



Technical Data Sheet H-25 Thermo-P



MINERAL COAT

THERMOPLASTER IN COCCIOPESTO AND LIME

DESCRIPTION: Thermo-P is a mixture, with low specific weight, specific for the creation of insulating civil plaster. Thermo-P combines thermal insulation with high breathability, regulation of internal condensation, absence of acoustic reverberation.

COMPOSITION: Dry mixture based on cocchiopesto, natural hydraulic lime, thermo-expanded aggregates, cork flour, pozzolans.

USE: Thermo-P is ideal for the thermal renovation of historic, old, new or recent buildings, where there are walls with non-homogeneous, discontinuous surfaces or walls that require insulation with external/internal thermal insulation in order to limit or avoid damage from condensation and restore the natural hydrometric balance of the existing masonry. Excellent for supports subject to rising humidity.



APPLICATION CYCLE AND PRECAUTIONS:

Thermo-P is mixed exclusively with clean water and the mixture can be applied by hand or by machine with the normal application technique: Rinzafo H-30RZ + Plaster primer H-25 in thickness + H-29Termofino.

To allow correct drying of the applied (Basecoat) once the surface has hardened, it must be roughened with a blade or robot (the surface must be open-pore to reduce the possibility of crazing). For significant thicknesses (> 4 cm) the insertion of a large mesh fiberglass mesh is recommended.



PRECAUTIONS:

Thermo-P must be protected from frost and rapid drying. It must not be applied at temperatures below +5°C and above +30°C.

The properties of the product are nullified if other binders, aggregates and/or various resins are mixed. In case of strong wind, strong sun, high absorbent power of the support, keep the plaster damp for at least two days. It is necessary to wait a few days before applying the finish, at least in two layers, (on average 5 days for each cm of thickness applied).

To reduce the possibility of shrinkage crazing, it is also advisable to use a reinforcing mesh to be embedded in the first finishing layer.

Store the product in a dry place, away from rain, humidity and strong heat.

SUPPLY: The product is supplied in a 50 liter recyclable paper bag, 32 bags on pallets with heat-shrink cover. Technical staff is available and provide assistance.



WINTER PERFORMANCE:

Determination of winter thermal resistance by means of the hot chamber method with Thermo flow meter UNI EN 1934: 2000				
Sample	Resistance thermal from surface to surface R (m ² K/W):	Conductance thermal from surface to surface $\dot{\gamma}$ (W/ m ² K)	Resistant za thermal Total RT (m ² K/W)	Transmittance From environment to the environment U (W/ m ² K)
H-25 Thermo-P Applied in a thickness of 6 cm				
Block masonry of 30 cm thick brick plastered on both sides	1,720	0.535	1,890	0.53
Masonry as above + thermo-plaster cycle 6 cm on each side external H-30 Rubber + H-25 Thermo-P + H-29 Thermofino	3,721	0.265	3,891	0.26
Improvement of thermal performance	+116%	+50%	+ 105 %	+ 50%

Insulating properties

Thermal conductivity of equivalent mass	$\dot{\gamma} = 0.031 \text{ W/m}^2\text{K}$	Resistance thermal UNI EN 1934:2000	R = 2.00 m ² K/W
---	--	-------------------------------------	-----------------------------

SUMMER PERFORMANCE:

Determination of thermal performance in summer phase shift and POI attenuation regime			
Sample H-25 Thermo-P Applied in a thickness of 6 cm	Phase displacement wa (hours):	Transmittance thermal periodic Yie (W/ m ² K)	Attenuation does(-)
Block masonry of 30 cm thick brick plastered on both sides	9h	0.24	0.45
Masonry as above + thermo-plaster cycle 6 cm on each side external H-30 Rubber + H-25 Thermo-P+ H-29 Thermofino	1.30pm	0.026	0.10
Improved summer thermal performance	+50%	- 89%	- 77%



TECHNICAL DATA:

Mixing water	35% approximately 8.5 liters per bag	Granulometry	0 - 3 mm
Basic binder	NHL3.5 lime	Membership	0.3 N/mm ²
Attenuation acoustics	from 19 dB to 28 dB (depending on the thickness and method applied)	Resistance to compression at 28 days.	approx. 0.1 Mpa
Resistance steamed	$\mu < 7$	Maximum thickness of application for layer	35mm
Specific heat	2500 J/kgK	Flexural strength 28 days	approx. 0.7 Mpa
Consumption	4.2 ± 0.2 Kg/m ² x cm. sp.	Reaction to fire	Class A 1
		Compliance	UNI EN 998-1

Environmental compatibility

Nature of the product	inorganic	Type of inert used	natural, inorganic
Contained in recycled materials	> 15 %	End-of-use disposal in landfill as	inert material (non-hazardous waste)

NOTES and LIMITATION OF WARRANTY – The product is intended for professional use and the application implies verification of suitability for the intended use and the assumption of responsibility deriving from use.

The data and information contained herein are obtained from the application cycle and not from the individual product, from laboratory certifications, from on-site tests and are given in good faith. Technical staff is available to assist and provide any useful advice for use and application.

However, as the conditions and methods of use of our products are not under our control this information should not be used as a substitute for consumer testing to ensure that the products are safe, effective and completely satisfactory for their intended use. wanted. The manufacturer explicitly denies any other express or implicit guarantee of suitability for the specific use that the customer intends to make of it and Heres declines any responsibility for incidental or consequential damages.

The manufacturer reserves the right to make the most appropriate variations to the technical data reported at any time and without notice.

Updated 02/2024/ Rev.06



SUMMARY EXCRIPTION

Thermal insulating mineral plaster for the thermal renovation of historic buildings, based on cocciopesto, natural hydraulic lime and thermo-expanded aggregates.

SUMMARY DESCRIPTION Thermal insulating mineral plaster for the thermal renovation of historic buildings, based on cocciopesto, natural hydraulic lime and thermo-expanded aggregates.

SPECIFICATION ITEM HERES thermal insulating mineral plaster mod. H-25 THERMO-P, for the thermal renovation of historic buildings, based on cocciopesto, natural hydraulic lime and thermo-expanded aggregates. Execution of HERES insulating plaster cycle mod. H-25 THERMO-P, highly breathable, composed of natural hydraulic lime, thermo-expanded aggregates, cork and selected cocciopesto, applied in one or more layers, on stone, brick and solid brick walls on existing plaster or substantial plaster-holder networks and strongly clinging to the masonry. This plaster must be applied following the layer cycle sequence (Rinzaffo + Fondo + Fino). The product must have the following specific technical-performance and application characteristics > fields of application: thermal renovation of historic buildings where there are walls with non-homogeneous, discontinuous surfaces or walls that require external thermal insulation while maintaining the natural balance for better habitability hydrometric of the existing masonry; thermal conductivity with density 420 / 450 kg/m³: 0.031 W/mk accompanied by UNI EN 1934:200 certification and CAM certification; fire reaction class: A1; mixing water: approx. 35%; base binder: NHL 3.5 lime; acoustic attenuation: 19-28 dB depending on the thickness and method applied; resistance to vapor diffusion: $\gamma = 7$; consumption: approx. 4.2 / 5 kg/m² x cm thickness; grain size: max 3 mm; adhesion: 0.3 N/mm²; compressive strength after 28 days: approx. 0.1 MPa; flexural strength after 28 days: approx. 0.7 Mpa; minimum application thickness: 20mm; The works must scrupulously respect what is contained in the executive project, in compliance with the technical provisions of the Works Director or the Client, in full compliance with what is contractually established in the special tender specifications. The final finishing, internal and external scaffolding over a height of 3.5 m are excluded from the price, while the supply of materials with their transport to the site and the removal of inconsistent parts are included in the price. and inconsistent, the removal of dust, saline efflorescence, any traces of oily or bituminous treatments by pressure washing and possibly brushing the surface, adequate wetting of the substrate before application making sure that it is still absorbent, preventive verification that the entire surface is clean, compact and rough, the preventive formation of guide strips at a sufficiently close distance, the costs for the supply and installation of corner guards in galvanized steel sheet, the formation of both sharp and beveled corners, the pilasters, the squares for door and window spaces, string courses, the formation and dismantling of work surfaces, the lifting of the materials used, the respect of any niches and connections for technical systems, the protection of all the elements adjacent to the area subject to the intervention including the relative removal at the end of the works, internal and external scaffolding up to a height of 3.5 m, temporary protection from frost and rapid drying caused by heat or wind, the samples requested by the works management before the execution phase, compliance with the CE marking for construction products required by Directive 89/106/EEC implemented by Presidential Decree 21.04.93 n. 246, the final cleaning with the removal of debris and dust, the transport of the rubble to the loading floor with its clearing and transport to public landfills, the fees for landfill rights, as well as any other ancillary service necessary to carry out the work at rule of art.