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# BETONGUAINA BASEMENT

Bi-component cement waterproofing coating  
for underground structure

CE MARKING:

EN 1504-2 (C)-PRINCIPLES PI-MC-IR; EN 14891 (CMO2P)

## Description

BETONGUAINA BASEMENT is a bi-component cement waterproofing coating for underground structures, composed of:

- component A: water-dispersed polymers and special additives;
- component B: hydraulic binders, selected aggregate and special additives.

BETONGUAINA BASEMENT dries to form a tenacious, elastic film which is highly waterproof and resistant to water under immersion.

## CE Marking:

- BETONGUAINA BASEMENT satisfies the requirements of EN 1504-9 ("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 the requirements of EN 1504-2 ("Systems for the protection of concrete structures") for class: surface protection products - coatings (Coatings, C) - Moisture control (2.2) (Moisture Control, MC) and Increasing resistivity (8.2) (increasing resistivity, IR) (ZA.1e).
- BETONGUAINA BASEMENT satisfies the requirements of EN 14891 "Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives", class CMO2P.
- Liquid-applied cement water impermeable product with improved crack-bridging at very low temperature (-20° C).

## Field of application

BETONGUAINA BASEMENT is used to waterproof the following, under positive hydrostatic pressure:

- concrete and masonry underground structures and foundation walls;
- temporary waterproofing applications;
- pavements;
- small balconies;
- showers and walls in damp conditions.

## Benefits

BETONGUAINA BASEMENT:

- when applied to walls with large irregularities (such as walls made of concrete blocks or concrete with large air inclusions) cures even to very thick layers;
- is packaged in a single oval bucket to facilitate use of 25 cm rollers;
- can also be applied at very low temperatures (down to -20°C);
- can be used on partly damp substrates;
- is suited for contact with drinking water, pursuant to Italian Ministerial Decree 174-2004;
- cures quickly, with a short interval between the first and second coat;
- is flexible down to -20°C;
- adheres well to a variety of substrates (cement, cotto, brick, plasterboard, EPS, XPS)
- can be covered with tiles.



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### Characteristics

TECHNICAL DATA The product is conforming to the following standards:	<b>- Product certified to EN 1504-2</b> Class pursuant to EN 1504-2: surface protection products - coatings - moisture control (2.2) and increasing resistivity (8.2) (ZA.1e). (C, principles MC – IR)	
	<b>- Product certified to EN 14891</b> Liquid-applied bi-component water impermeable product, containing cement modified with polymer, type (CMO2P)	
IDENTIFYING DATA		
specific gravity (A+B), UNI 8310	g/cm³	1.65 ± 0.02
apparent dynamic viscosity (A+B), ISO 3219	mPa·s	9000 ± 1000
APPLICATION DATA (20°C and 50% RH)		
ratio A: B	-	1: 2
minimum filming temperature	°C	+5
application temperature	°C	+1 to +40
working time (after mixing A+B, at 20°C)	min	45
operating temperature	°C	-20 to +60
walkover time (after second coat, at 20°C)	hours	8
final curing time (2 coats, at 20°C)	days	3
Mixing ratio	A:B	1:2
TECHNICAL DATA PURSUANT TO EN 1504-2 (with NYCON 100 reinforcement)		
Permeability to water vapour EN ISO 7783-2	m	class I (S <sub>D</sub> ≤ 5 m)
Capillary absorption and permeability to water EN 1062-3	kg/(m²h <sup>0.5</sup> )	0.04
Adhesion against direct traction, EN 1542	N/mm²	≥ 0.8
TECHNICAL DATA PURSUANT TO EN 14891		
Initial adhesion against traction (*)	N/mm²	≥ 1
Impermeability to water	---	No penetration
Durability by adhesion against traction (*): - after thermal ageing - after immersion in water - after contact with lime water - after freeze/thaw cycles	N/mm²	≥ 0.5 ≥ 0.5 ≥ 0.5 ≥ 0.5
Crack-bridging capacity: - standard conditions (+23°C) - very low temperature (-20°C)	mm	≥ 0.75 ≥ 0.75

Note: the test method is based on the indicated standard.

(\*): tests run with type C2 tile adhesive



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## Application

### Preparing the substrate:

- eliminate any residue of release agent and slurry with high pressure water;
- eliminate metal spacers, if any, and coat them with GROVE RAPIDO;
- if the structure is damaged, remove any damaged parts and restore them with GROVE series products;
- strip the wall/floor corner with GROVE RAPIDO.

On difficult substrates (waterproofed slabs, concrete which has not been washed with water, etc.) first apply BETON TACK primer.

### Preparing the mixture

Proceed as follows to prepare BETONGUAINA BASEMENT (A+B) fluid mixture:

- remove the two bags of component A and the two bags of component B from the bucket;
- pour the contents of the two bags of component A (3.5 kg each) into the oval bucket;
- gradually add and stir in the contents of the two bags of component B (7 kg each);
- mix thoroughly for 2 minutes with a low speed mechanical mixer;
- remove the partly wet powder from the walls and floor of the bucket;
- continue mixing for another 60 seconds until you obtain an even mixture without lumps;
- allow the mixture to rest for 2 minutes, then mix again and apply.

The packaging (2A+2B) means that you can also mix half a batch (10.5 kg) without affecting the contents of the two remaining bags.

### Applying the product

Apply BETONGUAINA BASEMENT in two coats using a roller, trowel or brush.

Wet the surface before applying the product (however, do not allow puddles to form).

Apply the first coat (1.6-1.9 kg/m<sup>2</sup>) taking care to thoroughly wet and impregnate the substrate so that the coverage is of the same thickness throughout.

In hot weather, if the roller or brush tend to drag or pull the coating off the substrate because it is drying too fast, do not add water to the mix; instead, wet the substrate again.

Wait for 6-8 hours and apply the second coat (mean coverage 1.6 kg/m<sup>2</sup>).

### Protecting the applied product

BETONGUAINA BASEMENT must be protected against rain for the first 24 hours after application (depending on the season). If it gets wet during this period, the film will be light grey and of uneven density, rather than uniform dark grey. Using plastic tarpaulins to protect the fresh product against the rain stops it getting wet, but also stops the product curing completely, which compromises its waterproofing performance: we advise protecting it in this way only for as long as strictly necessary. The product can be applied down to a temperature of +5°C; if you wish to apply it at lower temperatures, you must first ensure that there is no ice on the substrate (even the smallest amount) before proceeding.

The product, once applied and cured on foundation walls, must be protected before covering with earth with unwoven fabric of suitable thickness and weight, or with polystyrene panels in direct contact with BETONGUAINA BASEMENT, in combination with embossed membranes covering the protection with the bosses facing outwards (towards the earth itself).

Protect BETONGUAINA BASEMENT against prolonged exposure to direct sunlight: if you intend to cover it with earth a long time after it has cured, protect it with opaque tarpaulins.

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**N.B.:** if you wish to use BETONGUAINA BASEMENT on structures (like water tanks) which will be in contact with drinking water, make sure the product has cured completely for the specified times, then wash the surface thoroughly to remove any stagnant water before filling the tank.

**Mean consumption:** 3.2-3.5 kg/m<sup>2</sup> in two coats.

The technical characteristics of the resulting coat are guaranteed within the indicated coverage and thickness data given in the following table:

	minimum	MAXIMUM
consumption (A+B) [kg/m <sup>2</sup> ]	3.2	3.5
thickness [mm]	1.9	2.0

### Precautions and special instructions

- Do not modify the formulation of BETONGUAINA BASEMENT by adding water, cement or aggregate.
- If you intend to lay tiles directly over BETONGUAINA BASEMENT, use BETON-H 1 tile adhesive. Seal the gap between the wainscoting and the tiles with BETONSEAL MS 2.0.
- Cleaning tools: with water before the product hardens, with a synthetic solvent once it has dried.
- Read the safety sheet carefully before using the product.

### Packages and storage

Packages	kit (2A+2B), 21 kg in oval bucket; the kit contains: <ul style="list-style-type: none"> <li>• 2 bags of component A (fluid, 3.5 kg each)</li> <li>• 2 bags of component B (powder, 7 kg each)</li> </ul>
Storage	12 months in the original packaging in a dry place under cover, +5°C to +35°C. Protect against freezing.

### Legal notice

Any advice concerning the methods of use of our products reflects the current state of knowledge and does not imply any guarantee and/or responsibility as to the outcome of the application. Consequently, the customer must verify the product's suitability for the intended use and purposes by testing the product in advance. The website [www.nordresine.com](http://www.nordresine.com) contains the latest edition of this technical data sheet.

### Edition

01.04.2016