





-  TILE ADHESIVES
-  COLLANTI PER PIASTRELLE
-  COLLES POUR CARRELAGES
-  KLEJE DO PŁYTEK



BETON H-1

Tile Adhesive C2TE-S2 (Highly Deformable)

Description

BETON H-1 is a mono-component tile adhesive classified as C2TE-S2 according to EN 12004, composed of cement, sand of selected granulometry, resins and special additives.

It shall be prepared with the only addition of water at the time of installation.

In this phase the product is transformed into a Cementitious (C), High Performance (2) easily workable mortar with No Vertical Slip (T) and Extended Open Time (E), that is Highly Deformable (S2) and that once fully cured exhibits excellent frost resistance property. BETON H is designed for adhesive's thicknesses up to 15 mm and for tiles of small, medium and large format.

Where to use

BETON H-1 is designed for direct bonding of tiles to liquid membranes (e.g.: BETONGUAINA, BETONGUAINA.S, EPLASTIK and the like), for adhesive thicknesses up to 15 mm and tiles of all types, including very large format tiles.

Substrate Type: terraces, flat roofs and balconies treated with cementitious liquid membranes, radiant floors and already tiled floors.

Types of Materials: single and double-fired ceramic tiles, vitrified tiles, porcelain tiles and clinker of any size, stone material (moisture-stable).

Application

Substrate preparation

- thoroughly clean and remove all loose particles, oils, grease, paint and anything can prevent proper adhesion of the adhesive from all substrates;
- make sure that the substrate does not show any sign of rising damp;
- if deep chalking has taken place on the surface, proceed with the consolidation using a solvent-based product like NORPHEN FONDO IGRO. However, if chalking is only skin deep, consolidate with 1 coat of NORPHEN SW SOLID diluted 4-5 times in water.

Product preparation

- pour the water mixture (approx. 7.0 litres / bag) into an appropriate mixing container and enter the glue. Mix with a low revolution mixer (500 to 600 rpm), equipped with an impeller matching the bucket size, until a smooth paste with no lumps is achieved;
- allow to stand for approx. 6 ÷ 7 minutes, then re-mix and the adhesive dough is ready to apply.

How to lay the mixture

On liquid membranes the directions and the state of the art peculiarities for large format tiles shall be followed. As with all outdoors laying procedures, under the tile it must remain as less air as possible to prevent ice formation inside the glue. In this regard, if needed, a double spreading shall be carried out.

Mixture checking-open time





BETON H-1 is an adhesive with a theoretical open time of approx. 30 minutes. However, it should be kept in mind that, as it happens with all adhesives available on the market, under critical temperature conditions (wind and low humidity rate) this open time can be reduced to half or to a third of its normal levels. If needed, moistening the surface with water may be helpful to increase the open time.

As you proceed with the installation, check that there is no film formation. If needed, apply a small amount of fresh adhesive and re-mix it all without wetting with water.

Tile Grouting

With regard to grouting, keep in mind that if a cement based grout is used for the tiles joints, it shall be alternated with a grout based on BETONSEAL MS 2.0 or silicone materials with high UV resistance and low modulus. Areas with cementitious grout for medium to large size tiles should not exceed 5-6 square meters.



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Joints

Any existing shrinkage-flexure joints in the screed must be raised to the tiles level with BRIGHT STONE PROFILE series H, carefully following the procedures mentioned in the Technical Data Sheet.

Coverage

Coverage is highly variable, ranging from 3.75 kg/m² for a bonding minimum thickness of 3 mm to 11.25 kg for 9 mm and so on.

Special Warnings and Instructions

- Do not apply any type of binder on frozen surfaces or if it is expected it could freeze within the following 24 hours.
- Do not apply the binder directly on substrates made either of gypsum or anhydrite, but only after a period of time ranging from 0.5 to 1 hour has passed since you treated them with RIVLATEX SU.
- Apply preferably at a substrate temperature between +5 and +35°C.
- Joints sealing: 12÷24 on the wall after 24 hours, on the floor after 24÷48 hours.
- Transitability: 24÷36 hours
- Complete Cure: 13÷15 days
- This product is not expected to be hazardous. Nevertheless, it is subject to the Standard for cement-based compounds. Information Security Sheet available upon request.

Specifications

Bulk Density,	g/cm ³	1.65 ± 0.05
Max. granulometry	mm	0.315
Mixing water	%	27-29
Mixture life	Hours	>8
Frost protection (after application)	days	4-5
Theoretical open time	Min.	30 ± 5
Adjustment minimum time	Min.	60
Compressive strength after 28 days, UNI EN 196-1	MPa	18.0
Flexural strength after 28 days, UNI EN 196-1	MPa	7.0
Adhesion after 28 days, UNI EN 1348	MPa	2.0
Resistance to freeze-thaw cycles	cycles	25
Adhesion, UNI EN 1348	MPa	2.8

Note: testing methods are in accordance with the standards referred to on the table.

Packaging and storage

Packaging	25 kg bag in 56 bags pallets
Storage	12 months when stored in original packaging, in a dry area out of direct sunlight, between +5 C and +35°C The product is humidity sensitive.

Legal notice

Tips on how to use our products match the current state of our knowledge and do not imply any assumption of responsibility or/and liability for the final result of works. Therefore, customers are not exempt from the responsibility to verify the suitability of products for use and final aims through preliminary tests. The website www.nordresine.com contains the latest revision of this datasheet.

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