MAPEFLOOR FINISH 53 W/L

Two-component aliphatic, water-based, polyurethane transparent glossy finish





0474

DESCRIPTION

Mapefloor Finish 53 W/L is a two-component water-dispersed polyurethane aliphatic ,water-based, transparent glossy finish, according to a formula developed in the MAPEI R&D laboratories. When hardened, **Mapefloor Finish 53 W/L** improves the wear resistance of the treated surfaces and makes regular cleaning and maintenance operations easier.

TECHNICAL CHARACTERISTICS

- high resistance to wear;
- glossy aspect;
- water dispersed;
- compliant with the Fire Protection requirements of Marine Equipment Directive (MED) 2014/90/EU.

ADVANTAGES

- easy and fast to apply;
- odorless during application and hardening;
- it improves the wear resistance of the resinous and cementitious systems on which it is applied;
- a slip resistant finish may be obtained by adding **Mapefloor Filler**;
- sustainability: it can contribute to LEED credits. EPD (Environmental Product Declaration) compliant.

WHERE TO USE

- finishing coat on self-levelling resin floors such as **Mapefloor System 33** and **Mapefloor System 53**, in industrial, commercial, residential and tertiary sectors;
- finishing coat on cementitious floorings and systems **Ultratop**, **Ultratop Living** or **Ultratop Loft**, in commercial, residential and tertiary environments.

RECOMMENDATIONS

- Do not apply **Mapefloor Finish 53 W/L** on dusty, crumbling or weak substrates.
- Do not apply **Mapefloor Finish 53 W/L** on wet surfaces or those contaminated by oil, grease or dirt in general.

MAPEI

- The component B of **Mapefloor Finish 53 W/L** may be subject to shade variations, from colourless to straw yellow. This phenomenon does not affect the performance and the final aesthetic appearance of the coating.
- Do not mix partial quantities of the components to avoid mixing errors; the product may not harden correctly.
- The surface may change colour if it comes into contact with aggressive chemicals. A change in colour, however, does not imply any damage caused by chemical aggression.
- 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.
- Remove aggressive chemicals as soon as possible after they come into contact with **Mapefloor Finish 53 W/L.**
- Use suitable specific cleaning equipment and detergent to clean the resin system, depending on the type of dirt or stain to be removed.
- Protect the coating from water for at least 24 hours after application.
- The temperature of the substrate during the application and the hardening must be at least 3°C higher than the dew-point temperature. The air relative humidity must be max. 80%.

APPLICATION PROCEDURE

Preparation of the substrate

Resin systems:

Mapefloor Finish 53 W/L can be applied on both new and existing resin systems. The substrate surface must be hardened, dry, perfectly clean, sound, and free of loose or detached particles. On new resin systems, apply **Mapefloor Finish 53 W/L** within 24 hours of applying the base coat. After this time, the surface of the resin system must be treated by sanding with fine sandpaper (200-300 grit) or with an abrasive mesh.

On old resin systems substrates it is recommended to evenly prepare the surface by light grinding with fine diamond discs.

Before applying **Mapefloor Finish 53 W/L**, thoroughly remove all dust by vacuum.

Cementitious systems of the Ultratop and Ultratop Loft range:

Substrates made of **Ultratop**, **Ultratop Living** or **Ultratop Loft** must be prepared by light sanding. Thoroughly remove all dust by vacuum, then apply one layer of **Ultratop Base Coat**. For further information concerning the characteristics and the method of application of **Ultratop Base Coat** please refer to the relevant technical data sheet.
The base coat must be completely dry before the application of **Mapefloor Finish 53 W/L**.

Preparation of the product

Pour the content of the component B in the container of the component A e mix with a low-speed electric mixer (300-400 rpm) for approx. 2 minutes until a homogeneous mixture is achieved. The product can be diluted with maximum 10% by volume of clean water. Prepare only the quantity that may be applied within the maximum workability time reported in the data table.

If a slip resistant surface finish is required, add 1-3% by weight of **Mapefloor Filler** while mixing.

In this case, it is recommended to stir the mixture in the container frequently during the time of the application to prevent the filler from settling.

On very dark or bright substrate colours, the presence of **Mapefloor Filler** may cause a whitening effect on the surface.

Application of the product

Apply **Mapefloor Finish 53 W/L** in two or more layers by short-pile roller, such as mohair, taking care to cross the rolls. On substrates like **Mapefloor System 33** and **Mapefloor System 53** the application is also possible by airless spray.

When applying a second coat, respect the overcoating time indicated in the data table. If the maximum waiting time is exceeded, lightly sand the surface before applying the second coat.

CLEANING

Clean tools used to prepare and apply **Mapefloor Finish 53 W/L** 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 characteristics of the substrate.

PACKAGING

Kit 5.5 l (A+B):

Component A: 5.0 litres

Component B: 0.5 litres

STORAGE

12 months in its sealed, original packaging, in a dry, covered place at a temperature 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.

RESTRICTED TO PROFESSIONAL USERS.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY		
	component A	**component B**
Colour:	transparent	transparent
Appearance:	liquid	liquid
Density:	1,030 - 1,060 g/cm³	1,120 - 1,125 g/cm³
Brookfield viscosity:	90 mPa·s (# 1 - rpm 20)	390 mPa·s (# 1 - rpm 10)

APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio by volume:	comp. A : comp. B = 10 : 1
Colour of the mix:	transparent

Consistency of the mix:	fluid
Density of the mix:	1.035 - 1.055 kg/m³
Viscosity of the mix:	190 mPa·s (# 1 - rpm 20)
Workability time:	15-20 min.
Application temperature (refers to the ambient, material and substrate):	from +10°C to +30°C
Waiting time between coats:	min. 6 h - max. 24 h
Tack-free:	40 mins.

FINAL PERFORMANCE (at +23°C and 50% R.H.)	
Dust dry:	40 mins.
Set to foot traffic:	6-7 h
Final hardening time:	12 h
Abrasion resistance (Taber abrasimeter CS 17 wheel – 1,000 g – 1,000 revs) (EN ISO 5470-1):	22 mg
Glossiness (EN ISO 2813):	Gloss 80
Reaction to fire class (EN 13501-1):	B_{FL}-s1

Mapefloor Finish 53 W/L applied on Mapefloor System 33

Essential characteristics	Test method	Requirements according to EN 13813 for synthetic resin-based screeds	Typical values
BCA wear resistance:	EN 13892-4	≤ AR6	AR0.5
Bond strength:	EN 13892-8	≥ B1.5	B2.0
Impact resistance:	EN ISO 6272	≥ IR4	IR20
Reaction to fire class:	EN 13501-1	from $A1_{FL}$ to F_{FL}	B_{FL}-s1

Mapefloor Finish 53 W/L applied on Mapefloor System 53

Essential characteristics	Test method	Requirements according to EN 13813 for synthetic resin-based screeds	Typical values
BCA wear resistance:	EN 13892-4	≤ AR6	AR0.5
Bond strength:	EN 13892-8	≥ B1.5	B2.0
Impact resistance:	EN ISO 6272	≥ IR4	IR20

Reaction to fire class:	EN 13501-1	from $A1_{FL}$ to F_{FL}	B_{FL}-s1
Permeability to water vapour:	EN ISO 7783-1 EN ISO 7783-2	Class I: S_D < 5 m (permeable to water vapour) Class II: 5 m ≤ S_D ≤ 50 m Class III: S_D > 50 m (impermeable to water vapour)	Class I

IMO MED	Surface materials and floor coverings with low flame-spread characteristics: (c) floor coverings

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

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

TECHNICAL SPECIFICATIONS

Supply and installation of a two-component water-dispersed aliphatic polyurethane finishing coat, transparent glossy (such as **Mapefloor Finish 53 W/L** by MAPEI S.p.A.), to be applied on new or existing resin systems (such as **Mapefloor System 33** and **Mapefloor System 53** by MAPEI S.p.A.) or cementitious systems, even decorative (such as **Ultratop**, **Ultratop Living** and **Ultratop Loft** by MAPEI S.p.A.) to improve their wear resistance and facilitate cleaning operations.

If a non-slip surface is required, it can be achieved by mixing the polyurethane finishing coat with 1-3% by weight of special micrometric fillers(such as **Mapefloor Filler** by MAPEI S.p.A.).

The product must have the following characteristics:

Mixing ratio by volume:	A:B = 10:1
Density of the mix:	1,035-1,055 kg/m³
Taber abrasion resistance (CS17 wheel – 1.000 g – 1.000 rev) (EN ISO 5470-1):	22 mg
Glossiness (EN ISO 2813):	Gloss 80
Reaction fire class (EN 13501-1):	B_{FL}-s1
IMO MED	Surface materials and floor coverings with low flame-spread characteristics: (c) floor coverings
Sustainability: contributes to obtaining LEED credits and is provided with an EPD (Environmental Product Declaration)	

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