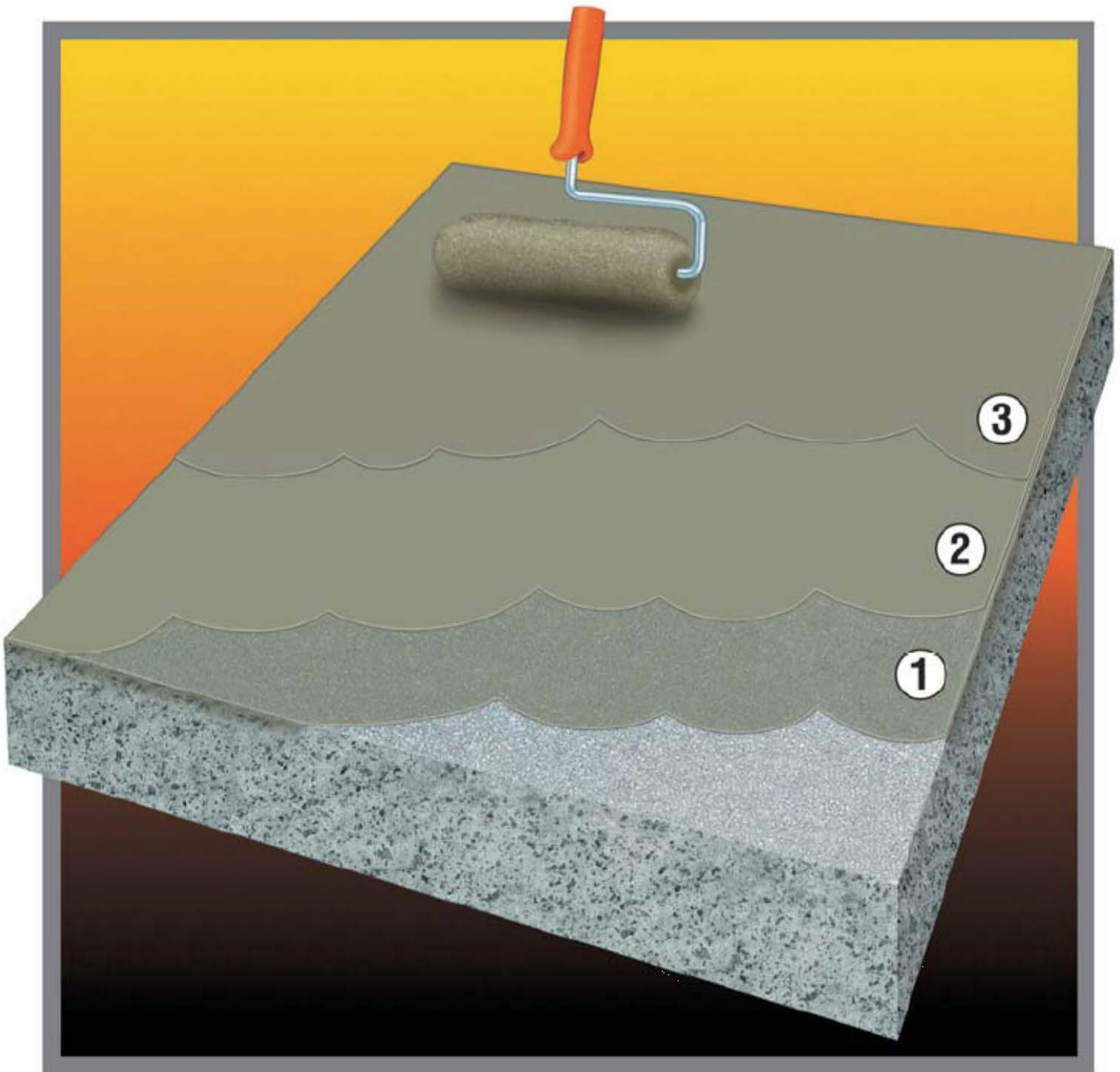
This Data Sheet was prepared taking into account the German laws, Standards, specifications and Codes of practice. All details were translated on the basis of the current German version. The contents do not form part of a legal contract. The user/purchaser is not released from the responsibility of checking that our products are suitable for the proposed use. In addition our general business conditions apply.

When a new version of this Data Sheet appears with updated information the previous version loses its validity.

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**Figure 1**  
Standard build-up on intact, normally absorbent substrates

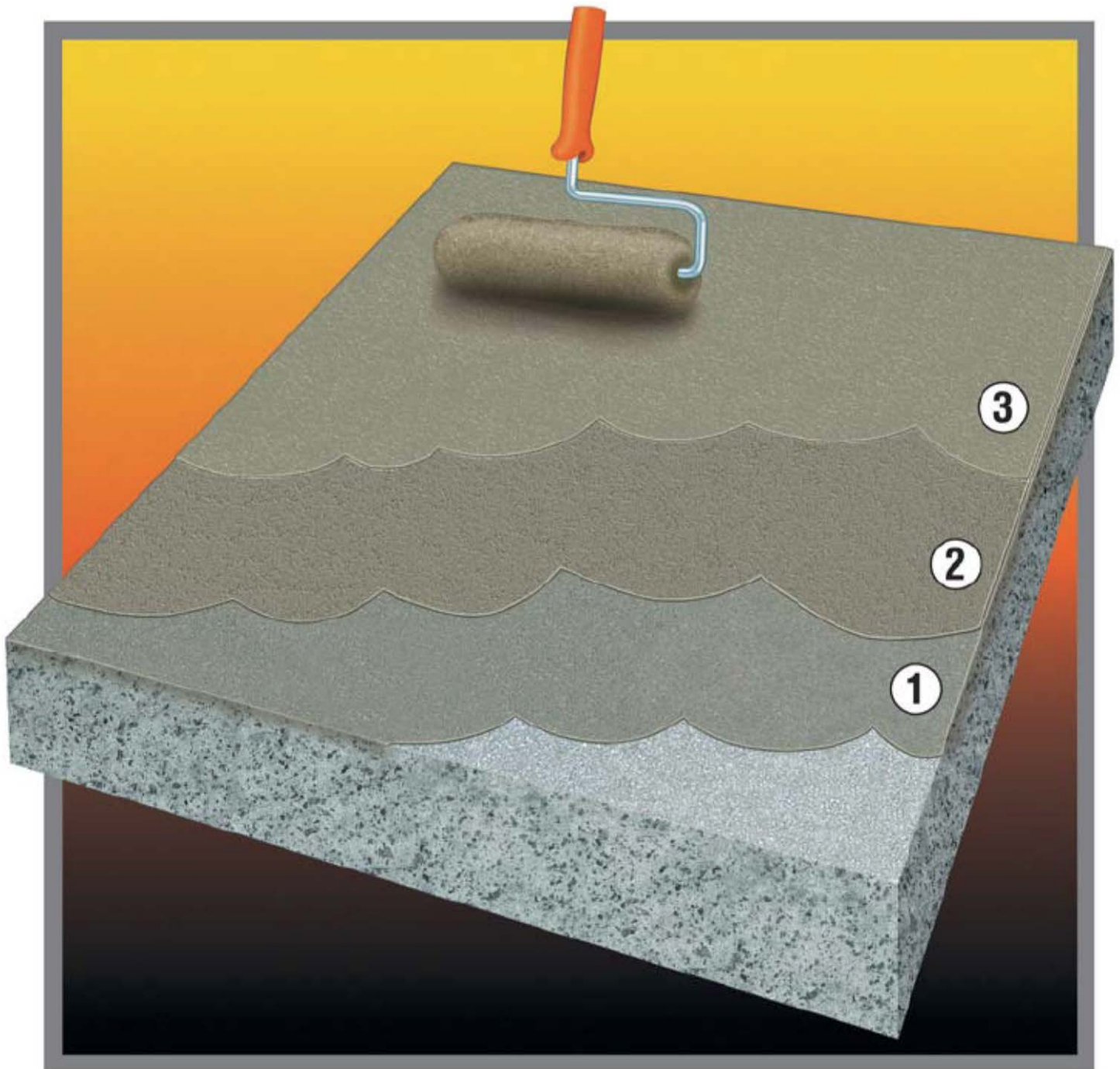


- 1 Prime coat**  
Floortec 2C Floor Sealer 853, thinned with Epoxy Thinner 854 up to approx. 15 %
- 2 Intermediate coat**  
Floortec 2C Floor Sealer 853, unthinned
- 3 Top coat**  
Floortec 2C Floor Sealer 853, unthinned



**Figure 2**

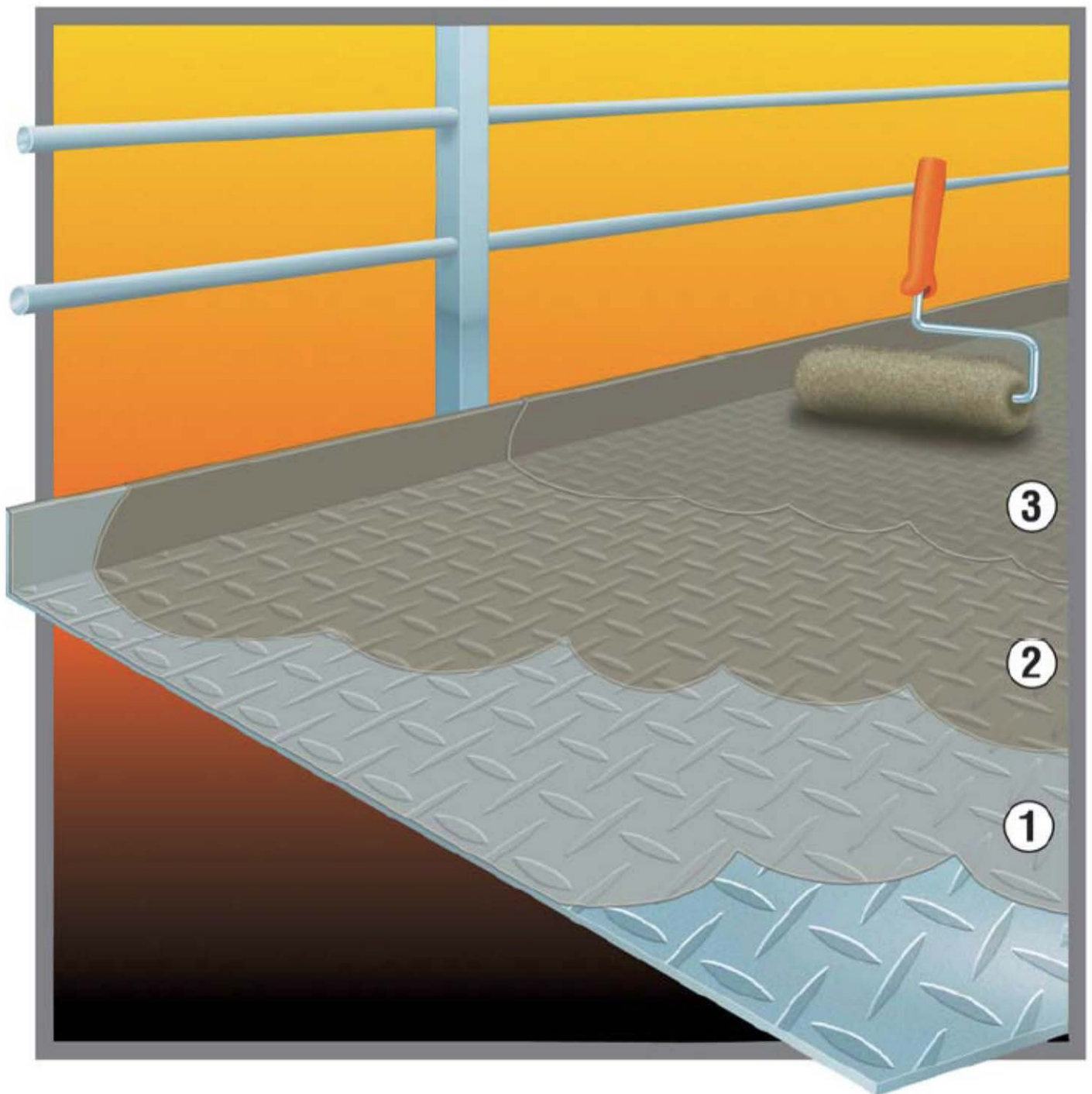
Slip-resistant coating on intact, normally absorbent substrates



- 1 Prime coat**  
Floortec 2C Floor Sealer 853, thinned with Epoxy Thinner 854, approx. 15 %
- 2 Intermediate coat**  
Floortec 2C Floor Sealer 853, filled with 10 % Quartz Sand 1526
- 3 Top coat**  
Floortec 2C Floor Sealer 853, unthinned

**Figure 3**

Build-up on untreated metal surfaces (e.g. walk-on plates)



- 1 Prime coat**  
2C Epoxy Primer 855, unthinned
- 2 Intermediate coat**  
Floortec 2C Floor Sealer 853, unthinned
- 3 Top coat**  
Floortec 2C Floor Sealer 853, unthinned