



# Mapecfloor® Parking System

Waterproofing coatings  
for trafficked areas



# Mapefloor® Parking System

Protecting the surface of concrete trafficked areas in structures designed for parking cars and vehicles is extremely important in order to preserve their functionality and durability to maintain a high level of safety and minimise maintenance costs.

Due to their special physical and mechanical properties, the resin coating products used in the **Mapefloor Parking System** guarantee a high level of protection for surfaces and may be adapted to suit a wide range of environmental conditions installations. Trafficked areas treated with one of these systems are characterised by the following main properties:



- Surfaces are waterproof, aggressive liquids are prevented from penetrating into the concrete and coming into contact with the reinforcing bars.
- Surfaces have a slip-resistant finish so that vehicles may travel in safety. The degree of slip resistance may be varied according to specific requirements.
- They have good resistance to chemicals such as oil, fuel, lubricants, de-icing salts, etc.
- They offer a high degree of mechanical resistance to the passage of vehicles.
- The systems are flexible\* to guarantee that surfaces remain impermeable, even if substrates settle slightly after applying the system.
- May be applied on external surfaces.\*
- Easy to maintain.
- Excellent cost/performance ratio over the years.
- Highly durable.
- They have an attractive finish and different colours may be used to divide areas according to specific type of use (e.g. trafficked areas for vehicles, parking areas, pedestrian trafficked areas, checkpoints, horizontal road signs, etc.).

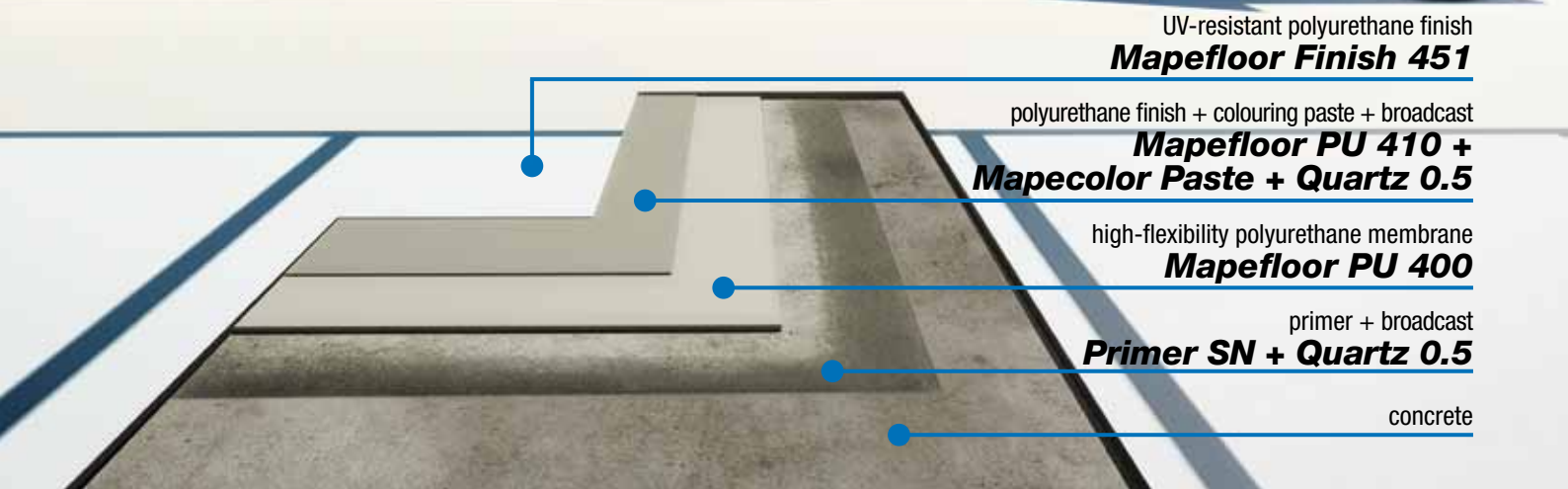
\* Depending on the type of system applied



# Mapecolor® Parking System HE

Multi-layered seamless polyurethane coating system with high dynamic crack-bridging capacity for pedestrian areas and areas with vehicular access subjected to intense use, and to protect parking areas even outdoor in compliance with Rili DafStb (Guidelines of the German Committee on Reinforced Concrete) OS 11a and EN 1504-2 (concrete surface protection systems).

Total thickness 3-3.5 mm.



UV-resistant polyurethane finish

**Mapecolor Finish 451**

polyurethane finish + colouring paste + broadcast

**Mapecolor PU 410 +  
Mapecolor Paste + Quartz 0.5**

high-flexibility polyurethane membrane

**Mapecolor PU 400**

primer + broadcast

**Primer SN + Quartz 0.5**

concrete

Highly elastic, slip-resistant, multi-layered, coloured coating system with *crack-bridging* capacity down to -20°C. Suitable for creating strong, waterproofing\* coatings with high chemical resistance on both internal and external surfaces in:

- Multi-storey car parks
- Flat roofs for vehicle use
- Internal and external transit areas for garages
- Garages
- Shared covered courtyards with garages

\* Depending on the amount of movement in the cracks in the substrate and the crack-bridging capacity of the system.

## Technical Data

Tear strength* (DIN 53515) +23°C	30 N/mm
Tear strength** (DIN 53515) +23°C	27 N/mm
Elongation at break* (DIN 53504) +23°C	470%
Elongation at break** (DIN 53504) +23°C	80%
Shore A hardness* (DIN 53505)	70
Shore A hardness** (DIN 53505)	88
Dynamic crack-bridging capacity at -20°C	Class B 3.2

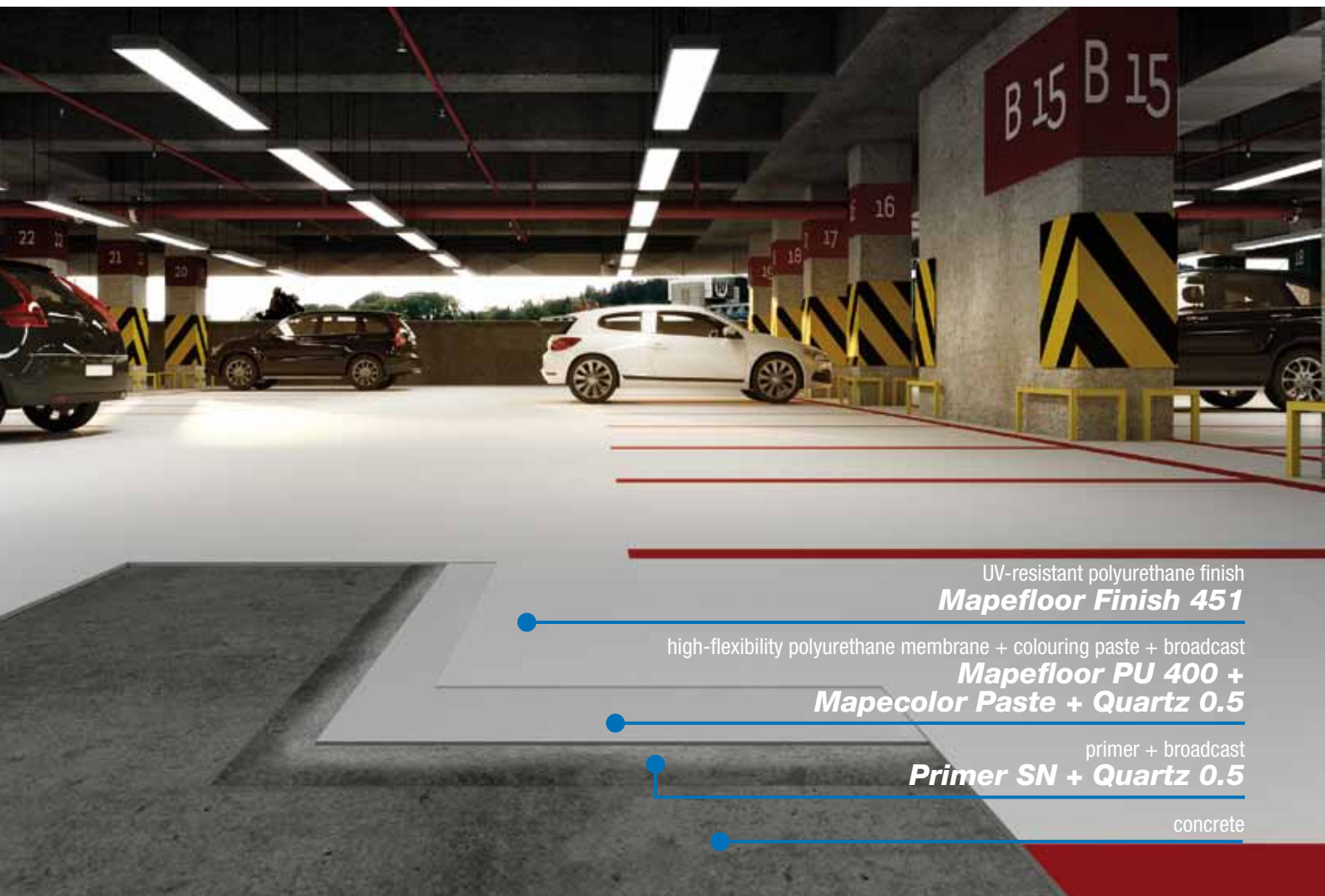
\* Values for **Mapecolor PU 400** flexible membrane mixed with 30% **Quartz 0.25**

\*\* Values for **Mapecolor PU 410** membrane mixed with 30% **Quartz 0.25**

# Mapecolor® Parking System ME

Multi-layered seamless polyurethane coating system with high dynamic crack-bridging capacity for pedestrian areas and areas with vehicular access subjected to intense use, and to protect parking areas even outdoor in compliance with Rili DafStb (Guidelines of the German Committee on Reinforced Concrete) OS 11b and EN 1504-2 (concrete surface protection systems).

Total thickness 2.5-3 mm.



UV-resistant polyurethane finish  
**Mapecolor Finish 451**

high-flexibility polyurethane membrane + colouring paste + broadcast  
**Mapecolor PU 400 +  
Mapecolor Paste + Quartz 0.5**

primer + broadcast  
**Primer SN + Quartz 0.5**

concrete

Flexible, non-slip, multi-layered, coloured coating system with crack-bridging capacity at temperatures down to -20°C. Suitable for creating strong, impermeable and waterproofing\* coatings with high chemical resistance on internal surfaces, including those subjected to variations in temperature, such as:

- Multi-storey car parks - intermediate levels
- Internal trafficked areas for garages
- Garages

\* Depending on the amount of movement in the cracks in the substrate and the crack-bridging capacity of the system.

## Technical Data

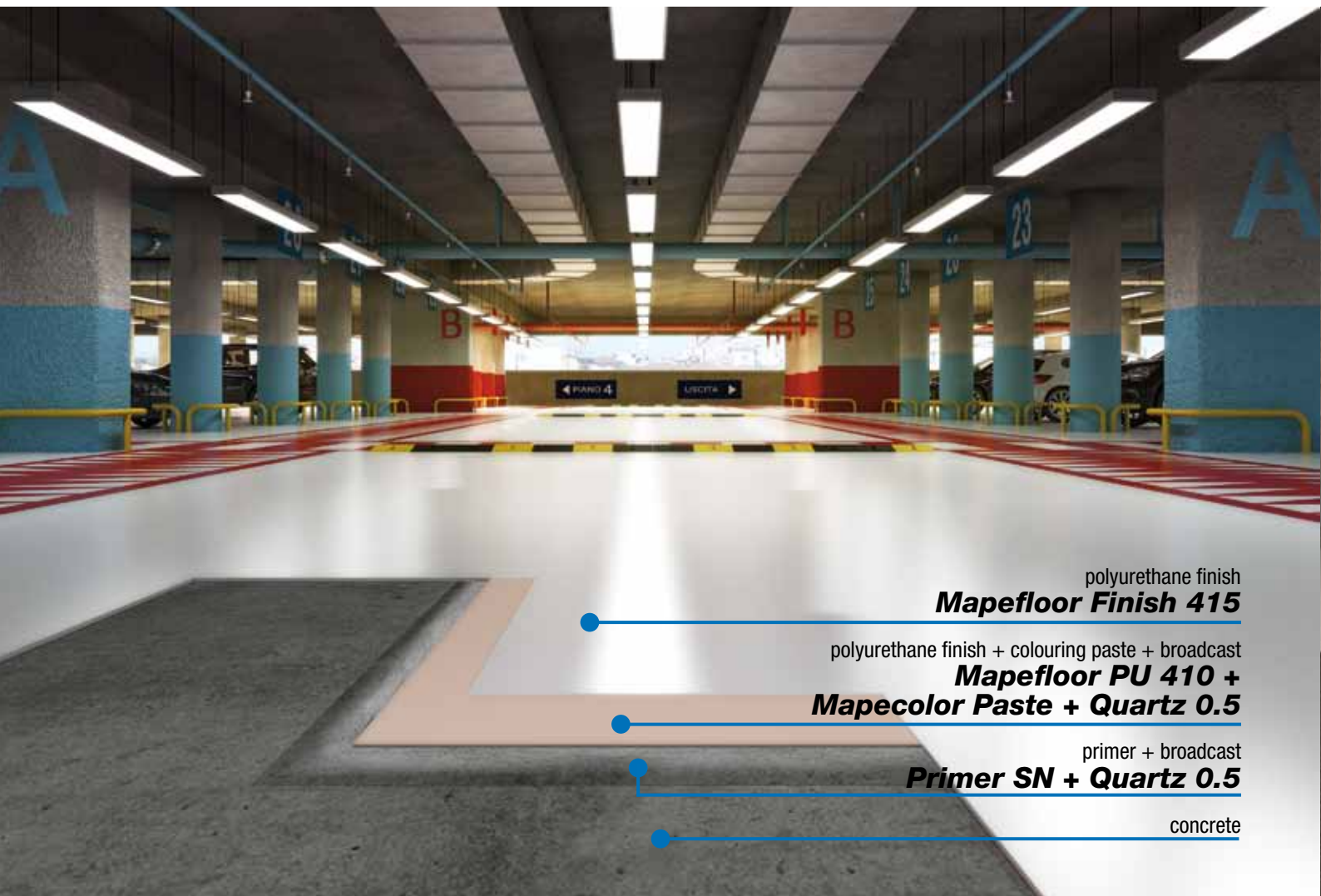
Tear strength* (DIN 53515) +23°C	30 N/mm
Elongation at break* (DIN 53504) +23°C	470%
Shore A hardness* (DIN 53505)	70
Dynamic crack-bridging capacity at -20°C	Class B 3.2

\* Values for **Mapecolor PU 400** flexible membrane mixed with 30% **Quartz 0.25**

# Mapefloor® Parking System ID

Multi-layered seamless polyurethane coating system with good dynamic crack-bridging capacity for pedestrian areas and areas with vehicular access subjected to intense use, and to protect parking areas in compliance with Rili DafStb (Guidelines of the German Committee on Reinforced Concrete) OS 13 and EN 1504-2 (concrete surface protection systems).

Total thickness 2-2.5 mm.



polyurethane finish

**Mapefloor Finish 415**

polyurethane finish + colouring paste + broadcast

**Mapefloor PU 410 +  
Mapecolor Paste + Quartz 0.5**

primer + broadcast

**Primer SN + Quartz 0.5**

concrete

Flexible, non-slip, multi-layered, coloured coating system. Suitable for creating strong, waterproofing\* coatings with high chemical resistance on internal surfaces, including those subjected to moderate variations in temperature:

- Multi-storey car parks - intermediate levels
- Internal trafficked areas for garages
- Garages

\* Depending on the amount of movement in the cracks in the substrate and the crack-bridging capacity of the system.

## Technical Data

Tear strength* (DIN 53515)	27 N/mm
Elongation at break* (DIN 53504) +23°C	80%
Shore A hardness* (DIN 53505)	88
Dynamic crack-bridging capacity at -10°C	Class A 1

\* Values refer to **Mapefloor PU 410** membrane mixed with 30% **Quartz 0.25**

# Mapefloor® Parking System RHT/RLT

Multi-layered seamless epoxy coating system for pedestrian areas and areas with vehicular access subjected to intense use (RHT) or light use (RLT) in compliance with Rili DafStb (Guidelines of the German Committee on Reinforced Concrete) OS 8 and EN 1504-2 (concrete surface protection systems).

Total thickness: 3-3.5 mm (RHT) or 0.8-1.2 mm (RLT).



epoxy formulate + colouring paste  
**Mapefloor I 300 SL +  
Mapecolor Paste**

primer + broadcast  
**Primer SN + Quartz 0.5**

concrete

Non-slip, multi-layered, coloured coating system. Suitable for creating strong, impermeable coatings with high chemical resistance on internal surfaces in:

- **Multi-storey car parks subjected to heavy (RHT) or light (RLT) traffic**
- **Garages, transit areas for garages, etc.**

## Technical Data

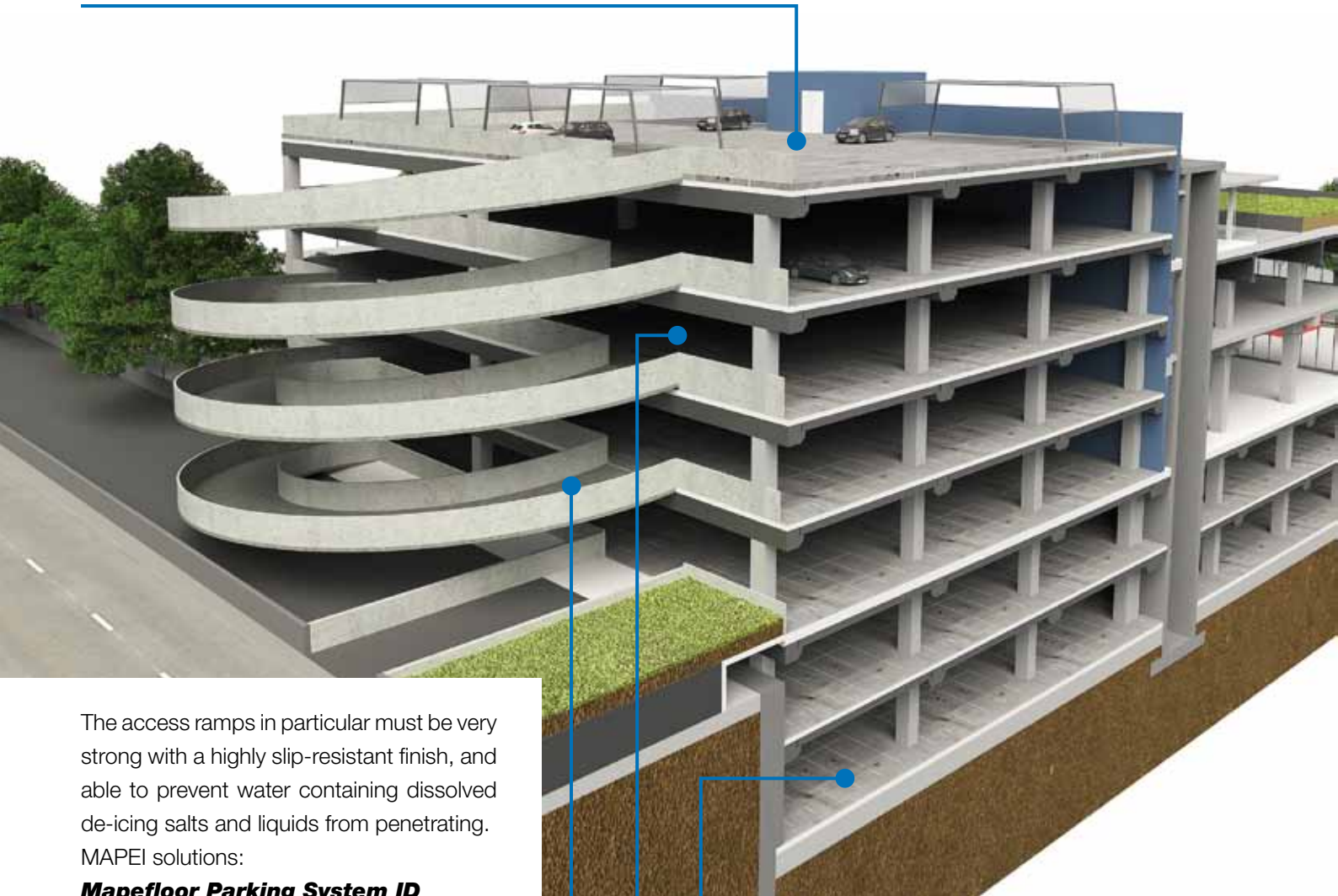
Adhesion to substrate (EN 13892-8)	3.10 N/mm <sup>2</sup> (failure of concrete)
BCA wear resistance (EN 13892-4)	10 µm
Impact strength (EN ISO 6272)	20 Nm

# Application examples of **Mapefloor® Parking System**

The floor slab where vehicles travel is affected by the problems caused by mechanical wear and aggressive chemical products, combined with the effects of harmful atmospheric agents and high temperature variations acting on the structure, that in some cases may be in the order of many tens of degrees centigrade. The solution to implement must create an impermeable, non-slip, coloured surface that is resistant to traffic and contact with oil and fuel. It must also be flexible enough to allow for any movements in the substrate and have crack-bridging properties to prevent water and de-icing salts infiltrating into the slab and corroding the reinforcing bars in the structure.

MAPEI solutions:

## **Mapefloor Parking System HE**



The access ramps in particular must be very strong with a highly slip-resistant finish, and able to prevent water containing dissolved de-icing salts and liquids from penetrating.

MAPEI solutions:

### **Mapefloor Parking System ID**

### **Mapefloor Parking System RHT/RLT**

The intermediate floors must offer protection against mechanical wear and aggressive chemicals, and also prevent de-icing salts from penetrating into them, but the movements due to expansion and contraction of the substrate are less compared with the top floor.

MAPEI solutions:

### **Mapefloor Parking System ME**

### **Mapefloor Parking System ID**

To protect trafficked areas on the lowest underground floors it is not necessary to guarantee the flexibility and crack-bridging capacity of the system because there is limited risk of the floor slabs suffering from structural failure. The coatings resistance to mechanical wear and aggressive chemicals, along with its impermeability and wide range of different colours, are all characteristics that combine to provide sufficient protection and preserve the surface.

MAPEI solutions:

### **Mapefloor Parking System RHT**

### **Mapefloor Parking System RLT**



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