



# CLIMA THERM

Premixed lightened plaster, thermal insulation for fire protection.  
Highly breathable, it prevents the formation of thermal bridges and molds.



## TECHNICAL FEATURES

**CLIMA THERM** is a special protective fire-fighting mineral plaster, based on perlite, Portland cement, hydrated lime and selected recycled aggregates, for use indoors and outdoors, on walls and ceilings. During the kneading **CLIMA THERM** transforms into a very light and porous, highly breathable mortar, capable of insulating surfaces from heat and protecting structures from fire during fires. Its healthy and hypoallergenic properties due to the high breathability and thermal insulation generated, make it highly recommended in preventing the formation of thermal bridges present on the walls and the molds generated by them. **CLIMA THERM** is a CE marked plaster mortar according to **EN 998-1** as a lightened mortar of type **LW GP-CSII**.

## FIELD OF APPLICATION

**CLIMA THERM** can be applied on all normal traditional substrates, such as bricks, bricks, concrete blocks, mixed masonry, as well as rough surface concrete, indoors and outdoors on walls and ceilings.

## PREPARATION OF THE SUBSTRATE

The substrates to be plastered must be solid, stable and clean: dust, paint, mold, dirt or release agents must be suitably treated and eliminated. Mechanically remove any dusty or detached parts. It is advisable to pre-treat mixed masonry or masonry with varying degrees of absorption and particularly absorbent substrates with **HERALAX AC**. On particularly smooth and compact surfaces such as poured concrete, it is necessary to prepare a substrate with adequate adhesion by previously applying a rough coat (3 ÷ 5 mm) or using **HERALAX GRIP**. Wet the substrates with water, especially if exposed to direct sunlight, about an hour before plastering so that they have time to cool and dry on the surface. Very humid substrates can slow down the setting.

## APPLICATION

The product can be mixed and applied mechanically with a common plastering machine available on the market. Arrange the level strips and the edge protectors and then start "spraying" the product starting from the lower part and then going upwards. Using a straightedge, level and smooth the plaster with horizontal and vertical steps. The minimum application thickness must never be less than 1 cm or greater than 2 cm for a single coat of application. In case of plaster thicknesses greater than 2 cm or in unfavorable application conditions, the application must be carried out in several layers taking care not to smooth the first layer and to wait for the second application the following day. After about 4–6 hours from application and depending on the environmental thermal conditions, prepare the plaster for the finishing treatments, making the surfaces uniform and regularizing the corners. If the surface must remain visible, it is advisable to apply a finishing smoothing compound from the **HERAKEM** range; in case you want to obtain a high breathability, we recommend the use of **BIO RASANTE**, highly breathable smoothing compound based on natural hydraulic lime and zeolite with "civil" finish. On mixed masonry, in critical points and to avoid possible cracks, it is recommended to drown a fiberglass mesh between the first and second coat of smoothing compound. When there are no particular aesthetic requirements, a rustic finish can be obtained by directly finishing **CLIMA THERM** with a plastic or wooden spatula. Remember that the application of very smooth and "closed" finishes tend to block the high breathability of **CLIMA THERM**. In the case of small surfaces or patches, manual application is allowed: mix **CLIMA THERM** with clean water according to the about 42 % (10.5 liters per 25 kg bag). Slowly add the powder to the water, mixing with a low-speed mixer fitted with a propeller, until a homogeneous, lump-free mortar is obtained; a maximum mixing time of 2–3 minutes is recommended. Mixing with a concrete mixer is not allowed because it can cause an anomalous incorporation of air, compromising the final mechanical performance. Apply the material with a trowel and spatula. The freshly mixed mortar must be used within 2 hours.

## ITEM OF SPECIFICATIONS

- Protection of walls, beams and pillars from the action of fire by plastering performed with lightened fireproof mineral plaster based on perlite, Portland cement, specific additives and selected aggregates.
- Creation of a plaster with thermal characteristics, highly breathable and hypoallergenic using a product based on perlite, Portland cement, specific additives and selected aggregates.
- The plaster must comply with the **EN standard 998 -1** as **LW - CSII - WO** as **CLIMA THERM** produced by the company **HERAKEM SRL**.

## WARNINGS

- **CLIMA THERM** is mixed with clean water without adding other products.
- If kneaded manually, do not exceed 2-3 minutes of mixing.
- Do not mix with a muller or concrete mixer.
- Do not apply in direct sunlight or with strong ventilation.
- Protect the applied plasters for at least 24 ÷ 48 hours from rain or washout and for at least 7 days from frost or rapid drying due to wind or beating sun.
- Do not apply on frozen substrates or in any case at ambient temperatures below + 5 ° C, because the hardening of the product is based on the hydraulic setting of the binders which, at low temperatures, is excessively delayed with consequent anomalous hardening.
- Subsequent finishes must be applied only after hardening and drying.
- In the junction points of two different materials and in the most critical points (eg window corners, door corners, etc.), where the mechanical stresses are greater, it is recommended to use (drown) a special mesh for plaster.

## TECHNICAL DATA \*(at +22±1°C and 55±5% R.H.)

Appearance	grayish powder	Compressive strength	category CS II (EN 1015-11)
Customs heading	3823 50 90	Adhesion to the substrate	0,3 N/mm <sup>2</sup> (EN 1015-12)
Aggregate size	< 1,4 mm	Water absorption	W0 (EN 1015-18)
Apparent specific weight of powder	800 kg/m <sup>3</sup>	Thermal conductivity	0,23 W/m·K (tabulated value)
Mixing water	about 41 ÷ 43 % by weight	Permeability to water vapor	5÷20 μ (EN 1745 tabulated value)
Mixing water per 25 kg bag	about 10,2 ÷ 10,7 liters	Moisture resistance	excellent
Application temperature	from +5°C to +30 °C	Resistance to aging	excellent
Maximum application thickness	20 mm for each coat	Durability to freeze / thaw	excellent
Density (dry hardened mortar)	≤ 900 kg/ m <sup>3</sup> (EN 1015-10)	Final hardening	28 days

<b>Consumption</b>	<b>approx. 9 ÷ 10 kg/m<sup>2</sup> per cm of applied thickness</b>	<b>Packaging</b>	<b>20 kg bag</b>
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### PRODUCT FOR PROFESSIONAL USE ONLY

All the data and indications given in this technical data sheet, although resulting from laboratory tests carried out and from our direct application experiences, due to the infinite number of variables linked to the construction site conditions, are to be considered, in any case, purely indicative. Therefore, before applying the product, the user is required to establish whether it is suitable for the use envisaged by him, in the specific hygrothermal and application conditions foreseen at the time of use and, in any case, he assumes all responsibility for it. We are not liable for damage to people or things deriving from improper use of the product. We reserve the right to modify the data contained therein as a result of improvements and technical progress.