

TECHNICAL CARD

ATF PSC 250T ROOF

Power Smart Coat – 250Temperation ROOF

Water-soluble material based on acrylic resin filled with ceramic nanospheres with thermo-reflective properties, intended for application on roof surfaces.

1. MAIN ADVANTAGES

Application ATF PSC 250T ROOF assures following benefits:

- Cost reduction cooling / heating (up to 50%)
- Insulation thermo-reflective outside of buildings for various types of roofs, ventilation pipes, drainpipes and any building material, except for plastics from the PP group;
- Prevents the penetration of thermal energy,
- Easy application, thanks to the possibility of applying the coating both manually behind with a brush, how and mechanically by spraying. Allows this for insulation complex elements and shapes such as roof tiles, metal elements of gutters, ventilation systems, architectural details, installations technical, e.t.c.,
- Short labor cost, in compared to traditional insulation, speed of work;
- Little density coatings, NO burdens Additionally isolated construction,
- uniform and uninterrupted structure, which eliminates bridges thermal andprovides thermo-reflective parameters with the same values on the entire applied surface,
- Fully washable, dirt and chemical resistant (C4 and C5i),
- Saving places thanks thin layer insulation, easily repairable
- Protection against water vapor condensation
- Security before corrosion biological, no mold or fungus growth,

2. DATA GENERAL

ATF PSC 250T ROOF is a highly efficient, energy-saving and flexible coating down insulation and sealing cover roofing and elements construction roofing. Water-based coating based on acrylic resin filled with microspheres (Swiss patent). Each cell is sealed with a microsphere using a vacuum. Thermal resistance and insulating properties cause a synergistic effect in reducing surface heat transfer. Isnon-toxic, environmentally friendly and forms a single membrane that covers micro-cracks. It is fully washable and resistant to dirt and chemicals. The coating has excellent properties insulating, it is not vapor permeable, but also waterproof and adhesive to the ground. High solar reflectivity and low conductivity create a perfect isolation effect. The coating is available in many different color shades. Due to the reflective function, shades are particularly recommended light (red through orange, yellow, green, blue and violet). After application creates a pleasant matt surface similar to plaster. Permanently connected to ground, environmentally friendly (water dispersion), resistant to factors weather, UV radiation. quick drying, owns a lot Good covering properties.

The coating is intended for use on the following surfaces: metals, all types steel, aluminum, metals non-ferrous, roofs metal, galvanized sheet, tanks metal, pipes, ventilation elements, ceramic and concrete tiles.

NO use : on PE, HDPE, PP, PTFE and selected plastics artificial

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3. APPLICATION

ATF PSC 250T ROOF coating is mainly used as a layer for coating new and old metal roof surfaces, garages, etc. It can also be used for painting roofs made of ceramic and concrete tiles with a slope of over 3%. It is also used for the application of ventilation pipes, downpipes, metal gutters, galvanized steel or hard PVC gutters. For newly galvanized surfaces, wash the surface with a solvent or use sandblasting. It is non-toxic, environmentally friendly and forms a membrane that covers micro-cracks. It is fully washable and resistant to dirt and chemicals (C4 and C5i). Suitable for use in various climatic conditions. The coating is perfect corrosion resistance biological, does not cause the development of fungi and mold.

4. DATA TECHNICAL

CLASSIFICATION ACCORDING TO PN-EN 1062-1: 2005

Term		
Term According to chemical character substancefilm-forming	Water dispersion resin acrylic	
Term That matter on state dissolution	Water-soluble	
Classification		
Gloss 85° ≤ 10 (Mat) according to PN-EN ISO 2813:2014	G 3	0.0
Thickness shell > 50 ≤ 100	E 2	55
Size seeds. (Minor). Marked according to PN-EN ISO 1524:2012 (EN 21524) on the sieve is: up to 100 μm	S 1	0.0
Factor penetration couples according to PN-EN ISO 7783:2012 (Medium) ≤ 150 > 15 [g/m ² d]	V 3	19 ± 3
Diffusion equivalent air layer thickness according to PN-EN ISO 7783:2012 Sd [m]	1.08	
Water permeability (little) ≤ 0.1 [kg/m ² h ^{0.5}]	W 3	0.02 ± 0.01
Covering lynx	no examined	
Permeability oxygen coal	no examined	

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5. Designation code

PN-EN 1062-1	G ₃	E ₂	S ₁	V ₃	W ₃	-	-
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Classification according to PN-EN 1504-2:2006

Term and classification	
Absorption water IN [kg/ m ^{2H} 0.5] according to PN-EN 1062-3:2008	W<0.1
Resistance per impact [Nm] according to PN-EN ISO 6272-2:2011	Class II ≥ 10
Load at failure, [N] according to PN-EN 1542:2000 Adhesion [n/mm ²] ≥0.8 according to PN-EN 1542:2000 Type damage according to PN-EN 1542:2000	1420 0.8±0.01 A
Resistance on abrasion (load 250g/quantity ticks 500)[mg] according to PN-EN ISO 5470-1:2017-02, Mass loss in [mg]	0.040 ± 0.004
Improvement resistance on abrasion (load 1000 g/quantity cycles 1000) [%], according to PN-EN ISO 5470-1:2017-02	≥30

parameters complementary

no	Parameter	Method tests	Value declared
1	Test SBI In range reaction on fire	PN-EN 13501-1+A1:2010	B-s1, d 0
2	Classification In range reaction on fire - flame range above 150 mm above the point application of flame in time 60 p - occurrence burning droplets/solid waste causing inflammation filter paper	PN-EN ISO 13832:2010 - Fs ≤ 150mm in thrust 60 p PN-EN ISO 11925-2:2010 - lack burning drops /waste constants causing inflammation material filter	- compatibility - compatibility
3	Conductivity warm [W/m*K] lambda	PN-EN 1745:2004; PN-EN 1745:2004/Apl:2006	0.000416
4	Density volumetric [g/ cm ³]		0.90 ± 0.05
5	Efficiency [kg/m ²] at thickness coatings 0.35 mm	depending on the way application	about 0.34
6	Weight per unit area [kg/m ²]		about 0.96
7	pH factor		8-9

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6. INSULATION - THERMOREFLEXIVENESS

ATF PSC 250T ROOF has a reflectivity (TSR) of $92 \pm 1\%$ and conductivity thermal $0.0324 [W/m \cdot K]$. Conventional paint insulating absorb light solar, and their effect consists only in slowing down the heat exchange. In the shell ATF PSC 250T ROOF most of the sunlight is reflected off surface, and remained energy is absorbed by superimposed coating or discharged back down atmosphere. In characters infrared radiation. This action applies to both warm and cold climates.

7. PREPARATION SUBSTRATES

All surfaces they must to be clear and deprived efflorescence (salting out, dust, dirt, oil and grease). The surface before application must be stable, even, dry and free of dust.

NOTE : Before applying the ATF PSC 250T ROOF coating, in the case of concrete or ceramic roofs, always prime the surface with ATF PSC BASIC B primer. For metal roofs use ATF PSC BASIC A primer.

Do not work in rain or high humidity (eg fog).

In case surface undergoing renovation recommends myself detailed rating state the ground and:

- check the stability of layers of old coatings on the roof (e.g. with a solvent) and remove them if necessary old shell and any impermanent elements,
- wash off greasy stains and raids, dry ,
- In case difficult and permanent dirt apply sanding,
- In in case of severe fungus apply appropriate preparations fungicidal,
- any roof sealing work should be done prior to the application of ATF PSC ROOF
- before applying the coating, prime the surface with ATF PSC BASIC B or ATF PSC BASIC A.

8. COLORS AND DYEING

Standard coating color it's white . Can be dyed in any color according to RAL's color chart with the help of solubles in dye water (e.g. Jotun , Hempel, Nippon). In production shades they can to be prepared on request – the minimum order quantity is 500 liters of PSC ROOF coating

Attention: we recommend use bright shades, darker colors May smaller reflection of sunlight and reduce the effectiveness of thermal insulation.

9. WEAR MATERIAL ATF PSC 250T ROOF on $1 m^2$

(one layer on all appropriate surfaces about perfect horizontal surface)

with thickness 0.15mm: 0.20 liter on $1 m^2$

by thickness 0.20mm: 0.26 liter on $1 m^2$

with thickness 0.25mm: 0.34 liter on $1 m^2$

Average material consumption with 2 layers of ATF PSC ROOF for a total thickness of 0.35 mm depending on the method of application, it is from 0.27 to 0.35 liters per $1 m^2$ for a flat surface.

The number increases for uneven roofs, e.g. ceramic ones. Correct application of the primer coating ATF PSC BASIC B provides better application of the ATF PSC ROOF coating and reduced material consumption.

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10. COATING DRYING TIME (SEASONING)

Time Before imposition second layer of ATF PSC 250T ROOF, wait min. 2 hours in dependence from temperature and relative humidity (see manufacturer's instructions - drying table) until the coating is COMPLETELY dry over the entire thickness.

Do not apply the coating in the rain.

Temperature environment and painted surface She should to be between +5 °C and +30 °C Relative humidity air should be lower than 80%.

Warning: In any case, the application of the next layer can not be implemented on wet surface of the previous layer!

11. MIXING (THINNING)

ATF PSC 250T ROOF can be diluted with water before use. Dilute Just quantity used product. The amount of water used down dilutions no it should exceed a maximum of 0.21 on packaging 18 liters of coating. A mixture of water and coating is mixed with a little speed (down 150 turnover on minute) By 3-5 minutes In mixers mechanical and 5-7 minutes by manual mixing. Specific information are located In instructions producer's + instruction application.

12. EQUIPMENT APPLICATION

Recommended equipment: brush, roller or spray device. Brush can be used on very small surfaces or during filling material losses (repairing mechanical damage). While overlapping product behind help brush belongs apply three layers cross, To to ensure proper layer thickness and protection.

13. PROCEDURES APPLICATION

We recommend using the Graco RTX 5500 for applying textured surfaces, a for smooth surfaces we recommend GRACO MARK V5 - V7 (see specifications producer's). For more information, see the device manufacturer's manual and the application manual.

14. PACKAGING

Plastic bucket 18 liters (4.76 US gal or 3.96 UK gal) size buckets: 34 cm width x 32 cm height

Plastic bucket 10 liters - size buckets: 33 cm width x 22 cm height.

Possibility of other packaging agreed with recipient.

15. WEIGHT TRANSPORT

net weight on liter: 0.90±0.05kg

Plastic bucket 18 liters weight: 16.2 kg

Plastic bucket 10 liters weight: 9.2 kg

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16. STORAGE

Store indoors, away from heat sources.

In original and tightly closed packaging, at a temperature between +5°C and +30°C.

Up to 4 layers of packaging can be stacked on top of each other. The product is water-soluble and yields destruction in sub-zero temperatures during storage or transport.

17. CONTENTS FLIGHTS SUBSTANCE ORGANIC PN-EN ISO 11890-1:2008

Determination of the content of organic compounds (VOC) (VOC) less than 19 g / l

18. PERIOD STORAGE IN PACKAGING

12 months From dates packing (protect Before freezing and directinsolation)

19. FLASH POINT

The product is marked as non-flammable (soluble in water) and non-drip.

20. CODE PRODUCT

ATF PSC 250T ROOF party production: see package label

Packaging 18 liters EAN 128 No. 7421351511923

Packaging 10 liters EAN Code 128 No. 7421351511930

21 WARRANTY / Protection time

2 years / 25 years

22. EXCLUSIVE EXCHANGE

The sole remedy for goods that do not conform to the warranty is replacement product.

The manufacturer is not responsible for any damages, incl (between other) salary costs.

ATTENTION: Further information you can find in instructions

23. DOCUMENTS FORMAL AND LEGAL

PN-EN 1062-1: 2005 Paints and varnishes. Varnish products and coating systems.

PN-EN 1504-2:2006 Products and systems down protection and fix construction concrete. Definitions, requirements, quality control and conformity assessment. Part 2: Systems concrete surface protection

CE declaration of performance