PRODUCT TECHNICAL DATA

WHITE CERAMIC FL

High SRI elastoplastic white paint

MADE IN ITALY

Description: Water-based white paint formulated with selected synthetic resins and special pigments and additives that give high solar reflectance properties.

Advantages:
- Ensures effective protection against UV rays and weathering.
- 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 White Ceramic FL 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.

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 and 450-650 g/m² on slated membranes.

WHITE CERAMIC FL

High SRI elastoplastic white paint

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 of the paint 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.

- 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.

Other versions: White Ceramic FL Fire Resistant is available; it is a version of the product with the addition of particular additives, which give self-extinguishing properties. White Ceramic FL Fire Resistant is certified resistant to external fire, in class $B_{Roof}(t2)$ according to EN 13501-5:2016 (specifications present in the product technical sheet).

Technical data:

MAIN CHARACTERISTICS		
Appearance		Fluid thixotropic paste
Colour		White
Shelf life in closed original packaging		24 months
Solid content *(m/m at 130 °C)*	EN ISO 3251	(66-72)%
Brookfield viscosity *(at 20 °C, spindle 5; 10 rpm)*	EN ISO 3219	(6,000±1,200)cP
Density *(at 20 °C)*	EN ISO 2811-1	(1.45-1.55) kg/L
pH (*at 20 °C)*		7.0-8.5
Drying time		30-60 minutes*

WHITE CERAMIC FL

High SRI elastoplastic white paint

MADE IN ITALY

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

* 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.

Specifications for COOL ROOFS: Thanks to its high SRI value, White Ceramic FL allows obtaining LEED credits for the reduction of the heat island effect and ensures an increase in the energy efficiency of the photovoltaic panels.

SOLAR REFLECTANCE, THERMAL EMITTANCE, SOLAR REFLECTANCE INDEX			
Solar Reflectance Index (SRI) ASTM E1980-11	Thermal emittance (E) ASTM C1371-15	Solar reflectance (R) ASTM E903-12	Surface temperature (T_s)
103	92	82	43.4 °C

LEED CERTIFICATION REQUIREMENTS v 4.1 BD+C

S 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 have an SRI > 82.

Marking CE Reference standard EN 1504-2

IN COMPLIANCE WITH: EN 1504-2 PROTECTION AND REPAIR OF CONCRETE — C PI-MC-IR SURFACE PROTECTION SYSTEMS FOR CONCRETE

Data sheet no.: 20004241-REV01 dated 01.01.2023

HA ITALIA S.p.A.
DIVISIONE PRODOTTI SPECIALI
Viale della Scienza 78 -80 - 36100 Vicenza - Italy
Stabilimento Via Vicenza 72 - 36015 Schio (VI)
P.I. e C.F. IT00169590247 - Ph +39 0445 678000
info@ha-italia.com - www.ha-italia.com - ha italia s.p.a - ha italia s.p.a