

RINOLCRETE *standard*

Tough and hygienic
The food industry choice

System description

A two layer smooth finish polyurethane mortar system for concrete and similar substrates. Applied thickness 3 - 6 mm

Maximum service temperature

85 °C dry / 60 °C wet

Colour range

Available in 6 standard colours.
See our brochure for details.

Benefits

- minimum downtime – tolerant of substrate moisture and fast curing
- non-tainting
- hygienic – will not support bacterial growth
- easy to clean (can be steam cleaned)
- meets EU requirements for food plants
- extremely tough and hard wearing
- highly impact and thermal shock resistant
- resistant to almost all chemicals
- non-dusting

Areas of use

- medium to heavy duty industrial areas
- food industry dry production areas
- food and drink packing areas
- food and drink storage areas and warehouses
- tobacco processing
- printed circuit board production
- chemical and pharmaceutical production

Physical properties

Compressive strength 58 N/mm²

DIN EN 196 / ASTM D 695

Flexural strength 18 N/mm²

DIN EN 196 / ASTM D 638

Tensile strength 10 N/mm²

ISO R 527 / ASTM D 638

Dynamic E modulus 14 500 N/mm²

DIN EN 13412 / ASTM C 597-83

Adhesive strength > 2.5 N/mm²

DIN ISO 4624 / ASTM C 882

(concrete failure)

Abrasion resistance (Taber H22 wheel, 1000g load) 1210mg / 1000 cycles

DIN 53754 / ASTM D 4060

Coefficient of thermal expansion 3.5 x 10⁻⁵ / °C

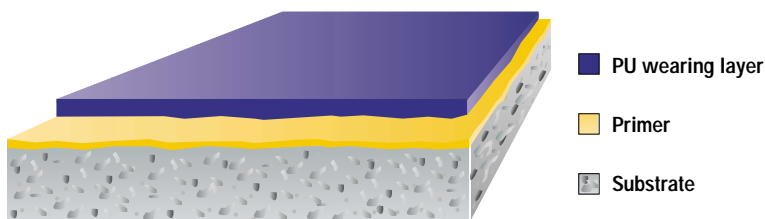
DIN EN 1770 / ASTM C 531

Thermal conductivity 0.91W/m °C

DIN 52612 / BS 874

Water absorption 0 ml

CP.BM 2/67/2



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A two layer smooth finish polyurethane mortar system for concrete and similar substrates. The primer is **RINOL PU-P250** Alternatively a scratch coat of **RINOL PU-C560** may be used. The wearing layer is **RINOL PU-C560** The applied thickness is 3 mm minimum to 6 mm maximum.

Method statement

1. Substrates

- 1.1 Suitable substrates are concrete, polymer modified concrete or screeds and mild (carbon) steel.
- 1.2 The substrate should have a tensile (pull-off) strength of at least 1.5 N/mm² when measured according to a recognised national standard.
- 1.3 The substrate should be visibly dry.
- 1.4 The substrate must be clean and free from dust and loose particles. All traces of contaminants such as oils, fats, greases, paint residues, chemicals, algae and laitance, should be removed.

2. Preparation

- 2.1 The preferred method of surface preparation is vacuum shot blasting. Other methods such as scabbling, grit blasting or surface planing can be used but are generally less satisfactory. Chemical methods such as acid etching are not to be used.

3. Priming

Two alternative priming methods may be used. The choice depends on substrate quality.

- 3.1 Polyurethane primer for dense, low porosity substrates.
 - 3.1.1 The primer **RINOL PU-P250** is mixed using an electric mixer taking care to avoid the inclusion of air. When homogeneous the mix is poured onto the prepared surface and spread using a Kaub spatula or rubber spreader. Material consumption will be 250 - 500 g/m² depending upon substrate roughness.
 - 3.1.2 Onto the wet primer dry silica sand (**RINOL QS-20**) is scattered at a rate of 1500 - 2500 g/m² to ensure good intercoat adhesion.
 - 3.1.3 **RINOL PU-P250** must not be applied if the temperature falls or is expected to fall to within 3 °C of the dew point.
- 3.2 **RINOL PU-C560** scratch coat for higher porosity substrates.
 - 3.2.1 **RINOL PU-C560** is mixed using a forced action pan mixer. When homogeneous the mix is poured onto the prepared surface and spread using a steel trowel. Material consumption will be approximately 2500 g/m².

4. Application of the polyurethane wearing layer

- 4.1 **RINOL PU-C560** should be applied once the primer or scratch coat has hardened but not completely cured. This will normally be after 12 - 15 hours for a primer or 8 - 12 hours for a scratch coat.
- 4.2 **RINOL PU-C560** is mixed using a forced action pan mixer. When the mix is homogeneous it is poured onto the primer or scratch coat and spread using a steel trowel or rake with the appropriate depth gauges. The mix should then be treated with a spiked roller to assist flow and release any air inclusions.
- 4.3 At 20 °C **RINOLCRETE standard** can be walked on after 8 hours, take light traffic after 24 hours, and will develop full mechanical and chemical resistance after 48 hours.

Specification clauses for RINOLCRETE standard

- 1) The primer shall be **RINOL PU-P250** applied at a rate of 250 - 500 g/m² in such a manner as to ensure complete sealing of the substrate surface and broadcast with dry silica sand (**RINOL QS-20**) at a rate of 1500 - 2500 g/m².
- or
- A scratch coat of **RINOL PU-C560** applied at a rate of approximately 2500 g/m² in such a manner as to ensure complete sealing of the substrate surface.
- 2) The wearing layer shall be **RINOL PU-C560** applied such that the total thickness of the floor is 3/4/6mm.



IMPORTANT

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee since the conditions of use are beyond the control of the company. It is the customer's responsibility to satisfy himself that each product is fit for the purpose for which he intends to use it and that the actual conditions of use are suitable.