CE

EN 13813	**08**	
EN 1504-2	**08**	**1119 - CPD - 1131**

Sikafloor®-14 Pronto

3-part self-smoothing screed and levelling mortar based on reactive acrylic resins

Construction

Product Description

Sikafloor®-14 Pronto is a three part, fast curing self-smoothing screed based on reactive acrylic resins for the Sikafloor®-Pronto Modular System and can also be used as a binder for levelling mortars.

Sikafloor®-14 Pronto consists of:

Part A: Sikafloor®-14 Pronto Resin
Part B: Sika®-Pronto Hardener
Part C: Sikafloor®-Pronto Filler

Sika®-Pronto Pigment is used to colour Sikafloor®-14 Pronto if required.

Uses

- Fast curing mechanically and chemically resistant coatings with layer thickness of 2 to 4 mm
- Particularly suitable for the beverage and food industry
- Fast decking system in multi-storey and underground car-parks
- Skid resistant and multi-coloured surfaces can be obtained by broadcasting with coloured quartz sand or coloured chips

Characteristics / Advantages

- Very fast curing, even at low temperatures
- Good mechanical and chemical resistance
- Good UV resistance
- Solvent-free
- Part of a complete modular system

Product Data

Form

Appearance / Colours

Part A: Sikafloor®-14 Pronto: transparent, bluish liquid
Part B: Sika®-Pronto Hardener: white, powder
Part C: Sikafloor®-Pronto Filler: white, fine aggregates

Sika®-Pronto Pigment:
~ RAL 7032 other colours upon request.

Packaging

Part A: Sikafloor®-14 Pronto: 25 kg, 200 kg
Part B: Sika®-Pronto Hardener: 0.96 kg bags
Part C: Sikafloor®-Pronto Filler: 25 kg
Sika®-Pronto Pigment: 5 kg (10 x 0.5 kg bags)

Storage

Storage Conditions / Shelf Life

From date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C.

Part A: Sikafloor®-14 Pronto:	12 months
Part B: Sika®-Pronto Hardener:	6 months
Part C: Sikafloor®-Pronto Filler	for an unlimited period
Sika®-Pronto Pigment	2 years

Sikafloor® -Pronto Hardener must be protected from heat, direct sunlight, moisture and impact.

Technical Data

Chemical Base	Reactive acrylic resins	
Density	~ 0.99 kg/l (at +23°C)	(DIN 51 757)
Solid Content	~ 100% (by volume) / ~ 100% (by weight)	

Mechanical / Physical Properties

Compressive Strength	Resin filled: ~ 40 N/mm^2 (14 days / +23°C)	(DIN 1164)
Flexural Strength	Resin filled: ~ 25 N/mm^2 (14 days / +23°C)	(DIN 1164)
Shore D Hardness	Resin: ~ 62	(DIN 53 505)

Resistance

Chemical Resistance

Resistant to many chemicals. Please ask for a detailed chemical resistance table.

Thermal Resistance

Exposure*	Dry heat
Permanent	+50°C
Short-term max. 2d	+60°C
Short-term max. 1h	+80°C

Short-term moist/wet heat* up to +80°C where exposure is only occasional (steam cleaning etc.)

* No simultaneous chemical and mechanical exposure and only in combination with Sikafloor®-13 / -16 Pronto as a broadcast system with approx. 3 - 4 mm thickness.

System Information

System Structure

Scratch coat / levelling mortar (surface roughness up to 3 mm):
Primer: 1 x Sikafloor®-10 / -13 Pronto
Scratch coat: 1 x Sikafloor®-14 Pronto + quartz sand (0.1 - 0.3 mm) + Extender T

Broadcast system approx. 2 - 4 mm for dry interior areas:
Primer: 1 x Sikafloor®-10 / -13 Pronto
Base coat: 1 x Sikafloor®-14 Pronto
Broadcasting: quartz sand (0.4 - 0.7 mm or 0.7 - 1.2 mm), coloured quartz sand (0.3 - 0.8 mm or 0.6 - 1.2 mm) or coloured chips, broadcast to excess
Seal coat: 1 - 2 x Sikafloor®-16 Pronto

Broadcast system approx. 3 - 4 mm for wet areas, flexible:
Primer: 1 x Sikafloor®-10 / -13 Pronto
Membrane: 1 x Sikafloor®-15 Pronto
Base coat: 1 x Sikafloor®-14 Pronto
Broadcasting: quartz sand (0.7 - 1.2 mm) or coloured quartz sand (0.6 - 1.2 mm), broadcast to excess
Seal coat: 1 - 2 x Sikafloor®-17 Pronto

Broadcast system approx. 2 - 4 mm for interior and exterior areas:
Primer: 1 x Sikafloor®-10 / -13 Pronto
Base coat: 1 x Sikafloor®-14 Pronto
Broadcasting: quartz sand (0.7 - 1.2 mm) or coloured quartz sand (0.6 - 1.2 mm), broadcast to excess
Seal coat: 1 – 2 x Sikafloor®-18 Pronto

Broadcast system approx. 3 - 4 mm for interior and exterior areas, flexible:
Primer: 1 x Sikafloor®-10 / -13 Pronto
Membrane: 1 x Sikafloor®-15 Pronto
Base coat: 1 x Sikafloor®-14 Pronto
Broadcasting: quartz sand (0.7 - 1.2 mm) or coloured quartz sand (0.6 - 1.2 mm), broadcast to excess
Seal coat: 1 - 2 x Sikafloor®-18 Pronto

Application Details

Consumption

Coating System	Product	Consumption
Primer	Sikafloor® -13 Pronto	0.4 - 0.5 kg/m²
Levelling Mortar (surface roughness max 3 mm)	Sikafloor®-14 Pronto without Filler (1 pbw) quartz sand 0.1 - 0.3 mm (1.5 - 2.0 pbw) Extender T (0.01 - 0.02 pbw)	~ 1.5 kg/m²/mm (0.5 kg part A + 1 kg quartz sand + 0.01 kg Extender T)
Broadcast base coat using quartz sand or coloured quartz sand (film thickness ~ 3 - 4 mm)	Sikafloor®-14 Pronto inclusive Filler, Hardener and (optional) Pigment (refer to mixing table) broadcast with quartz sand or coloured quartz sand	1.5 - 4.0 kg/m² ~ 6.0 kg/m²
Broadcast base coat using coloured chips (film thickness ~ 3 - 4 mm)	Sikafloor®-14 Pronto inclusive Filler, Hardener and (optional) Pigment (refer to mixing table) broadcast with colour chips	5.0 kg/m² ~ 0.5 kg/m²
Seal coat (dry areas)	Sikafloor®-16 Pronto (incl. Pigment if required)	0.6 - 0.8 kg/m² in 1 to 2 coats
Coating (dry and exterior areas)	Sikafloor®-14 Pronto Sikafloor®-16 Pronto (incl. Pigment if required)	~ 0.6 - 0.8 kg/m² ~ 0.3 - 0.4 kg/m²
Seal coat (exterior areas)	Sikafloor®-18 Pronto	~ 0.5 - 0.8 kg/m² In 1 – 2 coats

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Substrate Quality

The cementitious substrate must be sound and of sufficient compressive strength (min. 25 N/mm²) with a minimum pull-off strength 1.5 N/mm².

The substrate must be clean dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

If in doubt apply a test area first.

The Sikafloor®-Pronto System is not suitable to be applied on any kind of asphalt!

Substrate Preparation

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Application Conditions / Limitations

Substrate Temperature	0 °C min. / +30 °C max.
Ambient Temperature	0 °C min. / +30 °C max.
Substrate Moisture Content	≤ 4% pbw moisture content. Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-Sheet).
Relative Air Humidity	~ 80% r.h. max.
Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish.

Application Instructions

Mixing

Self-smoothing screed and levelling mortar:

Part A : Part C : Pigment = 12.5 : 25 : 1 (by weight)

The amount of Hardener required is dependent on the ambient- and substrate temperature (see table below).

Sikafloor®-14 Pronto 12.5 kg	Sika®-Pronto Hardener				Sikafloor®-Pronto Filler	Sika®-Pronto Pigment
	0 °C	+10 °C	+20 °C	+30 °C		
Sika®-Pronto Hardener (%pbw)	750 g (6.0%)	500 g (4.0%)	375 g (3.0%)	250 g (2.0%)	25 kg	1 kg

Seal coat (underneath Sikafloor®-16 Pronto):

Part A : Pigment = 9 : 1 (by weight)

The amount of Hardener required is dependent on the ambient- and substrate temperature (see table below).

Sikafloor®-14 Pronto	Sika®-Pronto Hardener			
	0 °C	+10 °C	+20 °C	+30 °C
Sika®-Pronto Hardener	6.0%	4.0%	3.0%	2.0%

Mixing Time

Mix part A thoroughly, then add the Sikafloor®-Pronto Filler, and (if required) the Sika®-Pronto Pigment and mix for at least 1 minute. When the different components are adequately mixed, add the Hardener in the correct quantity and mix for a further 1 minute.

Over mixing must be avoided to minimise air entrainment.

For ease of handling, 25 kg units may be split (2 x 12.5 kg) (refer to Mixing table). Always weigh out components.

Mixing Tools

For indoor work, spark free mixing equipment must be used (explosion-proof)!

Sikafloor®-14 Pronto must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

Application Method / Tools

Prior to application, confirm substrate moisture content, r.h. and dew point.

Levelling:
Rough surfaces need to be levelled first. Therefore use e.g. Sikafloor®-14 Pronto as a levelling mortar (see PDS). Apply by squeegee / trowel to the required thickness.

Stripe Coating
After priming the concrete with Sikafloor Pronto 13 and before the application of the Sikafloor Pronto decking system, apply a 200 mm wide 'stripe coat' of Sikafloor 15 Pronto to be used as a reinforcement embedment layer. Whilst the embedment layer is wet, apply a strip of 300g fleece, working well into the Sikafloor 15 Pronto. Apply a further saturation layer of Sikafloor 15 to fully encapsulate the fleece. Minimum consumption of Sikafloor 15 Pronto 1kg/m2

Broadcast base coat:
Sikafloor®-14 Pronto is poured, spread evenly by means of a serrated trowel. Roll immediately in one direction with a spiked roller to ensure even thickness and to remove entrapped air. Immediately afterwards, broadcast with quartz sand.

Note: broadcast quartz sand in ca. three steps, which means the first couple of times broadcast slightly, then to excess in order to ensure an even distribution of quartz sand and to avoid misplacing of the material.

A multi coloured surface can be obtained by broadcasting with coloured-chips or coloured-quartz. (The compatibility of the coloured-chips to PMMA-systems must be checked prior to application).

The material cures very quickly and therefore application must be carried out steadily and "wet on wet" in order to achieve joint free floors.

Cleaning of Tools

Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

Potlife

	0°C	+10°C	+20°C	+30°C
Time (minutes)	~ 20	~ 20	~ 15	~ 10

Waiting Time / Overcoating

Before applying Sikafloor®-14 Pronto on Sikafloor®-13 Pronto allow:

Substrate temperature	0°C	+10°C	+20°C	+30°C
Minimum(minutes)	50	45	40	35
Maximum (minutes)	*	*	*	*

Before applying Sikafloor®-14 Pronto / -16 Pronto on Sikafloor®-14 Pronto allow:

Substrate temperature	0°C	+10°C	+20°C	+30°C
Minimum(minutes)	80	60	45	35
Maximum (minutes)	*	*	*	*

*No time limit, the Sikafloor®-Pronto materials can be applied on each other after thorough clear

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Notes on Application / Limitations

Do not use Sikafloor®-14 Pronto on substrates with rising moisture.

In case of broadcast systems with a finer quartz sand, e.g. 0.4 - 0.7 mm, curing defects may occur which may require additional hardener. A trial area is mandatory.

Freshly applied Sikafloor®-14 Pronto must be protected from damp, condensation and water for at least 1 hour.

Avoid puddles on the surface with the primer.

Use spark proof mixing equipment for internal applications.

Always ensure good ventilation when using Sikafloor®-14 Pronto in a confined space.

In order to ensure optimum curing during internal applications the air must be exchanged at least seven times per hour. During application and curing use a forced fresh air supply/exhausting of fumes with appropriate equipment (explosion-proof).

Systems based on reactive acrylic resins exhibit a characteristic odour during application and prior to achieving full cure, once fully cured they are taint free. All unpackaged goods should be removed from the area of the works during application. Do not apply in the presence of foodstuffs. Any foodstuffs, whether packaged or not, should be completely isolated from the flooring works during the application process and until the products are fully cured.

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading, may lead to imprints in the resin.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

Curing Details

Applied Product ready for use

	0°C	+10°C	+20°C	+30°C
Foot traffic (minutes)	~ 80	~ 60	~ 45	~ 35
Full cure (hours)	~ 3	~ 3	~ 2	~ 2

Times are approximate and will be affected by changing ambient conditions.

Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

Legal Notes

CE Labelling

The harmonized European Standard EN 13 813 „Screed material and floor screeds - Screed materials - Properties and requirements“ specifies requirements for screed materials for use in floor construction internally.

Structural screeds or coatings, i.e. those that contribute to the load bearing capacity of the structure, are excluded from this standard.

Resin floor systems as well as cementitious screeds fall under this specification. They have to be CE-labelled as per Annex ZA. 3, Table ZA.1.5 and 3.3 and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

CE

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08 [1)]

EN 13813 SR-B1,5-AR1-IR 4

Resin screed/coating for indoors in buildings
(systems as per Product Data Sheet)

Reaction to fire:	E_{fl} [2)]
Release of corrosive substances (**S**ynthetic **R**esin Screed):	SR
Water permeability:	NPD [3)]
Abrasion **R**esistance:	AR 1
Bond strength:	B 1,5
Impact **R**esistance:	IR 4
Sound insulation:	NPD
Sound absorption:	NPD
Thermal resistance:	NPD
Chemical resistance:	NPD

[1)] Last two digits of the year in which the marking was affixed.

[2)] In Germany, DIN 4102 still applies. Passed class B2.

[3)] No performance determined.

Construction

CE Labelling

The harmonized European Standard EN 1504-2 „Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2 : Surface protection systems for concrete" gives specifications for products and systems used as methods for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE-labelled as per Annex ZA. 1, Tables ZA.1a to ZA 1g according to the scope and relevant clauses there indicated, and fulfil the requirements of the given mandate of the Construction Products Directive (89/106):

Here below indicated are the minimum performance requirements set by the standard. For the specific performance results of the product to the particular tests, please see the actual values above in the PDS.

CE	
1119	
Sika Deutschland GmbH Kornwestheimerstraße 103-107 D - 70439 Stuttgart Germany	
08 [1)]	
1119–CPD–1131	
EN 1504-2	
Surface Protection Product Coating [2)]	
Abrasion resistance (Taber test):	< 3000 mg
Permeability to CO_2:	S_D > 50 m
Permeability to water vapour:	Class III
Capillary absorption and permeability to water:	$w < 0.1$ kg/m^2 x h^{0,5}
Resistance to severe chemical attack: [3)]	Class I
Impact resistance:	Class I
Adhesion strength by pull-off test:	≥ 2.0 N/mm²
Fire Classification: [4)]	E_{fl}

[1)] Last two digits of the year in which the marking was affixed.

[2)] Tested as a part of a system build-up with Sikafloor®-13 Pronto and Sikafloor®-16 Pronto.

[3)] Please refer to the Sikafloor® Chemical Resistance Chart.

[4)] Min. classification, please refer to the individual test certificate.

EU Regulation 2004/42

VOC - Decopaint Directive

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / **j** type **sb**) is 550 / 500 g/l (Limits 2007 / 2010) for the ready to use product.

The maximum content of **Sikafloor®-14 Pronto** is < 500 g/l VOC for the ready to use product.

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ISO 14001 ISO 9001