LGAI

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Bellaterra: 17th September, 2013

File: **13/7185-3032 M1 Part 2**

Petitioner's reference: **ALUCOIL, S.A.**
Pol. Ind. Bayas
C/Ircio, Parc. R72-R77
09200 Miranda de Ebro
Burgos

Nº 9/LE897

Description of the modification: Editorial mistakes were corrected.

The present report replaces and cancels report 13/7185-3032 Part 1 that was issued on 2nd August, 2013. The petitioner is responsible for replacing the original document and all the copies thereof.

CLASSIFICATION REPORT

1-PRODUCT CHARACTERISTICS

Composite Panel composed by two aluminium sheets bonded by means of a mineral FR core, lacquered by one face with double-layer PVdF Kynar 500.

Commercial reference of the product: larson FR®

The product is presented in 3 layers:

- Layer 1: Aluminium, 0.5 mm thick, density of 2.72 g/cm^3 and smooth appearance.
- Layer 2: Mineral Fire retardant core, 3 mm thick, density of 1.64 g/cm^3, white colour and rugous appearance.
- Layer 3: Aluminium, 0.5 mm thick, density of 2.72 g/cm^3 and smooth appearance.

2- CLASSIFICATION AND DIRECT APPLICATIONS FIELD

This classification has been made in compliance with the procedures provided in Standard UNE-EN 13501-1:2007+A1:2010: "Classification in terms of the behaviour to fire of construction products and building elements. Part 1: Classification made from the data gathered during fire reaction tests".

2.1- Test Reports

Name of Laboratory	Applus – LGAI
Name of Petitioner	ALUCOIL, S.A.
Test Report Number	13/7185-3032 M1 Part 1
Testing method	UNE-EN-ISO 11925-2:2011 UNE-EN 13823:2012

2.2- Results of the Tests

Testing method	**RESULTS**			
	CRITERIA CLASS B	**Nº OF TESTS**	**MEAN VALUE**	**COMPLIANCE**
UNE-EN-ISO 11925-2:2011	$F_s \leq 150$ mm within 60 s	12	$F_s < 150$ mm	**YES**
UNE-EN 13823:2012	$FIGRA_{0.2\ MJ} \leq 120$ W/s	3	3.25	**YES**
	LFS < edge of sample	3	< to edge	**YES**
	$THR_{600s} \leq 7.5$ MJ	3	0.31	**YES**
	CRITERIA subclass 's1'	**Nº OF TESTS**	**MEAN VALUE**	**COMPLIANCE**
	SMOGRA ≤ 30 m^2/s^2	3	2.68	**YES**
	$TSP_{600s} \leq 50$ m^2	3	48.91	**YES**
	CRITERIA subclass 'd0'	**Nº OF TESTS**	**MEAN VALUE**	**COMPLIANCE**
	Fall of droplets/particles in flames within 600 s	3	NO	**YES**

CLASSIFICATION

With regard to its behaviour when reacting to fire, the product, *larson FR®,* is classified as follows:

Behaviour to fire		**Smoke production**			**Droplets in flames**	
B	-	s	1	,	d	0

Fire reaction classification: CLASS B s1 d0

This classification is only valid for the final conditions of use described in the present report.

"Point "2.3- Field of Application" below falls beyond the ENAC accreditation scope".

2.3- Field of application

- This classification is valid for the following product parameters:

The classification is only valid for the product characteristics shown.

-Variable parameter 1: COATING

After performing the test with the aluminum coating and considering that:
- Both components are not combustible and classified as A1 in accordance with the European Commission 96/603/CE
- Melting point of aluminum is approx. 660ºC
- Melting point of steel is approx. 1400ºC

it can be concluded by extension that the larson FR® products with both coatings can be included in the Euroclass:

Fire reaction classification: CLASS B s1 d0

This classification is only valid for the final conditions of use described in the present report.

- This classification is valid for the following final conditions for use:

Making architectural facades.

2.4- Restrictions

This classification standard should not be construed as a standard approval or certification of the product.

Digitally signed by Jordi Mirabent Junyent

Responsible of Fire Laboratory
LGAI Technological Center S.A.

Digitally signed by Vanessa Tutusaus Domingo

Responsible of Euroclass
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