

UNIVERSAL

EN 12004
C1TE

White tile adhesive with zero vertical slip and extended open time

DESCRIPTION

White cement-based tile adhesive with zero vertical slip and extended open application time. Provides high initial and final adhesion strength and moisture resistance. It is classified as a type C1TE adhesive according to the EN 12004 standard. Suitable for fixing ceramic tiles, on wall or floor, on surfaces made of concrete, render etc.

With EUROFINS Indoor Air Comfort Gold certification which ensures that UNIVERSAL meets the strictest European regulations regarding VOC emissions.

In addition, the product is accompanied by an Environmental Product Declaration (EPD) regarding the environmental impact during its life cycle. (EPD registration number: S-P-09964).

APPLICATION FIELDS

UNIVERSAL is suitable for fixing the following types of tiles:

- Tiles of any type
- Low absorbency tiles
- Artificial and natural granite tiles

- Glass tiles
- Gres porcelain type tiles
- Decorative stones, natural or artificial

UNIVERSAL is suitable for application on the following types of substrates:

- Concrete and cement mortars
- Coatings & mortars
- Cement boards, plasterboards (using a suitable primer)
- Brick masonry

CHARACTERISTICS/ ADVANTAGES

- Extended open time
- High strength
- Excellent adhesion
- Moisture and frost-proof
- Incomparable quality of raw materials
- Easy to apply - excellent workability
- Indoor and outdoor use

PRODUCT INFORMATION

Composition	Portland Cement, aggregates of selected granulometry, special additives and polymer components
Colour	White
Packaging	<ul style="list-style-type: none"> • 25 kg paper bag - 1500 kg pallet (60 paper bags) • 5 kg plastic bag - Pallet of 960 kg (48 cartons of 4 x 5 kg)
Storage Conditions	In the original, closed, sealed and indestructible packaging, protected from direct sunlight and frost and at temperatures from +5°C to +35°C
Shelf life	12 months from the date of production in unopened package

TECHNICAL CHARACTERISTICS

Specific gravity of wet mortar:	~ 1.60 kg/lit (+20°C)	
Slip	≤ 0.5 mm	(EN 1308)
Adhesion strength:		
<i>Annual results (2022) based on average laboratory tests:</i>		
On concrete after 28 days:	> 1.0 N/mm ²	(EN 1348)
After heating at 70°C:	> 0.75 N/mm ²	(EN 1348)
In water:	> 1.0 N/mm ²	(EN 1348)
After 25 cycles of freezing – thawing:	> 0.8 N/mm ²	(EN 1348)
Open time for application:	20 - 25 min	(EN 1346)
Time for minor corrections:	10 min	

APPLICATION INFORMATION

Substrate temperature	+5°C / +35°C
Environmental temperature	+5°C / +35°C
Mixing ratio	6.7 – 7.0 lt water/bag 25 kg
Maximum application thickness	10 mm
Consumption	2.5 – 4.0 kg/m ² , depending on the levelling of the surface, the size and the type of tile
Grouting	On floor: ~24 h at +20°C On walls: ~12 h at +20°C

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Check that the substrate is clean, dry and free from loose particles and other materials. If the substrate is unstable or crumbles, then it is recommended to prime the surface with MARMOLINE MST 11 acrylic water based primer.

MIXING

Mix well, with a low-speed electric stirrer, one bag 25 kg of UNIVERSAL with around 7 liters of clean water until a homogeneous, lump-free mixture is obtained. Leave the mixture to set for 5-10 minutes and stir again for 1-2 minutes. Spread with a notched trowel; choose the size according to the type of tile and the substrate. Tiles must be fixed within 30 minutes after applying the adhesive and definitely before it skins-over.

APPLICATION

Fix the tiles by applying pressure to them. The adhesive remains workable in the pot for 3 to 4 hours, depending on the season, temperature and humidity of the environment.

When the adhesive begins to set, stir again without adding water. Proceed to grouting after 24 hours for floors and 12 hours for walls.

TOOLS CLEANING

Raw material should be removed immediately from the application equipment with water. Hardened / cured material can only be removed mechanically.

IMPORTANT NOTES

- The laying of the adhesive should be done at temperatures between +5°C and +35°C, without exposure to extreme weather conditions.
- Apply only on stable, well-prepared substrates.
- Do not exceed the recommended maximum amount of mixing water.
- Do not add extra water to adhesive that has already started to set.
- Do not wet the applied adhesive layer before applying the tiles.
- Do not exceed the maximum application thickness.
- Protect the application surface from frost, wind and direct sunlight for at least 24 hours after application.

COMPLIANCE WITH STANDARDS

It has CE marking and Performance Declaration as improved, deformable, normal setting cementitious tile adhesive with reduced slip and extended available time, C1TE, according to EN 12004: 2007.

HEALTH, SAFETY & ENVIRONMENTAL PROTECTION

Detailed information and instructions regarding the safe management of the product and in matters of Health & Safety, are provided in the most recent Safety Data Sheet (SDS), copies of which are available on the company's website <https://marmoline.gr/> or upon request.


LEGAL NOTICE

We guarantee the quality of all our products, based on their technical specifications, as described in the Declaration of Performance (CE) and this Technical Data Sheet. Such guarantee refers only to the products that we deliver for use and never to its application or final result, which largely depends on the experience and quality of work of each user and on the application conditions. The user is advised to test the product on a small scale, and if he is satisfied with the result, then to use the product on large scale in his project.

All data stated in this Technical Data Sheet are based on laboratory tests. The really measurable data might differentiate due to conditions that do not are subject to our control. The recommendations and implementation instructions must be considered by the user as indicative, and always with given that the product has been traded and traded and stored according to its instructions.

As it is not possible to control the parameters / conditions of its application product in practice, no guarantee is provided for the final result of each application. Consequently, no legal liability of the Company can be established based on the information and instruction given in this Technical Data Sheet.

The Company reserves the right to modify data listed in this Product Data Sheet, with no previous warning. Users must refer to the latest version of the product Technical Data Sheet.

 12 DoP: 011 MARMO-CPR	
NORDIA A.E. 364 Kifissias Av., 15233 Chalandri, Athens, Greece	
EN 12004:2007 + A1:2012 MARMOLINE UNIVERSAL Cementitious adhesive for tiles with reduced slip and extended open time	
Initial tensile adhesion strength:	≥ 0.5 N/mm ²
Tensile adhesion strength after heat ageing:	≥ 0.5 N/mm ²
Tensile adhesion strength after water immersion:	≥ 0.5 N/mm ²
Tensile adhesion strength after freeze/thaw cycles:	≥ 0.5 N/mm ²
Reaction to fire:	Class A1
Release of dangerous substances:	See product's SDS
see detailed DoP in https://marmoline.gr	