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European Technical Assessment

ETA 14/0415 of 01/11/2024

I General part

Technical assessment body issuing the ETA E

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

This version replaces

Eurofins Expert Services Oy

ISOVER FireProtect[®] 150 ISOVER FireProtect[®] 150F

Fire protection of loadbearing steel structures

Division Isover

Saint-Gobain Construction Products CZ a.s. Počernická 272/96, Prague 10, 108 03 Czech Republic

Division Isover

Saint-Gobain Construction Products CZ a.s. Masarykova 197, Častolovice, 517 50 Czech Republic

15 pages including 2 Annex which form an integral part of this assessment

EAD 350142-00-1106 "Fire protective board, slab and mat products and kits", September 2017

ETA 14/0415, issued 21/5/2018

1. Technical description of the product

ISOVER FireProtect® 150 and ISOVER FireProtect® 150F are stone wool slabs. ISOVER FireProtect® 150 is unfaced and ISOVER FireProtect® 150F is faced with glass fibre tissue.

Dimensions and density of the slabs are given in Table 1.

Table 1. Dimensions and density of ISOVER FireProtect® 150 and ISOVER FireProtect® 150F.

	Nominal value	Tolerance
Density	thickness 20 - 25 mm: 165 kg/m ³	
	thickness 30 - 100 mm: 150 kg/m ³	
Length	1200 mm	± 8 mm
Width	1000 mm	± 5 mm
Thickness	20 - 60 mm	≤ -1 mm, ≤ +3 mm

ISOVER FireProtect® 150 and ISOVER FireProtect® 150F slabs are CE-marked according to harmonized product standard EN 14303 with designation code MW–EN14303–T5– CS(10)20–ST(+)700–WS1–CL10. Mechanical fasteners required for installation are described in Annex 1. The fasteners are not covered by this ETA and cannot be CE-marked based on it.

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

2.1 Intended uses

ISOVER FireProtect® 150 and ISOVER FireProtect® 150F are intended to be used for fire protection of structural steel columns and beams as specified in Table 2.

Table 2. Intended use of ISOVER FireProtect® 150 and ISOVER FireProtect® 150F.

Table 2. Interface doe of 100 vErt file folcoto foo and 100 vErt file folcoto foor.				
Product	Use category	Protection of	Climatic conditions use	
			category	
ISOVER FireProtect® 150 ISOVER FireProtect® 150F	Type 4	Load-bearing steel elements as specified in Annex 1	Type Z₂ and Type Y	

2.2 Assumptions

2.2.1 General

The completed building (the works) shall comply with the building regulations (regulations on the works) applicable in the Member States in which the building is to be constructed. The procedures foreseen in the Member State for demonstrating compliance with the building regulations shall also be followed by the entity held responsible for this act. This ETA does not amend this process in any way.

2.2.2 Assumed working life

The provisions made in this European Technical Assessment are based on an assumed working life of 25 years ¹ provided that the product is subject to appropriate installation and maintenance. These

¹ The real working life of a product incorporated in a specific works depends on the environmental conditions to which that works are subject, as well as on the particular conditions of design, execution, use, and maintenance of that works. Therefore, it cannot be excluded that in certain cases the real working life of the product may also be shorter than the assumed working life.

provisions are based upon the current state of the art and available knowledge and experience. The indications given as to the working life of the construction product cannot be interpreted as a guarantee, neither given by the product manufacturer or by the Technical Assessment Body, but are regarded only as a means for expressing the expected economically reasonable working life of the product.

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

3.1 Essential characteristics

Table 3 shows how the performance of ISOVER FireProtect $^{\circledR}$ 150 and ISOVER FireProtect $^{\circledR}$ 150F is assessed in relation to the essential characteristics.

Table 3. Basic requirements for construction works and essential characteristics

Basic requirement and essential characteristics	Performance	
BWR 2. Safety in case of fire		
Reaction to fire	Clause 3.2.1	
Resistance to fire	Clause 3.2.2	
Durability and serviceability	Clause 3.2.3	
BWR 3. Hygiene, health and the environment		
Water permeability	No performance assessed	
BWR 4. Safety and accessibility in use		
Flexural strength	No performance assessed	
Dimensional stability	No performance assessed	
BWR 6. Energy economy and heat retention		
Thermal resistance	Clause 3.3.1	
Water vapour transmission coefficient	Clause 3.3.2	

3.2 Safety in case of fire (BWR 2)

3.2.1 Reaction to fire

ISOVER FireProtect® 150 and ISOVER FireProtect® 150F fire protective slabs have been tested and classified according to Commission Delegated Regulation (EU) No 2016/364. Reaction to fire class is A1.

3.2.2 Resistance to fire

Fire resistance for assemblies incorporating ISOVER FireProtect® 150 and ISOVER FireProtect® 150F stone wool slabs have been tested according to EN 13381-4:2013 and classified according to EN 13501-2:2016. Description of the tested assemblies are presented in Annex 1.

Resistance to fire performance classes of the tested assemblies are R 15 - R 240. Tables of insulation thickness required to achieve the fire resistance class, in relation to section factor and design temperature, are presented in Annex 2.

3.2.3 Durability and serviceability

Working life of the slabs is 25 years if not more than accidental wetting is to be expected.

Categories of intended climatic conditions of ISOVER FireProtect® 150 and ISOVER FireProtect® 150F are Type Z₂, Fire protective slabs intended for internal use only, and Type Y, Fire protective slabs intended for internal and semi-exposed use.

3.3 Energy economy and heat retention (BWR 6)

3.3.1 Thermal resistance

Thermal conductivity of ISOVER FireProtect® 150 and ISOVER FireProtect® 150F is λ_D is 0,036 W/mK.

3.3.2 Water vapour transmission coefficient

Water vapour transmission coefficient (µ) is 1 for ISOVER FireProtect® 150 and ISOVER FireProtect® 150F.

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

For the products covered by EAD 350142-00-1106 the applicable European legal act is: Decision 99/454/EC.

The system to be applied is 1.

5. Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Eurofins Expert Services Oy.

Issued in Espoo on November 1, 2024 by Eurofins Expert Services Oy

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