

Title:

CLASSIFICATION OF
REACTION TO FIRE
PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1: 2018

Notified Body No:

0833

Product Name:

"Multipanel ACM 3mm"

Report No:

WF 429873

Issue No:

1

Prepared for:

Multipanel UK Ltd,
Unit 2 Millyard Way,
Eythorne,
Dover,
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Date:

3rd July 2020

1. Introduction

This classification report defines the classification assigned to “Multipanel ACM 3mm”, an aluminium composite panel, in line with the procedures given in EN 13501-1:2018.

2. Details of classified product

2.1 General

The product, “Multipanel ACM 3mm”, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, “Multipanel ACM 3mm”, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Coated aluminium composite material
Product reference of overall composite		“Multipanel ACM 3mm”
Name of manufacturer of overall composite		MultipanelUK
Thickness of overall composite		3mm (stated by sponsor) 3.59mm (determined by Warringtonfire)
Weight per unit area of overall composite		4.5kg/m ² (stated by sponsor) 4.16kg/m ² (determined by Warringtonfire)
Coating	Generic type	Polyester (PE) paint coating
	Product reference	“Multipanel White”
	Detailed description	Continuous layered coating process
	Name of manufacturer	See Note 1 below
	Thickness	17 microns
	Weight per unit area	See Note 1 below
	Colour reference	“White”
	Flame retardant details	See Note 2 below
Aluminium	Generic type	0.3mm aluminium coil
	Product reference	“Coated Aluminium Coil”
	Detailed description	Aluminium alloy coil
	Name of manufacturer	See Note 1 below
	Thickness	0.3mm
	Weight per unit area	0.89kg/m ²
	Colour reference	“White”
	Flame retardant details	Product is inherently flame retardant
Adhesive	Generic type	Pelletised adhesive polymer resin
	Product reference	“3400F”
	Name of manufacturer	See Note 1 below
	Colour reference	“White”
	Application rate / thickness	See Note 1 below
	Application method	Extrusion
	Flame retardant details	See Note 2 below
	Curing process	Heating through lamination

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Core	Generic type	Flame retardant LDPE pellets
	Product reference	"Flame Retardant LDPE Pellets"
	Detailed description	See Note 1 below
	Name of manufacturer	See Note 1 below
	Thickness	2.4mm
	Weight per unit area	2.72kg/m ²
	Colour reference	"White"
	Flame retardant details	See Note 1 below
	Generic type of flame retardant	LDPE pellet with mineral composition
	Amount of flame retardant	75%
Adhesive	Generic type	Pelletised adhesive polymer resin
	Product reference	"3400F"
	Name of manufacturer	See Note 1 below
	Colour reference	"White"
	Application rate / thickness	See Note 1 below
	Application method	Extrusion
	Flame retardant details	See Note 2 below
Curing process	Heating through lamination	
Aluminium	Generic type	0.3mm aluminium coil
	Product reference	"Coated Aluminium Coil"
	Detailed description	Aluminium alloy coil
	Name of manufacturer	See Note 1 below
	Thickness	0.3mm
	Weight per unit area	0.89kg/m ²
	Colour reference	"White"
	Flame retardant details	Product is inherently flame retardant
Joint details		No joints were incorporated in the test specimen
Mounting and fixing details		A 40mm ventilated cavity was situated between the reverse face of the specimens and the calcium silicate substrate as defined in EN 13238:2010
Brief description of manufacturing process		Automated production line, After core materials have been heated and mixed they are coextruded with adhesive through compounding rollers between two aluminium skins. The compositing line runs through a cooling system, easy peel film protective film is applied for protection during transportation and finally computerised guillotine cuts panel to finished size

Note 1: The sponsor was unwilling to provide this information.

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

3. Test reports & test results in support of classification.

3.1 Test reports.

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
warringtonfire	Multipanel UK Ltd	WF 429844	EN ISO 11925-2: 2010
warringtonfire	Multipanel UK Ltd	WF 429842	EN 13823:2010 + A1: 2014

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
ISO 11925-2: 2010 (30s exposure - surface)	F _s	6	-	Compliant (Nil mm)
	Flaming droplets/ particles		-	Compliant
ISO 11925-2: 2010 (30s exposure - edge)	F _s	6	-	Compliant (Nil mm)
	Flaming droplets/ particles		-	Compliant
EN 13823: 2010 + A1: 2014	FIGRA _{0.2MJ}	3	25.03 W/s	-
	FIGRA _{0.4MJ}		25.03 W/s	-
	THR _{600s}		2.97 MJ	-
	LFS		-	Compliant
	SMOGRA		0.00 m ² s ²	-
	TSP _{600s}		15.70 m ²	-
	Flaming of Fallen Particle Exceeding 10s?		-	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: 2018.

4.2 Classification

The product, "Multipanel ACM 3mm", an aluminium composite 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 droplets / particles is:

d0

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

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

i.e. **B – s1 , d0**

Reaction to fire classification: B - s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications mechanically fixed with a minimum airspace of 40mm over any substrate with a minimum density of 870kg/m³, having a minimum thickness of 12mm and a fire performance of A2-s1,d0 or better (except paper faced gypsum plasterboard).

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product weight per unit area	No variation allowed
Product density	No variation allowed
Product colour/pattern	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed
Joints	As tested, no joints allowed

5. Limitations

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

SIGNED



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Matthew Dale
Principal Certification Engineer
Technical Department

APPROVED



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Stacey Deeming
Principal Engineer
Technical Department
On behalf of **Warringtonfire**

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