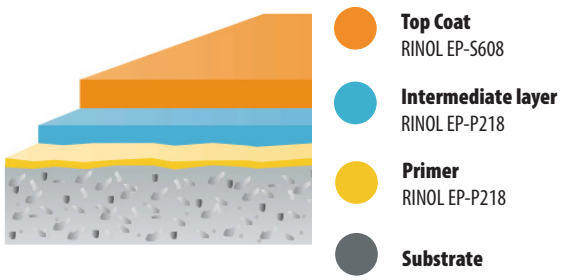
# RINOL *ALLROUNDER STR LE*

## VERSATILE AND DURABLE EPOXY COATING SYSTEM

### 1. System description

RINOL ALLROUNDER STR LE is a three-layer, low-emission epoxy coating system ideal for medium to heavy duty industrial floors. It offers seamless finishes, durability, and the option for slip-resistant surfaces. Certified under the RINOLGreenCoat Line, it aligns sustainability with performance.

### 2. System composition




### 3. Areas of application

The RINOL ALLROUNDER STR LE system is specifically designed to be applied in various types of industrial environments, adapting to the needs of several sectors, including:

- Medium to heavy duty industrial floors
- High bay warehouses
- Other warehouses and storage areas
- Car parks
- Laboratories
- Supermarkets

### 4. Properties

- Low odour during application
- Durable and long lasting
- Hygienic and impervious
- Meets EU requirements for food premises
- Smooth or non-slip finish
- Can be laid to superflat tolerances
- Seamless
- Good chemical resistance

### 5. Certifications

The individual products within RINOL ALLROUNDER STR LE are certified to meet high standards of sustainability and safe indoor environments.

Indoor Air Comfort Gold certifies very low VOC emissions, meeting stringent worldwide indoor air quality standards such as:

**AgBB:** Complies with the criteria of the German Committee for Health-Related Evaluation of Building Products (AgBB), ensuring low VOC emissions and suitability for use in environments where indoor air quality is a priority, such as residential and commercial spaces.

**A+ French VOC Emissions:** Awarded an A+ rating, demonstrating very low VOC emissions, suitable for applications focused on indoor air quality, such as schools and healthcare facilities.

**BREEAM:** Supports compliance with BREEAM criteria, contributing to sustainable building practices and environmental performance.

**LEED:** Compatible with LEED standards, helping projects earn credits for indoor environmental quality through low VOC content and durability.

### 6. Technical data

The RINOL ALLROUNDER STR LE system provides detailed technical data, including physical and mechanical properties:

| Technical Data | | |
|---|---|---|
| 1 | Thickness | 3 - 4 mm |
| 2 | Maximum service temperature | 60 °C |
| 3 | Compressive strength ( DIN EN 196 / ASTM C 109 ) | 71 N/mm² |
| 4 | Flexural strength ( DIN EN 196 / ASTM C 190 ) | 45 N/mm² |
| 5 | Adhesive strength ( DIN ISO 4624 ) | > 1,5 N/mm² |
| 6 | Abrasion resistance (Taber CS10 wheel) ( DIN 53754 / ASTM D 1044 ) | 80mg / 1000 cycles |
| 7 | Shore D hardness ( DIN 53505 / ASTM D 2240 ) | 80 |
| 8 | Colour stability (scale 1-8, best=8) ( DIN EN ISO 877 ) | 6 |
| 9 | Slip resistance (DIN 51130) | R9 - R13 |

### 7. Chemical Resistance

The RINOL ALLROUNDER STR LE floors, under ambient temperature conditions, demonstrate resistance to:

Weak mineral acids, such as hydrochloric, nitric, phosphoric, and sulfuric acids.
Alkaline substances, including sodium hydroxide up to 50% concentration.
Standard cleaning agents used for floor maintenance.
Sugars, even with repeated contacts.
Mineral oils, diesel, kerosene, and gasoline.

### 8. Available colours

The RINOL ALLROUNDER STR LE system is available in a wide range of RAL and NCS colours, offering a broad selection to meet the aesthetic preferences of any project.

### 9. Application Instructions

**9.1. Substrates**

**9.1.1** Suitable substrates are concrete, polymer modified concrete or screeds, anhydrite or magnesite.



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**9.1.2** The substrate should have a minimum tensile strength of 1.5 N/mm$^2$ and compressive strength of 25 N/mm$^2$ measured to an approved national standard.
**9.1.3** The substrate should be visibly dry. For concrete and polymer modified concrete, the moisture content should not exceed 4% by weight when measured according to a recognised standard. RINOL range includes primers that can optionally be used when the static moisture content reaches 6%, measured using CM (calcium carbide) Method. For anhydrite or magnesite substrates, moisture contents up to 0.8% by weight are acceptable.

### 9.2. Preparation

**9.2.1** The preferred method of surface preparation is vacuum blasting. Other methods such as scabbling, grit blasting or grinding may be used but are generally less satisfactory.

### 9.3. Priming

**9.3.1** Prepare the primer by thoroughly mixing the two components of RINOL EP-P218 using an electric mixer, taking care to avoid air entrapment. Once homogeneous, add dry quartz sand at a 1:1 ratio and mix again until evenly dispersed. Apply the mixture at a rate of 1.6 kg/m$^2$, spreading uniformly onto the prepared surface using a suitable spatula or trowel
**9.3.2** Saturate the wet primer thoroughly with dry quartz sand at a consumption rate of up to 2.5 kg/m$^2$, according to the required surface texture.
**9.3.3** Ensure the application temperature remains at least 3°C above the dew point during application and curing.

### 9.4. Application of the intermediate layer

**9.4.1** Prepare the intermediate layer by thoroughly mixing the two components of RINOL EP-P218 using an electric mixer, taking care to avoid air entrapment. Once homogeneous, add dry quartz sand at a 1:1 ratio and mix again until evenly dispersed. Apply the mixture at a rate of 1.6 kg/m$^2$, spreading uniformly onto the primer surface using a suitable spatula or trowel.
**9.4.2** Saturate the wet intermediate layer thoroughly with dry quartz sand at a consumption rate of up to 2.5 kg/m$^2$, according to the required surface texture.
**9.4.3** Ensure the application temperature remains at least 3°C above the dew point during application and curing.

### 9.5. Application of the topcoat

**9.5.1** After the intermediate layer has hardened but not fully cured (typically 12–15 hours at 20°C), remove excess quartz sand, sand down and vacuum-clean the surface thoroughly.
**9.5.2** Prepare the topcoat by mixing the two components of RINOL EP-S608 using an electric mixer, carefully avoiding air incorporation. Mix until completely homogeneous.
**9.5.3** Apply RINOL EP-S608 evenly at a consumption rate of approximately 0.7 kg/m$^2$ to achieve an anti-slip finish. Spread the material uniformly using a notched trowel or a suitable roller.
**9.5.4** Maintain a minimum of 3°C above the dew point throughout the application and curing.
**9.5.5** The surface is walkable after 18–24 hours at 20°C. Full mechanical resistance is reached after 7 days, and complete chemical resistance is achieved after 28 days.

## 10. Specification clauses for RINOL ALLROUNDER STR LE

All application and curing stages must be performed at temperatures between 15 and 25°C, with relative humidity below 80%.

## 11. Maintenance

The RINOL ALLROUNDER STR LE system is easy to maintain and clean. To ensure the system's longevity and performance, it is essential to follow the provided maintenance instructions. This may include regular cleaning with suitable products to remove dirt and residues, periodic inspection of the floor for signs of wear, and repair or replacement of damaged areas if necessary. With proper maintenance, the RINOL ALLROUNDER STR LE system can provide many years of reliable service.

## 12. Safety

Safety is a priority at RCR Flooring Products Italia S.r.l. We provide information on safety and precautions during the application of the RINOL 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 maintain the integrity of the systems.

## 13. Health and Safety Measures

Consult the latest valid Material Safety Data Sheet (MSDS) for the products that are part of the system and the Chemical Industry Guidelines on the Handling of Coating Materials (M004/M023) for information on the handling of the products. Wear suitable protective clothing such as gloves and goggles during application.

Skin contact with liquid resins can cause health damage and allergies. Once cured properly, the product is not hazardous.

## 14. Customer Service

At RCR Flooring Products Italia S.r.l., we pride ourselves on providing exceptional customer service. Our team of experts are on hand to answer your questions, provide technical advice and help you choose the RINOL systems that best suit your needs. We also provide application information to ensure that our systems are installed correctly and deliver optimum performance.

## 15. Legal notice

The technical data for the Company's products and systems have been compiled with due care. However, any recommendations or suggestions made with regard to the use of these products are made without guarantee as the conditions under which they are used are beyond the control of the Company. It is the responsibility of the customer to determine whether the products are suitable for the particular application and whether the conditions of use are appropriate for the particular product. No liability can therefore be derived from the product data sheet.

Please note that only the latest version of the data sheet is valid and replaces all previous versions. The technical data given are approximate values determined by us and do not constitute a guarantee of properties. Misprints, errors, translation errors and changes reserved. Please note that the information in the system datasheets may differ in different languages/ countries. For further information please visit our website at www.rinol.com.



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The technical data sheet does not exempt the user from carrying out his own application tests, if necessary, within the limits of his capabilities. Please refer to the RINOL Technical Guide for information on coating options and more detailed information on the installation of RINOL products.

**16. CE Marking**

The individual products that make up the system are certified according to DIN EN 13813 "Screed materials and floor screeds - Screed materials - Properties and requirements" (January 2003) and EN 1504-2. These standards specify the requirements for screed mortars used in internal floor constructions. Resin coatings and sealants are also covered by these standards. Products complying with the mentioned standards must have the CE mark.



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