



Mapefloor I 360 AS

Two-component, self-levelling epoxy formulate for high strength, electrically conductive floor coating



WHERE TO USE

Mapefloor I 360 AS is used to form an electrically conductive coating on concrete substrates and cementitious screeds, including those subjected to medium to heavy traffic.

Mapefloor I 360 AS is particularly suitable for use in various sectors of industry, particularly the electronics, pharmaceuticals and automotive industries, in warehouses used for storing inflammable products and combustible powders and in the aeronautics and aerospace sectors.

Mapefloor I 360 AS is used in particular to provide conductive floor coating in environments used for the production of high technology electronics components and equipment, medical instruments, in computer rooms, in areas where batteries are charged and in all those areas where an electrically conductive covering is required.

Some application examples

- Electronics industry.
- Pharmaceuticals industry.
- Laboratories and operating theatres.
- Automotive industry.
- Warehouses.
- Sterile environments.

TECHNICAL CHARACTERISTICS

Mapefloor I 360 AS is a two-component, epoxy

resin-based formulate with special electrically conductive fillers according to a formulation developed in the MAPEI R&D laboratories.

Mapefloor I 360 AS is used to make smooth, strong, electrically-conductive, self-levelling waterproof floor coatings with good resistance to chemicals. Apply **Mapefloor I 360 AS** on substrates after priming the surface with **Primer W-AS**, a special two-component epoxy primer in water dispersion for electrically conductive and dissipative floor coatings.

ADVANTAGES

- Electrically conductive.
- High mechanical strength.
- May be coloured on site using **Mapecolor Paste**.
- Waterproof.
- Resistant to dust.
- Treated surfaces are easier to clean.
- System put rapidly into service.

RECOMMENDATIONS

- Make sure the film of **Primer W-AS** has completely cured before applying **Mapefloor I 360 AS**.
- Before applying **Mapefloor I 360 AS**, check the electrical conductivity of the surface of the **Primer W-AS**.

Mapefloor I 360 AS

- Do not apply **Mapefloor I 360 AS** on substrates that have not been suitably prepared and primed.
- Only apply **Mapefloor I 360 AS** if the temperature of the substrate is at least 3°C higher than the dew-point temperature.
- **Mapefloor I 360 AS** contains special fillers to guarantee its electrical conductivity which may leave the surface uneven, but this will have no effect on the final performance of the product.
- The consumption of **Mapefloor I 360 AS** must never be higher than 2.5 kg/m², otherwise the electrical conductivity of the system could be compromised.
- **Mapefloor I 360 AS** is sensitive to temperatures: as the temperature of the resin or substrate increases, the workability time of the product is reduced.
- **Mapefloor I 360 AS** must not be used on external surfaces.

APPLICATION PROCEDURE

Preparation of the surface

Mapefloor I 360 AS must only be applied after carrying out the preliminary mechanical preparation phases of the substrate, priming the surface with **Primer SN** and positioning special MAPEI copper strips (**Copper Band**) connected to the earth points. The strip may be positioned against a wall, around a pillar, etc. on the primer once it has hardened. Apply a piece at least 1-1.5 m long on the surface of the flooring and then fold at least 50 cm of the strip onto the wall. Be very careful when handling the copper strip and folding it against the wall so that it isn't torn or damaged beyond repair.

Also, only apply **Mapefloor I 360 AS** after applying **Primer W-AS** and checking the electrical conductivity of the system.

Preparation of the product

Mix each of the two components of **Mapefloor I 360 AS** separately with an electric mixer at low speed, add to component A 4 kg of **Quartz 0.25** while mixing with an electric mixer at low speed until thoroughly blended again. Then pour component B into the container of component A, add **Mapecolor Paste** (0.7 kg of **Mapecolor Paste** for each kit A+B of **Mapefloor I 360 AS**) and mix with a drill at low speed until fully blended.

Application of the product

Apply a single coat 1.5-2 mm thick of **Mapefloor I 360 AS** using a notched trowel or spreader (with "V" shaped notches) over the entire surface to be treated. Immediately after spreading on the self-levelling product, roll the surface with a spiked roller to eliminate any air trapped into the product during mixing.

We recommend rolling the surface with the spiked roller in both directions at ninety degrees to each other.

When the film of **Mapefloor I 360 AS** has hardened, test an area of the system to check its conductivity.

The number of checks and measurements of the conductivity of the floor covering must be proportional to the area to be tested as indicated below:

Size of the area	Number of tests
< 10 m ²	1 test per m ²
10 < m ² < 100	from 10 to 20 tests
> 100 m ²	10 tests per 100 m ²

Cleaning

Clean tools used to prepare and apply **Mapefloor I 360 AS** with ethyl alcohol immediately after use. Once hardened, the product may only be removed mechanically.

CONSUMPTION

Max. 2.5 kg/m² of **Mapefloor I 360 AS**.

PACKAGING

20 kg kits.

Component A: 16 kg.

Component B: 4 kg.

STORAGE

Mapefloor I 360 AS may be stored for 24 months in its original packaging in a dry area at a temperature of between +5°C and +30°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapefloor I 360 AS component A is irritating for the skin and eyes. Components A and B may cause sensitisation in those subjects sensitive to such substances.

Mapefloor I 360 AS component B is corrosive and may cause burns. It is also harmful if swallowed and may damage the eyes. When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

Mapefloor I 360 AS components A and B are also hazardous for aquatic life. Do not dispose of these products in the environment. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

	component A	component B
Colour:	neutral	transparent
Consistency:	thick liquid	liquid
Density (g/cm³):	1.53	1.00
Viscosity at +23°C (Pa·s):	15 (# 5 - 10 rpm)	0.3 (# 2 - 50 rpm)

APPLICATION DATA (at +23°C - 50% U.R.)

Mixing ratio:	comp. A : comp. B = 80 : 20 by weight	
Colour of mix:	neutral	
Consistency of mix:	fluid	
Density of mix (kg/m³):	1,420	
Viscosity of mix (Pa·s):	1.5-2.5 (# 3 - 20 rpm)	
Workability time: - at +10°C: - at +20°C: - at +30°C:	approx. 40 min. approx. 25 min. approx. 15 min.	
Waiting time between application of Primer W-AS and Mapefloor I 360 AS (the times indicated may vary according to the surrounding conditions, such as temperature and relative humidity) Substrate temperature: - at +10°C: - at +20°C: - at +30°C:	min. 26 hours 17 hours 12 hours	max. 7 days 5 days 4 days
Set to foot traffic: - at +10°C: - at +20°C: - at +30°C:	approx. 30 hours approx. 24 hours approx. 16 hours	
Waiting time for light traffic: - at +10°C: - at +20°C: - at +30°C:	approx. 5 days approx. 3 days approx. 16 hours	
Waiting time before ready for maximum stress: - at +10°C: - at +20°C: - at +30°C:	approx. 10 days approx. 7 days approx. 5 days	
Application temperature range:	from +8°C to +35°C	

FINAL PERFORMANCE (at +23°C - 50% U.R.)*

Electrical resistance (EN 1081) (Ohm):	$10^4 < R_E < 10^6$ <i>these values may vary according to surrounding conditions (temperature and humidity) and the equipment used to take the readings</i>
Compressive strength after 28 days at +23°C (EN 196-1) (N/mm²):	approx. 80 (Mapefloor I 360 AS without quartz sand)
Flexural strength after 28 days at +23°C (EN 196-1) (N/mm²):	approx. 40 (Mapefloor I 360 AS without quartz sand)
Abrasion resistance - Taber abrasimeter (CS17 disk-1,000 revs-1,000 g) after 7 days at +23°C (DIN 53109) (mg):	70
Shore D hardness after 3 days at +23°C (DIN 53505):	77
Adhesion to concrete (ISO 4624) (N/mm²):	≥ 1.5 (failure of concrete)

* Testing was carried out on **Mapefloor I 360 AS** mixed with **Quartz 0.25**. If different types of quartz sand are used, the characteristics of the mix may be different from those mentioned above (workability, resistance to abrasion, appearance, etc.).
Also, the amount of **Quartz 0.25** may vary slightly according to the surrounding temperature (e.g. the amount of sand added may be reduced slightly at low temperatures).

**Mapefloor
I 360 AS**

information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

**All relevant references
for the product are available
upon request and from
www.mapei.com**

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