



PRT.0335

PROTECH SIL I - THERM

Anti-condensation, reflective siloxane plaster, with glass microspheres

Customs Code

3214 9000

Packaging

- Pail 20 kg

Application

- Finishing trowel
- Sponge float
- Spatula

Family
Protech

Product Lines
• **Building**

Components
Single-component

Type
Siloxane fixatives, fillers, paints and plasters

Functional Categories
• **Protective coating (plasters)**
• **Thermal-insulating renewal of masonry**

Appearance
Paste

Certifications and legislations



EN 15824

Specifications for organic binder based interior and exterior plasters

General description

Spatulated nanotechnological wall coating for interiors and exteriors, anti-condensation, elastomeric, sanitizing, thermal insulator, formulated with hollow glass microspheres (3M Glass Bubble), heat-reflecting based on siloxane resins in aqueous emulsion with high permeability to water vapor, with a similar final appearance to the civil plaster. It allows the creation of thermal insulation with the obvious advantages of recovering the thermal mass from the walls and eliminating bridges and thermal changes in buildings.

General features

PROTECH SIL I - THERM designed above all for buildings and monuments subject to the protection of the Ministry of Cultural Heritage. The binder based on an emulsion of silicones has allowed to develop a microporous filter impermeable to heavy rain, and at the same time permeable to the diffusion of water vapour. Thermal insulation coating that allows the realization of a thermal insulation with the obvious advantages of recovering the thermal mass from the walls and eliminating bridges and thermal changes of the buildings. Due to its high degree of insulation and transpiration, it is widely used to radically solve mould problems, through the synergistic action of fungicide and thermal insulation. It is composed of a water-dilutable silicone resin, acrylic dispersion, with controlled grain size marble grit, fillers, 3M Glass Bubbles, sanitizing additives and pigments, in a content that guarantees the fulfilment of physical parameters such as: permeability, water repellency, CO2 diffusion, etc.

Dosage

Indicative consumption depending on the different particle sizes of PROTECH SIL I-THERM available:

- 1 mm GRAIN: approximately 1.6 -1.8 kg/m²;
- 1.2 mm GRAIN: approximately 1.8 -2.0 kg/m²;
- 2 mm GRAIN: approximately 2.4 -2.8 kg/m²;
- 2.2 mm GRAIN: approximately 2.6 -3.0 kg/m².

The indicated yields refer to smooth supports and are for guidance only. Actual consumption must be identified with a suitable practical test.

Fields of application

Suitable for any type of mineral support, ideal especially on walls where the growth of mould and algae represents a serious problem. Due to its low thermal conductivity, it is particularly suitable for solving problems of mould and algae on walls exposed to areas of shade and high humidity.



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Basic features



Highlighted product



Shelf-life:
12 months



Temperature of use:
+5 / +35 °C



To be applied in two coats



UV-resistant



Available **colours**
Request available colors

Technical specifications

Grado di trasmissione dell'acqua liquida UNI EN 1062-3: 0.070 kg/(m² • h^{0.5})

Grado di trasmissione del vapore acqueo UNI EN ISO 7783-2: 0.3992 FP:A

Determinazione dell'aderenza per trazione diretta (Fh) UNI EN

1542: 0.4 MPa

Adhesion to substrate: 0.4 MPa

Complete hardening (20°C): 24 - 48 h

Reaction to fire: F₂

Solar reflection index (SRI) ASTM E1980-11: 95.2

Thermal conductivity UNI EN 1745: 0.83 - 0.93 W/m*K

Tools cleansing

- Water

Applicable on

- Plasters
- Concrete
- Cement-based or lime-based mortars
- Prefabricated concrete
- Fiber-cement

Substrate preparation

SUPPORTS ALREADY PAINTED WITH SILOXANIC PAINT

Remove any stains and proceed with painting with the siloxane coating (it is always recommended to apply a coat of siloxane impregnating agent).

NEW SUPPORTS

Apply a coat of siloxane acrylic fixative diluted from 20 to 60% with water depending on the absorption of the support.

OLD SUPPORTS ATTACKED BY MOLDS

Clean the wall from mould and algae with a steam cleaner, disinfect with CONSILEX MUFFA CLEANER and CONSILEX MUFFA REMOVER (sanitizer) after a few hours, when the microorganisms have neutralized proceed with the application of a coat of PROTECH FIX AC - THERM diluted from 20 to 50 % with water. Once dry, proceed with the application of PROTECH SIL I - THERM.

Instructions for use

The product is ready to use if necessary add a little water and stir slowly. Apply a coating layer with a stainless steel trowel with a thickness equal to that of the granules it contains. Pass again with a cutting spatula to remove any excess material. After light drying, pass over with a plastic trowel with rotary movements to compact, even out and achieve the full plaster effect.

On large surfaces, it is recommended to apply the product of the same lot and proceed always wet on wet to avoid signs of resumption.

Storage and preservation

Protect from freezing. Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Store the product at a temperature between +5°C and +35°C.



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Warnings, Precautions and Ecology

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge.

Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage.

Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: www.azichem.com. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.

It is forbidden to dispose of the product and/or packaging in the environment.

Never operate at temperatures below + 5°C. Rainy weather, excessive atmospheric humidity and temperatures below + 8°C, can considerably compromise drying with the possibility of rainwater washout even after several days. In these situations, it is advisable to protect the facades from unpredictable showers, in order not to jeopardize the success of the work. For storage store in tightly closed containers and protect from frost.

PROTECH SIL I - THERM is produced/distributed by



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