

WHITE CERAMIC FL FIRE RESISTANT

High reflectance, fire-resistant white paint

Description: WaterSolvent-based protective and decorative paint formulated with selected synthetic resins and special additives that give high solar reflectance properties. The formulation of the product features particular additives, which confer self-extinguishing properties.

Advantages:

- Reduces the fire risk of the coating in the event that burning embers fall on the roof.
- Ensures excellent thermal insulation by creating a highly reflecting barrier against sunrays, reducing both the temperature on the external surface and improving thermal well-being inside living spaces.
- Reduces the energy consumption of air conditioning in summer.
- Improves the yield and efficiency of photovoltaic panels.
- Extends the life of coats.
- Excellent adhesion and elasticity.
- Easy application.
- Stable colour over time.
- Low maintenance, does not require additional protection.
- Odourless, non-flammable product.
- Non-toxic product, free from solvents.

Applications: Protect and decorate:

- Polymer-bitumen membranes and corrugated bitumen sheets.
- Hot bituminous waterproofing with oxidised bitumen and cold waterproofing with stabilised bituminous emulsions.
- Surfaces in concrete, asbestos cement, wood, metal surfaces, plaster, pantiles and roof tiles.

Surface preparation:

- Make sure that the surface is free from detached parts, loose debris or non-adherent parts, coatings, rust, powder, or release oils; carefully clean the surfaces, which must be sound and dry.
- Before applying, check the solidity and efficiency of the water run-off points.
- The paint must be protected from rain, dew, or fog until it is completely dry: humidity and low temperatures lengthen drying times.

Application:

- Apply by brush, broom, roller or spray.
- Mix the product before use.
- As a first coat, apply the product diluted up to 10% with water.
- The second and any subsequent coats must be applied with the product as is or with 5% dilution and must be applied only on the perfectly dry film (at least after 6 hours) and must preferably be crossed with respect to the previous one.
- Polymer-bitumen membranes with non-woven synthetic fabric finish on the surface allow for immediate painting, but more than two coats are required in order to obtain a sufficient covering effect.
- After use, wash tools with water and, if the product has dried, it is advisable to remove it with hot water or with the common synthetic thinners.

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Consumption: -Application must include at least two layers to give the waterproofing layer a uniform colour. Consumption varies according to the nature and degree of porosity of the surface, overall 200-300 g/m² on aged smooth polymer-bitumen membranes or concrete and 450-700 g/m² on slated membranes.

- In the case of combining the two coats of a non-woven glass fibre reinforcement of (50±10) g/m², total consumption of the product is approximately 1.0-1.2 kg/m².

Warnings:

- We recommend applying the product at ambient temperatures between +5 °C and +35 °C and when there are no weather conditions such as fog, rain, or frost, and in any case avoid extreme situations of cold and heat, even during drying.
- Do not apply on very hot surfaces as the process of formation of the paint film would be excessively accelerated with negative consequences on the cohesion and adhesion of the product to the surface.
- In winter, it is preferable to finish application in the early afternoon to allow for the correct formation of the paint film (too humid days should always be avoided).
- We advise against applying the product on newly applied bituminous surfaces, which could still release hydrocarbons and cause adhesion problems of the film on the sheath.
- In any case, we recommend carrying out a preliminary application test to check whether the product is compatible with the surface.
- If the roof includes insulating packages, a shorter restore is advisable.
- It can be stepped on in case of occasional maintenance.
- Do not use for surfaces or containers of edible liquids, for drinking water or that may come into contact with solvents or mineral oils.
- Do not paint tanks, basements, or channels subject to backpressure and water pressure.
- To maintain high reflectivity and thus efficiency, periodic maintenance of the surfaces is recommended, with visual inspection and removal of dirt by hydro-washing. For further information, request the safety data sheet.
- Protect from frost, do not expose the package to temperatures below +5 °C; once frozen, the product can no longer be recovered.
- For further information, request the safety data sheet.

Packaging: 1, 5, 10, 20 and 25 kg metal or plastic pails.

Technical data:

MAIN CHARACTERISTICS		
Appearance		Fluid thixotropic paste
Colour		White
Shelf life in closed original packaging		24 months
Solid content (<i>m/m at 130 °C</i>)	EN ISO 3251	(66-72)%
Brookfield viscosity (<i>at 20 °C, spindle 5; 10 rpm</i>)	EN ISO 3219	(12,000±2,000)cP
Density (<i>at 20 °C</i>)	EN ISO 2811-1	(1.30-1.38) kg/L
pH (<i>at 20 °C</i>)		7.0-8.5
Drying time		30-60 minutes*

PERFORMANCE PROPERTIES - EN 1504-2 SURFACE PROTECTION SYSTEMS FOR CONCRETE (C COATINGS – PRINCIPLES: PI-MC-IR)		
Permeability to CO ₂	EN 1062-6	S _D > 50 m
Water vapour permeability	EN ISO 7783	Class I (S _D < 5 m)
Liquid water permeability	EN 1062-3	w < 0.1 kg/m ² ·h ^{0.5}
Tensile bond strength	EN 1542	≥ 1 N/mm ²
Reaction to fire	EN 13501-1	E

* Measurements have been recorded at a temperature of 23 °C and with 50% moisture. Declared data may vary depending on the thickness of the applied product and on the specific conditions of the construction site: temperature, humidity, ventilation, and absorbency of surfaces.

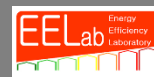
FIRE RESISTANCE CLASSIFICATION EN 13501-5:2016	
Classification Report no. N2476/21 T2i Trasferimento tecnologico e innovazione s.c.a.r.l. (LAB no. 0170L)	
Classification method	EN 13501-5:2016 Fire classification of construction products and building elements - Part 5: Classification using data from external fire exposure to roofs tests
Test method	CEN/TS 1187:2012 -Test 2 Test methods for roofs/roof coverings exposed to external fire
Classification	The White Ceramic FL Fire Resistant roof covering in relation to its external fire attack characteristics is classified: B_{ROOF}(t2) <u>Validity of the classification for the following fields of application:</u> <ul style="list-style-type: none"> - Roof covering – Gradient: all gradients. - On all combustible and non-combustible substrates with density not less than 20 kg/m³. - Interposition between the first and second coat of paint, of a layer of non-woven glass fibre reinforcement fabric of (50±10) g/m²

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SOLAR REFLECTANCE, THERMAL EMITTANCE, SOLAR REFLECTANCE INDEX

Test report of the Enzo Ferrari Engineering Department / EELab -
University of Modena and Reggio Emilia



Solar Reflectance Index (SRI) [%] ASTM E1980-11	Thermal emittance (IE) EN 15976	Solar reflectance (SR) ASTM C1549-09	Surface temperature (T _s) ASTM E1980-11
99.4	0.871	0.799	44.9 °C

LEED CERTIFICATION REQUIREMENTS v 4.1 BD+C



SS HEAT ISLAND EFFECT
CREDIT: ROOFS

Use roofing materials that have a Solar Reflectance Index (SRI) greater than or equal to the value shown in the table below for a minimum of 75% of the roof area.

Type of roof	Gradient	SRI
Low slope roofs	≤15%	82
Highly sloping roofs	>15%	39

Membranes painted with WHITE CERAMIC FL FIRE RESISTANT have an SRI > 82.



The advice and technical information provided represent HA ITALIA S.p.A.'s best knowledge of product properties and use. Considering the different situations of use of the products and factors beyond our control (media, working conditions, failure to comply with instructions), we cannot be held responsible for the results obtained. Before using the product, anyone who intends to make use of it is required to determine whether it is suitable for the intended use and assumes full liability for whatever may arise from its use.

HA Italia disclaims any and all liability arising from failure to observe the warnings mentioned in this data sheet and failure to comply with the requirements set out in the safety data sheet.

Data sheet no.: 20004242-REV01 dated 01.01.2023