# MAPEFLOOR FINISH 58 W

**Two-component, aliphatic, water-based, transparent, matt polyurethane finish**

CE EN 1504-2 — IN COMPLIANCE WITH EUROPEAN STANDARD EN 1504-2 (C) PRINCIPLES MC-IR MAPEI SURFACE PROTECTION SYSTEMS FOR CONCRETE — 0474

## WHERE TO USE

**Mapefloor Finish 58 W** is a two-component, aliphatic, water-based, polyurethane coating product with a matt, transparent finish.
**Mapefloor Finish 58 W** is an ideal finishing product for **Mapefloor System** and **Ultratop System** toppings. It improves their resistance to wear and to scratches while limiting dirt pick-up and making routine cleaning and maintenance operations simpler.
**Mapefloor Finish 58 W** is also suitable for protecting the surface of concrete.

### Some application examples

- Matt, transparent finish on resin floors such as **Mapefloor System 33**, **Mapefloor System 53** and **Mapefloor Comfort Systems**.
- Matt transparent finish on self-levelling floors made using **Ultratop**, **Ultratop Living** or trowelled coatings made of **Ultratop Loft**.
- Protection for concrete surfaces.

## TECHNICAL CHARACTERISTICS

**Mapefloor Finish 58 W** is a two-component, aliphatic, transparent, non-yellowing polyurethane coating product with a matt finish according to a formula developed in the MAPEI R&D laboratories.
When hardened, **Mapefloor Finish 58 W** improves the mechanical characteristics and in particular provides higher resistance to abrasion and to scratches.
As the product is dispersed in water, it is odourless which makes it suitable for use in closed environments and makes the work of floor layers easier during application.
**Mapefloor Finish 58 W** has the following main characteristics:

- high resistance to abrasion and to scratches;
- matt finish;
- non-yellowing;
- easy to apply;
- water dispersion;
- a non-slip finish may be obtained by adding **Mapefloor Filler**.

When applied on concrete substrates **Mapefloor Finish 58 W** complies with the principles defined in EN 1504-9 ("*Products and systems for the protection and repair of concrete structures: definitions, requirements, quality control and conformity assessment. General principles for the use and application of systems*"), and

the requirements of EN 1504-2 ("*Protection systems for concrete surfaces*") for class: products for protecting surfaces - coating (C) – moisture control (MC) + increasing resistivity by limiting moisture content (IR).

## RECOMMENDATIONS

- Do not apply **Mapefloor Finish 58 W** on dusty, crumbling or weak substrates.
- Do not apply **Mapefloor Finish 58 W** on wet surfaces or on surfaces with oil or grease stains.
- Do not apply **Mapefloor Finish 58 W** on damp substrates or on substrates with capillary rising damp (contact our Technical Services Department).
- Only apply **Mapefloor Finish 58 W** if the temperature of the substrate is at least 3°C higher than the dew-point temperature.
- Do not mix partial quantities of the components to avoid mixing errors; the product may not harden correctly.
- Do not expose the mixed product to sources of heat.
- If rooms where the product is being used need to be warmed up, do not use heaters that burn fossil fuels. The carbon dioxide and water vapour given off into the air will affect the finish of the coating. Use electric heaters only.
- Protect the product from water for at least 24 hours after its application.
- If more than one coat of finish is applied, do not exceed the maximum recommended overlay time between each coat to guarantee optimum adherence of the coating. If this time is exceeded, the surface of the previous layer must be abraded mechanically before applying the next one.
- Do not dilute **Mapefloor Finish 58 W** with organic solvents.
- **Mapefloor Finish 58 W comp. B** may be subject to shade variations from colorless to straw yellow. This phenomenon does not affect the performance and the final aesthetic appearance of the coating.
- The coating may change colour if it comes into contact with aggressive chemicals. An aesthetical change, however, does not mean that it has been damaged by chemicals.
- Remove aggressive chemicals as soon as possible after they come into contact with **Mapefloor Finish 58 W**.
- Use suitable specific cleaning equipment and detergent to clean the product, depending on the type of dirt or stain to be removed.

## APPLICATION PROCEDURE

### Preparation of the substrate

**Mapefloor Finish 58 W** can be applied on both new and old coatings.
If the product is applied on new resin coatings, they must be hardened, dry and have been applied no more than 24 hours before. If more time has passed than indicated above, the resin substrates must be perfectly clean, free from oils, greasy substances and/or any contaminant. They must be abraded using a single-head sander with 200-300 grade sandpaper ora fine graded abrasive pad. After mechanically preparing the substrate, remove all dust by thoroughly vacuuming the surface to guarantee the correct adhesion of the product.
The application of **Mapefloor Finish 58 W** on substrates made using cementitious products from the **Ultratop** range must be carried out after the complete hardening of the cementitious material (at least 24 hours, depending on the thicknesses and temperature), and must be preceded by light sanding. After the dust produced has been completely vacuumed, in any case before applying **Mapefloor Finish 58 W**, a base coat of **Ultratop Base Coat** has to be applied to regulate the absorption of the substrate.
**Mapefloor Finish 58 W** can also be applied on new or old concrete, as long as the latter is perfectly clean, free from oils, greases and/or any other contaminant. Before proceeding with the treatment, it is always necessary to carry out an accurate sanding, followed by the vacuuming of the dust produced by an industrial vacuum cleaner in order to guarantee the correct adhesion of the finish which however will be applied only after the pore-sealing treatment to be carried out with a coat of **Mapecoat I 600 W**, diluted with water at a ratio of 1: 3 by weight.

### Preparation of the product

To prepare the product, mix component A with component B with a low-speed electric mixer until they are completely blended.
We recommend preparing only the quantity that may be applied within the maximum workability time.

If a non-slip surface finish is required to **Mapefloor Finish 58 W**, add 3-5% by weight of **Mapefloor Filler** while mixing.

### Application of the product

Apply 1-2 coats of **Mapefloor Finish 58 W** with a short-piled roller (such as mohair) or by airless spray on the surface When applying by roller proceed in two directions at right angles to each other. If the over-coating time between each coat exceeds the recommended time in the table, lightly sand the surface of the first coat then thoroughly remove by vacuum the dust produced before applying the next one.
Over-coating times are shorter at high temperatures and longer at low temperatures.
Make sure rooms are well ventilated to help the product dry.

## CLEANING

Clean tools used to prepare and apply **Mapefloor Finish 58 W** immediately after use with plenty of running water. Once hardened, the product may only be removed mechanically.

## CONSUMPTION

0.1-0.2 kg/m² per coat, depending on the roughness and porosity of the substrate.

## PACKAGING

**Mapefloor Finish 58 W**:

- component A: 5 kg;
- component B: 0,5 kg.

## STORAGE

12 months in its original, sealed packaging in a covered, dry place at a temperature of between +12°C and +30°C. Protect from frost.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.
PRODUCT FOR PROFESSIONAL USE.

## TECHNICAL DATA (typical values)

| PRODUCT IDENTITY | comp. A | comp. B |
|---|---|---|
| **Colour:** | transparent | transparent |
| **Consistency:** | liquid | liquid |
| **Density:** | 1.06 g/cm³ | 1.12 g/cm³ |

| APPLICATION DATA (at +23°C - 50% R.H.) | |
|---|---|
| **Mixing ratio in weight:** | A : B = 10 : 1 |
| **Colour of mix:** | transparent |
| **Consistency of mix:** | fluid |
| **Density of mix:** | 1,065 kg/m³ |
| **Workability time at +23°C:** | 60-90 mins. |
| **Temperature of application surface:** | +10°C to +30°C |
| **Waiting time between coats at +23°C:** | min. 4 h - max. 72 h |
| **Dust dry:** | approx. 35 mins. |

| FINAL PERFORMANCE | |
|---|---|
| **Abrasion resistance after 7 days (Taber abrasion meter, CS17 wheel, 1000 g, 1,000 revs) (EN ISO 5470-1):** | 50 mg |

| | |
|---|---|
| **Abrasion resistance after 7 days (Taber abrasion meter, CS10 wheel, 1000 g, 1,000 revs) (EN ISO 5470-1):** | 34 mg |
| **Gloss (Gloss 60°C) (ISO 2813):** | 10 |
| **Set to foot traffic at +23°C and 50% R.H.:** | 12 h |
| **Complete hardening time at +23°C and 50% R.H.:** | 7 days |
| **QUV colour variation (ASTM G 154):** | more than 1,500 hours with no variation |

**MAIN CHARACTERISTICS FOR CE MARKING ACCORDING TO EN 1504-2 – TAB. ZA. 1e (coating C, MC-IR)**

| Essential characteristics | Test method according to EN 1504-2 | Requirements | Typical values |
|---|---|---|---|
| **Permeability to water vapour:** | EN ISO 7783-2 | Class I $s_D$ < 5 m (permeable to water vapour)<br>Class II 5 m ≤ $s_D$ ≤ 50 m<br>Class III $s_D$ > 50 m (impermeable to water vapour) | Class I |
| **Capillary absorption and permeability to water:** | EN 1062-3 | w < 0.1 kg/m²·$h^{0.5}$ | 0.047 kg/m²·$h^{0.5}$ |
| **Direct traction adherence test. Reference substrate: MC (0.40) as specified by EN 1766, curing time:<br>– 28 days for one-component systems containing concrete and PCC systems:<br>– 7 days for reactive resin systems:** | EN 1542 | Average (N/mm²)<br>**Crack-bridging or flexible systems**<br>with no traffic: ≥ 0.8 (0.5)[b]<br>with traffic: ≥ 1.5 (1.0)[b]<br>**Rigid systems**[c]<br>with no traffic: ≥ 1.0 (0,7)[b]<br>with traffic: ≥ 2.0 (1.0)[b] | > 3.5 Mpa (rigid system with traffic) |
| **Reaction to fire:** | EN 13501-1 | from $A1_{FL}$ to $F_{FL}$ | $B_{FL}$-s1 |

## 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 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**

## LEGAL NOTICE

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