

THERMOFLEX PERLA SILK

FEATURES AND FIELDS OF APPLICATION

THERMOFLEX PERLA SILK is an innovative thermoreflective decorative coating for exterior applications, designed to combine high surface protection, energy efficiency of the building envelope, and an exclusive aesthetic appearance.

Its special elastomeric-siloxane formulation, enriched with special high solar-reflectance fillers, functional microspheres, and premium pearlescent mica, allows the creation of decorative surfaces with an elegant mineral silk effect, characterized by refined light reflections, chromatic depth, and soft textured variations. THERMOFLEX PERLA SILK has been developed to meet the modern requirements of contemporary architecture, offering a decorative finish highly resistant to weathering, UV rays, smog, and thermal shock, while maintaining long-term color stability, surface compactness, and outstanding aesthetic value.

Thanks to its high solar reflectance, the product significantly reduces overheating of façades exposed to direct solar radiation, limiting heat absorption and improving indoor thermo-hygrometric comfort.

Its high thermal emissivity also promotes rapid dissipation of accumulated heat from surfaces, helping reduce thermal stress on the building envelope.

The coating simultaneously provides excellent breathability and strong water repellency: the substrate is protected from rainwater penetration while allowing natural water vapor diffusion outward.

THERMOFLEX PERLA SILK contains specific biocidal agents that effectively prevent the formation of mold, algae, and microorganisms responsible for façade deterioration.

IDEAL FOR:

- High-end residential buildings
- Villas and modern architectural complexes
- Hotels and hospitality facilities
- Commercial and office buildings
- Aesthetic and energy retrofit interventions on façades
- High-performance contemporary architecture

MAIN ADVANTAGES

- Elegant pearlescent silk effect with high aesthetic impact
- Soft, compact, and luminous decorative surface

- Certified high solar reflectance
- Solar Reflectance Index (SRI) up to 106.3
- Reduction of overheating on exterior surfaces
- High thermal emissivity
- High-efficiency "Cool Wall" surface
- Reduction of thermal stress on façades
- Increased durability of exterior coatings
- Excellent elasticity and resistance to microcracking
- High substrate breathability
- Strong water repellency
- Resistance to weathering and UV rays
- Protection against mold, algae, and smog
- Excellent long-term color stability
- High workability and ease of application
- Water-based product with low VOC content

COMPOSITION

Decorative paste coating based on modified acrylic-siloxane elastomeric emulsion, hollow thermoreflective microspheres, natural and synthetic pearlescent mica, selected mineral fillers with controlled granulometry, organic and inorganic pigments highly resistant to light and weathering, rheological additives, water repellents, biocides, and special functional additives.

APPLICATION METHOD

Substrates must be perfectly cured, dry, cohesive, and free from dust, dirt, salt efflorescence, or loose particles. Suitable substrates include:

- Lime/cement-based plasters
- Fine mortars
- Thermal insulation systems
- Old synthetic paints or coatings with good adhesion
- Absorbent mineral substrates

On chalky or highly absorbent substrates, first apply one coat of SILOSSANA PRIMER diluted 100% with water. Then apply one coat of THERMOFLEX PAINT properly diluted as a leveling base coat and adhesion promoter. After complete drying of the base coat, apply THERMOFLEX PERLA SILK using a stainless steel trowel, spreading the material evenly.



Emotion with paint ...

SPIVER s.r.l.

contrada Babbaurra S.S. 122

93100 Caltanissetta (CL)

Tel. +39 0934 57 77 91 Fax +39 0934 58 87 95

www.spiver.it - info@spiver.it

Scheda Tecnica: THERMOFLEX GUM SP 022. Rev.1 La presente scheda annulla e sostituisce le precedenti

THERMOFLEX PERLA SILK

The finishing effect is achieved by repeated passes with a clean stainless steel spatula until the exclusive compact and luminous pearlescent silk effect is obtained. Depending on the application technique, different aesthetic effects can be achieved:

- Mineral silk effect
- Compact pearlescent effect
- Elegant clouded effect
- Contemporary textured effects

Do not apply:

- At temperatures below +5°C or above +30°C
- In rain, heavy fog, or strong wind
- On substrates affected by rising damp or active water infiltration

Do not apply on substrates where rising damp or infiltration moisture has been detected.

TECHNICAL DATA

Specific Weight: 1.190 Kg/L $\pm 3\%$

Film Appearance: Whitish pearl

Viscosity (ASTM D2196): 130,000 cps (R7, RPM 10)

Drying Time:

- Touch dry: approx. 4 hours at 20°C and RH below 60%
- Through dry: approx. 48 hours at 20°C and RH below 60%

Application Temperature: between 5°C and 30°C

Packaging: 20 kg PP containers

Coverage: 0.60 - 0.70 kg/m² (two coats)

Water Vapor Permeability: sd = 0.15 m (UNI 8202/43)

Water Absorption: W24 = 0.02 Kg/m² h0.5 (DIN 52013)

Reaction to Fire: Not classified according to UNI EN 13501-1. Thin coating applied on generally non-combustible substrates.

Total Solar Reflectance (SR) (ASTM E903-20): 0.851 ± 0.053

Hemispherical IR Emissivity ϵ (UNI EN 15976:2011): 0.831

Solar Reflectance Index (SRI) (ASTM E1980-24):

- 106.6 (low wind)
- 106.3 (medium wind)
- 106.2 (high wind)

Application Tool: Stainless steel trowel

Dilution: Ready to use, max 5% with water

Storage: 24 months in unopened packaging protected from thermal shock

HS Code: 32091000

SPECIFICATION ITEM

Decoration and protection of exterior surfaces through the application of a thermoreflective decorative coating with a pearlescent silk effect, such as THERMOFLEX PERLA SILK by Spiver s.r.l., formulated with a modified acrylic-siloxane elastomeric emulsion, thermoreflective microspheres, natural and synthetic pearlescent mica, selected mineral fillers, pigments resistant to UV rays and weathering, specific additives, biocidal agents, and water repellents.

The product shall guarantee high certified solar reflectance with an SR value of 0.851 and a Solar Reflectance Index (SRI) up to 106.3, as determined by laboratory testing according to ASTM E903-20 and ASTM E1980-24 standards.

The coating shall also provide high thermal emissivity, excellent breathability, strong water repellency, high elasticity, and resistance to weathering.

Application shall be carried out on properly prepared substrates treated with a suitable fixing primer, using a stainless steel trowel until a compact, luminous, silky decorative finish of high aesthetic value is achieved.

Price inclusive of materials and application, excluding scaffolding, per square meter €.....

N.B. The above data may be subject to change. Spiver S.r.l. assumes no responsibility for negative results resulting from applications performed outside of its control or from factors unrelated to product quality.



Emotion with paint ...

SPIVER s.r.l.

contrada Babbaurra S.S. 122

93100 Caltanissetta (CL)

Tel. +39 0934 57 77 91 Fax +39 0934 58 87 95

www.spiver.it - info@spiver.it

Scheda Tecnica: THERMOFLEX GUM SP 022. Rev.1 La presente scheda annulla e sostituisce le precedenti