





# European Technical Assessment

ETA-24/0052 of 01/02/2024



#### **General Part**

Technical Assessment Body issuing the European Technical Assessment

Trade name of the construction product

Product family to which the construction product belongs

Manufacturer

Manufacturing plant

This European Technical Assessment contains

This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of

Instytut Techniki Budowlanej

Knauf Firepaint Lite

Reactive coatings for fire protection of steel elements

"Knauf" SIA Daugavas iela 4 LV-2118 Saurieši, Stopinu pagasts, Ropažu novads

Latvia

Manufacturing plant No 1

27 pages including 1 Annex which form an integral part of this Assessment

European Assessment Document (EAD) 350402-00-1106 "Reactive coatings for fire protection of steel elements"



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#### **Specific Part**

### 1 Technical description of the product

Knauf Firepaint Lite is a spray applied intumescent paint. The intumescent paint works with primer, and with or without topcoat where appropriate to suit the environmental conditions.

In accordance with EAD 350402-00-1106, Knauf Firepaint Lite may be considered as a reactive coating kit that includes one or more primers and/or topcoats (Option 3).

Knauf Firepaint Lite has been assessed as being compatible with the primer and topcoat as specified below:

Primer trade name	Generic primer type	Nominal tested primer DFT <sup>1)</sup> mm	Permitted primer DFT range <sup>1), 2)</sup> mm	
			minimum	maximum
NOVAGRUND 40	Alkyd 3)	0.040 - 0.060	0.020	0.090
Tikkurila Termacoat GPL-S	Two component epoxy 3)	0.108	0.054	0.162
Tikkurila Fontecryl AP	Waterborne acrylic 3)	0.044	0.022	0.065
Tikkurila Fontecryl SC MR 10	Waterborne acrylic 4)	0.060	0.030	0.090

<sup>1)</sup> DFT: Dry Film Thickness

<sup>&</sup>lt;sup>4)</sup> Applicable to specific primer only and no generic approach is possible. The assessment covers galvanised steel.

Topcoat trade name <sup>3)</sup>		Nominal tested topcoat DFT 1)	Permitted topcoat DFT range <sup>1), 2)</sup> , mm	
,		111111	minimum	maximum
Knauf T-Coat WB	Waterborne	0.040	0.040	0.060
Caparol Färdigfärg 40	Waterborne	0.040	0.040	0.060
Caparol Pansartäck V	Waterborne	0.040	0.040	0.060
Nordsjö Professional Snickerifärg 15	Waterborne	0.040	0.040	0.060
Nordsjö Professional Traditional Metal Paint	Alkyd	0.040	0.040	0.060
Nordsjö Professional P10	Waterborne	0.040	0.040	0.060
Alcro Milltex 7	Waterborne	0.040	0.040	0.060
Alcro Milltex Prestanda 7	Waterborne	0.040	0.040	0.060
Alcro Tålig	Waterborne	0.040	0.040	0.060
Flugger Flutex Pro 7	Waterborne	0.040	0.040	0.060
Flugger Dekso 20 H <sub>2</sub> O	Waterborne	0.040	0.040	0.060
Flugger High Finish 5	Waterborne	0.040	0.040	0.060
Flugger Strong Finish 20	Waterborne	0.040	0.040	0.060

<sup>2)</sup> The permitted minimum and maximum DFT cannot be less or exceed the DFT recommended by the manufacturer. Information given by the manufacturer have to be followed.

<sup>&</sup>lt;sup>3)</sup> Applicable to other primers from the same generic type provided the thickness is within the tolerance given. The assessment does not cover galvanised steel.



Topcoat trade name <sup>3)</sup>	Topcoat type	Nominal tested topcoat DFT <sup>1)</sup> mm	Permitted topcoat DFT range <sup>1), 2)</sup> , mm	
			minimum	maximum
Nor-Maali Norrapid 10	Semi-gloss alkyd	0.040	0.040	0.060
Tikkurila Fontecryl SC-EF 50	Waterborne acrylic	0.040	0.040	0.060
Tikkurila Fontecryl SC-EF 50	Waterborne acrylic	0.060	0.060	0.090

<sup>1)</sup> DFT: Dry Film Thickness

### 2 Specification of the intended use in accordance with the applicable European Assessment Document (EAD)

#### 2.1 Intended use

The intended use of intumescent paint Knauf Firepaint Lite is to fire protect I/H-section beams and columns, circular hollow columns, rectangular or square hollow columns and beams, and steel temperatures in the range of 350°C to 750°C. The precise scope is given in Annex A which shows the total dry film thickness of Knauf Firepaint Lite (excluding primer and topcoat) required to provide R15 to R90 class for I/H beams and columns, and R15 to R60 class for circular hollow columns and rectangular or square hollow columns and beams.

A reactive coating kit Knauf Firepaint Lite has ability to fire protect structural steel rectangular or square hollow beam sections up to 75 minutes. Therefore, tables which show the total dry film thickness for additional fire resistance periods also form part of this ETA.

The provisions given in this European Technical Assessment are based on an assumed working life of the products of 10 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer or the Technical Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

#### 2.2 Use category

Type Y: intended for use in internal and semi-exposed conditions. "Semi-exposed" includes temperatures below 0°C, but no exposure to rain and limited or casual exposure to UV (but the effect of UV exposure is not assessed).

Type  $Z_1$ : intended for use in internal conditions with humidity equal to or higher than 85 % RH, excluding temperatures below 0°C.

Type Z<sub>2</sub>: intended for use in internal conditions with humidity lower than 85% excluding temperatures below 0°C.

#### 3 Performance of the product and references to the methods used for its assessment

#### 3.1 Performance of the product

Basic requirement	Essential characteristic	Performance
BWR 2: Safety in case of fire	Reaction to fire	Class E – with the NOVAGRUND 40 primer, with or without topcoat Knauf T-Coat WB grey Any other configuration – No performance assessed

<sup>2)</sup> The permitted minimum and maximum DFT cannot be less or exceed the DFT recommended by the manufacturer. Information given by the manufacturer must be followed.

<sup>3)</sup> The assessment is limited to the specific product.



Basic requirement	Essential characteristic	Performance	
BWR 2: Safety in case of fire		I/H Beams and Columns: R15 – R90	
	Resistance to fire	Hollow Sections *: R15 – R60 (precise scope – see Annex A)	
BWR 3: Hygiene, health and the environment	Content, emission and/or release of dangerous substances	No performance assessed	
BWR 4: Safety and accessibility in use	Adhesion	Pass	
		Use category:	
	Durability	Type Y with or without Knauf T- Coat WB and Tikkurila     Fontecryl SC-EF 50 (0.060 mm DFT)	
		Type Z <sub>1</sub> and Z <sub>2</sub> ; with other topcoats	

<sup>\*</sup> A reactive coating kit Knauf Firepaint Lite has ability to fire protect structural steel rectangular or square hollow beam sections up to 75 minutes. Therefore, tables which show the total dry film thickness for additional fire resistance periods form part of this ETA

### 3.2 Methods used for the assessment

The assessment has been made in accordance with EAD 350402-00-1106.

# 4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

According to Decision 99/454/EC of the European Commission, as amended by Decision 2001/596/EC of the European Commission the system 1 of assessment and verification of constancy of performance applies (see Annex V to regulation (EU) No 305/2011).

# Technical details necessary for the implementation of the AVCP system, as provided in the applicable European Assessment Document (EAD)

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited in Instytut Techniki Budowlanej.

For type testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases the necessary type testing has to be agreed between Instytut Techniki Budowlanej and the notified body.

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Deputy Director of ITB