



## THERMOCEM T2

**Thermal insulating undercoat plaster (T2)  
based on cement and expanded perlite**

EN 998-1 **CE**

### Description

**THERMOCEM T2** is a thermal insulating undercoat plaster (T2) based on cement and expanded perlite, for interior and exterior surfaces. It is suitable for application on substrates such as clay bricks, lightweight bricks, concrete (not fair-face) and concrete blocks (regular or aerated).

### Technical Specifications

Density	:	~0.62 kg/L
Density of fresh mortar	:	~0.90 kg/L
Mixing ratio (water/Thermocem T2)	:	~9,5-10,5L / 25L
Substrate temperature	:	+5°C min. / +35°C max.
Ambient temperature	:	+5°C min. / +35°C max.
Reaction to fire	:	Class A1
Thermal conductivity ( $\lambda_{dry}$ )	:	$\leq 0,175$ W/mk tab. mean value, P=50%
Compressive strength	:	CSII
Flexural Strength	:	$\geq 1$ N/mm <sup>2</sup>
Adhesion strength	:	0,1 N/mm <sup>2</sup> – FP:A
Water absorption	:	W1
Water Vapour permeability coefficient:	:	$\mu 6$
Pot life	:	at least 4 hours at 23°C
<u>Consumption:</u>		
28.5 L/m <sup>2</sup> of Thermocem T2, for a layer thickness of 20mm		

### Instructions for Use

#### SURFACE PREPARATION

All substrates should be clean, free of dust, oil, residues of other building materials, etc. before applying the plaster. The substrate must be sprayed with water and the surface film should be allowed to dry, before applying **THERMOCEM T2**, so as not to inhibit the adhesion of the mixture.

#### Plastering

Allow 3-4 weeks after brick-laying before applying **THERMOCEM T2**.

For plastering as a first coat, it is advisable that a more fluid mixture is prepared and to be reinforced with Pelefix (product of Peletico -see *Technical Data Sheet*) in a ratio approximately 1.0 –1.5L of Pelefix per 25L of THERMOCEM. Keep the surface wet for 1-2 days before applying the next layer of plaster.

#### MIXING

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

Depending on the desired consistency, add approximately 9,5-10,5L of clean water for every bag (25L) of **THERMOCEM T2**.



Use a low speed mechanical stirrer or a concrete mixer for the preparation of the mix. Pour the appropriate amount of dry powder, into a suitable mixing container and while stirring, add the proportional quantity of clean water. Mix for at least 3 minutes, until a homogeneous, free of lumps mixture is obtained and the desired consistency is achieved. Hand mixing is not advisable, unless really small quantities are required. Extended mixing should be generally avoided, in order to decrease the possibility of crashing the expanded perlite.

The mixture can remain workable (pot life) for at least 4 hours, depending on the weather conditions. In case the mixture has started to set before it is used, dispose immediately without using it. Do not add additional water for remixing and/or for improving its workability.

### APPLICATION CONDITIONS

Use only at temperatures between +5°C and +35°C. During winter or 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 summer and generally at ambient temperatures exceeding or expected to exceed 35°C.

### APPLICATION

**THERMOCEM T2** is applied in layers of 20mm each.

Install the guides in the desired thickness, and apply **THERMOCEM T2** using the normal plastering techniques as all conventional plasters. When additional layers are required, scratch each layer using a plaster's trowel and allow settling. Then install a fiberglass mesh before applying the subsequent layer. The final surface should occasionally be sprayed with water for 2-3 days, before it is ready for the application of THERMOCEM FINISH, WATERPROOF FINISH PLASTER, PELELITE FINISH (for interior surfaces only), ULTRA-MIX, EXTERIOR PELEMURA (all products of Peletico -see *Technical Specifications Sheet*), ceramics, stone facing etc.

### CLEANING OF EQUIPMENT

Clean all tools and mixing equipment thoroughly with plenty of water after completion of work, while the plaster hasn't set. Use mechanical methods to remove hardened material.

### REMARKS / LIMITATIONS

- 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 product to the mixture which has started to set, in order to improve its workability.
- Do not add cement, gypsum, sand or any other materials to the supplied product, as this will negatively affect the end results of the product.
- Avoid using the product under extreme weather conditions, such as direct sunlight and strong winds.

### PACKAGING

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

### STORAGE / SHELF LIFE

Store under dry conditions and away from direct sunlight, in a sheltered, free from water and moisture area. Store in closed bags preferably in the original packaging, onto a pallet or generally without direct contact with the floor.

The product has a shelf life of up to 3 months from production date, when stored properly in the original, unopened bag.

### 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.
- Harmful 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 advices 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.