



# Sikafloor® 21 PurCem

## Medium Duty Self Smoothing Polyurethane Screed

### Technical Data Sheet

#### DESCRIPTION

**Sikafloor 21 PurCem** is a three component water based medium strength coloured polyurethane screed with self smoothing properties. For use in areas of medium loading, abrasion and chemical exposure.

#### USES

- \* Food process plants.
- \* Warehouses.
- \* Chemical plants.
- \* Pharmaceutical plants.
- \* Power plants.
- \* Storage areas.
- \* Plant rooms.
- \* Processing areas.
- \* Laboratories.
- \* Work shops.
- \* Cold stores.

#### ADVANTAGES

- \* Matt finish.
- \* Medium mechanical resistance.
- \* Medium abrasion resistance.
- \* Excellent chemical resistance.
- \* Easily maintained.
- \* Fast curing.
- \* Easy to apply.
- \* Durable.
- \* Jointless.

#### FLOOR COATING SYSTEM:

**Primer coat:** 1-2 x **Sikafloor 155W/156/157**  
(Allow to cure)

**Top coat:** 1 x **Sikafloor 21 PurCem**  
to required thickness

**Material consumption:** Approx 1.9 kg/m<sup>2</sup> per mm.

#### Technical Data (typical)

**Colour:** Refer to colour swatch and current price list for availability and minimum order quantities.

**Density (SG):** Approx 1.9 kg/litre

**Application temperatures:** +10°C min, +30°C max  
(Substrate and ambient)

**Substrate M.C:** ≤10% by Wt  
(with **Sikafloor 155W Primer**)  
≤4% by Wt  
(with **Sikafloor 156 Primer**)

**Application thickness:** 3 mm minimum  
6 mm maximum

#### MECHANICAL PROPERTIES:

**Compressive strength:** >50 N/mm<sup>2</sup>

**Heat resistance:** Continuous exposure  
120°C max  
Not suitable against thermal shock

**CHEMICAL RESISTANCE:** Refer to chart  
(Consult Sika Ltd for additional information)

**Additional application information:** @ +20°C

**Pot life:** 10 mins

**Final drying times:**  
Foot traffic: 8 hrs  
Lightly serviceable: 18 hours  
Fully serviceable: 4-5 days

**Note:** All above values are approximate.

## SURFACE PREPARATION

The cementitious substrate should be sound and of sufficient compressive strength. (Min 25 N/ mm<sup>2</sup>) . Minimum pull off strength 1.5 N/mm<sup>2</sup>.

The surfaces must be dry and free of all contaminants eg oils, grease, surface treatments and coatings etc. The substrate must be prepared mechanically to achieve an open textured fine gripping surface, free of cement laitance. Weak concrete should be removed and surface defects such as blowholes and voids must be fully exposed.

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

Repairs to cementitious substrate and filling of blowholes levelling of irregularities etc should be carried out using an appropriate product from the **SikaDur**<sup>®</sup>, **Sikafloor**<sup>®</sup> or **SikaGard**<sup>®</sup> range of materials.

## MIXING

Prior to mixing, stir component A (resin), add all of component B (Hardener) and mix both liquid components thoroughly with a low speed electric stirrer (300 - 400 rpm) for a minimum of 1 minute until a uniform mix has been achieved.

Gradually add component C (aggregate) to the mixed resin components in the mixer for a further 3 minutes minimum until a uniform moist mix is obtained.

## APPLICATION

Prior to application, confirm substrate moisture content. If >10% by wt. **Sikafloor**<sup>®</sup> **EpoCem**<sup>®</sup> may be applied as a D.P.M. system

Pour the mixed **Sikafloor 21 PurCem** onto the screed floor and work with a trowel or pin screed to the required levels, achieving a flat surface. Spike roller immediately (≤ 2 minutes).

## IMPORTANT CONSIDERATIONS

- \* Construction joints require pre treatment with a stripe coat. Contact **Sika Ltd** for further details.
- \* Do not apply **Sikafloor 21 PurCem** on substrates in which significant vapour pressure may occur.
- \* Both **Sikafloor 21 Purcem** and **Thinner C** are flammable. NO NAKED FLAMES.
- \* Always ensure good ventilation when using **Sikafloor 21 PurCem** in a confined space.
- \* Freshly applied **Sikafloor 21 PurCem** should be protected from damp, condensation and water for at least 24 hours.
- \* **Sikafloor 21 PurCem** shares the resin (A) and hardener (B) components with **Sikafloor 20 Purcem**. Ensure the correct pack sizes of aggregate are used.
- \* Steam cleaning may lead to delamination due to thermal shock.

## CLEANING EQUIPMENT

Use **Thinner C**. Hardened material may have to be mechanically removed.

## PACKAGING

Refer to latest price list

## CONSUMPTION

Approximately 1.9 kg/m<sup>2</sup>/mm. (These figures do not allow for surface porosity, profile or wastage). The practical minimum which can be achieved is 6-6.5 kg/m<sup>2</sup>.

## STORAGE AND SHELF LIFE

Minimum 6 months in sealed containers stored in dry warehouse conditions (+10°C - +30°C).

### Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

### Important Note

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

SIKA LIMITED

Watchmead, Welwyn Garden City, Hertfordshire, AL7 1BQ

Tel: 01707 394444 Email: sika@uk.sika.com

Fax: 01707 329129 www.sika.com

