





Single-phase dehumidifying readymade plaster for wet and saline walls

CE marking:

EN 998-1 - Classification: R-CSII

FIELD OF APPLICATION

EN 998-1 - Class: A1





TECHNICAL SPECIFICATIONS











APPLICATIONS











Description

DRY BETON SUPER is a dry ready-made plaster formulated with hydraulic binders resistant to sulphates, selected aggregates, light mineral fillers, synthetic fibres and specific additives.

When mixed with clean water alone, it forms an easily workable, thixotropic, very light and ready-to-use mixture for creating repair plasters with extremely high performances without having to pre-treat the surface with other products. The hardened mortar has a macro-porous structure that is highly effective against salts present in the support (which are made to crystallise within it) and against capillary rising damp (which is expelled towards the outside).

CE marking

► EN 998-1

DRY BETON SUPER complies with the principles defined in the EN 998-1 standard ("Specifications for mortars for masonry works - Part 1: Mortars for interior and exterior plasters") with the following designation:

 \rightarrow R – CS II

- Plastering mortar for repairs for interior and exterior use (R).
- Compressive strength at 28 days: 4.5 MPa (CS II).

The product is available in the cement grey version.

Field of application

DRY BETON SUPER is used as a plaster for:

- The refurbishment of damp structures subject to capillary rising damp both outdoors and indoors.
- Dehumidification of walls in environments with high salt concentration (lagoon areas, seaside areas), also deteriorated by salt-related peeling.
- The refurbishment of underground masonry or concrete environments, provided that there are no water infiltrations from the outside.

Advantages

• DRY BETON SUPER is a multifunctional preparation that allows for obtaining, with a single product, results that are normally achieved through complex cycles with several formulations.

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- DRY BETON SUPER possesses high hydrophobic characteristics that offset the negative effects of rainwater on dehumidifying plasters.
- DRY BETON SUPER possesses exceptional anti-condensate thermal properties.
- DRY BETON SUPER is finished with RIVENORD SILAC, setting coats formulated with silicates and lime.

General preparation of the laying support

• Remove any plaster present up to 70–100 cm above the humidity stain or evident signs of deterioration.





- Remove the loose and crumbling parts.
- Remove bedding mortars from the gaps when they are loose.
- In case of high salt concentrations, scrape the surface and brush it bare then perform a general dry or wet cleaning cycle.
- Adjust the surface and repair any holes using DRY BETON SUPER and brick flakes.
- Arrange the level strips using wooden straightedges or synthetic material.

Preparing the product

DRY BETON SUPER can be used as both a plaster and a scratch coat, depending on the amount of mix water used. DRY BETON SUPER can be applied both manually and mechanically using a pump for mortar (see § ► Applying the product).

▶ Preparation of the scratch coat

- Pour into a drum concrete mixer (or helical mixer) 5 litres of clean water (5.5 I to prepare the scratch coat) for every bag of DRY BETON SUPER.
- Slowly add DRY BETON SUPER to the water with the rotating concrete mixer.
- Mix for 5–7 minutes until obtaining a creamy and light paste.

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Application of the product

- ► Manual application
- → Scratch coating
- Apply, on a perfectly clean and deeply dampened substrate, a first layer of DRY BETON SUPER as a scratch coat (see ▶ Preparing the scratch coat) for a consumption equal to 4–5 kg/m².

In this case, the mix water is slightly more than normal.

- · During application, cover the surface completely without smoothing it.
- → Plastering
- Wait 4–5 hours (or less, depending on the season) before plastering the surface with DRY BETON SUPER (see
- ▶ Preparing the plaster).
- The minimum thickness of the plaster must be 2 cm in every point of the surface.
- Apply the product.
- · Avoid any crushing or smoothing operations while the product is still wet.
- · Level the surface lightly without pressing and pass over the previously arranged level strips.
- Remove the level strips in the final phase.
- · Repair the part wet.
- Thicker layers can be applied in successive coats with a 24-hour interval in between.
- For walls subject to high salt concentrations, after the scratch coat, wait at least 24 hours before applying the plaster.
- ► Mechanical application
- → Scratch coating
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In this case, the mix water is slightly more than normal.

- During application, cover the surface completely without smoothing it.
- → Plastering
- Wait 4–5 hours (or less, depending on the season) before plastering the surface with DRY BETON SUPER (see ▶ Preparing the plaster).
- Once prepared, the mix can be poured mechanically onto the wall using a normal two-stage mortar pump (with screw





and stator, for example: TURBOSOL POLI T or similar).

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- For walls subject to high salt concentrations, after the scratch coat, wait at least 24 hours before applying the plaster.

▶ Curing

In the presence of sun and wind on dry days, spray the water mist one of more times during the first 48 hours after laying.

► Finish

- Waiting time for the for the application of the top coats:
- → DRY BETON SUPER applied on surfaces SATURATED WITH DAMP and containing SOLUBLE SALTS: wait for the humidity to be expelled from the plaster (a few days may be necessary).

This phenomenon is clearly visible from the colour of the plaster.

- → DRY BETON SUPER applied on surfaces that have LOW HUMIDITY or are DRY: the top coat can be applied just 8 hours after.
- Types of finishes:

The top coat can be chosen among two types of products:

- → DRY BETON FINITURA for surfaces exposed to weathering (which produces a water-repellent finish).
- → RASANTE 1100 for internal surfaces (produces a lime-based finish).

Consumption

type of application	minimum consumption	maximum consumption	UoM	dilution
To create a 2 cm layer.	20	22	kg/m²	-

Cleaning of tools

- Wet product: clean with water (including a power wash).
- Hardened product: remove mechanically.

Useful application tips

- Apply at a temperature between +5°C and +35°C.
- Do not apply under strong sunlight, taking care to keep the product damp and shaded so at to prevent it from drying too rapidly.
- In the hot season, for outdoor exposed surfaces, aid the product's curing by wetting the plastered part during the first 48 hours (if necessary).
- Do not mix the product again during the setting phase by adding water.
- Do not paint or coat the surface with setting coats that can prevent humidity from escaping.

We recommend using RIVENORD SILAC, a waterproof paint formulated with siloxanes with ultra-high breathability (see Technical Sheet).

Technical data

► PRODUCT IDENTIFICATION DATA	UoM	value
Appearance	-	Powder
Maximum grain size, EN 933-1	mm	2,5 ± 0,1
Apparent density of the dry hardened mortar, EN 1015-10	kg/m³	1050 ± 10





► APPLICATION DATA AND FINAL PERFORMANCES	UoM	Value
Mix water	-	From 18% to 20%
Consistency of the wet mortar (spreading on flow table), EN 1015-3	mm	165 ± 10
Density of the mix, EN 1015-6	kg/L	1,35 ± 0,03
Application temperature	°C	From +5 to +35
Workability time of the wet mortar, EN 1015-9	min	75 ± 15
Minimum applicable thickness	mm	20
Maximum applicable thickness with a single coat	mm	30
► TECHNICAL DATA IN CONFORMITY TO EN 998-1	UoM	value
Compressive strength (at 28 days), EN 1015-11	MPa	4,5 ± 0,5
Adhesion to the support, EN 1015-12	MPa	1,10 ± 0,05 Modo di

FIECHNICAL DATA IN CONFORMITY TO EN 990-1	UOIVI	value
Compressive strength (at 28 days), EN 1015-11	MPa	$4,5 \pm 0,5$
Adhesion to the support, EN 1015-12	MPa	1,10 ± 0,05 Modo di rottura: (FP)=A
Water absorption due to capillaries of the hardened mortar, after 24 hours, EN 1015-18	kg/m²	3,3 ± 0,1
Permeability to water vapour of the hardened mortar (μ), EN 1015-19	-	8
Thermal conductivity (λ10, dry) (tabulated value P=50%), EN 1745	W/(m•K)	0,27
Fire reaction (Euroclass), EN 13501-1	-	A1
Type of mortar, EN 998-1	-	R

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 +35°C.
- Protect the product against humidity.

Packages				
VARIANT	PACKAGE	ADR	PACKAGES PER PALLET	COMPONENTS
-	25 kg bag	NO	48 sacchi	

Legenda ADR:

NO = merce NON PERICOLOSA

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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