

# Product Data Sheet AERO-THERM floor



### BASIC TECHNICAL INFORMATION

<b>Form of material</b>	water-based sealant
<b>Function</b>	heat reflection, thermal insulation
<b>Composition</b>	filler, dispersion, additives
<b>Application thickness</b>	0.8 to 1.0 mm
<b>Minimum lifetime</b>	25 years provided that application technology is followed

Basic characteristics	Properties/class	Harmonised technical specification
Water vapour permeability EN ISO 7783-2	<b>V1 high</b>	EN 15824
Water permeability EN 1062-3	<b>W1 high</b>	EN 15824
Adhesion EN 1542	<b>0.6 MPa</b>	EN 15824
Adherence EN ISO 4624	<b>1.0 MPa</b>	EN 15824
Durability	<b>NPD</b>	EN 15824
Thermal conductivity $\lambda$ (W/mK) EN 12667	<b>0.035</b>	EN 15824
Reaction to fire EN 13501-1+A1	<b>F #</b>	EN 15824

# meets the requirements without testing, the product is not applied as a final coat to floor structures, or lining; it is assumed that the wear layer will be provided with a resistant coating/material/ and the lining will be covered with paint (paint coat, spray application of paint).

Characteristics	Properties /class	Technical specification
Heat-storage capacity of the material, drop in temperature of contact and evaluation according to ČSN 730540-2	<b>Complies</b>	ČSN 730540-2
Emissivity $\epsilon$ , spherical emissivity at 20 °C (Taylor method)	<b>0.83 (-)</b>	(ČSN) EN 12898
Diffusion equivalent air layer thickness $s_d$	<b>0.11 (m)</b>	(ČSN) EN ISO 7783-2
Density (Specific density) $\rho_v$	<b>0.440 (g/ml)</b>	(ČSN) EN ISO 787-10 (ČSN) EN ISO 1183-1, part B (ČSN) EN ISO 2811-1
Specific surface density with 1-mm thick layer in dry state $\rho_s$	<b>0.110 (kg/m<sup>2</sup>)</b>	Manufacturer's Data Sheet
Density of water vapour diffusion flow rate resistance $V$	<b>182.3 (g/m<sup>2</sup>.d)</b>	(ČSN) EN ISO 7783
Diffusion resistance factor $\mu$	<b>107.80 (-)</b>	(ČSN) EN ISO 7783

pH value (at 20°C)	<b>7 – 7,5</b>	Manufacturer's Data Sheet
Sensory evaluation of odour	<b>grade 1</b>	(ČSN) EN 1230-1

### **Description of the Product**

AERO-THERM® floor is a thermoactive and insulating coating intended mainly for applying to floors.

Thanks to its properties, it influences the energy intensity of structures; it reduces cooling down of floors and decreases heat-storage capacity of the wear layer.

### **Range of Application**

Taking into account the content of the quality filler and the binding agent, AERO-THERM® floor can be applied to various surfaces, such as concrete, gypsum board, OSB boards, metal and others. Application of the AERO-THERM® floor coating contributes particularly to reduction of the energy intensity of buildings and eliminates a feeling of “feet numb with cold”. If the coating is suitably embodied in the structure of the heated floor multilayer, the efficiency of the heating system can be increased.

### **Specific Properties**

AERO-THERM® floor creates a 1-millimetre thick compact and flexible coating on the surface. The structure of the coating is based on its filler as well as on the binding agent enriched with other components. Thanks to its specific properties, AERO-THERM® floor does not have to be protected by a hard stepping (e.g. concrete) layer if soft floor covering is used.

### **Instructions for Use**

AERO-THERM® floor needs a cohesive base free from grease, dust, impurities and moulds.

AERO-THERM® floor cannot be applied to bases that are permanently damp, e.g. because of rising dampness, damaged water-proofing etc.

### **AERO-THERM® floor Preparation**

Always start with mixing AERO-THERM® floor itself properly (the material can separate water if stored for a longer time). According to the absorption capacity of the base, you can add clean water; if applied with a spraying machine, the material must be diluted in such a ratio that it flows down the mixing whisk evenly.

### **Applying**

#### **Applying with a notched trowel**

When applying the coating to a large flat surface, use a stainless notched trowel with 6mm grooves.

At first, apply the coating with the notched side of the trowel and smooth it equally with the straight side of the trowel so that bulges or protrusions will not arise – the material is hard to file off.

Pay attention to corners, edges and other details, the coating covering necessary stretches of the adjacent areas must dwindle away.

#### **Applying with a spraying machine**

AERO-THERM® floor must be diluted with water so that the material will flow down the whisk you use for mixing (flowing down must not be discontinuous).

Low pressure and high pressure spraying machines can be used for spraying.

### **Pouring**

If the base is not even, you can dilute the material to get a consistency enabling you to apply the coating by pouring. After pouring AERO-THERM® floor on the floor, use a stainless notched trowel with 6mm grooves to spread the coating evenly, then use a porcupine roller to make a solid layer, and leave it to "spread across". Take into account that this way of application requires longer drying time.

### **Base**

#### **Concrete coatings and self-levelling coatings**

Apply AERO-THERM® floor to a mature base (see data sheets for the respective materials). This also applies to local corrections of a base. **BE CAREFULL** when choosing patching materials. When applying by pasting with a notched trowel, **the surface must be provided with a bonding primer.**

#### **Metals and other non-absorbent materials**

Remove layers of old non-cohesive coatings. As for the metal base, remove the corroded layer, if any, remove dust and dirt, and apply a primer. It is advisable to apply an appropriate adhesive bridge to non-absorbent bases, such as plastic tubes (e.g. apply a silica sand bonding primer).

#### **Wood and wood-fibre materials**

When applying by pasting with a notched trowel, the surface must be provided with a system **bonding primer.**

#### **Gypsum-fibre and gypsum boards**

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### **AERO-THERM® floor Surface Finish**

#### **Coatings**

Contact the supplier/manufacturer to consult whether the selected material is suitable for applying to AERO-THERM® floor

#### **Tiling and floor tiling**

Consult the coating supplier/manufacturer on the choice of adhesive.

#### **Carpets and floating floors**

Carpets can be laid straight on AERO-THERM® floor. We recommend installing an impact sound insulation under a floating floor.

#### **Floor heating**

Thanks to its properties, AERO-THERM® floor is very suitable for application under both floor-heating systems, the hot-water system and the electric one. We recommend consulting the coating manufacturer before applying the coating.

#### **Cleaning tools**

Wash the tools and aids with lukewarm water.

**Standard hazard statements**

The product has not been classified as hazardous to health.

**Use adequate ventilation for work.**

**Do not eat, drink or smoke when using this product. Use suitable protective wear. Use a respirator, goggles or face shield when spraying and grinding the material. In case of contact with eyes. rinse with water immediately and contact your doctor for a preventive treatment.**

**Storage**

Store at a temperature from +5 to +25 °C, protect from direct sunshine.

Expiration period is two years in a non-diluted state.

**Disposal of packaging and unused material**

The rest of material can be disposed as non-toxic waste. Empty containers can be recycled.

**In case of doubts, feel free to ask the manufacturer for further information and potential technical support!**

**Packaging**

5 L , 12 L and 30 L

**Logistic convenience**

Low weight, approx. 0.4 kg/dm<sup>3</sup>

High yield of the volume per m<sup>2</sup> of the applied area (1000 m<sup>2</sup> from 1 m<sup>3</sup> with an application thickness of 1 mm)

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Certifikate of specialized property of material



Construction-technical certificate  
and product certificate