# RINOL*CRETE PU-C570*

POLYURETHANE-CEMENT THIXOTROPIC MORTAR

## 1 General data

### Product description and application

RINOL***CRETE*** PU-C570 is a coloured, ready-to-use 4-component thixotropic mortar made of high-quality polyurethane resin and mineral aggregates for the production of skirting, coving and vertical applications in general up to 9mm thickness in single application.

The product shows very good chemical resistance to a wide range of detergents, disinfectants, acids, solvents, and other chemicals, as well as a high impact and abrasion resistance in combination with excellent hygienic properties. The obtained surface does not support bacterial or mould growth.

The unique formulation of RINOL***CRETE*** PU-C570 ensures exceptional durability even when the coating is exposed to frequent thermal shocks and high temperature up to 120°C. Suitable also for freezer temperatures down to -40°C.

## 2 Installation instructions

### Substrate preparation

RINOL***CRETE*** PU-C570 is normally applied immediately after the application of the primer RINOL***CRETE*** PU-P270, while the primer is still wet. The open time of the primer is approx. 1 hour at 20°C. Do not re-coat after this time. If the open time of the primer is exceeded, allow the primer to fully cure. Typically 12 hours at 20°C. Once fully cured, reprime and apply RINOL***CRETE*** PU-C570 as normal. If the time between coats exceeds 48 hours, or if condensation or water impacts the surface, fully abrade the surface before the following primer application.

Make sure that no silicone-containing or other reaction-disturbing substances come into contact with RINOL***CRETE*** PU-C570 before and during the curing phase.

### Processing

Before application, the material must be acclimatised at least to ambient temperature (room and floor temperature). The ideal temperature lies in the range 16-22°C; this is also the preferred temperature range for mixing, laying and curing. The product is supplied in pre-dosed multi-component packaging. Only complete containers may be mixed.

Shake the resin RINOL***CRETE*** Comp. A 1,1Kg pack and pour it completely into a clean container. Add the liquid pigment RINOL***CRETE*** Comp. D and mix briefly with an electric stirrer (worm shaft). Add the hardener RINOL***CRETE*** Comp. B 1,1Kg pack and mix again for approx 30 seconds. After gradual addition of the filler RINOL***CRETE*** PU-C570 Comp. C, homogenise again for at least 2 minutes at 1500-2000 rpm. Make sure that the filler is properly wet with the liquid components and the mixture is homogeneous. Avoid air formation during stirring.

RINOL***CRETE*** PU-C570 is applied with a coving trowel or smooth metal trowel on the surface, previously primed with RINOL***CRETE*** PU-P270.

Once hardened and within 24 hours at 20°C, the mortar surface can be optionally topcoated with RINOL***CRETE*** PU-C565, according to the product data sheet, in order to improve cleanability and final appearance.

| Product information | | |
|---|---|---|
| 1 | **Packaging size**<br>Component A (Resin)<br>Component B (Hardener)<br>Component C (Filler)<br>Component D (Pigment) | **12,5 Kg**<br>1,1 Kg<br>1,1 Kg<br>10 Kg<br>0,3 Kg |
| 2 | Colours | See RINOL***CRETE*** brochure |
| 3 | Shelf life / Storage | 9 months at 5 - 30 °C, protect from freezing and direct sunlight, also during transport |

| Technical data | | |
|---|---|---|
| **liquid mixture (A+B+C+D)** | | |
| 1 | Density (20°C) | approx. 2,1 g/cm$^3$ |
| 2 | Processing time (20°C) | approx. 10 minutes |
| 3 | Processing / material<br>Room and ambient temperature | 12 - 25 °C (min. 3 °C above the dew point, also during installation and curing) |
| 4 | Material consumption (depends on the substrate, among other things) | approx. 2.100 g/m$^2$/mm layer thickness |
| 5 | Possible thickness (Vertical) | from 4 to 9 mm |
| 6 | Material consumption (Coves) | approx. 2100 g/cm$^3$ |
| 7 | Next coating (20°C) | within 12 - 24 hrs. |
| 8 | full resistance<br>mechanical (20°C)<br>chemical (20°C) | <br>after 7 days<br>after 28 days |
| 9 | Rel. Humidity | Between 40 - 80 % during the entire laying and curing phase |

| Technical data | | |
|---|---|---|
| **Cured material Mixture** | | |
| 1 | Adhesive strength<br>(DIN ISO 4624) | > 1,5 N/mm$^2$<br>(concrete failure) |
| 2 | Flexural strength<br>(DIN EN 196 / ASTM C 190) | 16 N/mm$^2$ |
| 3 | Compressive strength<br>(DIN EN 196 / ASTM C 109) | 52 N/mm$^2$ |



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| Technical data | | |
|---|---|---|
| **Cured material Mixture** | | |
| 4 | Tensile strength (ISO 527 / ASTM D638) | 7 N/mm$^2$ |
| 5 | Coefficient of thermal expansion (DIN EN 1770 / ASTM C531) | 4 x 10$^{-5}$ °C$^{-1}$ |
| 6 | Water absorption (CP.BM 2/67/2) | 0 ml |
| 7 | Temperature resistance | -40°C +120°C with a thickness of 9mm |

### Re-coating

If reworking within 24 hours following application, the coating surface must be carefully prepared by vacuum shot blasting or diamond grinding. On fully broadcasted surfaces, surface preparation is not necessary. Before application, excess of broadcasted aggregates must be removed completely.

### Health and safety measures

For information on handling the product, please refer to the latest and valid material safety data sheet and the chemical industry guidelines on handling coating materials (M004/M023). Wear suitable protective clothing and goggles during application. Clean tools immediately after finishing work with RINOL DE-X10.
Skin contact with liquid resins can lead to health impairments and allergies. Once properly cured, the product is physiologically nonhazardous.

### Maintenance

To preserve the properties of the floor covering in the long term, we recommend regular care.
Please ask for our RINOL***CRETE*** maintenance instructions.

The floor can be cleaned with most of the detergents and disinfectant solutions normally used in food industry, using mechanical cleaning machines, high-pressure water cleaners and gentle steam jet cleaners.

### Note

The characteristic data are approximate values determined by us, which do not have the meaning of property assurances. No liability claims can therefore be derived from the product data sheet.

For possible layer build-ups and more detailed information on the installation of RINOL***CRETE*** products, please refer to the RINOL***CRETE*** Technical guide or contact our technical team.

Only the latest version of the technical data sheet is valid and replaces all older data sheets.

### Important note

In addition to the ambient temperature, the substrate temperature is of decisive importance. Chemical reactions are generally delayed at low temperatures. At low temperatures, material working time and complete curing time of the coating is prolonged. Low temperatures increase material viscosity and therefore material consumption. At higher temperatures, chemical reactions are shortened, therefore material working time, recoating time and complete curing time of the coating are reduced.

The product has a surface structure that is usual for hand-laid coatings. Slight unevenness, color differences and visible trowel/roller marks cannot be avoided due to the raw material and processing. Surface appearance and color between the cove and the floor are not identical. UV exposure though not affecting the performance of the coating, will result in yellowing of the floor which is most apparent in light colours.

Protect the coating during application, curing and for the life of the floor from moisture on the reverse side and moisture under pressure.

The application examples are based on our best knowledge and experience. We always recommend testing on site before installation.

### Legal notice

Due to the different materials, substrates and deviating working conditions, no guarantee of a work result or liability for whatever reason and / or legal relationship can be assumed by RCR Flooring Products Italia S.r.l. or RCR Flooring Products GmbH. In all other respects, the respective latest general terms and conditions of RCR Flooring Products Italia S.r.l. or RCR Flooring Products GmbH shall apply, which can be requested from us or viewed and printed out at www.rinol.com up to date. We expressly reserve the right to make changes to the product specifications.

### CE - marking

DIN EN 13813 "Screed material and floor screeds - Screed materials - Properties and requirements" (Jan.2003) specifies requirements for screed mortars used for indoor floor constructions.
Synthetic resin coatings and sealers are also covered by this standard. Products that comply with the above standard must be CE marked.

CE

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EN 13813

1119-CPR-0833
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EN 1504-2



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| Synthetic resin screed/coating for interior use in buildings (structures according to technical data sheets) | |
|---|---|
| Fire behaviour: | Bfl-s1 |
| Release of corrosive substances: | SR |
| Water permeability: | NPD[2] |
| Abrasion Resistance: | NPD[2] |
| Adhesive tensile strength (bond): | B > 2,0 |
| Impact Resistance: | IR > 4 |
| Impact sound insulation: | NPD[2] |
| Sound absorption: | NPD[2] |
| Chemical resistance: | NPD[2] |

-1) the last two digits of the year in which the CE marking was affixed.

-2) NPD = No Performance Determined; characteristic value not determined

**CE marking: 1504-2**

Flooring systems that are subject to mechanical stresses and whose products comply with DIN EN 1504-2 must also comply with the requirement DIN EN 13813.

DIN EN 1504-2 " Products and systems for the protection and repair of concrete structures- Part 2:" "Surface protection systems for concrete" specifies the requirements for the surface protection methods" hydrophobic impregnation" impregnation and coating. If required, the corresponding leaflet can be requested.

**EU Regulation 2004/42 (Decopaint Directive):**

The maximum content of VOCs (product category IIA / j type sb) allowed in EU Regulation 2004/42 is 500g/l in the ready-to-use state (Limit 2010). The maximum content of RINOL***CRETE*** PU-C570 in ready-to-use condition is <500g/l VOC.

**GIS Code: PU 40**

For further information on the Giscode, please contact Wingis online at https://wingisonline.de



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