

# TECHNICAL DATA SHEET

## EXTHA FIREMAT SD



**Description:** Spray-on non-combustible insulation rendering.  
Spray-on application. Designed to provide fire protection for steel-sheet smoke-extraction and ventilation ducts.

Product compliant with new European standards  
(tested according to EN 1363-1, EN 1366-1 and EN 1366-8).

**Composition:** Mineral composite containing hydraulic binders, silicates and special additives.

**Thickness:** EIS 120 according to EN 1366-1 (ventilation duct A & B type): 47mm.  
EIS 120 according to EN 1366-8 (smoke extraction duct, C type): 59 mm.

**Implementation:** Before applying the rendering, hexagonal steel mesh is installed over the whole duct. The mesh is stretched over a frame and joined at each section using easy-clip attachments so that the grid is pre-positioned around 20mm from the duct. The rendering is sprayed on to the steel-sheet duct without any other special preparation of the surface. For thicknesses of up to 80mm, the rendering can be applied in a single application. The rendering must be applied using a special EXTHA FIREMAT-specific VR8 spraying machine. The machine must be set to +/- 350 l/h and equipped with a half-rate pump.

The first rapid-installation (staple flanges) product  
approved for steel-sheet ducts.

**Density:** 650kg/m<sup>3</sup> on average.

**Reaction to fire:** Non-combustible – A1.  
Classification according to the law of 21 November 2002 "mineral composition containing no more than 1% organic material (in weight or volume)".

**Resistance to fire:** EIS 120 according to EN 1366-1 (ventilation duct A & B type).  
EIS 120 according to EN 1366-8 (smoke extraction duct, C type).  
  
For any other duration, please contact technical department.  
  
Tested and approved for the maximum levels of low and high pressure according to the standards (+/- 1,500 Pa).  
  
Test-approved hot and cold air-tightness (1,000°C).

**Water absorption:** Maximum at 60 days with total immersion: 60%

**Intrinsic permeability:** approx. 10<sup>-14</sup> [m<sup>2</sup>]

**Porosity:** 67%

**Capillary absorption:** 19.4 kg/m<sup>2</sup>

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### **THERMAL PROPERTIES**

<b>Density at 25°C</b>	0.65
<b>Conductivity at 25°C</b>	0.229 W/m.K
<b>Specific heat, Cp</b>	c.a. 0.7 J/g.K
<b>Latent heat, Cv</b>	312 J/g at 124 °C

Conductivity ( $\lambda$ ) and diffusivity ( $\lambda / \rho C$ ) as a function of temperature:

	210°C	410°C	610°C	960°C
Conductivity (W/m K)	0.178	0.195	0.211	0.233
Diffusivity x $10^7$ (m <sup>2</sup> /s)	2.9	2.8	3	3.6



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