CE PROTEZIONE DEL CALCESTRUZZO
EN 1504-2 (C)
PRINCIPI
MC-IR

CON FOR MITÀ RESISTENZA AL LAVAGGIO
ISO 11998-1
classe 1

COAT MAT

Final protection for polished plaster floors of the NATURAL range: MATT PROTECTIVE TOP COAT

CE Mark:
• EN 1504-2 (C) - Principles: MC-IR

Certifications:
• ISO 11998 - Classe: 1

TECHNICAL SPECIFICATIONS

FIELD OF APPLICATION

APPLICATIONS

Description
COAT MAT is a water-based bi-component aliphatic top coat to be mixed when used. It creates a matt and transparent final protective layer for NATURAL-series polished plaster surfaces.

CE Mark
► EN 1504-2
COAT MAT fulfils the principles defined in the EN 1504-9 standard (“Products and systems for the protection and repair of concrete structures: definitions, requirements, quality control and evaluation of conformity. General principles for use of products and systems”) and to the requirements of the EN 1504-2 standard (“Protection systems for concrete surfaces”) for the following class:
→ MC-IR
• For Principle 2 (MC) - Humidity control: 2.2 Coating (C).
• For Principle 8 (IR) - Resistance increase through the limitation of the humidity content: 8.2 Coating (C).

Certifications
COAT MAT was subjected to the washing test according to EN ISO 11998 and results in Class 1 (0.46 ± 0.09 µm)

Colour
COAT MAT creates a matt transparent coating.

Field of application
COAT MAT is ideal for finishing and protection on the following materials:
• Finishing coatings made of cement or epoxy-cement skim coats, on the wall or floor.
• Floors made of concrete or cement screeds.
COAT MAT can also be used on cement and polymer-cement coatings with nature different to NATURAL.
In this case, however, the compatibility must be verified through preliminary trials.

Advantages
• COAT MAT allows for making cement and polymer-cement surfaces impermeable and stain-proof.
• COAT MAT is a water-based product and does not emit any odours during application.

Specific preparation of the laying support
► NATURAL TOP surfaces

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COAT MAT

• Smooth the surface with a 120–180-grit abrasive mesh.
• Completely remove any dust by carefully vacuuming the surface or rubbing a damp cloth.
• Make sure that the support is sufficiently cured (normally 8–12 hours after application in optimal environmental conditions).
• Apply NATURAL COAT PRIMER as explained in the Technical Sheet.
• Wait 6–8 hours until NATURAL COAT PRIMER cures completely.
• Proceed with the application of COAT MAT.

Preparing the product
The product preparation methods differ in relation to the packages.

► INDUSTRIAL PACKAGES
• Open the packages of components A and B.
• Pour the desired amount of comp. A into a clean service container.
• Pour comp. B into comp. A according to the weight ratio shown on the package.
• Mix thoroughly with a mechanical low-speed professional mixer.
• Do NOT dilute the A+B mix, it is ready-to-use.
• Once mixed and ready for use, the product must be used within 35 minutes (at 23°C), after which it cannot be further diluted to extend its usability: note that the expiry of its pot life cannot be seen (i.e. it does not become more dense or gel-like, like many commercial products).

► KIT PACKAGE
• Open the packages of components A (bottle) and B (bag).
• Pour comp. B into comp. A.
• Close the cap and shake the bottle until the contents are perfectly amalgamated.
• Do NOT dilute the A+B mix, it is ready-to-use.
• Once mixed and ready for use, the product must be used within 35 minutes (at 23°C), after which it cannot be further diluted to extend its usability: note that the expiry of its pot life cannot be seen (i.e. it does not become more dense or gel-like, like many commercial products).

Application of the product
Apply the product with a short-haired roller in 2 coats, the second coat 6-10 hours from the first, depending on the temperature.

Consumption

TYPE OF APPLICATION	MINIMUM CONSUMPTION	MAXIMUM CONSUMPTION	UoM	DILUTION
For two coats of the product, on NATURAL TOP treated with NATURAL COAT PRIMER	0,18	0,18	kg/m²	none

First coat: 80 g / m². Second coat: 100 g / m².

Cleaning of tools
• Rinse the tools and containers used for the application several times with water.
• Hardened product: remove mechanically, with an open flame or thermal gun (to be preferred).

Useful application tips
• Once mixed and ready for use, the product must be used within 30 minutes (at 23°C), after which it cannot be further diluted to extend its usability: note that the expiry of its pot life cannot be seen (i.e. it does not become more dense or gel-like, like many commercial products).
• Read the Safety Data Sheet carefully before using the product.

COAT MAT

Technical data

► PRODUCT IDENTIFICATION DATA	UoM	value
Density at 23°C (Component A), EN ISO 2811-1	kg/L	1,02 ± 0,03
Density at 23°C (Component B), EN ISO 2811-1	kg/L	1,10 ± 0,03
Density at 23°C (A+B mix), EN ISO 2811-1	kg/L	1,03 ± 0,03
Appearance (A+B mix)	-	Milky white liquid
Odour	-	Slight, solvent-like

► APPLICATION DATA AND FINAL PERFORMANCES	UoM	Value
Mix ratio by weight (A:B)	-	10 : 1
Pot-life (viscometric), A+B viscosity doubling, EN ISO 9514	min	35 ± 5
Application temperature	°C	From +10 to +35
Surface drying time (23°C, 50% R.H.), EN ISO 9117-3	hours	6 ± 2
Minimum commissioning time, without contact with water (at 23°C, 50% R.H.)	days	3
Minimum commissioning time, with contact with water (at 23°C, 50% R.H.)	days	7
Surface gloss, gloss 60°, on NATURAL TOP, EN ISO 2813	-	20 ± 5
Wear resistance (of the COAT MAT finish only) - Taber method, CS17 abrasive wheel, 25 turns, load 1 kg, EN ISO 5470-1	mg	16,4 ± 0,3
Wear resistance (of the NATURAL cycle complete with COAT MAT ** finish) - Taber method, H22 abrasive wheel, 1000 rpm, load 1 kg, EN ISO 5470-1	mg	3710 ± 10
Washing resistance (brush method), 200 cycles, Ldft, EN ISO 11998	µm	0,46 ± 0,09 (Class 1)

► TECHNICAL DATA IN CONFORMITY TO EN 1504-2	UoM	value
Permeability to water vapor, SD equivalent air thickness, thickness 0.12 mm, EN ISO 7783	m	0,070 ± 0,003 (Class I)
Capillary absorption and permeability to water, EN 1062-3	kg/(m²•√h)	0,020 ± 0,004
Direct tensile adhesion, EN 1542	MPa	2,42 ± 0,05 (Cohesive failure in concrete)
Classification as per EN 1504-2	-	MC-IR

► CHEMICAL RESISTANCE TO COLD LIQUIDS FOR HORIZONTAL SURFACES UNI 10944 * (ON COMPLETE NATURAL CYCLE with COAT MAT ** finish)	Contact time	Outcome
Acetic acid (aqueous sol. 10% by weight)	1 h	5
Acetone	10 s	5
Ammonia (aqueous sol. 10% by weight)	1 h	5
Red wine	10 min	5
Citric acid (aqueous sol. 10% by weight)	10 min	5
Detergent solution	1 h	5
Coffee	1 h	5
Disinfectant (2.5% chloramine T)	1 h	5
Ink for stamps	16 h	5
Ethyl alcohol (aqueous solution 48% by volume)	10 min	5
Ethyl acetate + butyl acetate (1:1)	10 s	5
Olive oil	1 h	5
Liquid paraffin	1 h	5
Sodium carbonate (Solvay soda) (aqueous sol. 10% by weight)	1 h	5
Sodium chloride (aqueous sol. 15% by weight)	1 h	5
Tea	1 h	5
Deionised water	1 h	5
Pale beer	10 min	5
Final chemical resistance attribution class, UNI 10944	-	D

* Assessment of the corrosive EFFECTS caused by cold liquids applied to the test surface in accordance with the EN 12720 standard:

COAT MAT

1: SIGNIFICANT PHYSICAL ALTERATION
2: SLIGHT PHYSICAL ALTERATION
3: SIGNIFICANT AESTHETIC ALTERATION
4: SLIGHT AESTHETIC ALTERATION
5: NO CHANGE

** The cycle subjected to wear resistance tests (Taber method) and chemical resistance according to UNI 10944 was created as per the Technical Data Sheet and is composed of:
1 - BASE QUARTZ
2 - NATURAL BOND (2 coats)
3 - NATURAL TOP (1 coat)
4 - NATURAL COAT PRIMER (2 coats)
5 - COAT MAT (1 coat)

Storage of the product
• 12 months in the closed original packaging, in a dry and covered place away from direct sunlight, at a temperature between +5°C and +30°C.
• Protect the product against frost.

Packages

VARIANT	PACKAGING	ADR	UNITS PER PALLET	COMPONENTS
-	kit (A+B) - 0,77 kg	NO	-	A = 0,70 kg – bottle B = 0.07 kg – bag
-	kit (A+B) - 1,1 kg	NO	-	A = 1,0 kg – bottle B = 0,1 kg – bag
- (1)	kit (A+5B) - 5,5 kg	NO	-	A = 5,0 kg – jug B = 0,5 kg x 5 – bag

legend
NO = NON DANGEROUS goods
(1): Component B is packed in 5 bags each weighing 0.1 kg, for practical partial use of the kit. The kit includes a transparent and graduated container for preparing the mixture.

LEGAL NOTES
Advice on how to use our products corresponds to the current state of our knowledge and does not involve the assumption of any guarantee and / or responsibility for the final result of the work. They do not refore exempt the customer from the responsibility of verifying the suitability of the products for the use and the prefixed purposes through preventive tests. The website www.nordresine.com contains the latest revision of this datasheet.

EDITION
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