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Testing. Advising. Assuring.

Title:

CLASSIFICATION OF
REACTION TO FIRE
PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1:2007+A1: 2009.

Notified Body No:

0833

Product Name:

"DIBOND/DILITE"

Report No:

322114

Issue No:

1

Prepared for:

3A Composites GmbH,
Alusingenplatz 1
Singen
78224
Germany

Date:

25th September 2012

UKAS TESTING
0249

1. Introduction

This classification report defines the classification assigned to “DIBOND/DILITE”, a family of coated aluminium panels with a plastic inner core, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, “DIBOND/DILITE”, a family of coated aluminium panels with a plastic inner core, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product family, “DIBOND/DILITE”, a family of coated aluminium panels with a plastic inner core, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Aluminium Composite Material
Product reference of composite		DIBOND and DILITE
Overall thickness of composite		2 to 6 mm (+/- 0.2 mm)
Overall weight per unit area of composite		2.6 to 6.6 kg/m²
Product configuration		• Coating (Test Face) • Aluminium • Plastic core • Aluminium • Coating
Coating (Test Face)	Generic type	Liquid paint
	Product reference	Polyester
	Name of manufacturer	**Note 1**
	Colour	various
	Number of coats	1 or 2
	Application thickness	> 18 µm
	Application method	Roller coating
	Specific gravity	**Note 1**
	Flame retardant details	**Note 2**
	Curing process	Continuous coil coating, stove curing
Aluminium	Generic type	Aluminium alloy
	Thickness	0.2 to 0.3 mm
	Density	2.7 g/cm³
Core	Generic type	Plastic material
	Product reference	Polyethylene, Type LDPE
	Name of manufacturer	**Note 1**
	Thickness	1.4 to 5.4 mm
	Colour	Black
	Density	0.92 g/cm³
	Note 2	

Aluminium	Generic type	Aluminium alloy
	Thickness	0.5 to 0.3 mm
	Density	2.7 g/cm³
Coating	Generic type	Liquid paint
	Product reference	Polyester
	Name of manufacturer	**Note 1**
	Colour	various
	Number of coats	1 or 2
	Application thickness	> 18 µm
	Application method	Roller coating
	Specific gravity	**Note 1**
	Flame retardant details	**Note 2**
	Curing process	Continuous coil coating, stove curing
Brief description of manufacturing process		Lamination of coil coated aluminium sheets and plastic core in a continuous production

Note 1: The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

Note 2: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product.

3. Test reports/extended application reports & test results in support of classification

3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova Warringtonfire	3A Composites GmbH	WF 318467	EN ISO 11925-2
Exova Warringtonfire	3A Composites GmbH	WF 318460, WF 318461, WF 318462, WF 318463, WF 318657, WF 318671, WF 318675, WF 318680	EN 13823
Exova Warringtonfire	3A Composites GmbH	WF 322111	EN/TS 15117

3.2 Test results

Test method & test number		Parameter	No. tests	Results	
				Continuous parameter - mean (m)	Compliance parameters
EN ISO 11925-2	30s exposure - surface	F_s	6	Nil	Compliant
		Flaming droplets/ particles		None	Compliant
	30s exposure – edge	F_s	6	Nil	Compliant
		Flaming droplets/ particles		None	Compliant
EN 13823		FIGRA $_{0.2MJ}$	5	298.3	Compliant
		THR $_{600s}$		25.4	Compliant
		LFS		N	Compliant
		SMOGRA		4.2	Compliant
		TSP_{600s}		66.9	Compliant

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1: 2009.

4.2 Classification

The product, “DIBOND/DILITE”, a family of coated aluminium panels with a plastic inner core, in relation to its reaction to fire behaviour is classified:

D

The additional classification in relation to smoke production is:

s2

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

d0

Reaction to fire classification: D – s2, d0

4.3 Field of application

This classification is valid for the following end use applications:

i) Construction applications used over any substrate with a density equal to or greater than 870kg/m3, having a minimum thickness of 12mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard), either with or without air gap.

ii) The product can be installed with open joints.

This classification is also valid for the following product parameters:

Overall product thickness	2 to 6 mm
Aluminium surface thickness	0.2 (Dilite) to 0.3 mm (Dibond)
Core thickness	1.4 to 5.6 mm
Product composition	No variation other than specified
Product construction	No variation other than specified

SIGNED

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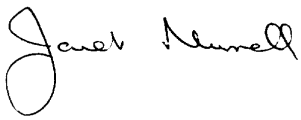
Frans Paap
Certification Engineer
Technical Department

APPROVED



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Janet Murrell
Technical Manager
Technical Department
on behalf of **Exova Warringtonfire**