



Mapefloor® 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

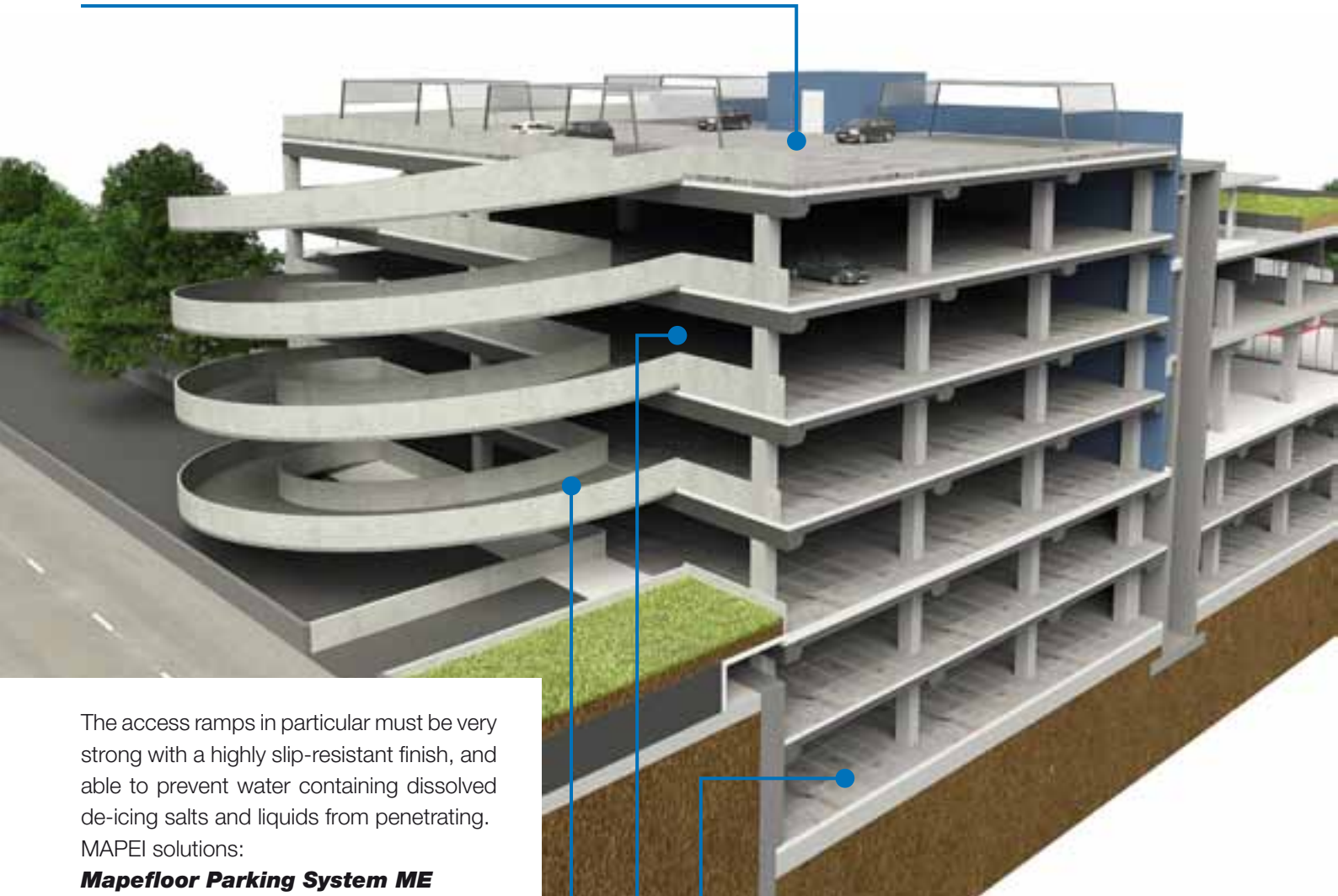


Application examples of **Mapecfloor® Parking System**

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:

Mapecfloor 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:

Mapecfloor Parking System ME

Mapecfloor Parking System ID

Mapecfloor 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:

Mapecfloor Parking System ME

Mapecfloor 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:

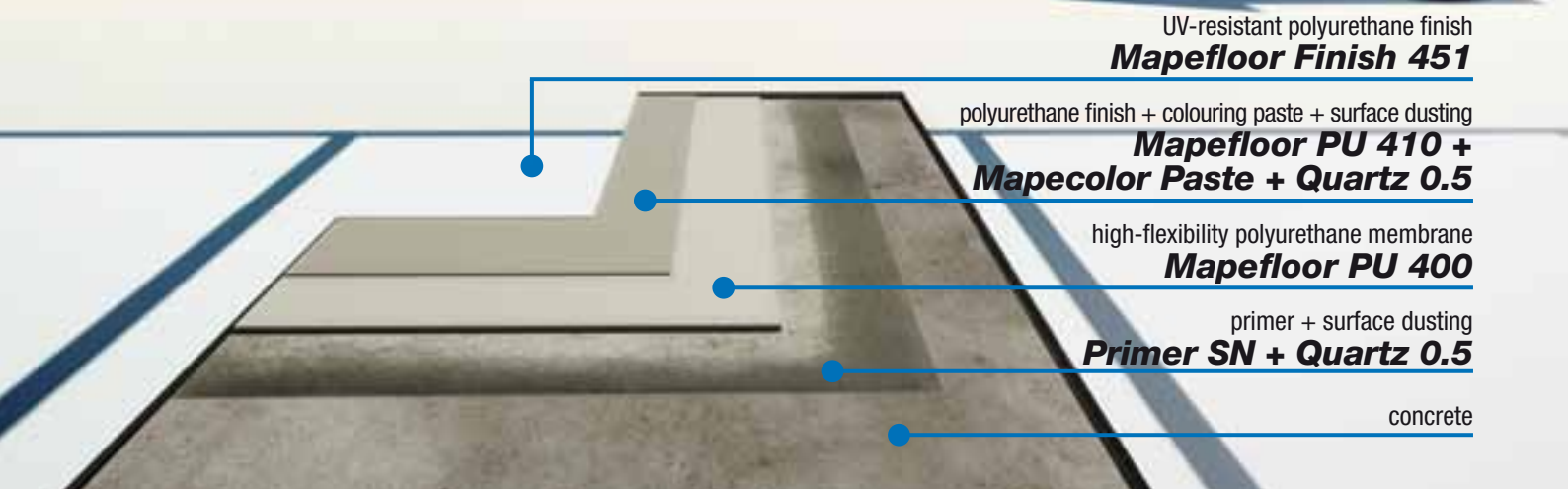
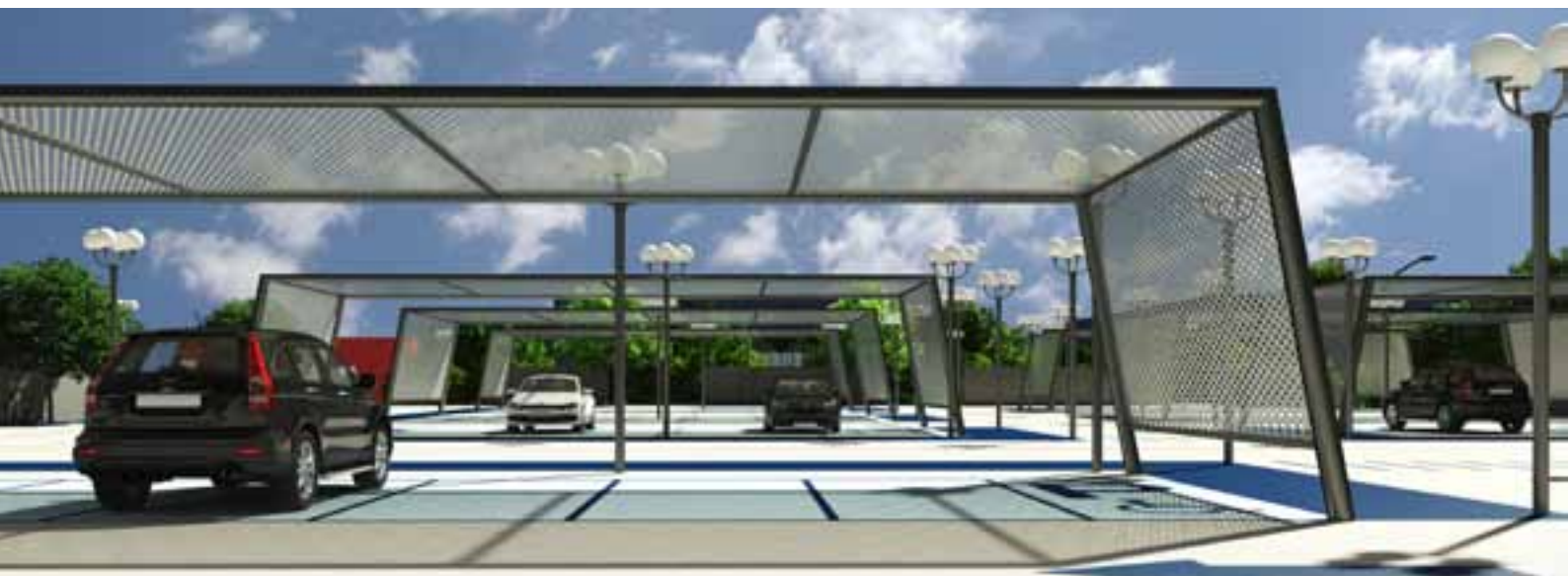
Mapecfloor Parking System RHT

Mapecfloor Parking System RLT

Mapecolor® Parking System HE

Multi-layered polyurethane system that meets Class OS 11a requirements according to EN 1504-2 standards, with a slip resistant finish and 100% solids content. Used to form protective, impermeable, seamless coatings on surfaces in car parks subjected to heavy traffic, including external car parks.

Thickness: 3-3.5 mm.



UV-resistant polyurethane finish
Mapecolor Finish 451

polyurethane finish + colouring paste + surface dusting
**Mapecolor PU 410 +
Mapecolor Paste + Quartz 0.5**

high-flexibility polyurethane membrane
Mapecolor PU 400

primer + surface dusting
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 failure* (DIN 53504) +23°C	470%
Elongation at failure** (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

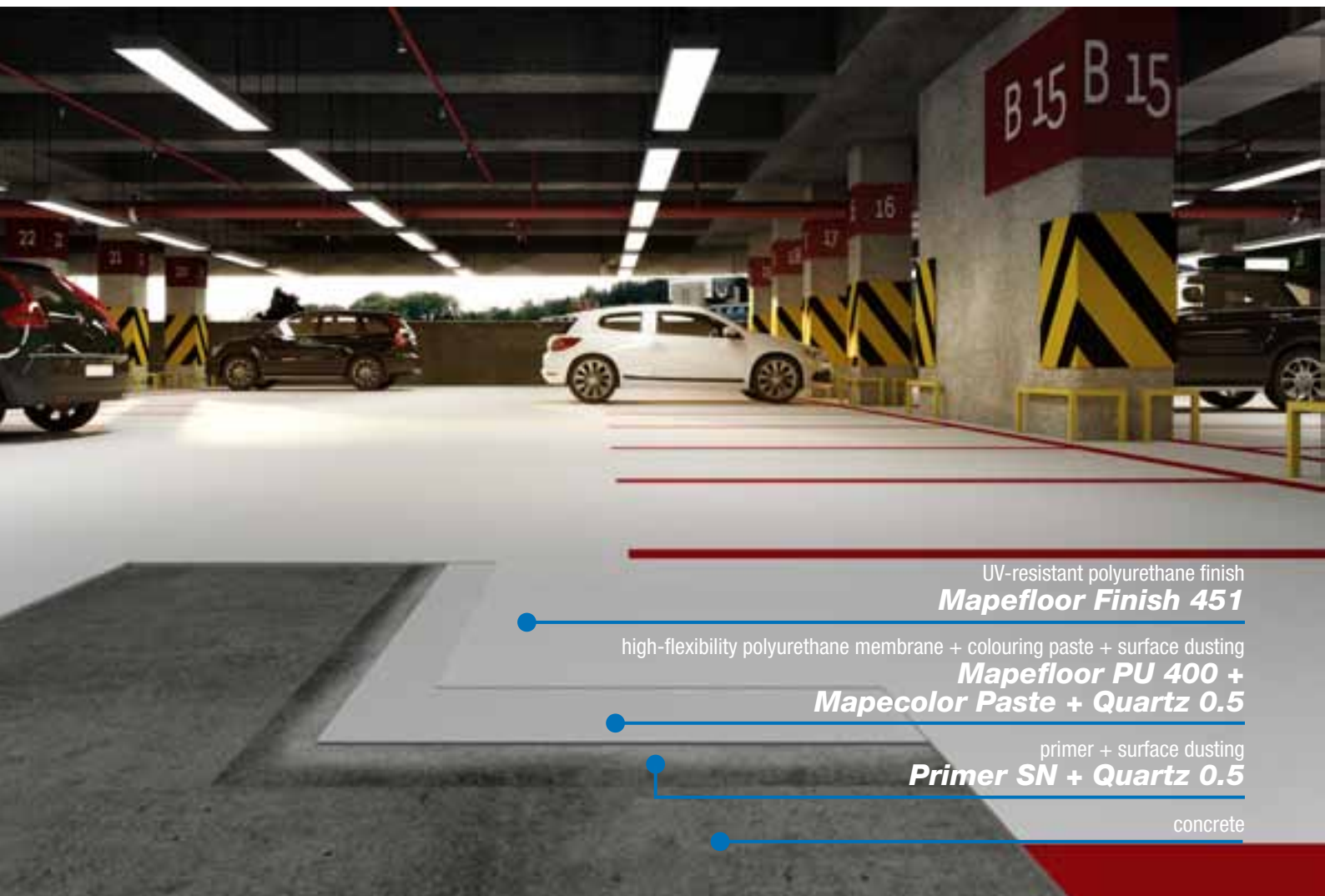
* Values for **Mapecolor PU 400** flexible membrane mixed with 30% **Quartz 0.25**

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

Mapecolor® Parking System ME

Multi-layered polyurethane system that meets Class OS 11b requirements according to EN 1504-2 standards, with a slip-resistant finish and 100% solids content. Used to form protective, impermeable, seamless coatings on surfaces in car parks subjected to heavy traffic, including external car parks.

Thickness: 2.5-3 mm.



UV-resistant polyurethane finish
Mapecolor Finish 451

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

primer + surface dusting
Primer SN + Quartz 0.5

concrete

Flexible, non-slip, multi-layered, coloured coating system with crack-bridging capacity at temperatures down to -10°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

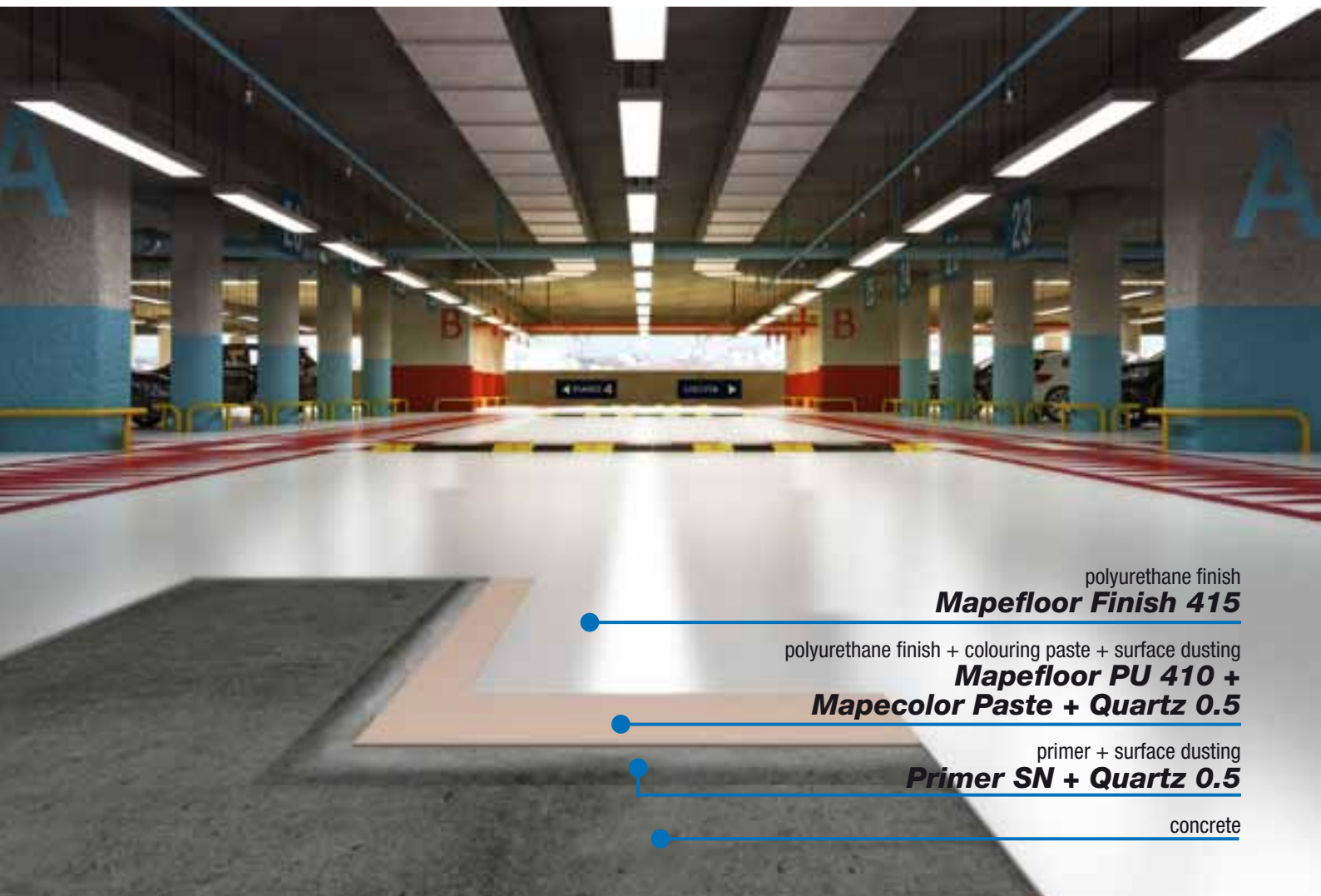
Tear strength* (DIN 53515) +23°C	30 N/mm
Elongation at failure* (DIN 53504) +23°C	470%
Shore A hardness* (DIN 53505)	70
Dynamic crack-bridging capacity at -20°C	Class B 3.2

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

Mapefloor® Parking System ID

Multi-layered, seamless polyurethane system compliant with Class OS 13 requirements according to EN 1504-2 standards, with a slip resistant finish and 100% solids content. Used to form a protective coating on surfaces in car parks subjected to heavy traffic.

Thickness: 2-2.5 mm.



polyurethane finish

Mapefloor Finish 415

polyurethane finish + colouring paste + surface dusting

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

primer + surface dusting

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

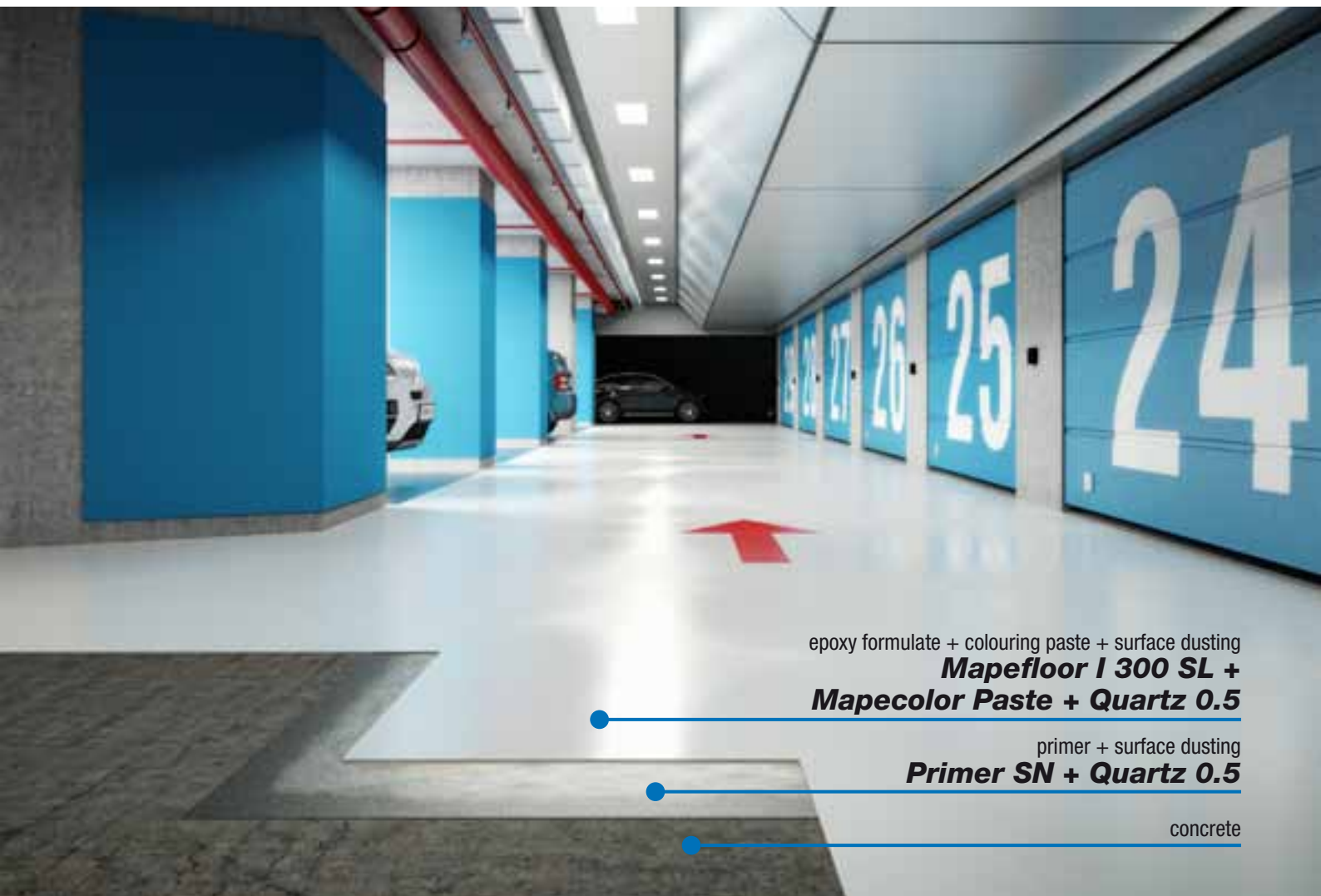
Tear strength* (DIN 53515)	27 N/mm
Elongation at failure* (DIN 53504) +23°C	80%
Shore A hardness* (DIN 53505)	88
Dynamic crack-bridging capacity at -10°C	Class A 1

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

Mapecolor® Parking System RHT/RLT

Multi-layered, seamless epoxy system compliant with Class OS 8 requirements according to EN 1504-2 standards, with a non-slip finish and 100% solids content. Used to form a protective coating on surfaces in car parks subjected to heavy (RHT) or light (RLT) traffic.

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



epoxy formulate + colouring paste + surface dusting

**Mapecolor I 300 SL +
Mapecolor Paste + Quartz 0.5**

primer + surface dusting

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 (UNI EN 13892-8)	3.10 N/mm ² (failure of concrete)
BCA wear resistance (UNI EN 13892-4)	10 µm
Impact strength (UNI EN ISO 6272)	20 Nm



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