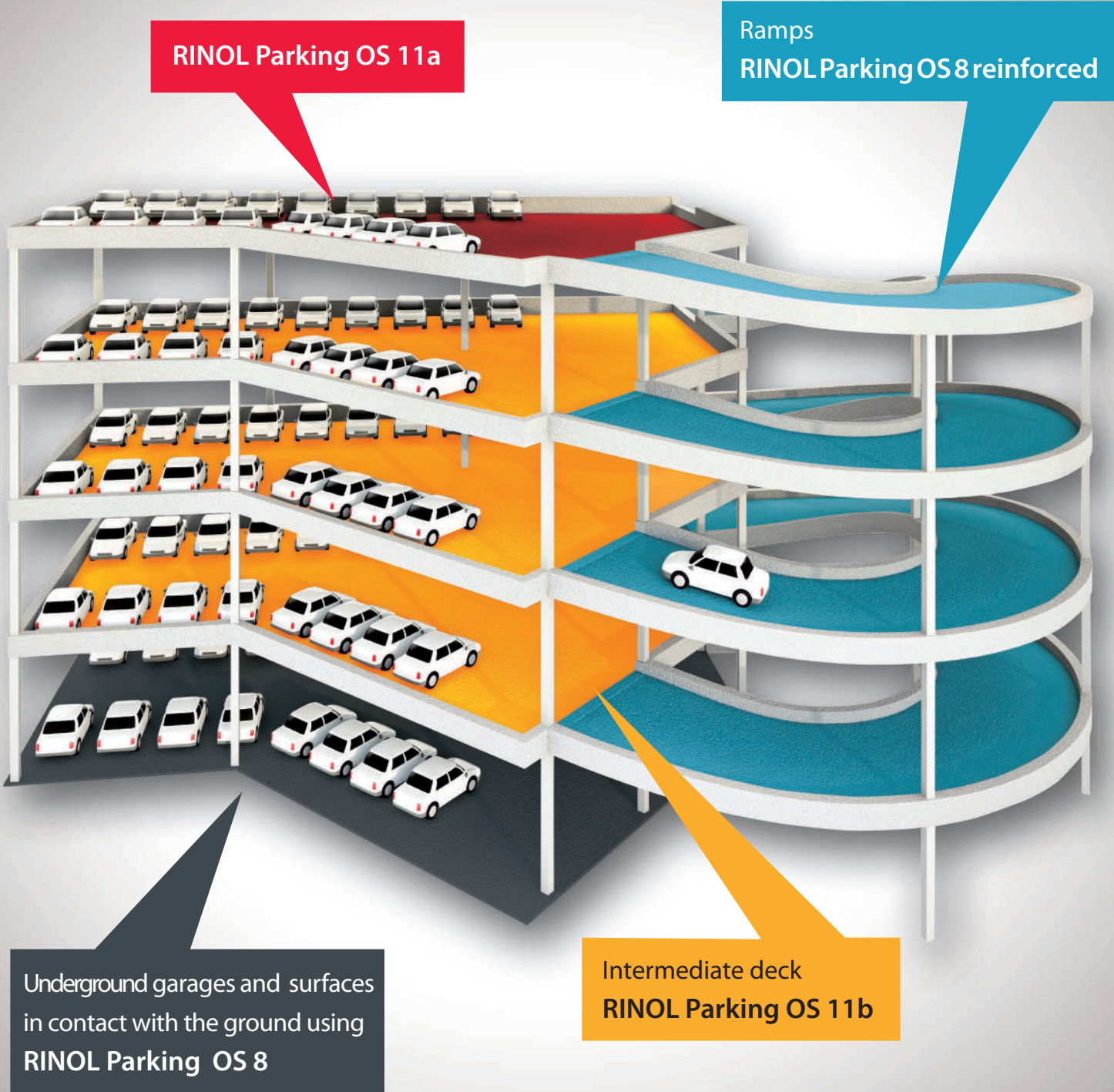


# RINOL



**RINOL Surface Protection Systems**  
Multi-Storey Car Park & Underground Garage

# RINOL Surface Protection Systems







## Parking surfaces in multi-storey car parks and underground garages

In multi-storey car parks and underground garages the long-lasting protection of the stability of the supporting floorslabs and parking surfaces in contact with the ground against mechanical and chemical stress, alternating temperature loads, frost and other damaging agents is of enormous significance for the durability of the reinforced concrete or composite structure.

For this RINOL Parking Systems are used both on the floor slab in contact with the ground, the covered dynamically stressed intermediate deck, the extremely stressed surfaces of the open-air deck as well as on the ramps and spindles subjected to shearing stresses and heavy loads.

Here RINOL Parking Systems fulfill the regulated requirements of DIN EN 1504 in combination with DIN V 18026, as well as DAfStb. with flying colors on the basis of reaction resins.

With over 50 years of experience in the development, production and application of cast resin coating systems and certified according to DIN EN ISO 9001, the RCR Group is the market leader in the field of industrial floors and coatings.

Whether for the construction of new parking surfaces, for the adaptation of existing floor surfaces to changed utilization requirements or in the case of reconstruction:

Our RINOL Parking - Coating - Systems are equal to the high demands and ensure high standards.

RINOL Parking Systems are used throughout the world under the different climatic conditions typical in various countries.

You will find our references every where in the world.

**We advise you, together with our trained RINOL multi-storey car park consultants, in the optimal choice of the system, appropriate for your case of application.**



## RINOLParking OS8

Rigid multi-storey car park coating for heavily mechanically stressed surfaces suitable for traffic according to the "Directives for the protection and repair of concrete structures of the German Reinforced Concrete Committee" DIN EN 1504:2.

### System Profile

Two-layer epoxy resin system for multi-storey car parks or underground garages on concrete or similar subsurfaces.

#### Range of colors

Available in RINOL standard colors

You will find more details in the RINOL color chart

#### Properties

- Low development of odor while processing
- Protects surfaces
- Hard-wearing
- Suitable for vehicle traffic
- Non-slip
- Seamless
- Dust-binding

#### Scopes of application

- Garages and multi-storey car parks

### Technical Data

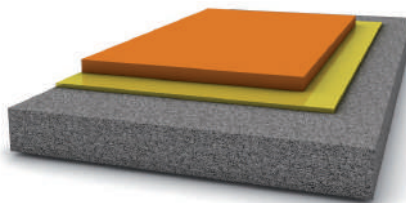
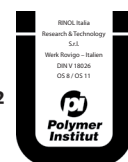
**Bending tensile strength approx. 48 N/mm<sup>2</sup>**  
DIN EN 196 / ASTM C190




**Compressive strength approx. 55 N/mm<sup>2</sup>**  
DIN EN 50014-23/50-2




**Adhesive strength > 2,3 N/mm<sup>2</sup>**  
DIN ISO 4624

**Abrasion resistance**  
(Taber CS10 Rad) 27 mg/1.000 Zyklen  
DIN 53754 / ASTM D 1044

**Shore D-Hardness 67**  
DIN 53505 / ASTM D 2240



OS 8 System (unfilled)  
 **Surface sealing**  
 RINOL EP-S600 Abstreue  
 **Base layer**  
 RINOL EP-P208  
 **Subsurface**

OS 8 System (prefilled)  
 **Surface sealing**  
 RINOL EP-S611N  
 **Base layer**  
 RINOL EP-P211  
 **Subsurface**

As a rule floor slabs in contact with the ground are not subjected to extreme dynamic stress like intermediate or open-air decks. Besides the resilience, here the requirements are the protection against aggressive substances that damage reinforced concrete, against rising damp, the visually user-friendly colored design and finally the non-slip quality.





## RINOLParking OS11b

Elastic multi-storey car park coating for heavily mechanically stressed surfaces suitable for traffic according to the "Directives for the protection and repair of concrete structures of the German Reinforced Concrete Committee" DIN EN 1504:2

### System Profile

Three-layer polyurethane / epoxy resin system for multi-storey car parks on concrete or similar subsurfaces.

#### Range of colors

Available in RINOL standard colors

You will find more details in the RINOL color chart

#### Properties

- Low development of odor while processing
- Protects surfaces
- Bridges cracks at -20° C
- Hard-wearing
- Suitable for vehicle traffic
- Non-slip
- Seamless
- Dust-binding

#### Scopes of application

- Garages and multi-storey car parks

### Technical Data

**Adhesive strength** > 2,5 N/mm<sup>2</sup>

DIN ISO 4624

**Abrasion resistance**

(Taber CS10 Rad) 74 mg/1.000 Zyklen

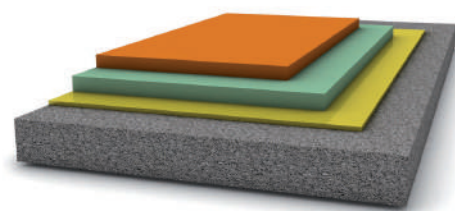
DIN 53754 / ASTM D 1044

**Shore D-Hardness 67**

DIN 53505 / ASTM D 2240

**Crack bridging class B 3.2 (II T+V)**

DIN EN 1062-2



- Sealing  
RINOL EP-S611
- HwO layer  
RINOL PU-L311
- Base layer  
RINOL EP P211
- Subsurface

Other than with floor slabs in contact with the ground, intermediate decks are subjected to dynamic load changes due to vehicle traffic. Besides the requirements described for floor slabs, here the crack-bridging property of the system used is of enormous significance. If applicable, to be observed here is the implementation of the DBV leaflet "Multi-storey car parks and underground garages" for rigid OS 8 systems with accompanying crack treatment.



## RINOLParking OS11a

Elastic multi-storey car park coating for heavily mechanically stressed surfaces suitable for traffic according to the "Directives for the protection and repair of concrete structures of the German Reinforced Concrete Committee" DIN EN 1504:2

### System Profile

Four-layer polyurethane / epoxy resin system for multi-storey car parks on concrete or similar subsurfaces.

#### Range of colors

Available in RINOL standard colors

You will find more details in the RINOL color chart

#### Properties

- Low smell during installation
- Bridges cracks at -20°C
- Protects surfaces
- Hard-wearing
- Suitable for vehicle traffic
- Non-slip
- Seamless
- Dust-binding

#### Scopes of application

- Garages and multi-storey car parks

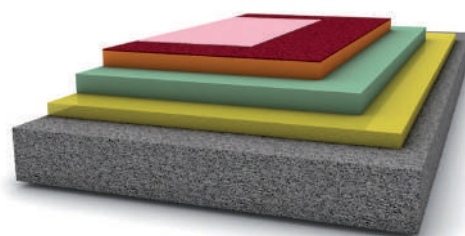
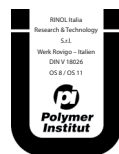
### Technical Data

**Adhesive strength** > 1,5 N/mm<sup>2</sup>  
DIN ISO 4624

**Abrasion resistance**  
(Taber CS10 Rad) 74 mg/1.000 Zyklen  
DIN 53754 / ASTM D 1044

**Shore D-Hardness 65**  
DIN 53505 / ASTM D 2240

**Crack bridging class B 3.2 (II T+V)**  
DIN EN 1062-2



- Sealing**  
RINOL EP-S611
- Wear layer**  
RINOL PU-V411
- HwO layer**  
RINOL PU-L311
- Base layer**  
RINOL EP P211
- Subsurface**

Besides the ramp, the weathered open-air deck of a multi-storey car park represents the greatest stress for the coating system. Besides the most far-reaching congruent requirements of the floor slab and the intermediate deck, here the RINOL OS11a coating system fulfills the protective functions required in extremely different climatic weather conditions.

## CONSULTING:

Consulting means, solving problems before they occur.

We have comprehensive know-how in the construction and composition of RINOL parking deck coating systems and industrial floors. We are happy to make this knowledge available to our customers at an early stage.

## PRODUCTION:

All components and constituents of our RINOL car park coating systems are developed, produced and tested by us ourselves.

This guarantees top quality, fast availability and optimal quality of our products.

## INSTALLATION:

Our industrial floor systems only unfold their full functionality with professional installation, under control of the highest quality guidelines.

Throughout the world RINOL industrial floors are a byword for reliability, precision, quality and cost-effectiveness!

- Industrial floor systems for retail, trade and industry, proven reliability for decades
- Special developments for our customer in the Hightech branches
- Subsidiaries and affiliated companies worldwide
- Research & Development, Production by RINOL - for you only one contact partner

## ↓ OUR STANDARD COLORS

Light grey

**7035**

Pebble grey

**7032**

Telegrey

**7045**

Stone grey

**7030**

Dust grey

**7037**

Agate grey

**7038**



European Conformity  
Our products conform to  
the standard DIN EN 13813, which  
permits us to use the CE symbol  
(European Conformity)

# RINOL

## The RCR Group

The RCR Group – the market leader in industrial floors and coatings, certified according to DIN EN ISO 9001 – is represented in many countries in Europe and has a comprehensive network of competent and market-experienced partners for all types of industrial floors.

In the framework of our modular system, we can offer you a comprehensive complete system of industrial floors:

From reinforced and non-reinforced sole plates, concrete floors and various types of wear layers through to individual highly complex synthetic resin coatings for superior demands.

Wherever you are located, you will always find a partner of

the RCR Group in your vicinity, who offers you a complete service: The RINOL specialists are your competent contact partners: from the planning phase and consulting with regard to the requirements to be fulfilled in your branch, through the timely and professional application, to the execution of the complete maintenance and servicing work. Our coating systems are the result of decades of experience and constant development work in our laboratory. Naturally, for your safety these are tested continuously by independent experts and in addition have all essential international test certificates.



### IMPORTANT INFORMATION

The necessary care was applied in the compilation of the technical data for the products of the company. All recommendations or suggestions submitted with regard to the use of these products are however given without guarantee, since the conditions under which the use takes place eliminate the influence of the company. It is the responsibility of the customer himself to check, whether the products are suitable for the respective application purpose and whether the operating conditions are appropriate for the respective product. All specifications do not have the significance of an assurance of properties.

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