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Reaction to fire classification report

1 Introduction

This classification report defines the classification assigned to the product "CR-DUCT" in accordance with the procedure given in EN 13501-1:2007+A1:2009.

2 Details of classified product

2.1 General

The product "CR-DUCT" is defined as an aluminium faced mineral wool duct.

2.2 Product description

According to the client:

Product called "CR-DUCT", consisting of a core of mineral wool with a nominal area weight of 2.0 kg/m^2. The facing and backing of the mineral wool consists of a lacquered aluminium foil, nominal area weight 34 g/m^2 and nominal lacquer area weight of 0.08 g/m^2. The aluminium foil on each side is attached to the mineral wool with layers of PE nominal area weight 12 g/m^2, PET nominal area weight 17 g/m^2, glass scrim nominal area weight 6 g/m^2 and a layer of PE nominal area weight 15 g/m^2 on the facing, while the PE layer is 25 g/m^2 on the backing. The product as a whole has a nominal thickness of 30 mm.

3 Test reports & test results in support of classification

3.1 Test reports

This classification is based on the test reports listed below:

Name of laboratory	Name of sponsor	Test report ref no	Accredited test method
SP	Climate Recovery AB	5P00666	EN 13823
SP	Climate Recovery AB	4F026718	EN ISO 1716

3.2 Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean (m)	Compliance with parameters
EN 13823		3		
	$FIGRA_{0,2MJ}$ (W/s)		0	Compliant
	$FIGRA_{0,4MJ}$ (W/s)		0	Compliant
	LFS < edge		(-)	Compliant
	THR_{600s}, (MJ)		0.7	Compliant
	SMOGRA, (m^2/s^2)		0	Compliant
	TSP_{600s}, (m^2)		18	Compliant
	Flaming droplets/particles		(-)	No flaming droplets/particles
EN ISO 1716		9		
	PCS (MJ/kg) (1)		1.20	Compliant
	PCS (MJ/m^2) (2)		1.62	Compliant
	PCS (MJ/m^2) (2)		1.94	Compliant
	PCS (MJ/kg) (4)		2.74	Compliant

(-) : not applicable

(1): for non-homogeneous products the parameter for each substantial component is given

(2): for non-homogeneous products the parameter for each external non-substantial component is given

(4): the parameter for the product as a whole

4 Classification and field of application

4.1 Reference and direct field of application

This classification has been carried out in accordance with clause 11 and 15 of EN 13501-1:2007+A1:2009.

4.2 Classification

The product called "CR-DUCT" in relation to its reaction to fire behaviour is classified:

A2

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	
A2	**-**	**s**	**1**	**,**	**d**	**0**

Reaction to fire classification: *A2-s1,d0*

4.3 Field of application:

This classification is valid for the following product parameters:

Nominal thickness: 30 mm.

Nominal area weight: 2.0 kg/m^3.

Nominal area weight of Aluminium foil, PE, PET, glass scrim as described in the product description.

This classification is valid for the following end use conditions:

Fixings

- Mechanically fixed.

Joints

- Horizontal joints.

Void

- Free standing mounting.

The sample was delivered by the client. SP 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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