BUILDING TRUST

PRODUCT DATA SHEET

# Sika® Ucrete® HF 100 RT

Hygienic, slip-resistant, flow-applied, heavy-duty polyurethane 9 mm floor screed

## DESCRIPTION

Sika® Ucrete® HF 100 RT is a 9 mm, flow-applied, lightly textured, heavy-duty resin floor. It is used for rapid installation applications such as large fast-track new-build and refurbishment projects.

## USES

Sika® Ucrete® HF 100 RT is used as a wearing layer screed for Sika® Ucrete® flooring systems.
Sika® Ucrete® HF 100 RT is used within wet and dry process areas including the following application areas:

- Food and beverage facilities
- Pharmaceutical facilities
- Chemical and processing facilities
- Manufacturing facilities and workshops

Please note:

- The Product may only be used by experienced professionals.

## FEATURES

- Expert installation by fully trained and licensed applicators
- Resistant to bacterial or mould growth
- Suitable for application on to 7-day-old concrete and 3-day-old polymer screed
- Fast installation
- Very good resistance to a wide range of chemicals
- Very good mechanical resistance
- Impermeable to liquids
- Non-tainting from the end of mixing
- Low VOC emissions
- Thermal expansion properties similar to concrete
- Tolerant to substrates with high moisture content

## CERTIFICATES AND TEST REPORTS

- Food and Beverage Facilities Suitability, Sika® Ucrete®, HACCP, Test Report No. I-PE-769-SA-2-RG-06b
- Halal Certification Europe (HCE), Sika® Ucrete®, WHFC, Certificate No. 21453-2/1/1/Y1
- Indoor Air Comfort Gold EN 16516, Sika® Ucrete®, eurofins, Certificate No. IACG-321-01-01-2023

## PRODUCT INFORMATION

| | | | |
|---|---|---|---|
| **Composition** | Water-based polyurethane cement hybrid | | |
| **Packaging** | Refer to the current price list for available packaging variations. | | |
| **Colour** | Cured Colour : Red, Orange, Yellow, Bright Yellow, Cream, Grey, Light Grey, Green, Light Green, Green/ Brown, Blue. | | |
| **Shelf life** | Always refer to the best-before date of the individual packaging. | | |
| **Storage conditions** | The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to the packaging. Refer to the current Safety Data Sheet for information on safe handling and storage. | | |
| **Density** | Mixed Product | ~1.97 kg/l | (EN ISO 2811-1) |

## TECHNICAL INFORMATION

| | | | |
|---|---|---|---|
| **Compressive strength** | Cured 28 days at +23 °C | 54 N/mm² | (EN 13892-2) |
| **Modulus of elasticity in compression** | 3000 MPa | | (BS 6319-6) |
| **Flexural-strength** | Cured 28 days at +23 °C | 14 N/mm² | (EN 13892-2) |
| **Tensile strength** | Cured for 28 days at +20 °C | 6 MPa | (BS 6319-7) |
| **Tensile adhesion strength** | > 2.0 N/mm² (concrete failure) | | (EN 1542) |
| **Coefficient of thermal expansion** | $4.1 \times 10^{-5}$ °C$^{-1}$ | | (ASTM C531) |
| **Reaction to fire** | Class $B_{fl}$-s1 | | (EN 13501-1) |
| **Chemical resistance** | Laboratory-defined resistance to many individual chemicals. Before proceeding, contact Sika Technical Service for specific information. | | |
| **Skid / slip resistance** | PTV, slider 96 | 40–45 wet conditions | (EN 13036-4) |
| | Flow application | R10 | (DIN 51130) |
| | Trowel application | R11 | |
| **Service temperature** | Maximum | +120 °C | |
| | Minimum | -40 °C | |

## APPLICATION INFORMATION

**Consumption**

| Layer | Product | Consumption |
|---|---|---|
| Option 1: Primer slurry | Sika® Ucrete® PFS | 1.6 kg/m²/1mm |
| Option 2: Scratch Coat | Sika® Ucrete® MF | 2.0 kg/m²/1mm |
| Wearing layer | Sika® Ucrete® HF 100 RT | 16 - 17 kg/m² for 8 mm |

Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

| | | |
|---|---|---|
| **Layer thickness** | ~9 mm | |
| **Material temperature** | Maximum | +30 °C |
| | Minimum | +15 °C |
| **Ambient air temperature** | Maximum | +35 °C |
| | Minimum | +8 °C |
| **Substrate temperature** | Maximum | +30 °C |
| | Minimum | +8 °C |

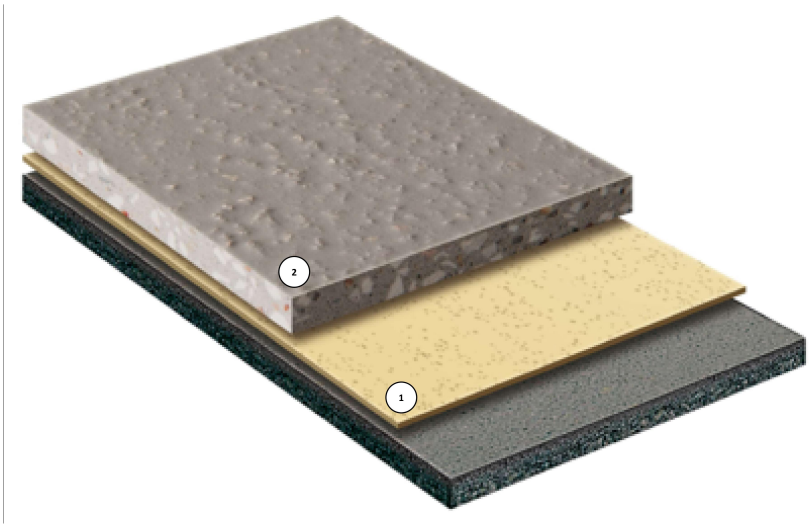
**Curing time**

| Substrate temperature | Return to traffic |
|---|---|
| +8 °C | 16–24 hours |

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

## SYSTEM INFORMATION

**System structure**




| | Layer | Product |
|---|---|---|
| 1. | Option 1: Primer slurry | Sika® Ucrete® PFS |
| | Option 2: Scratch coat | Sika® Ucrete® MF |
| 2. | Wearing layer | Sika® Ucrete® HF 100 RT |

| | | |
|---|---|---|
| **Dry film thickness** | Dry Film Thickness | ~ 9 mm |

## BASIS OF PRODUCT DATA

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

## FURTHER DOCUMENTATION

- Method Statement: Sika® Ucrete® HF 100 RT
- Substrate Quality & Preparation: Please refer to Sika Method Statement: “EVALUATION AND PREPARA TION OF SURFACES FOR FLOORING SYSTEMS”

## SPECIFICATION INFORMATION

Select the following specification clause as required:

- A 9 mm Sika® Ucrete® HF 100 RT floor is fully resist- ant to high temperature spillage and discharge up to +120 °C and is fully steam-cleanable. Suitable for freezer temperatures down to -40 °C.

## IMPORTANT CONSIDERATIONS

- Do not apply to PCC (polymer modified cement mor tars) that may expand due to moisture when sealed with an impervious resin.
- Always ensure good ventilation when using Sika® Ucrete® HF 100 RT in a confined space, to prevent ex cessive ambient humidity.
- Freshly applied Sika® Ucrete® HF 100 RT must be pro tected from damp, condensation and direct water contact for at least 24 hours.
- Protect the substrate during application from con densation from pipes or any overhead leaks.
- Do not apply to cracked or unsound substrates
- Products of the Sika® Ucrete® product range are sub- ject to discolouration when exposed to UV radiation. Extent depends on colour. There are no measurable losses of any properties when this occurs and it is a purely aesthetical matter.

## ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and con- tains physical, ecological, toxicological and other safety-related data.

# APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

**IMPORTANT**
**Reduced service life due to incorrect treatment of cracks**

- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- For static cracks, ensure the width is suitable for overcoating with Sika® Ucrete® HF 100 RT.
- For dynamic cracks, ensure the movement is within the movement capacity of Sika® Ucrete® HF 100 RT.

### TREATMENT OF JOINTS AND CRACKS

- Construction joints and existing static surface cracks in substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.
- The Product can be applied on green or damp concrete with no standing water. Allow for at least 3 days for early concrete shrinkage to occur to prevent shrinkage cracks from appearing on the wearing surface.
- Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 30 $N/mm^2$) with a minimum tensile strength of 1.5 $N/mm^2$.
- Substrates must be clean, dry and free of contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

### APPLICATION

Application must be undertaken by a fully trained and licensed Sika® Ucrete® applicator.

### CLEANING OF EQUIPMENT

Clean all tools and application equipment with e.g.Sikafloor THN 2 or other suitable thinner, immediately after use. Hardened / cured material can only be mechanic ally removed.

# LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

# LEGAL NOTES

The information, and, in particular, the recommenda tions relating to the application and end-use of Sika products, are given in good faith based on Sika's cur rent knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommenda tions. In practice, the differences in materials, sub strates and actual site conditions are such that no war ranty 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 recom mendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika re serves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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