

# RINOL *CRETE*

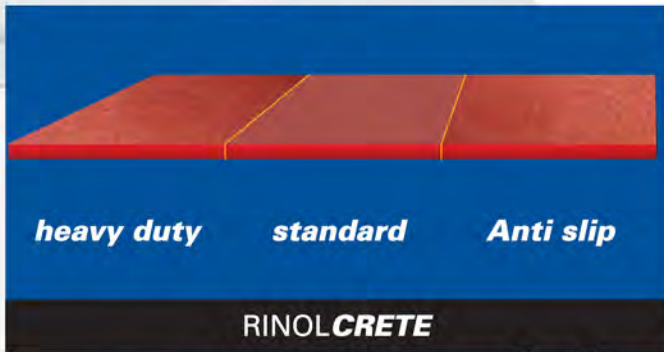
The ultimate polyurethane mortar floor



RINOL

# RINOL**CRETE** – hygienic, long-lasting and tough

Since their introduction some thirty years ago polyurethane mortars have become established as the basis of the flooring systems most suited to the exacting needs of the food processing, chemical, pharmaceutical and related industries. They have achieved this position by virtue of their outstanding combination of toughness, durability and chemical resistance. Building upon this history of success by using the very latest developments in polyurethane chemistry and formulation technology, RINOL, the world's leading industrial flooring company, have developed RINOL**CRETE** the ultimate polyurethane mortar.



## RINOL**CRETE** – the benefits

### fast installation

- tolerant of substrate moisture – can be laid on 7 day old concrete
- fast curing – can be walked on after ca. 12 hours and in full service after ca. 48 hours

### single responsibility

- RINOL**CRETE** is manufactured and installed only by RINOL

### long service life

- will resist heavy traffic – even steel wheeled trolleys
- high impact resistance
- unaffected by constant thermal cycling
- resistant to thermal shock
- extreme chemical resistance: will resist almost all acids, alkalis, salts and organic solvents
- will withstand temperatures from -40°C to 120°C
- hot water resisting up to 90°C and water vapour resistance up to 120°C

### hygiene and security

- RINOL**CRETE** floors meet all the requirements of EU and US authorities for hygiene in food plants
- will not support bacterial growth
- ease of cleaning by all industrial detergents, sterilants, high pressure jets or live steam
- non-tainting
- non-dusting
- slip resistant even when wet



## Three RINOLCRETE systems to meet your needs

### RINOLCRETE heavy duty

The toughest floor for the toughest applications

RINOLCRETE heavy duty is a trowel applied slip resistant polyurethane mortar system applied at thicknesses of 6 – 9mm. It is designed for use in areas where floors may be wet and subjected to heavy mechanical, thermal or chemical stress.

#### Benefits

- extremely tough and hard-wearing
- highly impact resistant
- highly temperature and thermal shock resistant
- non-tainting
- will not support bacterial growth
- easy to clean (can be steam cleaned)
- non-dusting
- resistant to almost all chemicals

#### Areas of use

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

### RINOLCRETE standard

Combines maximum hygiene with toughness

RINOLCRETE standard is a self smoothing polyurethane mortar system applied at thicknesses of 3 – 4 mm. It is designed for use in dry process, packing or storage areas subject to occasional spillage and medium to heavy duty traffic.

#### Benefits

- tough and hard wearing
- good impact resistance
- thermal shock resistant
- non-tainting
- will not support bacterial growth
- easy to clean smooth surface
- non-dusting
- resistant to almost all chemicals

#### Areas of use

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

### RINOLCRETE anti-slip

Combines maximum hygiene with toughness

RINOLCRETE anti-slip is an anti-slip polyurethane mortar system applied at thicknesses of 4-5mm. It is designed for use in wet processes, packing or storage areas subject to occasional spillage and medium to heavy duty traffic. With ANTI-SLIP the accident preventive measure are upgraded in a significant way as the slide risk will be much reduced.

#### Benefits

- tough and hard wearing
- good impact resistance
- thermal shock resistant
- non-tainting
- will not support bacterial growth
- easy to clean
- non dusting
- resistant to almost all chemicals

#### Areas of use

- medium to heavy duty industrial areas
- food industry dry and wet process areas
- food and drink packing areas
- food and drink storage areas and warehouse
- meat processing industries
- kitchens
- chemical and pharmaceutical production and storage

#### Chemical resistance summary (full list available on request)

	Acetic acid 60 %	Citric acid 50 %	chloric acid 37 %	Hydrogen peroxide 35 %	Ethanol	Lactic acid 90 %	Nitric acid 50 %	Phosphoric acid 80 %	Sodium hydroxide 50 %	Sodium hypochlorite 15 %	Sulphuric acid 70 %	Toluene
RINOLCRETE heavy duty	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ
RINOLCRETE standard	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ
RINOLCRETE anti slip	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ

Ⓟ = Resistant

\* a daily cleaning maintenance is presupposed







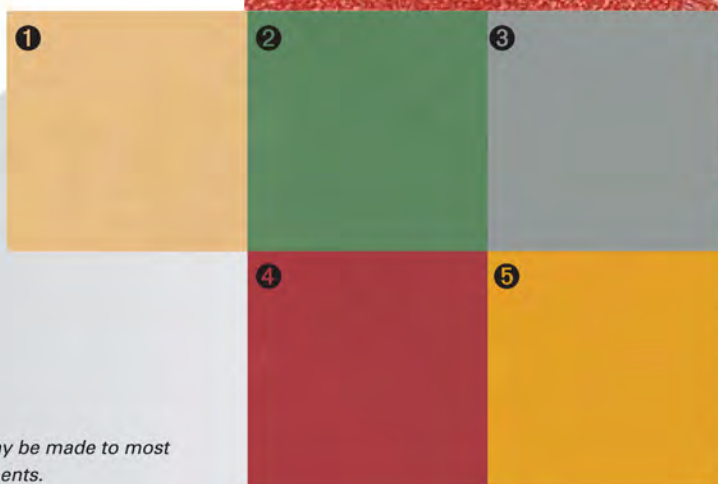
# RINOLCRETE

## Colours and data

RINOLCRETE is available in 5 standard colours. Other colours can be supplied to meet specific requirements. The colours shown are approximate because of printing limitations and can be affected by UV light – particularly paler colours.

Standard colour range:

- 1 beige
- 2 green
- 3 mid-grey
- 4 red
- 5 yellow




Other colours may be made to most specific requirements.

### Physical properties

	RINOLCRETE heavy duty	RINOLCRETE standard	RINOLCRETE Anti slip
Compressive strength DIN EN 196 / ASTM D 695	65 N/mm <sup>2</sup>	58 N/mm <sup>2</sup>	61 N/mm <sup>2</sup>
Flexural strength DIN EN 196 / ASTM D 638	16 N/mm <sup>2</sup>	18 N/mm <sup>2</sup>	16,5 N/mm <sup>2</sup>
Tensile strength ISO R527 / ASTM D 638	7 N/mm <sup>2</sup>	10 N/mm <sup>2</sup>	9 N/mm <sup>2</sup>
Dynamic elastic modulus DIN EN 13412 / ASTM C 597-83	20.000 N/mm <sup>2</sup>	14.500 N/mm <sup>2</sup>	17.500 N/mm <sup>2</sup>
Adhesive strength DIN ISO 4624 / ASTM C 882	> 2,5 N/mm <sup>2</sup> concrete failure	> 2,5 N/mm <sup>2</sup> concrete failure	> 2,5 N/mm <sup>2</sup> concrete failure
Abrasion resistance Taber H22 wheel, 1000g load, 1000 cycles DIN 53 754 / ASTM D4060	950mg loss	1.210 mg loss	1.020 mg loss
Coefficient of thermal expansion DIN EN 1770 / ASTM C 531	2,1 x 10 <sup>-5</sup> / °C	3,5 x 10 <sup>-5</sup> / °C	2,9 x 10 <sup>-5</sup> / °C
Thermal conductivity DIN 52 612 / BS 874	0,84 W/m°C	0,91 W/m°C	0,88 W/m°C
Water absorption CP.BM 2/67/2	0 ml	0 ml	0 ml





**RINOL***CRETE* –  
**food, chemicals, pharmaceuticals –  
the floor of choice**

The ever more stringent hygiene requirements of the food, chemical and pharmaceutical industries combined with the need for safe working conditions places great demands on flooring materials. They must resist heavy objects being dropped on them, laden steel wheeled trolleys moved over them, pallets scraped across them, corrosive chemicals spilt on them. They can be subjected to extreme cold or heat. Yet they must retain their structural integrity, slip resistance, cleanability and appearance for years.

This is what **RINOL***CRETE* has been designed to do – designed by the world's leading industrial flooring contractor – RINOL.



**DO YOU WANT MORE INFORMATIONS?**

**Should you want more detailed information about our complete answers to flooring problems, please give us a call or a fax or an e-mail.**



**Your contact partner in the RCR Group**

**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.



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