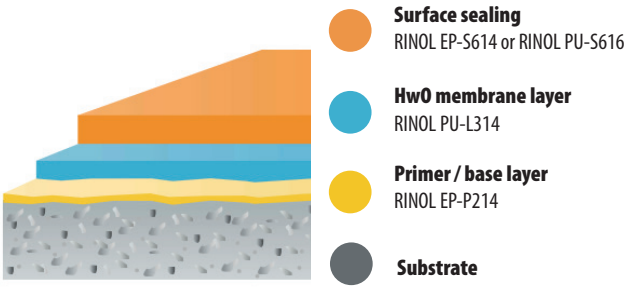
RINOL *PARKING OS11b LE*

LOW EMISSION ELASTIC MULTI-STOREY CAR PARK COATING FOR HIGH MECHANICAL RESISTANCE

1. System description

Three-layer elastic flooring for high-traffic driving areas. It offers exceptional dynamic crack bridging capacity and outstanding resistance to intense mechanical stress. Certified in accordance with the German Concrete Committee's guideline for the protection and repair of concrete structures (DIN EN 1504-2).

2. System composition



3. Properties

- Low VOC emission
- Low odor development during processing
- Protects surfaces
- Fills cracks at -20 °C
- Wear resistant
- Suitable for vehicular traffic
- Non-slip
- Seamless

4. Certifications

RINOL PARKING OS11b LE is certified to meet high quality standards.

OS 11 B In according with the "Guideline for the Protection and Repair of Concrete Components" issued by the German Committee for Reinforced Concrete (DAfStb).

The individual products within RINOL PARKING OS11b LE system are certified:

Synthetic resin screed material according to EN 13813:2002

Coating for surface protection of concrete according to EN 1504-2:2004

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

5. Technical data

The RINOL PARKING OS11b LE system provides detailed technical data, including physical and mechanical properties:

Technical Data		
1	Thickness	approx 4-5 mm
2	Tensile strength (DIN EN 53504)	> 12 N/mm²
3	Crack bridging (DIN EN 1062-2)	class B 3.2 (II T+V)
4	Adhesive strength (DIN ISO 4624)	> 1,5 N/mm²
5	Impact resistance (DIN EN ISO 6272-1)	> 4 Nm
6	Abrasion resistance (Taber CS10 wheel/1000g/1000turns) (DIN 53754 / ASTM D4060)	< 2500 mg / 1000 cycles
7	Shore D hardness (DIN 53505 / ASTM D 2240)	Approx. 60
8	Water absorption (DIN EN 1062-3)	< 0,01 kg/(m² · h0,5)
9	Chemical resistance (DIN EN 13529) DIBt n. 1 (Fuel) DIBt n. 3 (Oil) DIBt n. 10 (Acid)	 Pass Pass Pass
10	Slip resistance (DIN EN 13036-4)	> 60 SRV
11	Slip resistance (DIN 51130)	R11
12	Colour stability (scale 1-8, best=8) (DIN EN ISO 877) with RINOL EP-S614 with RINOL PU-S616	 6 8

6. Chemical Resistance

The RINOL PARKING OS11b 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.

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7. Available colours

The RINOL PARKING OS11b 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.

8. Application Instructions

8.1. Substrates

8.1.1 Suitable substrates are concrete, polymer modified concrete or screeds, anhydrite or magnesite.
8.1.2 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.
8.1.3 The substrate should be visibly dry. For concrete and polymer modified concrete, the moisture content should not exceed 6% by weight when measured according to CM (calcium carbide) Method. For anhydrite or magnesite substrates, moisture contents up to 0.8% by weight are acceptable.
8.1.4 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.

8.2. Preparation

8.2.1 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.

8.3. Priming

8.3.1 The primer is mixed using an electric mixer, taking care to avoid the inclusion of air. When homogeneous, the mixture is poured onto the prepared surface and spread using a Kaub spatula or rubber trowel. Material consumption is 300 - 500 g/m^2 depending on the roughness of the substrate.
8.3.2 Dry quartz sand RINOL QS20 is scattered on the wet primer at a rate of approx 800 g/m^2 to ensure slip resistance and good adhesion between the coats.
8.3.3 RINOL primers must not be applied when the temperature falls or is expected to fall within 3 °C of the dew point.

8.4. Application of the membrane

8.4.1 The RINOL PU-L314 membrane should be applied when the primer has hardened but not completely cured. This will normally be after 12 - 15 hours.
8.4.2 Prior to the application of the membrane, remove excess silica sand and sand and vacuum clean the primer.
8.4.3 The two components of RINOL PU-L314 should be mixed using an electric mixer, taking care to avoid the inclusion of air. Once homogeneous, add 30% of dry quartz RINOL QS10 ratio and mix again until evenly dispersed. This mixture is then poured onto the primer surface and spread with a notched spatula, at a rate of approx 2000 g/m^2.
8.4.4 Dry quartz sand RINOL QS20 is fully scattered on the wet membrane layer to ensure slip resistance.
8.4.5 RINOL PU-L311N must not be applied when the temperature falls or is expected to fall within 3 °C of the dew point.

8.5. Application of the topcoat

8.5.1 The topcoat RINOL EP-S614 or RINOL PU-S616 should be applied when the levelling coat has hardened but not completely cured. This will normally be after 12 - 15 hours.
8.5.2 Before applying the top coat, remove excess quartz sand and sand and vacuum the surface.
8.5.3 Mix the two components of the topcoat with an electric mixer, taking care to avoid the inclusion of air. When the mixture is homogeneous, pour it on the surface of the levelling layer and spread it with a rubber spatula or squegee and back roll with a medium-short hair roller. The material consumption should be approximately 600-800 g/m^2.
8.5.4 The topcoat must not be applied when the temperature falls or is expected to fall within 3 °C of the dew point.
8.5.5 At 20 °C RINOL PARKING OS11b can be walked on after 18 to 24 hours, reaches full mechanical resistance after 7 days and full chemical resistance after 28 days.

9. Specification clauses for RINOL PARKING OS11b LE

All products must be applied and cured at temperatures between 15 and 25°C and relative humidity <80%.

The primer shall be RINOL EP-P214, applied at a rate of 300-500 g/m^2.

Dry quartz sand 0,8 Kg/m^2 of RINOL QS-20 shall be fully broadcast into the wet primer.

The membrane shall be RINOL PU-L314 filled at 30% with dry quartz sand RINOL QS-10. The mixture is applied at a rate of 2300 g/m^2.

Dry quartz sand (RINOL QS-20) shall be fully broadcast into the wet wear layer.

The topcoat shall be RINOL EP-S614 or RINOL PU-S616, applied at a rate of 600-800 g/m^2.

10. Maintenance

The RINOL PARKING OS11b 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 PARKING OS11b LE system can provide many years of reliable service.

11. 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.

12. 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.

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Once cured properly, the product is not hazardous.

13. 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.

14. 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.

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.

15. 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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