

Classification of reaction to fire in accordance with EN 13501-1

1 Introduction

This classification report defines the classification assigned to product “Sandwich panel” in accordance with the procedure given in EN 13501-1:2018.

This report replaces RISE report 2P00259-4, dated September 10, 2020. This revision includes additional test reports and an update of field of application.

2 Details of classified product

2.1 General

The product “Sandwich panel” is defined as a surface lining to be used as wall and ceiling for indoor use.

According to the owner of this classification report, this product complies with the European product specification EN 14509.

2.2 Product description

The product, “Sandwich panel”, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

Product called “Sandwich panel”, consisting of a PIR core with coated steel sheets protecting the PIR core on both sides. The product is intended to be used as wall and ceiling for indoor use. The product has a nominal density of 48 kg/m³ (PIR) and a nominal thickness of 75 - 125 mm (including steel sheets). The steel sheet coating system is called “Advantica® CL Clean”. Joints between panels are sealed with “Brandfog A 560” acrylic sealant. The product is white.

3 Reports and results in support of this classification

3.1 Test reports

Table 1 Test reports forming the basis for this classification.

Name of laboratory	Name of sponsor	Test report reference no	Accredited test methods and date
RISE	Finnebäcks AB	2P00259-2	EN 13823:2010+A1:2014
RISE	Finnebäcks AB	2P00259-3	EN ISO 11925-2:2020
RISE	Finnebäcks AB	2P00259-5	EN 13823:2010+A1:2014

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3.2 Test results

The tests have been carried out on products covering the thickness range of the product group (ref EN 14509, annex C, table C.1).

Table 2 Test results showing the worst case as found in the test program performed.

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean (m)	Compliance with parameters
EN ISO 11925-2		18		
Edge/Surface flame attack*				
30 s exposure	$F_s \leq 150$ mm		(-)	Compliant
Flaming droplets/particles	Ignition of filter paper		(-)	No ignition of filter paper
EN 13823		5		
	$FIGRA_{0,2MJ}$ (W/s)		31	Compliant
	$FIGRA_{0,4MJ}$ (W/s)		30	Compliant
	$LFS < \text{edge}$		(-)	Compliant
	THR_{600s} , (MJ)		2.8	Compliant
	$SMOGRA$, (m ² /s ²)		2.9	Compliant
	TSP_{600s} , (m ²)		35	Compliant
	Flaming droplets/particles		(-)	No flaming droplets/particles

* : as required to the end use application of the product

(-) : not applicable

4 Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 11 and 15 of EN 13501-1:2018.

4.2 Classification

The product called “Sandwich panel” in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming particles/droplets is:

d0

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation product is:

Fire Behaviour		Smoke Production				Flaming Droplets	
B	-	s	1	,	d	0	

Reaction to fire classification: *B-s1,d0*

4.3 Field of application:

This classification is valid for the following product parameters:

- Product description, as specified in 2.2 in this report
- Nominal thickness range: 75 - 125 mm (ref EN 14509, annex C, table C.1)
- Nominal density of PIR core: 48 kg/m³

This classification is valid for the following end use conditions:

- Mounting:
 - Free standing.
- Joints:
 - Vertical joints, sealed with “Brandfog A 560” acrylic sealant.
 - Metal corner flashings covering cut panel edges.

The sample was delivered by the client. RISE Safety - Fire Research was not involved in the sampling procedure.

5 Limitations

This classification document does not represent type approval or certification of the product.

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