



Scheda Tecnica art. H-55Pv-C



Anti-condensation **thermal** plaster for heat-reflecting mineral insulation

- **PRODUCT:** Dry mixture in mineral microcomposite to be mixed with water and applied as a coating, with the aim of obtaining an effective improvement in the thermal insulation of vertical walls.
- **COMPOSITION:** Mixture based on white cement, hydrated lime, cocciopesto, thermo-expanded aggregates, ceramic glass microspheres, specific minerals, reinforcing microfibers and natural resins.
- **USE:** Biocompatible product aimed at energy saving of buildings, reducing condensation and consequent mold, improving insulation and thermal bridges on traditional plasters, pillars, old discontinuous masonry, door and window jambs, cell blocks, panels for thermal insulation of homes and commercial buildings, both internal and external,



(e.g. ceilings, balconies, overhangs, concrete structures, etc.)

To limit thermal bridges deriving from pillars and beams, apply a thickness of 5/6 mm of RasoThermo-C on all four sides, as well as to eliminate condensation problems.

FUNCTIONALITY: The RasoThermo-C product combines thermal insulating and thermo-reflective performance, with levelling properties, particularly suitable in case there are irregularities and imperfections on the surfaces to be treated. The thickness applied, although extremely thin (5mm), is able to drastically reduce heat loss by reducing the internal/external thermal shock.

The composition makes RasoThermo-C a breathable, permeable and long-lasting protection, applicable on any type of wall surface. The applied mixture does not absorb heat, lowering the thermal conductance value. It also makes the substrates particularly resistant to corrosion, reduces the formation of fungi and mould, allows significant energy savings and a significant improvement in the quality of life.

APPLICATION:

<u>PREPARATION OF THE SUPPORT</u>: The application must be carried out on well-aggregated supports; any parts that are chalking or detaching must be removed. In the presence of absorbent substrates, it is advisable to wet the surfaces before applying the product. If wetting is not possible, use an absorbency regulator using ID-10 primer diluted 1+6 with clean water.



MIXING: Mix the FONDO mixture with about 8-10 litres of clean water per 25 kg bag.

For a homogeneous and lump-free mixture, it is advisable to mix mechanically (with an electric mixer), adding 5/6 of the water at the beginning and the rest after a few minutes of mixing until the desired fluidity is reached. Small quantities can still be mixed manually. In low-thickness applications, it is always recommended to insert a fiberglass reinforcement mesh to promote the flatness of the surface.

LOW THICKNESS INSTALLATION: Apply the first layer with a straight American steel trowel, then pass with a 10 mm notched trowel to form a full line groove, apply the reinforcement mesh and go over again with a straight blade, also adding the mixture and flattening the surface;

Do not exceed 5 mm thickness per single layer. Higher thicknesses must be achieved by applying several layers, even with the help of guides.

<u>THICK INSTALLATION</u>: it is possible to use a plastering machine for premixes prepared with a special kit for lightened mixtures or with an air spraying machine; Apply in successive thicknesses of about 1 cm. In the case of several coats, each pass must be adjusted in a stadia and the last application troweled with a PVC tool. On very absorbent masonry or with high temperatures, it is advisable to wet the substrate in advance to avoid rapid drying of the plaster just applied.

Before proceeding with the creation of the finishing coating, wait for the skim coat to dry completely, even in depth (at least 36 hours at 20° C for thicknesses of 5 mm). The times can be longer depending on the climatic conditions and the thickness of the product applied. Apply an absorbency regulator using ID-10 primer diluted 1+6 with clean water; In the case of friable substrates, the prior application of a consolidant based on pre-dispersed silicates (Comfrey-2) or a water-based vinyl fixative (ID-10) is recommended. Apply the layer of FINO with a stainless steel blade and finish with a hard sponge or plastic tool before complete drying; Any second application of finishing at the discretion of the customer or the D.L.

TECHNICAL DATA:

Grain size of Fine mixture Bottom mixture	ca. 1 mm ca. 0.5 mm.	
Mixing water	24% approx	
Powder mass	ca. 520 kg/m³	
Minimum thickness advised	5 mm	
Surrender	ca. 0,55 kg/m² x1 mm. di thickness	
Basic binder	Calce NHL 3,5	
Mixture conformity	UNI EN 998-1	

Adhesion	>0.14	
	N/mm2	
Compressive	> 1 MPa	
strength at 28 days.		
Flexural strength	> 0.80 MPa	
Reaction to fire	Class A 1	
Vapor resistance	d 2.2 10-11	
μ = 9	(Kg/s m Pa)	
μ 3	(10) 5 11 1 0)	
Thickness of the air		
layer equivalent to the	0.15 Sd (m)	
vapor diffusion		
Aqueous (average)		
Water absorption by	cm 1.1	
capillarity (kg/m ²	category	
min0,5)	W2	
min0,5)	W2	



Insulating properties

Certification standard UNI EN 1934:2000

Certified thermal conductivity of the product UNI EN 1934.2000	λd= 0.0104 W/m°k
Equivalent thermal conductivity of the product (calculation value) UNI EN ISO 6946	λeq = 0.002 W/m°k

Environmental Friendliness

Nature of the product	Inorganic	Type of aggregate used	natural, inorganic
Contained in Recycled (by volume)	> 45 %	End-of-use disposal	in landfills as inert material (waste not dangerous)

SUMMER PERFORMANCE:

Determination of thermal performance in summer phase shift and P.O.I.					
attenuation by means of the hot chamber method with thermo flowmeter					
- UNI EN 1934: 2000					
Sample		Thermal			
BasaThormo Applied	Bewilderment		Attenuation		
RasoThermo Applied		transmittanc	and		
in a thickness of 5	WA (hours):	e	anu		
mm		Yie Periodic			
		(W/ m2 K)	fa(-)		
		(W) 112 K)			
Masonry in brick					
blocks 30 cm thick	11h	0.204	0.309		
Masonry as above					
+ cycle	13h	0.100	0.196		
RasoThermo di 5	30'				
mm on the outside					
Improved	+ 21%	+ 51%	+ 37%		
Summer thermal					
performance					



WARNINGS:

- Store the product in a dry place and protected from frost.
- Protect from frost, rain, wind and sun until completely dry.
- Protect from rapid drying to prevent cracking and detachment.
- It is recommended to operate at temperatures between +5° and +32°C.
- Store the product in a dry place away from rain and humidity.
- Do not mix with cement, dyes, additives, or other substances in general.

NOTES and WARRANTY LIMIT – The product is intended for professional use and the application implies verification of suitability for the intended use and the assumption of responsibilities deriving from the use during installation. Data and information contained herein are obtained from laboratory certifications from on-site tests and are given in good faith.

However, since the environmental conditions and methods of use of our products are not under our control, this information should not be used as a substitute for the application tests that the applicator must do to ensure that the products are satisfactory for the end use desired by the customer and D.L. The manufacturer explicitly denies any other express or implied warranty of fitness for the non-specific use that the customer intends to make of it and Heres declines any liability for incidental or consequential damages.

The manufacturer reserves the right to make the most appropriate changes to the technical data at any time and without prior notice. Technical staff is available to provide assistance and provide any useful advice for use and application.

Update 02/2024

SPECIFICATIONS:

BRIEF DESCRIPTION Fibre-reinforced thermal insulation skim coat for exteriors and interiors type RasoThermo-C[®] dry mixture produced on the basis of white cement, hydrated lime, recycled glass sand and thermo-expanded siliceous aggregates, aimed at obtaining thermal performance and elimination of thermal bridges of the building, to be applied as per the requirements of the technical sheet and indications of the D.L.

SPECIFICATIONS Extended: HERES RasoThermo-C[®] fibre-reinforced thermal insulation skim coat for

exteriors and interiors based on white cement, hydrated lime, vitreous aggregates, siliceous aggregates and thermo-expanded ceramics, natural resins. Execution of HERES RasoThermo-C thermo-insulating hydraulic skim coat, aimed at saving energy in buildings, applied in two or more coats depending on the thickness, with an American steel trowel or with a pre-prepared plastering machine. The product must have the following specific technical and application characteristics: - fields of use: elimination of thermal bridges on traditional plasters, pillars, old discontinuous masonry, door and window jambs, cellular blocks, panels for thermal insulation of homes and commercial buildings, both internal and external (e.g. ceilings, balconies, overhangs, concrete structures, etc.); - Mixing water: about 24%;

- thermal conductivity λ : 0.0104 W/mK (determination of winter thermal resistance and determination of thermal performance in summer phase shift and attenuation by means of the hot chamber method with thermo flowmeter - UNI EN 1934:2000); Powder mass: approx. 520 kg/m³; - yield: approx. 0.55 kg/m² x mm thickness; Base binder: white cement; grain size of the primer mixture: approx. 1 mm; Fine mixture grain size: approx. 0.5 mm; reaction to fire: class A1; - mixture conformity: UNI EN 998-1; - adhesion: > 0.1 N/mm²; - 28 days compressive strength: >1 MPa; - flexural strength: > 0.8 MPa; - resistance to vapour diffusion: $\mu = 9$; - thickness of the layer of air equivalent to the diffusion of water vapour (average): 0.15 Sd (m); - water absorption by capillarity: 1.1 cm (kg/m² min 0.5) category W2; - nature of the product: inorganic; - recycled content: > 45%; - type of aggregate used: natural, inorganic; - end-of-use disposal: in landfills as inert material (non-hazardous waste); - accompanied by certification C.A.M. issued by a sworn body or laboratory.



The works must scrupulously comply with the contents of the executive project, in accordance with the technical provisions of the Works Manager or the Client, in full compliance with the contractual provisions of the special tender specifications. The price does not include the removal of any chalking or detachment parts, the removal of old paintwork by hydro-cleaning or hydro-sandblasting, any final plaster, steel protection corners, while the price includes the supply of materials with their transport to the site, the execution in a workmanlike manner through the use of a special steel trowel, the supply and installation of fiberglass reinforcement mesh, the laying of the second layer with a straight blade to plane the surface, any trowel (in the case of subsequent painting) with a wooden or plastic sponge before complete drying, the preventive control of the solidity and stability of the substrate (not subject to hygrometric shrinkage or detachment), the installation of reference guides for thicknesses greater than 5 mm, the preventive roughening of excessively smooth surfaces, the removal with a soft brush of surface deposits of various kinds such as dust or dirt, the preventive wetting for very absorbent substrates, the protection of all the elements present that are not to be skimmed with their removal at the end of the work, internal and external scaffolding up to a height of 3.5 m, the samples required by the Works Management before the executive phase, the correct finishing of particular points such as niches, shelves and corners, compliance with the CE marking for construction products provided for by Directive 89/106 / EEC transposed by Presidential Decree 21.04.93, n. 246, final cleaning with the removal of debris and dust, the transport of the rubble to the loading floor with the removal and transport to public landfills, the fees for landfill fees, as well as any other ancillary service necessary to carry out the work in a workmanlike manner.