

Mapefloor™

Parking Deck Systems

Flexible waterproofing membrane systems
for heavy pedestrian and vehicular traffic



Mapecfloor Parking Deck Systems

Two-component, flexible polyurethane systems designed to provide an elastomeric waterproofing membrane for four types of traffic: standard pedestrian; heavy pedestrian / light vehicular; heavy-duty vehicular; and extreme vehicular

Where to use

The *Mapecfloor* parking deck systems may be used for the following applications:

- Multi-storey parking garages and areas with heavy vehicular traffic
- Concrete surfaces requiring flexibility as well as high resistance to wear and abrasion
- Suspended pedestrian walkways and balconies
- For waterproofing interior and exterior concrete surfaces

Performance characteristics

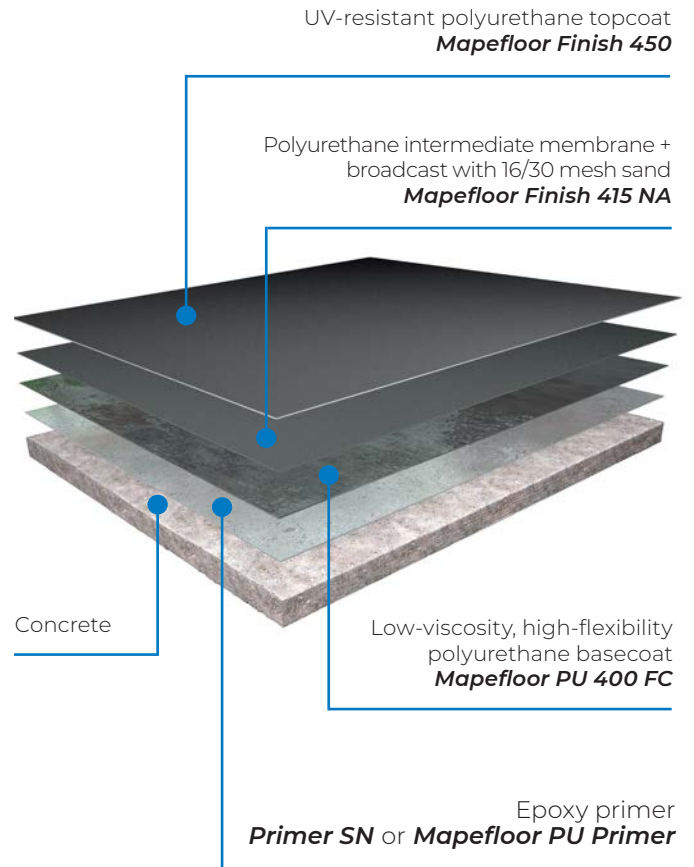
The *Mapecfloor* parking deck systems provide surfaces with the following:

- High flexibility with good crack-bridging capacity
- High resistance to wear and abrasion for long-lasting performance
- Low odor and VOC compliance for use in interior occupied environments
- Easy cleanability
- Excellent resistance to chemical agents, including diluted acids, bases, oil, fuel and salts
- Highly attractive wearing surface, in as little as one topcoat

Color palette

Colors shown here may not accurately represent the actual color of the installed coating because of jobsite conditions, product preparation, installation methods, lighting, and the type of surface utilized. In addition, because these color samples may alter over time, MAPEI recommends periodic replacement of samples. Consequently, MAPEI makes no representation, warranty or guarantee of any kind regarding the color, texture, appearance or suitability of our coatings. For those characteristics, MAPEI excludes all express or implied warranties including, but not limited to MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE.

Example of a system for heavy-duty vehicular traffic



(001) Light Gray



(002) Medium Gray



(003) Concrete Gray



(004) Charcoal



(005) Black



(006) Tan



(007) Red



(008) Green



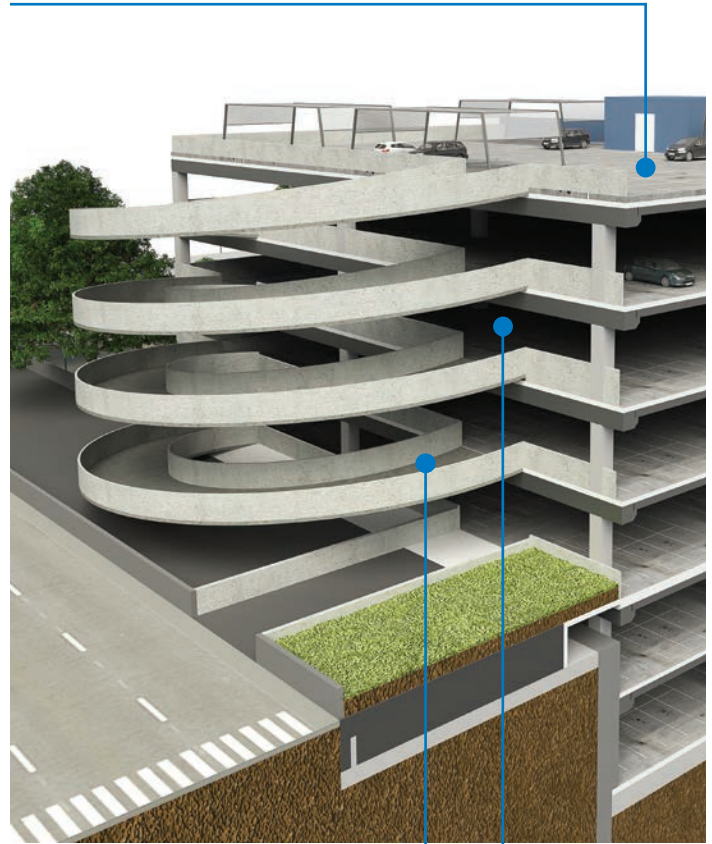
(009) Dark Maple



Application examples for *Mapefloor* Parking Deck Systems

- Parking decks are negatively affected by wear and abrasion, aggressive chemical agents, water and salt intrusion, harmful atmospheric agents and extreme temperature variations. The solution is to provide an impermeable, non-slip surface that will resist the wear caused by vehicular traffic, in addition to the oil, fuel and salts that deck surfaces experience. Flexible enough to allow for above-grade movements in the substrate, the surface treatment must also have crack-bridging properties to prevent water and de-icing salts from infiltrating the slab.
- Access ramps of the parking structure must be equally protected with a highly slip-resistant and abrasion-resistant surface to handle the multiple stops and turns on these ramps. They must also be protected against water and dissolved salts penetrating the slabs.
- Intermediate parking decks must be protected from mechanical wear and aggressive chemicals, and be able to prevent de-icing salt intrusion into the substrate. Intermediate decks must also handle movement caused by expansion and contraction of the substrate, although not to the same degree as the top deck.
- Decks on and below grade require the same resistance to aggressive chemicals and wear as the upper decks, but they are generally less impacted by slab movement and possible structural failure than above-grade decks.

Mapefloor parking deck system with ***Mapefloor Finish 450*** aliphatic topcoat



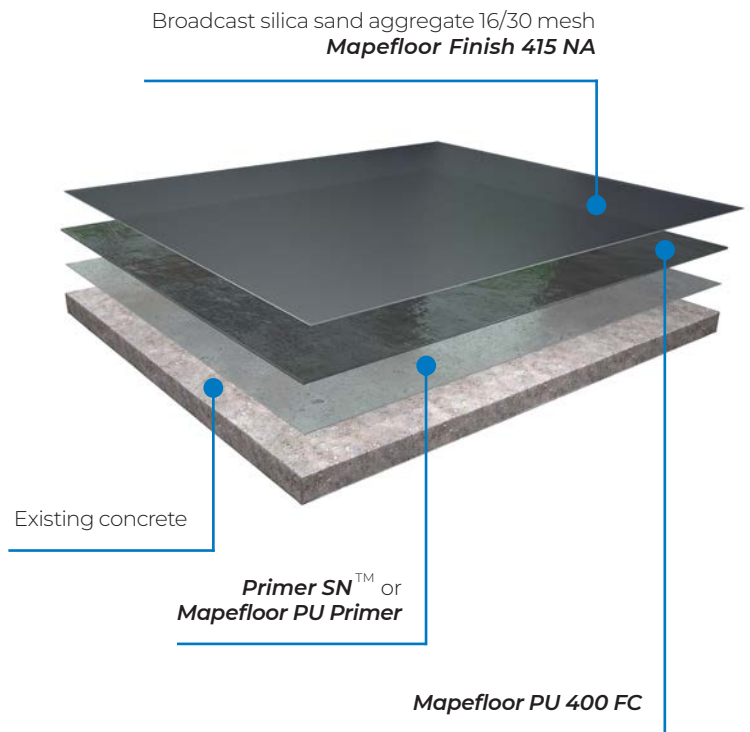
Mapefloor parking deck system with ***Mapefloor Finish 415 NA*** intermediate coat, ***Mapefloor Finish 450*** aliphatic topcoat and double sand broadcast

Mapefloor parking deck system with ***Mapefloor Finish 415 NA*** aromatic topcoat and sand broadcast

Installation phases

1. Application of the primer (*Primer SN* or *Mapecfloor PU Primer*)
2. Spreading the flexible polyurethane basecoat (*Mapecfloor PU 400 FC*)
3. Spreading the polyurethane topcoat *Mapecfloor Finish 415 NA* or *Mapecfloor Finish 450*)
4. Broadcasting aggregate at a rate of 10 to 15 lbs. per 100 sq. ft. (0.49 to 0.73 kg per m²) and back-rolling

Example of a system for heavy pedestrian / light vehicular traffic



Product application

1. For slabs above grade, apply *Primer SN* at a thickness of 9 to 15 mils WFT or a rate of 107 to 178 sq. ft. per U.S. gal. (2.62 to 4.36 m² per L). Alternatively, *Mapefloor PU Primer* may be used when applied at 3 to 5 mils WFT or a rate of 320 to 530 sq. ft. per U.S. gal. (7.84 to 13.0 m² per L).
2. Pour the mixed *Mapefloor PU 400 FC* onto the surface of the properly prepared substrate and spread evenly and uniformly with a rubber squeegee at a depth of 20 mils WFT or a rate of 80 sq. ft. per U.S. gal. (1.96 m² per L). Apply *Mapefloor PU 400 FC* within 6 to 24 hours of application of *Primer SN* or *Mapefloor PU Primer*. Re-prime if *Mapefloor PU 400 FC* cannot be applied within 24 hours. Steep slopes may require thinner, multiple passes of coating to achieve the necessary thickness.
3. Allow *Mapefloor PU 400 FC* to cure (at least 3 hours at 75°F [24°C]). Then, pour mixed *Mapefloor Finish 450* or *Mapefloor Finish 415 NA* onto the previous layer of *Mapefloor PU 400 FC* and spread evenly and uniformly with a rubber squeegee at a depth of 12 mils WFT* or a rate of 134 sq. ft. per U.S. gal. (3.28 m² per L). Apply *Mapefloor Finish 450* or *Mapefloor Finish 415 NA* within 8 to 24 hours of application of *Mapefloor PU 400 FC*.
4. Immediately broadcast 16/30 mesh silica quartz sand aggregate – evenly distributed – into the wet coating at a rate of 10 to 15 lbs. per 100 sq. ft. (or 0.49 to 0.73 kg per m²), and back-roll. Allow 5 to 6 hours for curing.
5. For heavy-duty areas such as spiraled ramps, turn areas and ticket booths, apply an additional coat of *Mapefloor Finish 450* or *Mapefloor Finish 415 NA* at 12 mils WFT or a rate of 134 sq. ft. per U.S. gal. (3.28 m² per L). Broadcast a second layer of 16/30 mesh silica quartz sand at a rate of 10 to 15 lbs. per 100 sq. ft. (or 0.49 to 0.73 kg per m²) and back-roll. Heavy-duty areas should average 44 mils WFT, excluding aggregate and primer. All other areas (non-heavy-duty) should average 35 mils WFT, excluding aggregate and primer.

* Refer to MAPEI's Mapefloor Installation Manual.





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