le futur en construction
SAFETY, STRUCTURES AND FIRE DEPARTMENT
Reaction to Fire

REACTION TO FIRE CLASSIFICATION REPORT No. RA16-0108 ACCORDING TO THE EUROPEAN STANDARD NF EN 13501-1+A1:2013

Notification by the French Government to the European Commission under no. 0679
Seule la version française fait foi
The French version is legally acceptable

Product standard
ETA Guide no. 034:2012 "Kits for external wall claddings"

Owner:	**ALCOA ARCHITECTURAL PRODUCTS SAS** **2 rue Marie Curie** **68500 MERXHEIM** **FRANCE**
Commercial brand(s):	**REYNOBOND® FR** **REYNOBOND® INOX** **REYNOBOND® 55 FR**
Manufacturing unit(s):	**The manufacturing unit appear in the associated tests reports**
Brief description:	**Composite panel with polyethylene core surfaced on both sides with sheets** (see detailed description in paragraph 2)
Date of issue:	**May 25th, 2016**

The indicated classification does not prejudge the conformity of marketed materials with the samples submitted to the tests and under no circumstances, this document should not be considered as type approval or certification of the product in the sense of the L 115-27 to L 115-33 and R 115-1 to R 115-3 articles of the consumption's code.
If this report is being issued by e-mail and/or on an electronic medium, only the hard copy of the report signed by CSTB shall prevail in the event of a dispute.
The reproduction of this classification report is only authorised in its integral form.
It comprises 5 pages.

1. Introduction

This classification report defines the classification assigned to the above-mentioned product(s) in accordance with the procedures given in the NF EN 13501-1+A1:2013 standard.

2. Product description

Composite panel consisting of a fire-retarded polyethylene core surfaced on each side either with a precoated aluminium sheet or an uncoated stainless steel sheet, thermally bonded.
Tested systems: cassette on metal substructure and riveted on metal substructure.
Tested finish with the aluminium sheet: Duragloss® 5000 35 µm .

Nominal thickness of the aluminium facings: 0.5 mm.
Overall nominal thickness: 4 mm.
Colours of the core: grey or black.
Colours of the finish: various.

Nominal thicknesses of the stainless steel facings: from 0.3 to 0.5 mm.
Overall nominal thickness: 4 mm.
Colours of the core: grey or black.

3. Tests reports and tests results in support of this classification

3.1 Tests reports

Name of laboratory	Name of sponsor	Test identification	Test report No.	Test method
CSTB	**ALCOA ARCHITECTURAL PRODUCTS SAS 2 rue Marie Curie 68500 MERXHEIM FRANCE**	**ES541150627**	RA16-0108	NF EN ISO 11925-2:2013 NF EN 13823+A1:2015
	ALCOA ARCHITECTURAL PRODUCTS SAS 1 rue du Ballon 68500 MERXHEIM FRANCE	**ES541130101**	RA14-0125	NF EN ISO 11925-2:2002 NF EN 13823:2002
	ALCOA ARCHITECTURAL PRODUCTS S.A.S. 1 rue du Ballon 68500 MERXHEIM FRANCE	**ES541120503**	RA12-0348	NF EN ISO 11925-2:2002 NF EN 13823:2002

3.2 Tests results

Test method	Product	Number of tests	Parameters	Results
				Compliance parameters
NF EN ISO 11925-2 30s surface exposure	REYNOBOND® FR Duragloss® 5000 35 µm finish (with aluminium facings - precoated sheet and polyethylene core with a grey colour)	6	Fs > 150 mm Filter paper	Not reached Not ignited
NF EN ISO 11925-2 30s surface exposure	REYNOBOND® INOX (with stainless steel facings - uncoated sheet)	6	Fs > 150 mm Filter paper	Not reached Not ignited
NF EN ISO 11925-2 30s surface exposure	REYNOBOND® 55 FR Duragloss® 5000 35 µm finish (with aluminium facings - precoated sheet and polyethylene core with a black colour)	6	Fs > 150 mm Filter paper	Not reached Not ignited
NF EN ISO 11925-2 30s edge exposure	REYNOBOND® FR Duragloss® 5000 35 µm finish (with aluminium facings - precoated sheet and polyethylene core with a grey colour)	6	Fs > 150 mm Filter paper	Not reached Not ignited
NF EN ISO 11925-2 30s edge exposure	REYNOBOND® INOX (with stainless steel facings - polyethylene core)	6	Fs > 150 mm Filter paper	Not reached Not ignited
NF EN ISO 11925-2 30s edge exposure	REYNOBOND® 55 FR Duragloss® 5000 35 µm finish (with aluminium facings - precoated sheet and polyethylene core with a black colour)	6	Fs > 150 mm Filter paper	Not reached Not ignited

Test method	Product	Number of tests	Parameters	Results	
				Continuous parameters Mean values	Compliance parameters
NF EN 13823	REYNOBOND® FR Riveted system Duragloss® 5000 35 µm finish (with aluminium facings and polyethylene core with a grey colour)	3	$FIGRA_{0.2MJ}$(W/s) $FIGRA_{0.4MJ}$(W/s) LFS THR_{600s}(MJ)	**5.7** **5.7** **-** **0.6**	**-** **-** **Not reached** **-**
			SMOGRA(m²/s²) TSP_{600s}(m²)	**0.4** **16.9**	**-** **-**
			Flaming droplets or debris	**-**	**None**
NF EN 13823	REYNOBOND® FR Cassette system Duragloss® 5000 35 µm finish (with aluminium facings and polyethylene core with a grey colour)	3	$FIGRA_{0.2MJ}$(W/s) $FIGRA_{0.4MJ}$(W/s) LFS THR_{600s}(MJ)	**16.8** **16.8** **-** **0.8**	**-** **-** **Not reached** **-**
			SMOGRA(m²/s²) TSP_{600s}(m²)	**0.5** **21.7**	**-** **-**
			Flaming droplets or debris	**-**	**None**

(-) means: not applicable

3.2 Tests results (continuation)

Test method	Product	Number of tests	Parameters	Results	
				Continuous parameters Mean values	**Compliance parameters**
NF EN 13823	REYNOBOND® INOX Riveted system (with stainless steel facings)	1	$FIGRA_{0.2MJ}$(W/s) $FIGRA_{0.4MJ}$(W/s) LFS THR_{600s}(MJ)	**5.0** **5.0** **-** **0.6**	**-** **-** **Not reached** **-**
			SMOGRA(m²/s²) TSP_{600s}(m²)	**3.2** **41.8**	**-** **-**
			Flaming droplets or debris	**-**	**None**
NF EN 13823	REYNOBOND® INOX Cassette system (with stainless steel facings)	1	$FIGRA_{0.2MJ}$(W/s) $FIGRA_{0.4MJ}$(W/s) LFS THR_{600s}(MJ)	**4.3** **4.3** **-** **0.4**	**-** **-** **Not reached** **-**
			SMOGRA(m²/s²) TSP_{600s}(m²)	**1.8** **21.4**	**-** **-**
			Flaming droplets or debris	**-**	**None**
NF EN 13823+A1	REYNOBOND® 55 FR Riveted system Duragloss® 5000 35 µm finish (with aluminium facings and polyethylene core with a black colour)	1	$FIGRA_{0.2MJ}$(W/s) $FIGRA_{0.4MJ}$(W/s) LFS THR_{600s}(MJ)	**0.0** **0.0** **-** **0.2**	**-** **-** **Not reached** **-**
			SMOGRA(m²/s²) TSP_{600s}(m²)	**0.0** **13.3**	**-** **-**
			Flaming droplets or debris	**-**	**None**
NF EN 13823+A1	REYNOBOND® 55 FR Cassette system Duragloss® 5000 35 µm finish (with aluminium facings and polyethylene core with a black colour)	1	$FIGRA_{0.2MJ}$(W/s) $FIGRA_{0.4MJ}$(W/s) LFS THR_{600s}(MJ)	**9.7** **9.7** **-** **0.3**	**-** **-** **Not reached** **-**
			SMOGRA(m²/s²) TSP_{600s}(m²)	**1.2** **21.1**	**-** **-**
			Flaming droplets or debris	**-**	**None**

(-) means: not applicable

4. Classification and direct field of application

4.1 Reference of the classification

This classification has been carried out in accordance with clauses 11.6, 11.9.2 and 11.10.1 of the NF EN 13501-1+A1:2013 standard.

4.2 Classification

Fire behaviour		Smoke production		Flaming droplets or debris
B	**-**	**s1**	**,**	**d0**

Classification: B - s1, d0

4.3 Field of application

This classification is valid for the following product parameters:

- The system described in paragraph 2.
- An overall nominal thickness of 4 mm.
- A range of nominal thicknesses of the stainless steel facings from 0.3 to 0.5 mm.
- A nominal thickness of the aluminium facings of 0.5 mm.
- A 35 µm thick Duragloss® 5000 finish for the aluminium facings configuration.
- Various colours.

This classification is valid for the following end use conditions:

- Riveted or screwed system and cassette system on metal substructure.
- Without insulating material or with any A1 or A2-s1,d0 class mineral wool insulating material behind the metal substructure.
- With or without air gap behind the metal substructure.
- Without substrate or with any A1 or A2-s1,d0 class substrate with a density ≥ 652 kg/m^3.

5. Limitations

The present document does not represent type approval or certification of the product.

Champs-sur-Marne, May 25th, 2016

The Technician Responsible for the test

Benoit FOREST

The Head of Reaction to Fire Unit

Gildas CREACH

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