



Mapecfloor CPU/HD

Three-component, polyurethane-cement-based mortar with high mechanical strength and high resistance to chemicals, for industrial floors with a layer of 6 to 9 mm thick



WHERE TO USE

Mapecfloor CPU/HD is a polyurethane-cement-based formulate for industrial floors subject to heavy traffic, high chemical attack and subject to high thermal shock, such as storage warehouses, production facilities in the foodstuffs industry, chemical and pharmaceutical industries.

Some application examples

- Industrial floors subject to intense passage of forklifts and general traffic.
- Floors in production areas in the foodstuffs industry subject to frequent cleaning operations, such as those areas used for processing fish and meat products.
- Floors in the dairy industry.
- Floors in breweries, wineries and bottling factories.
- Pavements in areas for processing and packing sugar.
- Floors in production and storage areas in the chemicals industry.

TECHNICAL CHARACTERISTICS

Mapecfloor CPU/HD is a three-component, fillerized, polyurethane resin and cement-based mortar, made according to a formula developed in MAPEI's own R&D laboratories. Floors finished with **Mapecfloor CPU/HD** are resistant to almost all chemical substances, such as diluted acids, alkalis, salt, oil, grease, hydrocarbons and aggressive gases.

Mapecfloor CPU/HD also has excellent resistance to high temperatures: when applied at a thickness of 9 mm, it is resistant to a maximum service temperature of +120°C in dry environments and +100°C in damp environments.

Thanks to its high mechanical strength and resistance to abrasion, **Mapecfloor CPU/HD** is suitable for floors subject to heavy traffic.

Mapecfloor CPU/HD is hygienic (does not promote the development of bacteria), is easy to clean (meets European standards for the foodstuffs industry) and also has an attractive finish.

Mapecfloor CPU/HD may be applied at a thickness from 6 to 9 mm and is available in grey, beige, ocher, red and green.

Floors coated with **Mapecfloor CPU/HD** are ready for foot traffic approximately 8 hours after application, and for light traffic after only 24 hours. Complete chemical resistance and mechanical strength develop after 4 days.

RECOMMENDATIONS

Do not apply **Mapecfloor CPU/HD**:

- on dusty, crumbly or irregular surfaces;
- on ceramic or stone surfaces;
- on damp or wet surfaces.

Apply **Mapecfloor CPU/HD**:

- homogeneously in a uniform thickness using a smooth trowel;



TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
	comp. A	comp. B	comp. C
Colour:	gray, beige, ocher, red, green	amber	white
Appearance:	liquid	liquid	powder
Density (g/cm³):	1.05	1.2	-
Bulk density (g/cm³):	-	-	1.15
Viscosity at +23°C (mPa·s):	1,380 (#1 - rpm 5)	110 (#1 - rpm 5)	-
Hazard classification according to EC 1999/45:	none	harmful	irritant
	Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet		
APPLICATION DATA			
Mixing ratio:	A/B/C: 3.2 / 3.2 / 25		
Colour of mix:	gray, beige, ocher, red, green		
Consistency of the mix:	thick		
Density of the mix (kg/m³):	1,900		
Viscosity of the mix (mPa·s):	> 2,000,000		
Pot life of mix at +20°C:	25 minutes		
Application surface temperature:	from +8°C to +30°C		
FINAL PERFORMANCES			
Dust dry at +23°C and 50% R.H.:	2-4 hours		
Step-on time at +23°C and 50% R.H.:	8 hours		
Final setting time:	4 days		
Flexural strength after 28 days (N/mm²):	16		
Compressive strength after 28 days (N/mm²):	65		
Tensile strength after 28 days (N/mm²):	7		
Pull-out strength (N/mm²):	> 2.5		
Thermal expansion factor (DIN EN 1770/ASTM C 531):	2.1 x 10 ⁻⁵ /°C		
Thermal conductivity (W/m·K):	0.84		
In-service temperature range, thickness 6 mm:	from -40°C to +70°C		
In-service temperature range, thickness 9 mm:	from -40°C to +120°C		
Taber test after 28 days (at +23°C, 50% R.H., 1000 cycles/1000 g - H22 disk) (mg):	1,490		

- on concrete substrates with a pull-out strength of at least 1.5 N/mm².

APPLICATION PROCEDURE

Preparation of the substrate

Concrete substrates must be clean and free of oil, grease, any other loose material and detached parts, and must not be subject to capillary rising damp.

After the correct preparation of the surface by milling, cut hooking slots around vertical protrusions and drain holes.

Cut a 2 cm-deep slot across the diagonals of the areas to be coated, and remove all the dust.

COATING THE FLOOR

Preparation and application of Mapefloor CPU/HD

Pour the three components which make up **Mapefloor CPU/HD** (A+B+C) into a clean container and carefully mix together for at least 3 minutes with a low-speed drill with a mixing attachment to form a smooth, homogenous mix.

Pour the mix on the floor, and spread it out evenly using a smooth trowel.

CONSUMPTION

Mapefloor CPU/HD (A + B + C): 1.9 kg/m² per mm of thickness.

Cleaning

Tools and equipment used to prepare and apply **Mapefloor CPU/HD** must be cleaned with solvents for polyurethane immediately after use. After hardening, the product may only be removed using mechanical means.

PACKAGING

31.4 kg kits:
component A = 3.2 kg;
component B = 3.2 kg;
component C = 25 kg.

STORAGE

12 months in its original packaging at a temperature between +5°C and +30°C in a dry place.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Component B of **Mapefloor CPU/HD** irritates if it comes into contact with the eyes or skin.

If it comes into contact repeatedly with the skin, it may cause rashes in those subjects allergic to iso-cyanates.

May cause irreparable damage.

Component C irritates, and may cause serious eye damage.

While handling and mixing the various components, avoid contact with the skin and eyes, and always use protective gloves and goggles when preparing and applying the product. Areas where the product is prepared and applied must be well ventilated. Only when used at temperatures above +60°C, part B may become hazardous and irritating if inhaled. In the case of accidents, seek medical advice.

Do not dispose of the product to the environment.

For further and complete information about a safety use of our product please refer to our latest version of the 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 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



**Mapefloor
CPU/HD**



BUILDING THE FUTURE

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