



Mapecfloor SL HD



**Self-leveling
epoxy coating**



AREA OF USE

Mapecfloor SL HD can be used as flooring in all types of industry, workshops and warehouses.

Mapecfloor SL HD is normally applied on concrete and other cement-based substrates, but may also be used on steel surfaces.

TECHNICAL CHARACTERISTICS

Mapecfloor SL HD is a three component self-leveling, solvent free epoxy.

Mapecfloor SL HD contains fillers and gives highly abrasion and chemical resistant, watertight, seamless coatings.

Mapecfloor SL HD is similar to **Mapecfloor SL**, but has a different filler, and better wear resistance.

Mapecfloor SL HD is delivered in colors shown in the provided color guide.

Mapecfloor SL HD complies with the principles defined in EN 1504-9 standards ("Products and systems for protecting and repairing 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) – PI, MC, PR and IR.

Mapecfloor SL HD complies with EN 13813.

APPLICATION PROCEDURE

Preparation of the substrate:

The concrete must be sound, clean and dust-free with a smooth permanent surface. Normal cleaning methods such as milling, grinding or shot blasting can be used. The substrate's surface temperature should be at least +12 °C and at least 3 °C above the applicable dew point during product application.

Preparation of the product:

Components A and B should have a temperature of +15 °C or more when mixed together. Comp. B is poured into comp. A and mixed with a drill whisk at a slow speed for approximately 3 minutes until the product is completely homogenous. Then add comp. C to the mixture, and stir until the product is completely homogenous.

The product must not be thinned!

Application of the product:

Used as single layer epoxy coating 2 - 3.5 mm

a. Primers

The surface should always be cleaned and prepared with a primer (such as **Primer SN**, **Mapecprimer M**) before applying **Mapecfloor SL HD**. The primer is best applied using a smooth trowel or rake. After application all pores or air holes in the concrete surface should be filled and the surface appear to be sealed without any apparent dry spots.

Mapefloor SL HD: Self-leveling epoxy coating. The product complies with specification in EN 13813 and EN 1504-2 Coating (C) principles: PI, IR, PR and MC.

TECHNICAL DATA (typical values)

PRODUCT DETAILS		Component A	Component B	Component C
Color:		colored	straw colored	neutral
Appearance:		dense liquid	liquid	powder
Density (g/cm³):		1.16	1.06	-
Brookfield viscosity at +23°C (mPa•s):		approx. 2 100	approx. 380	-
APPLICATION DATA				
Color of mixture:		colored		
Mixing ratio:		70:32:150 component A: component B: component C		
Consistency of the mixture:		dense liquid		
Density of the mixture (kg/m³):		approx. 1 660		
Brookfield viscosity of the mixture (mPa•s):		approx. 5 700		
Application temperature range:		+12°C - 30°C		
Potlife (EN 9514):		30 minutes		
FINAL PROPERTIES (7 days at +23°C and 50 % R.H.)				
Dust-dry:		approx. 5 hours		
Step-on time:		approx. 24 hours		
Final setting time:		7 days		
Shore D (ISO 868:2003):		approx. 75		
Performance characteristics for product or system	Test methods	Requirements according to EN 13813 for synthetic resin screeds	Product or system performance	
Wear resistance:	EN 13892-4	< AR1	AR0,5	
Bond strength:	EN 13892-8:2004	>1.5 N/mm ²	> 4.7 N/mm ²	
Impact resistance:	EN 6272-1	> IR4	> IR4	
Reaction to fire:	EN 13501-1	declared value	B _{fl} - s1	
Performance characteristics for product or system	Test methods	Requirements according to EN 1504-2	Product or system performance	
Compressive strength:	EN 12190	Class I: ≥ 35 N/mm ² (for traffic with polyamide wheels) Class II: ≥ 50 N/mm ² (for traffic with steel wheels)	Class II	
Abrasion resistance:	EN ISO 5470-1	< 3000 mg H22/1000 cycles/load 1000 g	< 200 mg	
Permeability to CO₂:	EN 1062-6	Permeability to CO ₂ SD > 50 m	Sd > 50 m	
Water vapor permeability:	EN ISO 7783	Class I: SD < 5 m Class II: 5 m < SD < 50 m Class III: SD > 50 m	Class II	
Capillary absorption and permeability to water:	EN 1062-3	w < 0.1 kg/m ² *h ^{0.5}	w < 0.01 kg/m ² *h ^{0.5}	
Chemical resistance:	EN ISO 2812-1	No visual defects after 30 days exposure	See separate list	
Impact resistance:	EN 6272-1	Class I: ≥ 4 Nm Class II: ≥ 10 Nm Class III: ≥ 20 Nm	Class I Class III*	
Pull-off test Reference substrate: MC (0.40) as specified in EN 1766, curing time 7 days:	EN 1542	Average (N/mm ²) Crack-bridging or flexible systems with no traffic: ≥ 0.8 (0.5) with traffic: ≥ 1.5 (1.0) Rigid systems with no traffic: ≥ 1.0 (0.7) with traffic: ≥ 2.0 (1.0)	> 4.7 N/mm ²	
Reaction to fire:	EN 13501-1	Declared value	B _{fl} -s1	

* used in system Mapefloor SL S

Please take notice of the primer used and its recoatability (often 24-48 hours). If this time is exceeded the primer should be grinded and/ or a new layer of primer should be applied.

b. Coatings

Mapefloor SL HD self-leveling coating is applied using a leveling rake or a v-toothed spattle in the desired thickness of at least 2 mm. If necessary, a spike roller can be used to remove any air bubbles.

If desired the coating can be dressed with plastic chips (flakes) for decoration.

Used as a multilayer epoxy coating 3.5 to 7 mm

a. Primer

The surface should always be cleaned and prepared with a primer (such as **Primer SN**, **Mapeprimer M**, **Mapeprimer P**) before applying **Mapefloor SL HD**. The primer is best applied using smooth trowel or rake. After application all pores or air holes in the concrete surface should be filled and the surface appear to be sealed without any apparent dry spots.

Depending on the type of primer used; one should broadcast with dry sand grain size of 0.1-0.5 or 0.4-0.8 mm onto the primer using the "grain-to-grain" technique while the primer is still wet, in order to ensure good adhesion of the subsequent layer.

b. Multilayer coating

A self-leveling coating of **Mapefloor SL HD** is applied using a leveling rake or a v-toothed spattle in the desired thickness of at least 2 mm, and covered to complete saturation using dry sand with a grain size of 0.4-0.8 mm or 0.7-1.2 mm. More wear resistant aggregates like **Dynagrip**, **Emery**, **Bauxite** or ground granite can also be used to increase wear resistance.

For layers thicker than 5 mm – please apply in two application steps.

c. Topcoat

Aggregates that did not adhere to the surface must be removed from the dry and cured wear coat, and a top layer of **Mapefloor SL HD** is applied using a rubber squeegee, leveling rake or v-toothed spattle to the desired texture is achieved.

PLEASE NOTE!

If the product is applied in areas with a high concentration of CO₂, high moisture and/ or temperatures less than 3 degrees above dew point, this might lead to a sticky and discoloured surface. Before any further treatment, this must be removed and the surface must be recoated.

CLEANING

Tools and equipment must be washed immediately after use with **Spesialtynner**,

ethanol or other cleaning agent suited for epoxy. Once hardened the product can only be removed mechanically.

CONSUMPTION

Used as single layer epoxy coating:
1,66 kg/m² per mm.

Consumption is dependant of the temperature and the substrate's coarseness and absorption.

PACKAGING

25.2 kg set: Component A = 7 kg,
component B = 3.2 kg and
component C = 15 kg

STORAGE

Properties for use are not changed for a period of 24 months when stored between + 5 and + 30 °C in unopened original packaging.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

PRODUCT FOR PROFESSIONAL USE!

NOTE

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.no

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The most up-to-date TDS can be downloaded from our website www.mapei.no

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**All relevant references
for the product are available
upon request and from
www.mapei.no**

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