

TECHNICAL SHEET PSC- 250T/ECR - ROOF

Acrylic based, thermal reflective paint designed for metal roofs

Applying PSC 250T/ECR - ROOF provides benefits such as:

- reduction of heating/air-conditioning costs (by up to 50%)
- thermal stability while using heating/air conditioning
- decrease/increase of ambient temperature
- pollution reduction in urban areas
- easy recycling
- insulation space savings due to the use of nanotechnology
- protection from corrosion
- protection from water condensation
- thermal insulation
- increased object longevity

GENERAL DESCRIPTION

PSC-250T/ECR – ROOF is a highly efficient thermal insulation and protection material for metal roofs. It is completely washable and resistant to dirt and chemicals. The acrylic resin based paint uses the microspheres technology (Swiss formula). Each cell is sealed with a vacuum. Thermal resistance and insulating properties create a synergic effect in reducing surface heat transfer. The coating is also air permeable, waterproof and has an excellent surface adhesion. High solar reflectivity and low conductivity create a perfect insulation effect. The paint is available in many color shades. Because of its reflective properties, it is advised to choose a light one (red, orange, yellow, green, blue, violet). After application forms a layer similar to gypsum. The product is eco-friendly, resistant to atmospheric conditions and UV radiation. It is a quick-drying material with excellent covering properties.

The paint is designed for surfaces such as : metals, all kinds of steel, aluminium, non-ferrous metals, metal roofs, galvanized sheets, metal storage tanks, pipes,

Do not apply on: PE, HDPE, PP, PTFE and other plastics

POSSIBLE APPLICATIONS

Farba PSC-250T/ECR - ROOF is designed for coating new metal roofs and renovating older ones. It is also suitable for ceramic/concrete tiles on roofs with slope of over 3%. The material can be used for painting: ventilation and garbage disposal pipes, and those made of solid PVC/galvanized sheet. In case of new surfaces, clean it with solvent or sandblasting. It is suitable for use in climatic conditions where energy costs play an important role in maintaining a favorable temperature environment. The material is resistant to corrosion, water condensation and works in C4/C5 chemical environment.

TECHNICAL DATA
CLASSIFICATION ACCORDING TO PN-EN 1062-1: 2005

Classification	
Classification according to chemical properties	Acrylic based resin aqueous dispersion
Classification according the state of dissolution	Water-dilutable
Classification	
Gloss 85° ≤ 10 (Matt)	G₃
Coating density > 50 ≤ 100	E₂
Grain volume. (fine-grained). Marked according to PN-EN ISO 1524:2002 (EN 21524) equals: up to 100 µm	S₁
Water vapour diffusion (Medium) ≤ 150 > 15 g/m ² ·d	V₂
Water permeability (Small) ≤ 0,1 kg/m ² ·h0,5	W₃
Covering of cracks	Not tested
Carbon dioxide permeability	Not tested

Code mark:

PN-EN 1062-1	G₃	E₂	S₁	V₂	W₃	-	-
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INSULATION PROPERTIES

PSC-250T/ECR - ROOF has a reflection factor value (TSR) of 92 ± 1% and thermal conductivity of 0,0324 W / mK. Traditional insulation paints just absorb sunlight, their formula slowing thermal exchange. In contact with PSC-250T/ECR - ROOF, the majority of sunlight energy is reflected back from the surface, the rest absorbed by the coating or removed as infrared rays.

SURFACE PREPARATION

All surfaces must be clean and free of efflorescence, dust, dirt, oil and grease. For cleaning metal surfaces, it is advised to use a wire brush or sandpaper. All rust must be removed from metal surfaces. Smooth surfaces must be mechanically roughened. In case of roofs it is advised to apply washing by water under pressure or sandblasting.

COLORS

The standard color is white. Other shades can be prepared on request using water-soluble dyes (eg Jotun, Hempel, Nippon).

Note: We recommend using light shades, darker colors have lower reflection of sunlight

CONTENT OF VOLATILE ORGANIC SUBSTANCES

less than 10 g / l

CONSUMPTION OF PSC MATERIAL ON 1 m²

(one layer on all applicable surfaces with ideally level surface)

At a thickness of 0,15 mm: 0,18 liters per 1 m²

At a thickness of 0,20 mm: 0,24 liters per 1 m²

At a thickness of 0,25 mm: 0,30 liters per 1 m²

TIME OF EXCLUSION

Time before applying PSC-250T/ECR - ROOF: min. 1,5 hours according to temperature and relative humidity (see Manufacturer's instruction + Application manual - drying chart). After this time, no dust is poured onto the paint and the coating does not flow at increased humidity. Do not apply the product in case of rain or if the rain may start before the paint dries sufficiently.

WARNING: In all cases, the paint cannot be applied on a wet surface

MIXING

PSC-250T/ECR - ROOF is diluted with water before use. Dilute only the amount of product you use. The water used for dilution should not exceed 0.3l per pack. Mix the diluted mixture with a mixer at low speed (up to 150 rpm) for 3-5 minutes in mechanical mixers and 5-7 minutes with manual mixing. For detailed information please consult Manufacturer's instruction + Application manual).

APPLICATION EQUIPMENT

Recommended equipment: roller or spray. Brush can be used on very small areas. When applying the product with a brush, it is necessary to apply three cross layers to ensure adequate protection.

APPLICATION PROCEDURES

We recommend using the Graco RTX 5500 for the application of structured surfaces, and GRACO MARK V or GRACO MARK VII (see manufacturer's specifications) for smooth surface applications. Always apply only 0,5 mm layer and. Each layer needs to be perfectly dry before another layer is applied .

PACKAGING

Plastic buckets 18 litres (5,3 galon) or plastic buckets 10 litres

ADDITIONAL TRANSPORT WEIGHT

Net weight per liter: 0.52±0,05 kg

Plastic bucket 18 liters (5.3 gallons): 9.36 kg

Bucket size: 34 cm width X 32 cm height

STORAGE

- in original and properly sealed containers , in temperature between +5 °C and + 25 °C
- in sealed rooms, away from heat sources

The product is water-dilutable and will be destroyed in sub-zero temperatures.

LIFE OF PSC IN PACKAGING

12 months from date of packaging (protect from freezing and direct sunlight)

IGNITION TEMPERATURE

non-flammable (water-soluble)

PRODUCT CODE

PSC-250T /ECR - ROOF

Batch number: see package

WARRANTY / Protection time

1 year / 25 years

EXCLUSIVE REPLACEMENT

Exclusive compensation for goods that does not correspond to the warranty provided is the replacement of the product. The manufacturer is not responsible for any damages, including (but not limited to) wage costs.

Legal documents

PN-EN 1062-1: 2005 Farby i lakiery .Wyroby lakierowe i systemy powłokowe.

Declaration of conformity