

# WHERE TO USE

On cementitious screeds, which are not subject to rising damp, but have a residual humidity content higher than the British Standards recommended 75% R.H. (BS8203) for laying resilient and wood flooring.

# Some application examples

- Consolidating cementitious screeds which are mechanically weak.
- Prior to laying wooden flooring, to prevent a failure due to excessive residual moisture in the cementitious screed.

## **TECHNICAL CHARACTERISTICS**

**Mapeproof 1K Turbo** is a one-component polyurethane primer which hardens due to the humidity present in the surrounding air and in the screed.

Mapeproof 1K Turbo is characterised by its short set to light foot traffic period and that it quickly loses tackiness, so that wood flooring may be laid after a very short time (after approximately 2 hours in normal conditions of temperature and humidity).

**Mapeproof 1K Turbo** does not contain solvents, is odourless and is non-flammable.

Mapeproof 1K Turbo has a very low emission level of volatile organic compounds (EMICODE EC1 R Plus).

Because of the total absence of solvents and odour, **Mapeproof 1K Turbo** may also be used on sites which are located close to inhabited areas (such as flats, schools, offices, etc.).

After application and rapid curing of the resin, the substrate treated with **Mapeproof 1K Turbo** becomes more consistent, harder and is resistant to abrasion.

#### **RECOMMENDATIONS**

- Do not dilute Mapeproof 1K Turbo with water or solvent.
- Do not apply below +5°C.
- Do not apply Mapeproof 1K Turbo on wet surfaces or in the presence of rising damp.
- If a smoothing and levelling compound has to be applied, or if the wood is to be laid after more than 24 hours, apply Mapeproof 1K Turbo so that a thin layer remains on the surface. Completely saturate this layer with Quartz 1.2 while is still fresh.
- Do not apply Mapeproof 1K Turbo onto heated screeds as a vapour membrane. It is suitable as consolidor only.
- Do not apply Mapeproof 1K Turbo so that it puddles on the surface of the substrate.
- The installation of wooden flooring on substrates treated with Mapeproof 1K Turbo must be carried out using a reactive polyurethane adhesive (such as Ultrabond P990 1K or Ultrabond Eco P992 1K), an epoxy-polyurethane adhesive (such as Lignobond or Ultrabond P902 2K) or a sililated-based adhesive (such as Ultrabond Eco S955 1K).



TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	liquid
Colour:	brown
Density (g/cm³):	1.20
Maximum residual humidity permitted:	5%, measured with carbide hygrometer (for screeds thicknesses of approx. 6 cm)
Brookfield viscosity (at +23°C) (mPa·s):	300 (# 1 - 10 rpm)
Dry solids content (%):	100
EMICODE:	EC1 R Plus - extremely low emission level
APPLICATION DATA (+23°C - 50% R.H.)	
Application temperature range:	from +5°C to +35°C
Loss of stickiness:	after 30-40 minutes
Set to light foot traffic:	60 minutes
Final hardening time:	after 2 hours
Waiting time between each coat:	minimum 40 minutes, max. 2 hours
Waiting time before laying directly with adhesive:	minimum 2 hours, maximum 24 hours
Minimum waiting time before successive treatments on final coat (blinded with Quartz 1.2):	min. 2 hours

# **APPLICATION PROCEDURE Preparation of the substrate**

The screed must be clean and free of oil, wax and dirt. Traditional screeds must be cured for at least 7-10 days per centimetre of thickness, while quick-drying or rapid-drying screeds must be cured according to the manufacturer's instructions for each particular product.

Cracks and surface crazing must be opened and then repaired with **Eporip** or **Eporip Turbo**.

If used for consolidating purposes, make sure that the porosity of the surface is sufficient to allow **Mapeproof 1K Turbo** to penetrate.

If the screed is excessively dense, the surface must be abraded in order to open the pores.

## **Application of the product**

Apply **Mapeproof 1K Turbo** with a roller, a brush or flat trowel. On porous substrates, a single coat of the product is usually enough to obtain a good waterproofing and consolidating effect.

For more porous substrates, or substrates in poor condition, a second layer should be applied when the first is suitable to light foot traffic.

If the substrate needs to be rectified with a cementitious smoothing and levelling compound, apply a coat of **Mapeproof 1K Turbo**. Make sure there is a thin layer on the surface, and while it is still fresh, apply **Quartz 1.2** until it is completely blinded.

Once the **Mapeproof 1K Turbo** has dried, prior to the application of smoothing compounds a primer must be applied.

Eco Prim T Plus is suitable. Once the primer has dried, apply the cementitious smoothing compound.

If the parquet is to be laid directly after 24 hours, prepare the substrate with the Quartz 1.2, as described above to provide a key for the cementitious smoothing and levelling compound.

As an alternative, it may be laid directly on the primer after at least 2 hours and after no more than 24 hours of its application using a reactive adhesive (such as Ultrabond P990 1K, Ultrabond Eco P992 1K, Ultrabond P902 2K or Ultrabond Eco S955 1K).

#### Cleaning

Mapeproof 1K Turbo may be removed from clothing and tools while still fresh using Thinner PU or Cleaner L.

Once set, it may only be removed using Pulicol 2000.

## **CONSUMPTION**

0.2-0.4 kg/m<sup>2</sup> per coat.

#### **PACKAGING**

The product is available in 10 kg drums.

#### **STORAGE**

12 months in its original, well-sealed container stored under normal conditions. Protect from frost.

### **SAFETY INSTRUCTIONS FOR** PREPARATION AND APPLICATION

Mapeproof 1K Turbo is irritant for the eyes, skin and the respiratory tracks. It may cause irreversible damages if used for lengthy periods and frequent contact with the skin may cause an allergic reaction in those subjects sensitive to isocyanates. If the product is used for lengthy periods with temperatures higher than +60°C component B may become harmful and sensitizing if inhaled. In case of sickness, seek medical attention. When applying the product, use protective cloths, gloves and goggles, protect the respiratory tracks wearing the mask and work in well ventilated areas. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention.

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 ONLY FOR PROFESSIONAL USE.

#### N.B.

Whilst we try to ensure that any advice, recommendations or information given in our literature is accurate and correct, we have no control over the circumstances in which our product is used. It is therefore important that the end users satisfy themselves that the product and conditions are suitable for the envisaged application.

No warranty can be given or responsibility accepted other than, that the product supplied by us will meet our written specification.

End users should ensure that our latest product data and safety information sheets have been consulted prior to use.

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.



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

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



