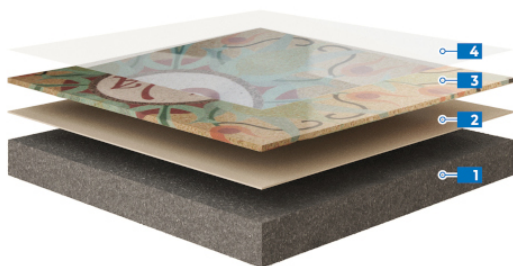


# MAPEFLOOR SYSTEM 35 F

Epoxy coating system to create highly decorative and durable floors with a “Terrazzo alla Veneziana” effect total thickness approx. 10 mm

## Products used in the system

PRIMER SN - QUARZO 0,5 - QUARZO 0,9 - MAPEFLOOR I 300 SL or MAPEFLOOR I 302 SL or MAPEFLOOR I 302 SL/TZ - DYNASTONE TZ - MAPELUX LUCIDA or MAPELUX OPACA



- 1 substrate: concrete
- 2 Primer SN + Quartz 0.5 + broadcast of Quartz 0.9
- 3 Mapefloor I 300 SL or Mapefloor I 302 SL or Mapefloor I 302 SL/TZ Dynastone TZ
- 4 Mapelux Lucida or Mapelux Opaca (optional)

## DESCRIPTION

**MAPEFLOOR SYSTEM 35 F** is a system used to create polished floors with a “Terrazzo alla veneziana” effect by spreading an approx. 10 mm thick mixture made from **MAPEFLOOR I 302 SL** or **MAPEFLOOR I 300 SL**, or **MAPEFLOOR I 302 SL/TZ** two-component epoxy binders, and **DYNASTONE TZ**, special mixed aggregates, to form a layer approx. 10 mm thick.

The **MAPEFLOOR SYSTEM 35 F** screeds are left exposed as finished floors and are suitable for a number of uses in the interior design of commercial, residential, and public spaces such as shopping centres, showrooms, schools, museums, theatres, restaurants, bars, representative offices, shops, apartments, etc.

## WHERE TO USE

**MAPEFLOOR SYSTEM 35 F** is the ideal solution for new or existing substrates to create highly decorative floors in numerous commercial, residential, and public environments and tertiary sector environments and settings subject to medium to heavy traffic.

**MAPEFLOOR SYSTEM 35 F** is used for:

- pedestrian areas in shopping centres;
- pedestrian areas in supermarkets;
- sales areas in shops;
- showrooms;
- restaurants and bars;
- apartments;
- areas in banks used by the public and in representative offices;
- offices;
- theatres and museums;
- offices and meeting rooms in schools.

## PERFORMANCE AND ADVANTAGES

- Unique, original finish.
- Easy to clean and maintain.
- A variety of colour schemes and aesthetic effects.
- Flat, smooth, light-reflecting surfaces.
- Seamless surfaces with limited number of joints.
- Highly durable.

## SURFACE PREPARATION

### Characteristics of the substrate

Before applying the **MAPEFLOOR SYSTEM 35 F**, the substrate on which it is going to be applied must be carefully checked.

The concrete screed must be solid, compact, stable, strong, and clean and dimensioned according to the static and dynamic design loads it will have to withstand while in service.

To get the best results, the substrate must be checked to make sure there are no materials or substances that could affect adhesion of the system, such as:

- cement laitance;
- dust, detached or loose parts;
- protective wax, curing products, paraffin or efflorescence;
- oil stains or layers of dirty resin;
- traces of paint or chemical products.

Any other kind of material or substance that could affect the adhesion of the coating must be removed before starting work. If such materials or substances are present, the substrate must be prepared using a suitable preparation method. Please contact MAPEI Technical Services for advice and information.

The minimum compressive strength of concrete substrate must be 25 N/mm<sup>2</sup> and its tensile strength must be at least 1.5 N/mm<sup>2</sup>. The strength of the substrate must also be suitable for its final use and for the types of loads acting on the flooring.

The moisture content in the substrate must be max. 4% and there must be a suitable vapour barrier; in any case there must not be capillary rising damp (check by testing it with a sheet of polythene).

If the above conditions are met, **MAPEFLOOR SYSTEM 35 F** may be applied on concrete industrial floors, conventional or polymer-modified cementitious screeds, shrinkage-compensated screeds such as those made from **MAPECEM** or **TOPCEM**, old cement Terrazzo floors, and ceramic floors only if well bonded and prepared according to specification.

## Preparation of the substrate

It is very important that the surface is prepared correctly to guarantee correct installation and the best performance of the **MAPEFLOOR SYSTEM 35 F** epoxy cycle.

The most suitable method to prepare the surface is the shot-blasting, being careful to not go too deep down into the substrate. Do not use chemical preparation methods, such as acid rinsing, or aggressive percussion tools, to prevent damaging the substrate.

Any defects present in the surface, such as holes, pitting, cracking, etc., must be repaired with **PRIMER SN** mixed with quartz sand or made thixotropic with **ADDITIX PE**, or with **MAPEFLOOR JA** or **MAPEFLOOR JA FAST** depending on the width and depth of the defects or cracks. Reintegrate any badly damaged areas or joints, fill hollows in the surface, and repair or carry out localized modifications to slopes with **MAPEFLOOR EP19**, ready-mixed epoxy mortar. If the substrate needs to be strengthened, apply **PRIMER MF** with a roller in one or more coats until the substrate is completely saturated.

## Preliminary checks before application

Make sure that all the checks indicated in section 1 "Characteristics of the substrate" have been carried out, and that all the operations indicated in section 2 "Preparation of the substrate" have been carried out correctly. The surrounding temperature must be higher than +8°C (the ideal application temperature is between +15°C and +25°C) and the temperature of the substrate must be at least 3°C higher than the dew-point temperature.

## Preparation and application of the products

Carefully follow the preparation instructions contained in the Technical Data Sheet for each single product used to form the complete system: **PRIMER SN**, **MAPEFLOOR I 302 SL**, **MAPEFLOOR I 300 SL** or **MAPEFLOOR I 302 SL/TZ**. Do not add quartz sand to **MAPEFLOOR I 302 SL** or **MAPEFLOOR I 300 SL** or **MAPEFLOOR I 302 SL/TZ** when they are used in **MAPEFLOOR SYSTEM 35**.

## Preparation and application of PRIMER SN

Pour component B into component A and mix with a low speed electric mixer to form a smooth, even paste. While mixing, add approx. 20% by weight of **QUARTZ 0.5** to the mix, and mix again for a few minutes to form a smooth, even compound. Pour the product onto the floor to be coated and spread it out evenly and uniformly using a straight steel trowel or a rake. While the compound is still wet, fully broadcast the surface with **QUARTZ 0.9**.

## Removal of the dust

Once **PRIMER SN** has hardened, remove excess sand with an industrial vacuum cleaner

**Note:** If, after the first coat of primer, the surface is still porous, not compact, or if it has pinholes due to its high absorbency, smooth over the surface with a second layer of **PRIMER SN** as described above until the porosity has been completely eliminated.

## Preparation of the MAPEFLOOR I 302 SL or MAPEFLOOR I 300 SL or MAPEFLOOR I 302 SL/TZ and DYNASTONE TZ mix

Prepare **MAPEFLOOR I 302 SL** or **MAPEFLOOR I 300 SL** or **MAPEFLOOR I 302 SL/TZ** in a mixer suitable for resin mortars. Pour component B into component A, and mix for a few minutes. If the products have been supplied in neutral version, add the specific colouring paste **MAPECOLOR PASTE** to the mixture. Keep mixing the compound and add the **DYNASTONE TZ** aggregates.

The binder/aggregates ratio is approx. 28 : 100 by weight.

Keep mixing **MAPEFLOOR I 302 SL**, **MAPEFLOOR I 300 SL** or **MAPEFLOOR I 302 SL/TZ** and **DYNASTONE TZ** until they form an homogeneous compound.

Spread small amounts of the blend on the substrate to form a layer at least 10 mm thick using flat spreaders, trowels and straight-edges.

We recommend applying an even layer on the surface, without forming hollows or defects (holes, irregularities or high roughness).

Leave the coating to cure for 24 hours, depending on the surrounding temperature and humidity.

## Roughing treatment

Once the **MAPEFLOOR I 302 SL**, **MAPEFLOOR I 300 SL** or **MAPEFLOOR I 302 SL/TZ / DYNASTONE TZ** mix has hardened, and in all cases after at least 24 hours, rough the surface using a dry system and then polish it using the wet technique. Both operations must be carried out using suitable polishing equipment with diamond disks or similar.

## Grouting

The first roughing cycle will leave some pinholes in the surface; grout them using the same resin used as a binder in the system (**MAPEFLOOR I 302 SL**, **MAPEFLOOR I 300 SL** or **MAPEFLOOR I 302 SL/TZ**), or with a

similar type of epoxy fluid resin applied by flat metal trowel. Lightly broadcast the resin while still wet with **QUARTZ 0.25**, then go over the surface with a single-head polisher with a black Scotch Brite® disk. Leave the surface to dry for at least 24 hours, depending on the surrounding temperature and relative humidity before carrying out the final polishing treatment.

#### Polishing

When polishing the surface of the floor, make sure it is kept wet; the polishing disks rotate at a very high speed and could overheat the surface of the resin and leave unsightly dark marks on the floor. We recommend carrying out preliminary tests beforehand.

Carry out the polishing operation in order to obtain a smooth, shiny, light-reflecting surface.

**Note:** if profiles are used to create a special layout or to divide the floor into areas with different decorative effects, we recommend using profiles made of PVC, aluminium or brass, which are easy to polish.

## CONSUMPTION

#### Primer

**PRIMER SN (A+B):** 0.7 kg/m<sup>2</sup>

**QUARZO 0.5:** 0.14 kg/m<sup>2</sup>

#### Broadcasting

**QUARZO 0.9:** 2-3 kg/m<sup>2</sup>

The actual consumption rate for the primer depends on the roughness of the substrate, the surrounding temperature during application and the general site conditions.

#### Terrazzo alla veneziana" finish system (thickness 10 mm):

**MAPEFLOOR I 300 SL:** (A + B)\*

or

**MAPEFLOOR I 302 SL** or **MAPEFLOOR I 302 SL/TZ** (A + B)\*: 4.2-4.8 kg/m<sup>2</sup>

**DYNASTONE TZ:** 15-17 kg/m<sup>2</sup>

\* if neutral version has been supplied, add **MAPECOLOR PASTE** to the mix.

The actual consumption rates depend on the roughness of the substrate, the surrounding temperature, general site conditions, etc.

#### Waxing

**MAPELUX LUCIDA / MAPELUX OPACA:** 0.05 kg/m<sup>2</sup>

## Hardening and step-on times

At +23°C **MAPEFLOOR SYSTEM 35 F** sets to foot traffic in 16 hours. It may be used by light loads after 1 to 2 days and is ready for final use once fully hardened after approx. 7 days. Lower temperatures lead to longer hardening and step-on times.

## CLEANING AND MAINTENANCE

**MAPEFLOOR SYSTEM 35 F** can be treated with **MAPELUX LUCIDA** or **MAPELUX OPACA**, special double-curing, highly resistant waxes which make surfaces even easier to clean and maintain.

If these operations are carried out regularly, the floor will keep its attractive finish for a long time and will help prevent the floor from picking up dirt. Floors made from **MAPEFLOOR SYSTEM 35 F** are generally easy to clean with 5% or 10% of neutral or alkaline detergent in water. **MAPEFLOOR MAINTENANCE KIT** is available for maintenance operations, and includes **MAPELUX LUCIDA** metallic wax, **MAPEFLOOR WAX REMOVER** and **MAPEFLOOR CLEANER ED** detergent for daily cleaning operations. Our Technical Services Department is also available for any information required

## NOTE

Procedures regarding the safe handling of the products are contained in the Safety Data Sheet for each single product in the system. However, the use of protective gloves and goggles is recommended when mixing and applying the products.

If the cycle is applied on different surfaces from those mentioned above, or in climatic conditions and/or for final uses not mentioned above, please contact the Technical Services Department at MAPEI S.p.A.

## TECNICAL DATA

### TECHNICAL DATA (after 7 days at +23°C)

Adhesion (EN 13892-8) (N/mm <sup>2</sup> ):	> 1,5 failure of concrete
Abrasion resistance (TABER Test CS 17 - 1000 revs - 1000 g) (EN ISO 5470-1) (mg):	approx. 70
Compressive strength (EN 196-1) (N/mm <sup>2</sup> ):	≥ 50
Flexural strength (EN 196-1) (N/mm <sup>2</sup> ):	≥ 20
Shore D hardness (DIN 53505):	85 ÷ 90
Skid test (EN 13036-4) PTV:	dry: 91 wet: 43

**Mapei S.p.A.**

Via Cafiero, 22, 20158, Milano



+39-02-376731



[www.mapei.com](http://www.mapei.com)



[mapei@mapei.it](mailto:mapei@mapei.it)

**6138-3-2022-gb**

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

