



RINOL *PARKING*

Coating systems for multi-storey & underground car parks

RINOL

SYSTEMS ARE:

seamless

antibacterial

variety of
colours

anti-slip

easy to clean &
hygienic

mechanically
robust

thermally
durable

non-porous

liquid
proof

easy to
repair

low emission

visually
attractive

chemical
resistant

RINOL

For over 60 years, RINOL industrial floors have enjoyed a worldwide reputation for reliability, precision, quality and economy!

Our research and development department works permanently and consistently on new and further developments of products and systems. RINOL's goal is to support our customers and partners with innovative products and system solutions based on epoxy, polyurethane, vinyl ester or polyester resins.

Each system typically comprises two or three layers applied in sequence to the concrete surface - a primer, a filler and finally the coloured coating. This process ensures a high quality, durable and attractive finish.

All components and ingredients for our coating systems are tested and produced by ourselves. This guarantees the highest quality, fastest availability and optimal properties of our products. Our RINOL cast resin systems are tested for your safety by renowned, independent experts and accredited institutes, such as the German Institute for Construction Technology.

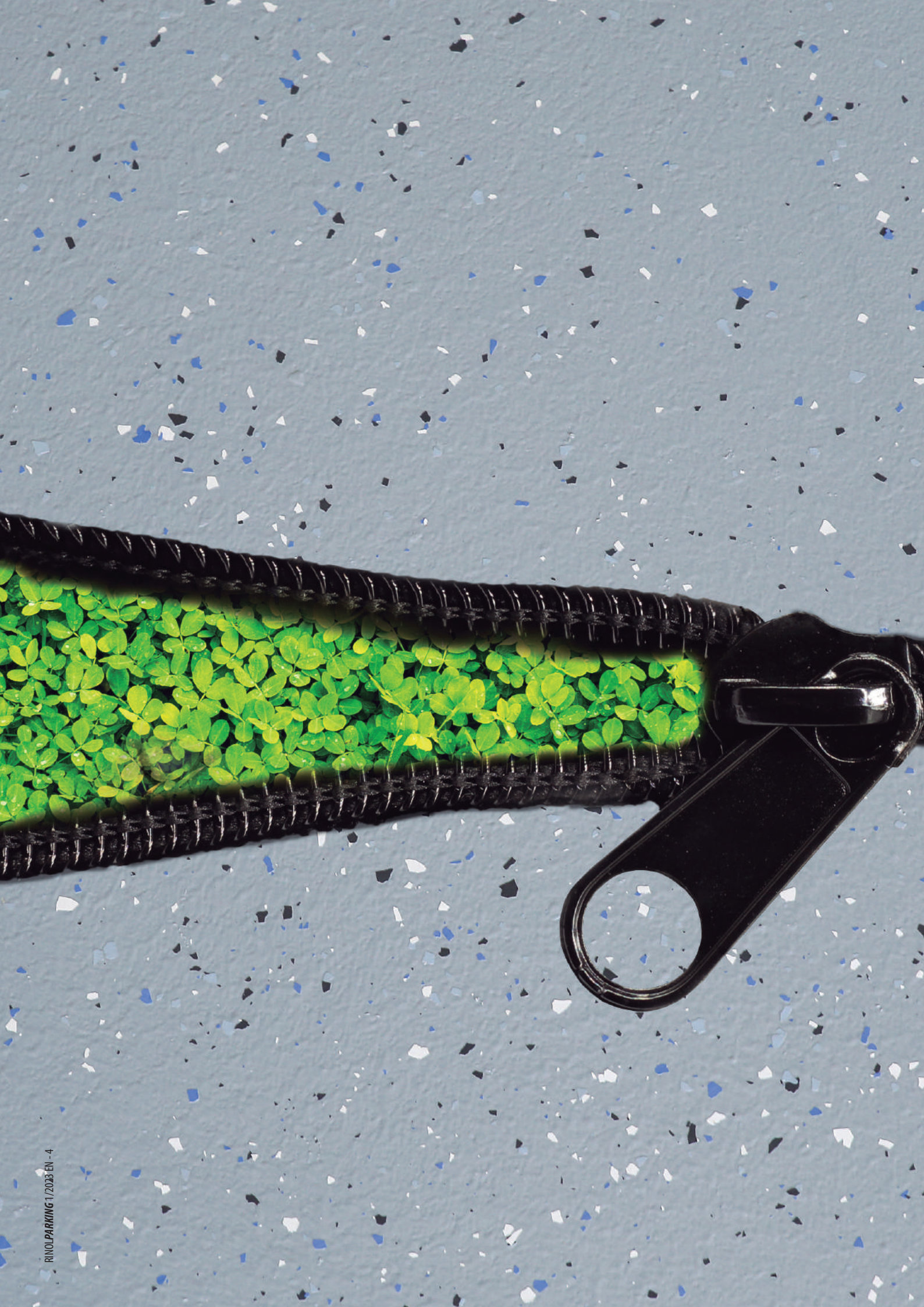
In addition to industrial floors, RINOL systems are also suitable for showrooms, exhibition spaces, schools, public buildings and homes. In addition, the company can create special systems to suit a customer's exact application - all certified to ISO9001. Furthermore, RINOL has a multitude of test certificates of all kinds to meet the high requirements towards synthetic resin coatings. The products or systems are manufactured according to the specifications of DIN EN 1504:2.

Choosing a RINOL coating offers important advantages for owners and users of a building, such as chemical resistance, abrasion resistance and an attractive and seamless surface.

RINOL also offers a wide range of RAL and NCS colours. With no minimum order quantity, designers can enjoy the freedom to work creatively in smaller spaces.

For more information, visit www.rinol.de.







GOING GREEN

Sustainable building has become more and more important worldwide in recent years. Today, a wide variety of country-specific requirements and certifications are needed. However, all countries and certification systems have one thing in common - they want to create more ecological sustainability in the construction industry.

Our research and development department works permanently and consistently on new and further product developments. RINOL's aspired goal is to offer our customers and partners innovative and sustainable products and system solutions that differ from other products in terms of durability, efficiency, ecology and aesthetics and generate added value.

The health and well-being of people working in indoor areas in a wide range of industries are not only determined by climatic conditions and impurities in the air. Sustainable and environmentally compatible products that are low in emissions not only support the environment, but also ensure a healthy indoor climate.

The fact that RINOL products and systems fulfil many criteria and are environmentally compatible is shown by the tests according to AGBB, Eurofins, ISEGA and LEED.

RINOL



PARKING

In multi-storey and underground car parks, constantly protecting the stability of the slabs and parking areas in contact with the ground from mechanical and chemical loads, temperature/freeze variations and other damaging agents is of paramount importance for the durability of the reinforced concrete or composite structure.

RINOL Parking systems for car park floors are used on slabs in contact with the ground, on covered intermediate floors subject to dynamic loads, on uncovered floor surfaces subject to extremely high stresses, as well as on load-bearing structures subject to shear stresses and heavy loads and base ramps subject to high stresses.

RINOL Parking systems, with their reactive resins, fully comply with the standard requirements of DIN EN 1504 in conjunction with DIN V 18026 and DAfStb.

Whether it is the construction of new parking areas or the adaptation of existing pavings for new usage requirements or renovation, our RINOL Parking coating systems meet every requirement and guarantee high standards. RINOL Parking systems are installed all over the world in the various climatic conditions typical of different countries. You will find our references all over the world.

With our trained consultants specialised in car park solutions, we will advise you on the most suitable system for your specific application.

Properties

- LE (Low Emission) systems with LEED v4
- Surface protection
- Crack-bridging at -20° C
- Hard-wearing and durable
- Non-slip
- Seamless

Areas of application

- Underground
- Garages
- Multi-storey car park



CHEMICAL RESISTANCE

Car parks and underground garages not only have to withstand various load and temperature changes, but also a wide range of different chemical attacks. In addition to various salts and water, surface protection systems must also withstand attacks from fuels and oils.

The following overview shows various test results (+ resistant, 0 conditionally resistant, - unstable)

Chemicals	RINOLEP-S611N			Chemicals	RINOLEP-S611N		
	Exposure approx. 1 day	Exposure approx. 10 days	Exposure approx. 42 days		Exposure approx. 1 day	Exposure approx. 10 days	Exposure approx. 42 days
Formic acid 20%	+	-	-	Petrol	+	+	+
Ammonia 25% Benzene	+	-	-	Propylene glycol	+	+	+
Benzyl alcohol	+	0	-	Nitric acid 25%	+	+	0
Brake fluid	+	+	0	Hydrochloric acid 37%	+	+	+
Diesel	+	+	+	Lubricating oil	+	+	+
Acetic acid 10%	+	+	+	Sulphuric acid 50%	+	+	+
Ethylene glycol	+	+	+	TolueneAqueous	+	0	-
Heating oil	+	+	+	Formaldehyde solution 37%	+	+	+
Isooctane	+	+	+	Aqueous saline solution 20%	+	+	+
Potassium hydroxide 45%	+	+	+	Aqueous sodium carbonate solution 20%	+	+	+
Cooling concentrate for cars	+	+	+	Aqueous sodium sulphide solution 35%	+	+	+
Lactic acid 90%	+	+	+	Aqueous detergent concentrate solution	+	+	+
Sodium hydroxide solution 20%	+	+	0	Aqueous detergent concentrate solution 50%	+	0	-
Natronlaug 20%	+	+	+	Xylene	+	+	+

The resistance to chemicals was tested in a standard climate (23°C) according to DIN 50014-23/50-2. The coating was exposed to the test liquid in accordance with DIN 53168. The assessment is based on the criteria of appearance, hardness and blistering or destruction of the surface. Daily maintenance cleaning is assumed. The chemicals must be removed immediately after exposure and rinsed with water.





COLOUR DESIGN

You have probably wondered where your car is parked in a multi-storey car park. Modern multi-storey and underground car parks, such as those at a shopping centre or an airport, use colour concepts for the different levels. For example, U3 is designed in blue, U2 in yellow and U1 in red. Through the use of colour and light, even an underground car park with its corridors and staircases is perceived as friendly and orientation is easier for visitors.

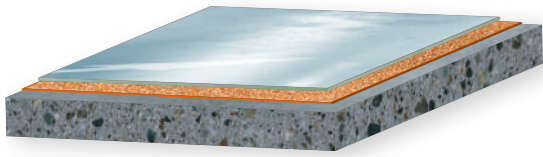
The advantages of a coloured design:

- Representative appearance and highest aesthetics for the property
- Individual design of floors and staircases
- Visitors find their way around more easily and more quickly
- Escape routes are more clearly marked

RINOL offers a wide range of RAL and NCS colours with no minimum order quantity. This gives designers the freedom to work creatively in small spaces or entire levels.

RINOLPARKING OS8 LE (very low emission)

The LEED v4 certified rigid car park coating for trafficable, mechanically heavily loaded surfaces in car parks and underground garages is free of benzyl alcohol and nonylphenol. The hard-wearing surface is jointless, slip-resistant and can be designed in a variety of colours.

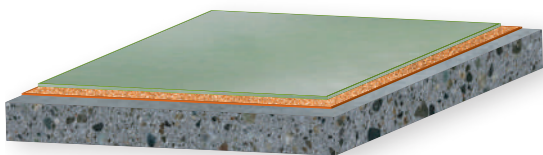


-  RINOLEP-S614 Surface sealer
-  RINOLEP-P214 Primer



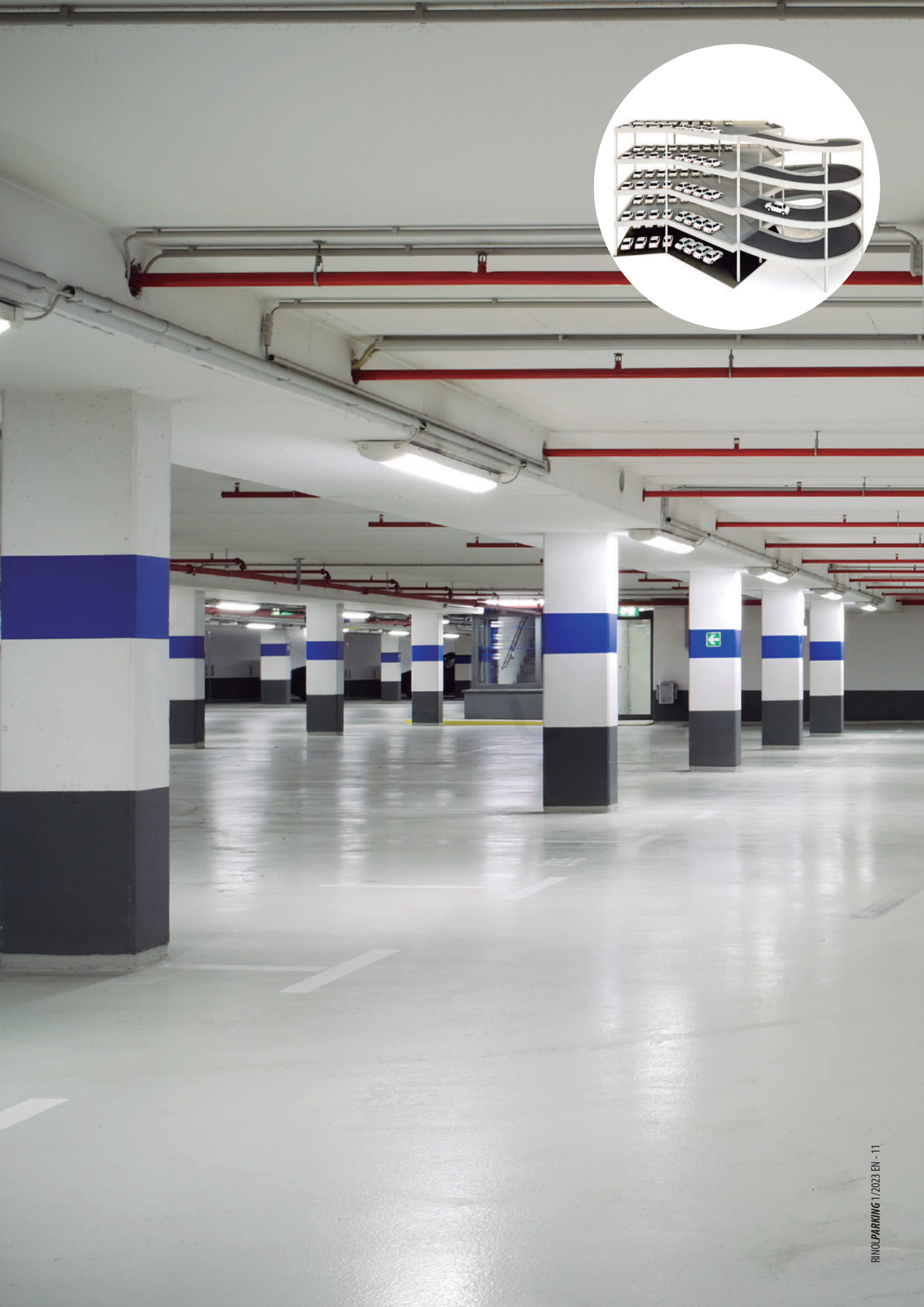
RINOLPARKING OS8

Rigid car park coating for drivable surfaces subject to heavy mechanical exposure such as car parks and underground garages. The hard-wearing surface is jointless, slip-resistant and can be designed in a variety of colours.



-  RINOLEP-S611N Surface sealer
-  RINOLEP-P211 Primer

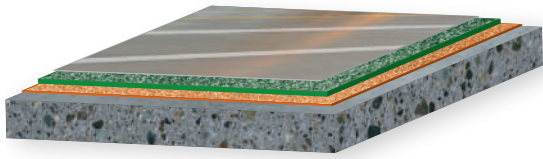









RINOLPARKING OS11b LE (very low emission)

The LEED v4 certified elastic car park coating for very heavily exposed surfaces, such as the weathered outdoor deck, is free of benzyl alcohol and nonylphenol. The three-layer polyurethane/epoxy resin system is permanently crack-bridging down to -20°C and protects the surface with a non-slip and visually appealing texture. Layer thickness approx. 3mm - 4mm.



-  RINOLEP-S614 Surface sealer
-  RINOLPU-L314 Elastic HwO - Layer
-  RINOLEP-P214 Primer



RINOLPARKING OS11b

Elastic car park coating for trafficable surfaces subject to high mechanical loads. The three-layer polyurethane/epoxy resin system is permanently crack-bridging up to -20°C and protects the surface with a non-slip and visually appealing structure. Layer thickness approx. 3mm - 4mm.

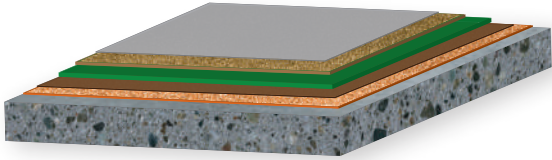







-  RINOLEP-S611N Surface sealer
-  RINOLPU-L311N Elastic HwO - Layer
-  RINOLEP-P211 Primer



RINOLPARKING OS10 - I

Elastic OS10 car park coating for accessible surfaces subject to very high mechanical exposure, such as the weathered open-air or mezzanine floor. This multi-layer system fulfils the required protective function even under extremely varying climatic weather conditions. The basis of the durable crack bridging is a HwO layer based on a polyurea spray coating. The hard-wearing surface is jointless, slip-resistant and can be designed in a variety of colours.

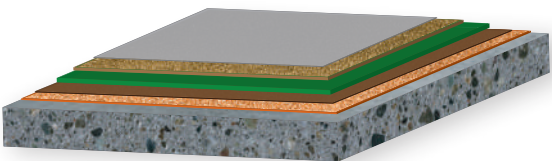






	RINOLPA-S635	Polyaspartic - Sealer
	RINOLPU-V435	Wearing layer
	RINOLP-L5 (Polyurea)	HwO Polyurea Spray Coating
	RINOLPU-P235	Bonding agent
	RINOLEP-P235	Primer



RINOLPARKING OS10 - II

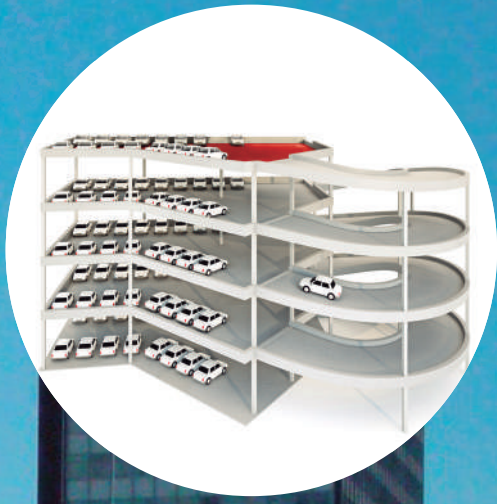
Elastic OS10 car park coating for accessible surfaces subject to very high mechanical exposure, such as the weathered open-air or mezzanine floor. This multi-layer system fulfils the required protective function even under extremely varying climatic weather conditions. The basis of the durable crack bridging is a HwO layer based on a polyurethane spray coating. The hard-wearing surface is jointless, slip-resistant and can be designed in a variety of colours.



	RINOLPA-S635	Polyaspartic - Sealer
	RINOLPU-V435	Wearing layer
	RINOLPU-L340	HwO PUR Spray Coating
	RINOLPU-P235	Bonding agent
	RINOLEP-P235	Primer

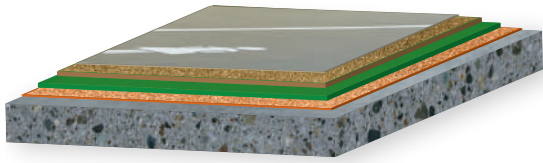






RINOLPARKING OS11a LE (very low emission)

The LEED v4 certified elastic car park coating for very heavily exposed surfaces, such as the weathered outdoor deck, is free of benzyl alcohol and nonyl phenol. The hard-wearing, crack-bridging and slip-resistant surface provides the required protective function even in extremely varying climatic weather conditions.

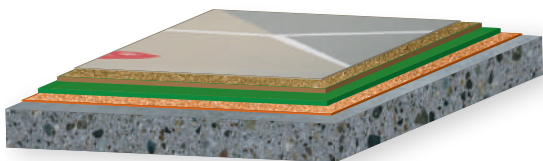




	RINOLEP-S614	Surface sealer
	RINOLPU-V414	Wearing layer
	RINOLPU-L314	Elastic HwO - Layer
	RINOLEP-P214	Primer



RINOLPARKING OS11a

Elastic car park coating for accessible surfaces subject to very high mechanical exposure, such as the weathered outdoor deck. This four-layer polyurethane/epoxy resin system fulfils the required protective function, such as permanent crack bridging and slip resistance, even under extremely varying climatic weather conditions.

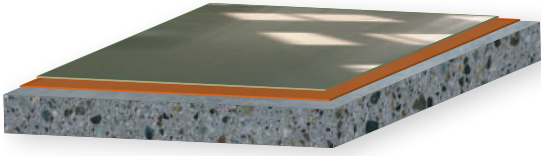


	RINOLEP-S611N	Surface sealer
	RINOLPU-V411	Wearing layer
	RINOLPU-L311N	Elastic HwO - Layer
	RINOLEP-P211	Primer



RINOLPERM

RINOLPERM is a water-based, solvent-free sealing system for lightly exposed industrial floors, stairwells and utility rooms. The jointless, dust-binding sealing system protects surfaces and can optionally be made slip-resistant.

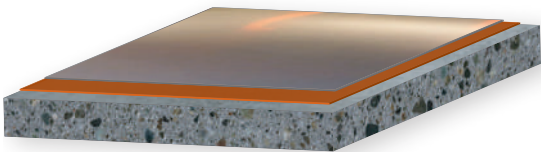


-  RINOLEP-S680 Sealer (1-2 layers)
-  RINOLEP-S680 Primer



RINOLSEALING

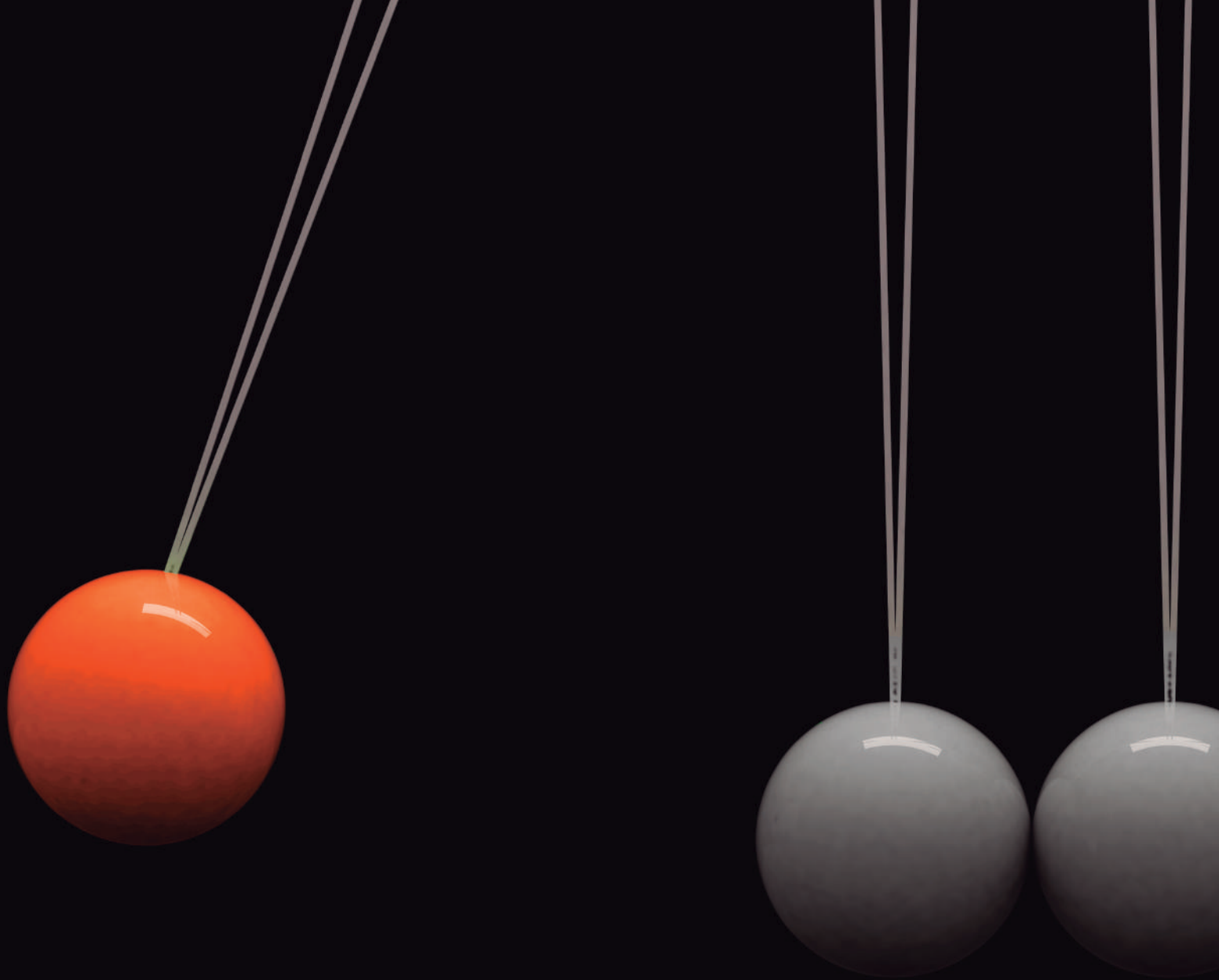
RINOLSEALING is an economical surface protection with optimised performance for lightly to moderately stressed industrial floors, staircases as well as utility rooms and corridors. The jointless, dust-binding sealing system permanently protects and hardens surfaces. The surface is easy to clean.



-  RINOLEP-S600 Surface sealer
-  RINOLEP-P202 Primer







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