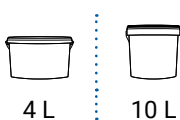


# IR INSIDE PLUS

HEAT-REFLECTIVE INTERIOR  
FINISH PAINT



**Thermal-ceramic coating,  
for any interior wall surfaces**



## COMPOSITION

Synthetic polymers and acrylsiloxanes, hollow ceramic and glass microspheres, fillers, TiO<sub>2</sub> and silicon nanoparticles

## MAIN CHARACTERISTICS

Water repellent,  
Breathable, Excellent  
thermal regulator



Heat reflective

## RECOMMENDED FOR

**Children's rooms, bathrooms, kitchens, hospitals, schools, hotels and public areas.** IR INSIDE Plus is suitable to covering the existing walls surface of all types and new solid surfaces such as concrete, plaster, drywalls.

## HIGH QUALITY PAINTING

Its particular formulation offers great advantages, improving the technical skills of a high-quality painting: easy clean up, excellent coverage, antifungal function and it offers an excellent combination of elasticity and surface adhesion. The heat-reflecting characteristics allow for uniform surface temperatures, reducing the possibility of concentrations of cold areas and, above all, keeping the walls dry.

## PROPERTIES AND BENEFIT

It is a thermoceramic nanotechnology coating composed of microreflectors, hollow ceramic and glass microspheres, fillers and ultra-reflective TiO<sub>2</sub> and silicon nanoparticles. **IR INSIDE Plus is a high-quality paint with insulating and heat-reflective properties, specially designed for indoor use.** Based on special thermal reflective components, on a micro and nano-scale, it creates a high-performance product for energy saving. The heat insulating particles reduce heat transfer by reflecting thermal radiation and, at the same time, creating a barrier against humidity. This translates into significant energy savings. It prevents thermal bridges, minimizing humidity condensation and mould growth.

It also contains special IR reflective materials that ensure all the benefits of a thermal reflective micro coating. **IR INSIDE Plus, thanks to the high quality and technology of the materials used, is a paint with a high solar reflectance index (SRI = 108) for energy saving.**

The material, applied to the inner side of the walls, manages to combine a double summer / winter heat exchange saving effect inside the building: it allows to use less heating energy (in winter) and less cooling energy (in summer). The application of IR INSIDE also reduces thermal bridges which cause humidity condensation and mould growth on poorly insulated surfaces.

## APPLICATION

IR INSIDE Plus can be applied directly to internal walls (concrete, plaster, drywall, skim coats) and wherever water-based paints can be applied. New concrete or masonry should dry more than 3-4 weeks before application. Finishing for cycle NS67 RASOTHERM NATURAL LIME.

**APPLICATION NOTE: Ready to use.** Mix well before use. If necessary, applying the product thinned with up to a max of 5% water by volume. Mix well during application. Application temperature must be between 8-35 °C. Apply with a good quality brush or roller. Do not apply excess paint. Make sure to provide adequate covering to all edges and corners. Wait min. 4-6 hours before proceeding with the subsequent layers. Mix periodically during application.

## SURFACE PREPARATION

Before applying, the application surface should be dry and clean. Carefully clean the surfaces and remove any residues. Avoid any cracks or fissures on the substrate. It is recommended to fix them previously. Very dirty surfaces (humidity, mold) must be pre-treated. Apply NS67 MUFFA to the entire surface. Perform surface washing. Then apply NS67 CMIX Primer consolidante, following instructions. To fill microcracks, consider applying NS67 FONDO ACRYLSIL® leveling primer. For larger cracks, use a suitable filler.

## CONSUMPTION AND DRYING TIME

Yield: **5 m<sup>2</sup>/L** for 2 coats. Drying time: **40 minutes**, depending on the thickness of the coating. Dry film: 8 hours. Low temperatures and high humidity can affect drying times.

## APPLICATION UTENSILS AND STORAGE

After use, all tools and equipment must be cleaned immediately with water. Store in a cool, dry and well-ventilated place away from heat and direct sunlight. Containers which have been partially used should be kept carefully closed. Protect from frost. Always transport in closed containers that are up-right and secure. Stored in its original airtight containers, the product has 18 months' shelf life, undiluted.

### TEST E PERFORMANCE

☑ Test	📄 Standard	🏷 IR INSIDE PLUS
Determination of wet-scrub resistance and cleanability of coatings	UN1 EN ISO 11998	(Ldft) = 25,72 micron Class R3
Cross-cut test	UNI EN ISO 2409	Class 1
Pull-off test for adhesion	UNI EN ISO 4624	1,5 MPa - Breaking 85% e 15% B
Determination of through-dry state and through-dry time	UNI EN ISO 29117	40 minutes
Determination of liquid water permeability	UNI EN 1062-3	W <sub>6</sub> = 1,490 kg/(m <sup>2</sup> h <sup>0.5</sup> ) Class W1
Determination and classification of water-vapour transmission rate (permeability)	UNI EN ISO 7783	Sd = 0,0124 m Thickness= 126 µm µ = 98 Class V1
Determination of dry film thickness	UNI EN ISO 2808 - Method 4A	92 micron (consumption 130 gr/m <sup>2</sup> )
Determination of wet film thickness	UNI EN ISO 2808 - Method 1A	103 micron
Determination of crack bridging properties	UNI EN 1062-7	Class >A1
Determination of volatile organic compounds (VOC) and/or semi volatile organic compounds (SVOC) content	ISO 11890-2 (rif. 2004/42/CE)	10,65 gr/lt
SRI	ASTM E 903-12 - ASTM C 1371-15 ASTM G 173-12 - ASTM E 1980-11	108
Thermal Resistance Test	UNI EN ISO 1934:2000	R = 0,38 m <sup>2</sup> K/W
Packaging: 4L e 10 L	Consumption : 5 m <sup>2</sup> /L	Tyntometric System: Yes

The correct application of the product is the sole responsibility of the user. Any visits or site inspections by Nanosilv staff are intended to provide technical application recommendations, but in no case to inspect the construction site or perform quality checks on behalf of Nanosilv srl.

### PRECAUTIONARY STATEMENTS

Keep out of reach of children. Do not reuse container. Avoid contact with skin and eyes. In case of skin contact, wash off with soap and plenty of water. Never use solvents or thinners. In case of eye contact, rinse thoroughly with plenty of water, seek medical assistance. If swallowed, seek immediate medical assistance and show container or label to the doctor in attendance. Do not let product enter drains. Dispose of containers contaminated by the product in accordance with local or national legal provisions. Before use, read and understand the Safety Data Sheet.

### LIMITED WARRANTY INFORMATION - Please read carefully.

The information contained herein is true and correct to the best of Nanosilv's knowledge. Final determination of the suitability of the material, in relation to the specific use of the product, is the sole responsibility of the user. Nothing herein should be interpreted as a warranty. Since conditions and methods of use of our products are beyond our control, observing applicable law or regulation is the sole responsibility of the user. Nanosilv disclaims liability for any incidental or consequential damages. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## ITEM SPECIFICATIONS

Interior Finish Paint with application of a nano-structured, water-based, thermo-ceramic, heat-reflecting micro coating, composed of micro-reflectors, hollow ceramic and glass microspheres, fillers and ultra-reflective TiO<sub>2</sub> (titanium dioxide), which reflect thermal radiation and silicon nanoparticles.

To be applied, after priming, in 2 coats with a brush or roller, approximately 4 hours apart.

Characteristics:

Finish paint with thermal resistance = 0,38 m<sup>2</sup>K/W.

Water vapour permeability UNI EN 7783 Class V1; Liquid water permeability UNI EN 1062-3 Class W1; Cross-cut test UNI EN ISO 2409 Class 1; Pull-off test UNI EN ISO 4624 1.5 MPa, cleanability of coatings Class 3, SRI 108.

The product must protect:

- from heat dispersion through opaque surfaces and thermal bridges;
- from overheating due to thermal radiation;
- from atmospheric agents. Material certified according to UNI EN 1934:2000. Part of the CAM certified cycle.

## NANOSILV PAINT APPLICATION CYCLE

### CLEANING and WALL PREPARATION:

1- Spray anti-mold type NS67 MUFFA and leave to act for 24 hours and then rinse (yield 8/10 m<sup>2</sup>/L)

2- Spray primer type NS67 CMIX diluted 1:6 as a primer and leave to dry for 4 hours (yield diluted 8/10 m<sup>2</sup>/L)

### FINISH:

3- Spread uniforming primer type NS67 FONDO UNIFORMANTE, consumption 0.35-0.40 Kg/ m<sup>2</sup> (yield 32 m<sup>2</sup>/per jar) and leave to dry for 8 hours (recommended for exteriors on plaster)

4- Spread two coats of paint type IR INSIDE PLUS (for interiors) at least 4 hours apart, yield 5 m<sup>2</sup>/L with 2 coats (yield 50 m<sup>2</sup>/per jar).

### N.B.

For interiors it is essential to check that the pre-existing paint is **coherent with the support** (see tear test with a cutter and duct tape), **otherwise it must be removed hot or with other useful tools.**