

RINOLCRETE *heavy duty*

The ultimate heavy duty hygienic floor

System description

A two layer slip resistant polyurethane mortar system for concrete and similar substrates. Applied thickness 6 - 9 mm

Maximum service temperature

120 °C dry / 100 °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 temperature and thermal shock resistant
- highly impact resistant
- resistant to almost all chemicals
- non-dusting

Areas of use

- heavy duty industrial areas
- food industry wet process areas
- meat and fish processing
- processed meals
- dairies
- breweries and wineries
- soft drinks
- sugar refineries and confectionery production
- chemical production and storage

Physical properties

Compressive strength 65 N/mm²

DIN EN 196 / ASTM D 695

Flexural strength 16 N/mm²

DIN EN 196 / ASTM D 638

Tensile strength 7 N/mm²

ISO R 527 / ASTM D 638

Dynamic E modulus 20 000 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) 950mg / 1000 cycles

DIN 53754 / ASTM D 4060

Coefficient of thermal expansion 2.1 x 10⁻⁵ / °C

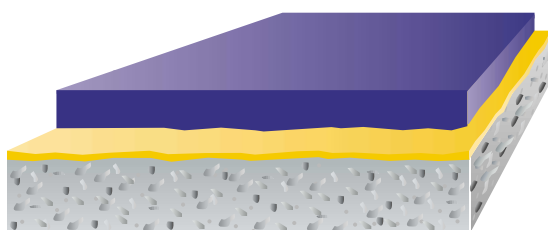
DIN EN 1770 / ASTM C 531

Thermal conductivity 0.84W/m °C

DIN 52612 / BS 874

Water absorption 0 ml

CP.BM 2/67/2



■ PU wearing layer

■ Primer

■ Substrate

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System description

A two layer slip resistant polyurethane mortar system for concrete and similar substrates. The primer is **RINOL PU-P250**. The wearing layer is **RINOL PU-C550**. The applied thickness is 6 mm minimum to 9 mm.

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

- 3.1 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.
- 3.2 Onto the wet primer dry silica sand (**RINOL QS-20**) is scattered at a rate of 1500 - 2500 g/m² to ensure good inter-coat adhesion.
- 3.3 **RINOL PU-P250** must not be applied if the temperature falls or is expected to fall to within 3 °C of the dew point.

4. Application of the polyurethane wearing layer

- 4.1 **RINOL PU-C550** should be applied once the primer has hardened but not completely cured. This will normally be after 12 - 15 hours.
- 4.2 **RINOL PU-C550** is mixed using a forced action pan mixer. When the mix is homogeneous it is poured onto the primer and spread and closed using a steel trowel. Optionally the mix can then be lightly rolled using a short pile mohair roller to obtain a more even finish.
- 4.3 At 20 °C **RINOLCRETE heavy duty** 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 heavy duty

- 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.
- 2) The wearing layer shall be **RINOL PU-C550** applied such that the total thickness of the floor is 6/8/9mm.



No.1 in industrial flooring

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