

PRODUCT DATA SHEET

Sika ThermoCoat®-5 HS Fire

Non-combustible, colored, water repellent, decorative, paste-like finishing render

DESCRIPTION

Sika ThermoCoat®-5 HS Fire is an acrylic, ready-to-use, water repellent paste of high fire resistance, used as finishing and protective coating. It is available in two versions (Fine & Medium) and in a wide range of colors, depending on the maximum grain size and the desired aesthetic effect of the final surface.

USES

- Designed for use as the final coating of external thermal insulation composite systems.
- Suitable as finishing coat for plasters in indoor and outdoor applications.
- Suitable for application on concrete, masonry, plasterboards and cement boards.
- Complies with the requirements of EN 15824 as external render and internal plaster based on organic binders.

CHARACTERISTICS / ADVANTAGES

- Excellent UV resistance
- High elasticity and workability
- Non-combustible material with excellent fire resistance
- Breathable and water repellent
- Available in a wide range of colors
- Available in various grain sizes in order to achieve the desired aesthetic effect
- According to EN 15824
- A2- s1,do according to EN 13501-1

APPROVALS / CERTIFICATES

- CE Marking and Declaration of Performance according to EN 15824 - Render based on organic binders, for external and internal uses on masonries
- CE Marking and Declaration of Performance according to EAD 040083-00-0404 -External Thermal Insulation Composite Systems (ETICS) with renderings

PRODUCT INFORMATION

Composition	Acrylic dispersion with fillers of specific granulometry	
Packaging	25 kg pail	
Appearance / Colour	Paste in a wide range of colours	
Shelf life	18 months from date of production	
Storage conditions	Store in undamaged and unopened original sealed packaging in cool and dry conditions at temperatures between +5 °C and +35 °C. Protect from direct sunlight and frost.	
Density	1.85 ± 0.05 kg/lt	EN ISO 2811-1
Granulometry	Available in two granulometries: Fine & Medium	

Product declaration

- CE-marking and Declaration of Performance as Render based on organic binders, for external and internal uses on masonries according to EN 15824:2017, based on type testing and factory production control.
- CE-marking and Declaration of Performance according to EAD 040083-00-0404: External Thermal Insulation Composite System (ETICS) with rendering, as part of Sika ThermoCoat® system.

TECHNICAL INFORMATION

Tensile adhesion strength	Results	Requirements	EN 1542
	> 0.6 MPa	≥ 0.3 MPa	
Permeability to water vapour	Results	Requirements	EN ISO 7783
	Cat. V2 $S_d < 0.25$	Diffusion equivalent to the air layer thickness $0.14 \leq S_d < 1.4$	
Water absorption	Results	Requirements	EN 1062-3
	Cat. W3	$w \leq 0.1 \text{ kg}/(\text{m}^2\text{h}^{0.5})$	
Thermal conductivity	1.11 W/mK		EN 1745
Reaction to fire	A2-s1, d0		EN 13501-1

SYSTEM INFORMATION

System structure

Sika ThermoCoat® -5 HS Fire forms part of ETICS Sika ThermoCoat® which comprises of the following products:

Sika ThermoCoat® - 1/3 HS	Cementitious mortar (acc. to EN 998-1) for bonding and rendering thermal insulation boards
Sika ThermoCoat® - 2 HS	Expanded polystyrene boards (EPS) with flame retardant, suitable for ETICS (acc. to EN 13163)
Sika ThermoCoat® - 2 HS MW	Non-combustible rock based mineral fiber insulation boards (MW), suitable for ETICS (acc. to EN 13162)
Sika ThermoCoat® - 4 HS	Alkali resistant glass fiber mesh for strengthening the rendering of thermal insulation boards
Sika ThermoCoat® - 5 HS Primer	Water dispersed primer for (acrylic) paste-like renders
Sika ThermoCoat®-5 HS Fire / -5 HS / -5 HS Silic	Acrylic / silicone based, paste-like finishing coating (according to EN 15824)
Sika ThermoCoat® - 8 HS / -8 HS CL	Plastic expandable fixation anchor with plastic / steel, nail
Sika ThermoCoat® - 8 HS FR	Fire resistant fixation anchor made of hot-dip galvanized or stainless steel

APPLICATION INFORMATION

Consumption	Sika ThermoCoat®-5 HS Fire Fine: ~2.1kg/m ² Sika ThermoCoat®-5 HS Fire Medium: ~2.65kg/m ²
Ambient air temperature	+5 °C min. / +35 °C max.
Substrate temperature	+5 °C min. / +35 °C max.
Waiting time to overcoating	Tack free after ~3-4 hours (23 °C / 50% R.H.)

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- The optimum temperature during application of the product is between +5°C and +35°C, while the maximum relative air humidity must be 80% max.
- The application should not take place under direct sunlight, high radiation, strong wind, rain or frost. Therefore, it is necessary to use suitable coverings to protect the façade.
- Prior to the application, check the color shade and the sufficiency on site of the quantity of Sika ThermoCoat®-5 HS Fire for the complete application.
- For exact color matching, ensure that Sika ThermoCoat®-5 HS Fire has the same batch number on each section of the façade. Surface from one corner of the wall to the other are defined as sections.
- In case the application process has to stop, do so near joints, balconies or areas with sharp lines, so when the application restarts, the connection marks will be less obvious.
- It is recommended that the applicators should be the same during the whole application. They should work in groups, so as that one applicator applies Sika ThermoCoat®-5 HS Fire on the surface and the second one smooths the still wet surface of the applied product, without any interruption. The application & smoothing process should not stop on the surface for any other reason but coming across an edge or an architectural finish, such as a gutter or an architectural detail. If this process is not strictly followed, there is a risk for darkening / shade appearance on the final surface, despite the fact that product is applied from the same batch. The application process as described above should take place simultaneously on each level. Therefore, it is really important that the planning of the application is properly organized in advance.
- In cases of Sika ThermoCoat®-5 HS Fire application from different batch numbers, stir the content of 2 or more pails in a large container. When sufficient quantity of the prepared compound (for example half of it) is used, stir the remaining material with the content of the next pail following the same process, in order the final color shade to be uniform for the whole application.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Substrate must be dry, sound and free from cracks, oil, grease, loose and friable particles, which could affect the correct application of Sika ThermoCoat®-5 HS Fire.

Coated surfaces

Old coatings must be tested in order to confirm their adhesion to the substrate and must be completely removed if considered to be inappropriate. Remove loose areas or mortar residues and where alignment work is needed, fill the gaps or cracks that exist with Sika ThermoCoat®-1/3 HS or Sika ThermoCoat® Easy. Prepare the surface by brushing, wiping or washing with high pressure water jetting (200-400 bar) and wait for drying.

Concrete / Masonry / Cement boards

Substrate must be cured (at least 28 years old for concrete) and must be prepared with suitable mechanical methods. In case of defects on concrete or masonry, apply appropriate repair mortars from SikaRep® or Sika MonoTop® range. When alignment work is needed, apply Sika ThermoCoat®-1/3 HS or Sika ThermoCoat® Easy for rendering as base coat by embedding Sika ThermoCoat®-4 HS and wait for them to dry out. In any case, appropriate methods should be provided to deal with rising moisture phenomena of the substrate and wait for drying.

At least 12 hours before the application, apply one layer of Sika ThermoCoat®-5 HS Primer diluted with 15% by weight of clean water depending on substrate's absorption and wait for 12-24 hours, depending on the prevailing conditions. If needed, select the appropriate color of Sika ThermoCoat®-5 HS Primer, in order the application of Sika ThermoCoat®-5 HS Fire will not encounter issues concerning the tint (differences in shades etc).

For further technical information, please consult our Technical Department.

MIXING

Sika ThermoCoat®-5 HS Fire is ready for use. Stir thoroughly prior to the application for 3-4 minutes. If necessary, add up to 1% b.w. (250ml) of clean water per 25kg pail. Special attention should be paid to tinted darker colour shades of the product, where the addition of water is suggested to be less than 250ml. The addition of excess water may differentiate product's technical characteristics.

APPLICATION

Apply a uniform layer of Sika ThermoCoat®-5 HS Fire manually from the bottom to the top (upwards) using a stainless steel spatula at thickness layer corresponding to the product's maximum grain size. Smooth the surface using a plastic trowel according to the desired aesthetic effect.

CLEANING OF EQUIPMENT

Removal of fresh remnants from tools and application equipment can be carried out using water immediately after use. Hardened / cured material can only be mechanically removed.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always

refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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