

## TECHNICAL CARD

### **ATF PSC 250T OUTSIDE**

#### **Power Smart Coat – 250Temperation OUTSIDE**

A water-soluble material based on acrylic resin filled with ceramic nanospheres intended for thermal insulation and protection of external surfaces of buildings.

#### **1. MAIN ADVANTAGES**

**Application ATF PSC 250T OUTSIDE provides following benefits:**

- Cost reduction energy and cooling / heating (up to 50%),
- Insulation thermal insulation and thermo-reflective outside of buildings for application on ATF PSC BUILD and any building material, except for plastics from the PP group;
- Prevents the penetration of thermal energy, prevents the walls from freezing,
- 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 facades with details architectural, 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 and provides insulation parameters with the same values on the entire applied surface,
- Fully washable, resistant to dirt and chemicals (C4 and C5),
- Saving places thanks thin layer insulation,
- It is vapor permeable, protection against water vapor condensation,
- Security before corrosion biological, no mold or fungus growth,
- It eliminates the visual effect of "unevenness" of the walls caused by nanospheres.

#### **2. DATA GENERAL**

ATF PSC 250T OUTSIDE is a highly efficient insulating and decorative coating protective for use on external facades and surfaces of residential buildings and industrial. Is In full washable and resistant on dirt and diluted chemicals (C4 and C5). It is a waterborne coating on base resin acrylic filled microspheres (Swiss patent). Each cell is sealed with a microsphere behind help vacuum. Resistance thermal and properties insulating cause effect synergistic In reducing surface transfer heat between the partitions.

Used in the system with the ATF PSC BASIC B primer and ATF PSC BUILD, it is the third and last outer layer applied in the system. Shell has excellent insulating properties, it is vapor permeable, but it is also waterproof, strong and resistant to weather conditions and very well adhesive to the substrate. It additionally protects the other layers. High solar reflectivity and low conductivity create perfect effect insulation. Range of reflection of light energy (from red through orange, yellow, green, blue and violet). The coating is white in color but is available upon request many different color shades. Due to the reflection function, they are particularly recommended pastel shades. After imposition creates pleasant matte surface.

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### 3. APPLICATION

ATF PSC 250T OUTSIDE coating is mainly used as the final layer for the ATF PSC BUILD system, but it can also be used to paint mineral substrates: cement-lime plasters, cement plasters, concrete, gypsum, clinker, etc. Energy-saving and flexible coating for insulation and sealing. It is non-toxic, environmentally friendly and forms a membrane that covers micro-cracks. It is fully washable and resistant to dirt and chemicals. Suitable for use in various climatic conditions. The coating is perfect corrosion resistance biological, does not cause the development of fungi and mold and eliminates condensation of water vapor.

### 4. DATA TECHNICAL

#### CLASSIFICATION ACCORDING TO PN-EN 1062-1: 2005

Term		
Term According to chemical character substancefilm-forming	<b>Water dispersion resin acrylic</b>	
Term That matter on state dissolution	<b>Water-soluble</b>	
Classification		
Gloss $85^\circ \leq 10$ (Mat) according to PN-EN ISO 2813:2014	<b>G 3</b>	<b>0.0</b>
Thickness shell $> 50 \leq 100$	<b>E 2</b>	<b>74</b>
Size seeds. (Minor). Marked according to PN-EN ISO 1524:2012 (EN 21524) on the sieve is: up to 100 $\mu\text{m}$	<b>S 1</b>	<b>0.0</b>
Factor penetration couples according to PN-EN ISO 7783:2012 (Medium) $\leq 150 > 15$ [ $\text{g}/\text{m}^2 \text{d}$ ]	<b>V 3</b>	<b>16 <math>\pm</math> 8</b>
Diffusion equivalent air layer thickness according to PN-EN ISO 7783:2012 Sd [m]	<b>1.26</b>	
Water permeability (little) $\leq 0.1$ [ $\text{kg}/\text{m}^2 \text{h}^{0.5}$ ]	<b>W 3</b>	<b>0.040 <math>\pm</math> 0.01</b>
Covering lynx	<b>no examined</b>	
Permeability oxygen coal	<b>no examined</b>	

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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 <sup>2H</sup> 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 <sup>2</sup> ] ≥0.8 according to PN-EN 1542:2000 Type damage according to PN-EN 1542:2000	1460 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	0.0032
4	Density volumetric [g/ cm <sup>3</sup> ]		0.90 ± 0.05
5	Efficiency [kg/m <sup>2</sup> ] at thickness coatings 0.35 mm	depending on the way application	about 0.29
6	Weight per unit area [kg/m <sup>2</sup> ]		about 0.87
7	pH factor		8-9

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#### **6. INSULATION**

ATF PSC 250T OUTSIDE has a reflectivity (TSR) of  $92 \pm 1\%$  and conductivity thermal  $0.000146 [W/m^*K]$ . Conventional paint insulating absorb light solar, and their effect consists only in slowing down the heat exchange. In the shell ATF PSC 250T OUTSIDE, sunlight is mostly 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**

If the coating is not applied over ATF PSC BUILD (does not require priming ATF PSC BASIC) then 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 only the ATF PSC OUTSIDE coating, always prime the surface with ATF PSC BASIC B (2 coats).**

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

- to remove old shell and any impermanent elements,
- wash off greasy stains and raids, dry coatings,
- In case difficult and permanent dirt apply sanding,
- In in case of severe fungus apply appropriate preparations fungicidal,
- remove all irregularities with gypsum or cement plasters or cement-lime plasters
- before applying the coating, prime the surface with ATF PSC BASIC B.

#### **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 OUTSIDE coating.

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

#### **9. WEAR MATERIAL PSC OUTSIDE ON $1 m^2$**

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

with thickness 0.15 mm: 0.18 liter on  $1 m^2$

by thickness 0.20 mm: 0.24 liter on  $1 m^2$

with thickness 0.25 mm: 0.30 liter on  $1 m^2$

Average material consumption with 2 layers of ATF PSC OUTSIDE for a total thickness of 0.35 mm depending on the method of application, it is from 0.27 to 0.30 liters per  $1 m^2$

Proper application of the primer with the ATF PSC BASIC B coating ensures better coating application ATF PSC OUTSIDE and reduced material consumption.

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#### **10. COATING DRYING TIME (SEASONING)**

Time before imposition second the ATF PSC OUTSIDE layer, wait min. 2.5 hours In dependence from temperature and relative humidity (see manufacturer's instructions - drying table) until the coating is COMPLETELY dry over the entire thickness.

Temperature environment and painted surface It 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**

ATF PSC 250T OUTSIDE 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 0.3 l 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.

#### **12. 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.

#### **13. 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.

#### **14. 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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#### **15. 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.

#### **16. CONTENTS FLIGHTS SUBSTANCE ORGANIC PN-EN ISO 11890-1:2008**

Determination of volatile organic compounds (VOC) content (VOC) less than 19 hours / l

#### **17. PERIOD STORAGE IN PACKAGING**

12 months from dates packing (protect before freezing and directinsolation)

#### **18. FLASH POINT**

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

#### **19. CODE PRODUCT**

ATF PSC 250T OUTSIDE Party production: see package label

Packaging 18 liters EAN 128 code No. 7421351511862

Packaging 10 liters EAN 128 No. 7421351511879

#### **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**