



## PELECRETE®

**Tile adhesive for interior and exterior surfaces**

**C1 EN 12004-1**



### Description

**PELECRETE®** is a tile adhesive, classified as C1, cementitious (C), normal (1), according to European Standard EN 12004-1, for interior and exterior surfaces. It is suitable for the adhesion of absorbent tiles on medium-size non absorbent tiles on vertical and horizontal substrates of concrete (not fair-faced) and cementitious plasters or renders. It is available in white and grey colour.

### Technical Specifications

Dry density	: $\approx 1.30 \text{ Kg / L}$
Density of mixture	: $\approx 1.65 \text{ Kg / L}$
Mixing ratio (water / PELECRETE®)	: $8.25 - 8.50 \text{ L / 25 Kg}$
Substrate temperature	: $+5^{\circ}\text{C min. / } +35^{\circ}\text{C max.}$
Application temperature	: $+5^{\circ}\text{C min. / } +35^{\circ}\text{C max.}$
Adhesion	: $\geq 0.60 \text{ N / mm}^2$
Adhesion after 20 minutes (extended open time)	: $\geq 0.50 \text{ N / mm}^2$
Adhesion after heating	: $\geq 0.60 \text{ N / mm}^2$
Adhesion after freeze/thaw cycles	: $\geq 0.50 \text{ N / mm}^2$
Adhesion after water immersion	: $\geq 0.50 \text{ N / mm}^2$
Workability	: at least 20 minutes at $23^{\circ}\text{C}$
Pot life	: at least 4 hours at $23^{\circ}\text{C}$
Time for small adjustments	: at least 20 minutes at $23^{\circ}\text{C}$
Wall grouting	: after 4-8 hours at $23^{\circ}\text{C}$
Floor grouting	: after 24 hours at $23^{\circ}\text{C}$
Light food traffic	: after 24 hours at $23^{\circ}\text{C}$
Normal use	: after 14 days at $23^{\circ}\text{C}$
<u>Consumption</u>	
Indicatively, for ceramic mosaics $2-2.5 \text{ Kg/m}^2$ or for ceramic tiles $3.5-7 \text{ Kg/m}^2$ depending on the size of the notched trowel. On flat surfaces, $1.4 \text{ Kg/m}^2$ per mm of thickness.	

### Conformity/ Standards

Conformity of **PELECRETE®** Technical specifications is verified by Notified body (0370), with Declaration of Performance (DoP) PPL13-PP C1-CPR 01/07/2013 and bears CE marking.

### Application Examples

- Adhesion of ceramic tiles (monocotura, bicotura, klinker, etc.).
- Adhesion on floors and walls, for interior and exterior surfaces such as kitchens, bathrooms, bedrooms, offices etc.

**PELECRETE®** can be used on various types of substrates, such as:

- Concrete floors.
- Ready-mix or traditional cementitious plasters and renders.

### SUBSTRATE PREPARATION

All surfaces should be clean, free of dust, oil, residues of other building materials etc. before applying **PELECRETE®**. It is recommended that substrate is sprayed with water, before applying the mixture. In such case, the surface should be allowed to dry after spraying, so as not to inhibit adhesion of **PELECRETE®**.

Ensure that cementitious substrates will not shrink after applying the tiles. Therefore, during spring or summer, make sure that renders are allowed to cure for at least one week per cm of thickness, and cementitious screeds for at least 28 days before tiling.

### MIXING

All equipment and containers should be clean, free of dust, residues of previous mixtures and/or other building materials, etc. to not adversely affect the setting time and the mechanical properties of the product.

Depending on the desired consistency, mix 25 Kg (1 bag) of **PELECRETE®** with 8.25 – 8.50 L of clean potable water. Mix using a low-speed electric stirrer until a homogeneous, free of lumps mixture is achieved and the right consistency is obtained. Allow the mixture to settle for approximately 10 minutes and then stir again.

The pot life of the mixture is at least 4 hours depending on weather conditions. In this case, stir the mixture regularly, without adding additional water.

### APPLICATION CONDITIONS

Use **PELECRETE®** only at temperatures between +5°C and +35°C. During periods of low temperatures (5 – 10°C), it is advisable that warm water (approx. 30°C), is used for the mixing and if possible, the application to be performed during noontime. On the contrary, use cool water (approx. 20°C), for the mixing during high temperatures (up to 35°C) and if possible, the application to be performed in the coolest hours of the day (early in the morning or late in the afternoon hours) avoiding the direct sunlight.

### APPLICATION

Apply the adhesive using a metal notched trowel. The size of the trowel depends on the size of the tile and the desired final thickness of application. **PELECRETE®** is spread uniformly using the notched trowel and covered with the tile, before a film is formed on its surface (an indication that the mixture started to set) i.e., within 15 – 20 minutes of its application, depending on weather conditions. The tiles are placed and adjusted to the desired level with light taps to ensure the best coverage with the adhesive.

A minimum 2 mm wide joint should be left between the tiles, while the width of the joint should increase as the size of the tile increases and in general the conditions affecting its expansion. For applications on large surfaces, expansion joints should be created every 16 – 25 m<sup>2</sup> (as symmetrically as possible) and depending on the geometry of the surface. It is recommended that adhesive is applied both to the substrate and to the back of the tile or the natural stone.

### CLEANING OF EQUIPMENT

Clean all tools and mixing equipment thoroughly with plenty of water after completion of work, while the mixture is still fresh. In case that the mixture has been set, then tools can be cleaned only by mechanical means

### REMARKS / LIMITATIONS

- To repair cement-based substrates, use RM40, before tiling.
- Do not use **PELECRETE®** on substrates waterproofed with flexible cementitious waterproofing PELELASTIC PE50. Use **PELECRETE® FLEX** or **PELECRETE® ULTRA**.
- Do not use direct on metal, wooden or plastic substrates.
- Use only fresh, clean water for both mixing and cleaning.
- Avoid using material which was stored in open bags for a long period of time, as it may contain lumps or be contaminated.
- Never add water or new material to the mixture which has started to set to improve the workability.
- Do not add cement, gypsum, sand or any other materials to the supplied product, as this may negatively affect the final properties of the product.
- Avoid using the product under extreme weather conditions (strong winds, direct sunlight etc.).
- Prime cementitious substrates with slightly weak surface using **PELEBOND** at a ratio of 2 parts **PELEBOND** : 1 part clean potable water.

**PACKAGING**

25 Kg multiwall paper bags (one layer of which is made of PE-HDPE) and 5 Kg PE bags.

**STORAGE**

**PELECRETE®**, in 25 Kg packaging, can be stored for 3 months and in 5 Kg packaging for 12 months from production date, in its original, unopened packaging in dry conditions. The storage place must be covered and protect the product from direct sunlight, water, and moisture, while the product must not be in direct contact with the floor.

**Health  
and Safety  
Measures**

- The product contains cement, which reacts as alkaline with water, moisture, sweat and/or other body fluids so it is classified as irritant. Follow normal precautions as with all cementitious materials and products.
- Harmful in contact with skin.
- Harmful if inhaled or if swallowed.
- May cause respiratory irritation.
- Keep out of reach of children.
- Wash body and clothes thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear respiratory protection.
- Please refer to Safety data Sheet for more information and advice regarding the safe handling, storage, use and disposal of the material.

**Note 1:** All Technical Data provided on section "Technical Characteristics" are based on laboratory trials and tests, under conditions which may significantly differ from the ambient application conditions. Therefore, the actual technical characteristics may vary due to conditions or circumstances beyond company's control.

**Note 2:** The information provided by our Technical Data Sheets or given by our employees, agents or distributors concerning the use of our products, is based upon extensive research and experience and are provided in good faith in order to help you. We guarantee the consistent high quality of our products; however, as we have no control over site conditions of the executions of work, we cannot accept any liability for any loss or damage, which may arise as a result thereof.

**Note 3:** All cement-based products, must be stored in dry sheltered places, on wooden pallets. Even under these circumstances, the products are influenced by the atmospheric moisture after a period of time. Since this period is not defined or standard, we strongly advise our customers not to use hardened products or if, generally, its quality due to storage is uncertain.