

## 1. Product Description

The RINOLCRETE HEAVY-DUTY system, is a high quality, highly resistant anti-slip coating based on polyurethane mortar, specifically designed for environments where floors are often wet and at the same time subjected to high mechanical, thermal or chemical stresses. Resisting temperatures from -40°C to 130°C, it offers unrivalled resistance, ideal for demanding working areas. The monolithic 6 to 12 mm layer provides durability in heavy duty conditions. Resistant to most chemicals, it prevents bacterial growth and is easy to maintain, making it a premium choice for industries where safety and performance are paramount.

## 2. System Composition

The system begins with the RINOLCRETE PU-P250 Primer, ensuring impeccable adhesion to the substrate and forming a robust foundation. Building upon this, the RINOLCRETE PU-C550 mortar forms the body of the system, delivering the core resistance and durability attributes. Each component within the system has been rigorously tested and selected to guarantee peak performance, providing a flooring solution that is both durable and safe.



### Mortar coating

- RINOLCRETE PU-C550
- RINOLCRETE PU-C550RT (Alternative)
- RINOLCRETE PU-C555 (Alternative)

### Primer

- RINOLCRETE PU-P250 (Optional)

### Substrate

## 3. Areas of Application

The RINOLCRETE HEAVY-DUTY system is suitable for a variety of environments, including:

- **Industrial kitchens:** The system is stain-resistant and easy to clean, making it ideal for industrial kitchens where hygiene is essential.
- **Food processing plants:** With its resistance to chemicals, low and high temperatures, it's an ideal solution for food processing environments that require a durable floor.
- **Warehouses:** Its resistance to abrasion and impact makes it suitable for warehouses where heavy loads are handled.
- **Laboratories:** Its resistance to chemicals and ease of cleaning make it ideal for laboratories where chemical substances are handled.
- **Packing rooms:** Its slip resistance and durability make it perfect for packing rooms where safety is essential.
- **Warehouse applications:** Its resistance to abrasion and impact makes it suitable for warehouse applications where heavy loads are handled.
- **Dry and wet product manufacturing sector:** The system's resilience and adaptability make it a top choice for sectors involved in both dry and wet product manufacturing.

## 4. Properties

- Extremely resistant and strong
- High impact resistance
- High resistance to temperature and temperature variations
- Prevents bacterial growth
- Easy maintenance (can be steam cleaned)
- No dust generation
- Resistant to almost all chemicals

## 5. Certifications

All RINOLCRETE systems are EUROFINS INDOOR AIR COMFORT GOLD, demonstrating their high quality and performance. This top level certification ensures that the product's emissions meet the criteria of many voluntary specifications issued by the main eco-labels, EU specifications and requirements for sustainable building certification (LEED, BREEAM, etc.), including low air emissions, slip resistance, chemical resistance and fire resistance, among others relevant to their specific use. Please contact us for a full list of our certifications.



## 6. Technical Data

We provide detailed technical data on the system, including its physical and mechanical properties.

Technical data		
1	Compressive strength (DIN EN 196 / ASTM C 109)	65 N/mm <sup>2</sup>
2	Flexural strength (DIN EN 196 / ASTM C 190)	18,0 N/mm <sup>2</sup>
3	Coefficient of thermal expansion (DIN EN 1770 / ASTM C 531)	4 x 10 <sup>-5</sup> /°C
4	Thermal conductivity (DIN 52612 / BS 874)	0,91 W / m°C
5	Water absorption (CP.BM 2/67/2)	0 ml
6	Abrasion resistance Roue Taber CS10/1000 cycles - 1kg (DIN 53 754 / ASTM D 1044)	950 mg
7	Slip resistance (DIN 53505 / ASTM D 2240)	R10 - R13
8	Thermal resistance	-40°C +130 °C with a thickness of 12mm

## 7. Extreme Durability Properties

The RINOLCRETE HEAVY-DUTY system is distinguished by its exceptional hardness and durability, making it a standout choice for environments that demand the utmost in floor resilience. Engineered to withstand intense mechanical, thermal, and chemical stresses, this system is designed to endure where others might falter. Its extreme hardness not only ensures a long-lasting floor but also minimises wear and tear, even in the most challenging conditions. This unparalleled durability means reduced maintenance costs and longer intervals between necessary repairs or replacements. Whether faced with heavy machinery, high foot traffic, or aggressive chemical agents.

## 8. Available Colors

The RINOLCRETE HEAVY-DUTY system is available in a variety of colors to suit the aesthetic needs of any installation.

- Light Grey: 
- Mid Grey: 
- Beige: 
- Red: 
- Green: 
- Yellow: 
- Blue: 

## 9. Application Recommendation

The RINOLCRETE systems should be applied by trained professionals. This process includes surface preparation, which may involve cleaning, sanding, or shot blasting the existing surface to ensure optimal adhesion. Then, the system components are mixed according to the product specifications and applied using appropriate techniques to ensure uniform coverage.

Please note that curing times can vary depending on environmental conditions and the specific product. Generally, the system will be ready for use 24-48 hours after application. However, for the surface to be completely operational and for the floor to exhibit all its properties, a curing period of several days may be required. This period can vary depending on the specific system and the conditions of the application site, including climate and other environmental factors.

## 10. Maintenance

The RINOLCRETE HEAVY-DUTY system is easy to maintain and clean. To ensure the system's longevity and performance, the provided maintenance instructions should be followed. This may include regular cleaning with appropriate cleaning products to remove dirt and residues, periodic floor inspection for signs of wear, and repair or replacement of damaged areas if necessary. With proper maintenance, the RINOLCRETE HEAVY-DUTY system can provide many years of reliable service.

## 11. Safety

Safety is our priority at RCR Flooring Products Italia S.r.l. We provide safety information and precautions that should be taken during the application of RINOLCRETE systems. This may include the use of personal protective equipment during application, adequate ventilation, prevention of exposure to chemicals, and proper disposal of product waste. It is important to follow all safety guidelines to ensure a safe working environment and to maintain the integrity of the RINOLCRETE systems.

## 12. 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.

Skin contact with liquid resins can lead to health impairments and allergies. Once properly cured, the product is non hazardous.

## 13. Sustainability

Our commitment to sustainability shines through our RINOLCRETE systems. Central to this commitment is the EUROFINS INDOOR AIR COMFORT GOLD certification. This prestigious certification ensures low VOC emissions and encompasses several renowned environmental and health standards:

- **LEED**: Recognizes sustainable building design and operation.
- **BREEAM**: Assesses the environmental performance of buildings.
- **A+ French VOC Emission Rating**: Indicates minimal harmful substance emissions.
- **AgBB/ABG**: German standard for low VOC emissions.

By achieving the EUROFINS INDOOR AIR COMFORT GOLD certification, we demonstrate our unwavering dedication to environmental excellence and indoor air quality. For a complete list of standards we comply with under this certification, please contact us for more information.

## 14. Customer Service

At RCR Flooring Products Italia S.r.l., we pride ourselves on offering exceptional customer service. Our team of experts is available to answer your questions, provide technical advice, and help you select the appropriate RINOLCRETE systems for your needs. We also offer training in the application of our systems to ensure they are installed correctly and provide optimal performance.

## 15. Warranty

We offer a warranty on the RINOLCRETE systems, which covers manufacturing defects and ensures that the system meets our technical specifications. For more details about our warranty, please contact us.

## 16. 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.it](http://www.rinol.it) up to date. We expressly reserve the right to make changes to the product specifications.

The colors can vary depending on the specific system and the conditions of the application site, including climate and other environmental factors.

## 17. GIS Code

GIS Code: WGK PU 40. For further information on the Giscode, please contact Wingis online at <https://wingisonline.de>

## 18. CE - Marking

The individual products that make up the system are certified under the DIN EN 13813 "Screed material and floor screeds - Screed materials - Properties and requirements" (Jan.2003) and EN 1504-2 standards. These standards specify requirements for screed mortars used in indoor floor constructions. Synthetic resin coatings and sealers are also covered by these standards. Products that comply with the mentioned standards must be CE marked.