

Title:

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

Product Name:

“Alupave® Aluminium Decking & Flat Roofing
System”

Report No:

WF 517190

Issue No:

1

Prepared for:

Clear Amber
Inveralmond Place,
Inveralmond Industrial Estate,
Perth,
PH1 3TS

Date:

26th August 2022

1. Introduction

This classification report defines the classification assigned to “Alupave® Aluminium Decking & Flat Roofing System”, a family of coated aluminium products, in line with the procedures given in EN 13501-1: 2018.

2. Details of classified product

2.1 General

The products, “Alupave® Aluminium Decking & Flat Roofing System”, are defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The products, “Alupave® Aluminium Decking & Flat Roofing System”, are fully described below and in the test reports provided in support of classification listed in Clause 3.1.

Item		Detail
General description		Coated aluminium
Product reference of system		“Alupave® Aluminium Decking & Flat Roofing System”
Name of manufacturer of system		Clear Amber Group
Coated aluminium thickness		2.18mm (determined by Warringtonfire)
Overall profile thickness		25mm (determined by Warringtonfire)
Weight per unit area of system		10.63kg/m ² (determined by Warringtonfire)
Coating	Generic type	Powder coating
	Product reference	“Alupave® APV212”
	Name of manufacturer	Clear Amber Group Limited
	Number of coats	1
	Thickness	60-100µm
	Application rate	140-150g/m ²
	Application method	Spray
	Colour	Grey, Sand
Flame retardant details		See Note 2 below

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Item		Detail
Substrate	Generic type	Aluminium
	Product reference	“Alupave® Aluminium Decking & Flat Roofing System”
	Name of manufacturer	Clear Amber Group
	Thickness	2mm
	Weight per unit area	10.63kg/m ²
	Flame retardant details	See Note 2 below
Mounting and fixing details		A 40mm ventilated cavity was situated between the reverse face of the specimens and the aluminium substrate as defined in EN 13238:2010
Joint details		Vertical joints were incorporated in the specimen
Brief description of manufacturing process		Spray coated powder coating

Note 1: The sponsor was unable 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/extended application reports & test results in support of classification

3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/classification report Nos.	Test method / classification rules & date
Warringtonfire	Clear Amber	511881, 511882	EN ISO 1716: 2018
Warringtonfire		517734	EN ISO 1716: 2018 Composite Summary
Warringtonfire		Formal: 508045 (Issue 2) Indicative: 521087	EN 13823: 2020
Warringtonfire		WF 521734	EN 15725:2010 and EN/TS 15117:2005

3.2 Test results

Test method & test number	Parameter	No. tests	Report	Results	
				Continuous parameter - mean (m)	Compliance parameters
EN 13823	FIGRA _{0.2MJ}	3	508045 (Issue 2)	0 W/s	-
		1	521087	0 W/s	-
	FIGRA _{0.4MJ}	3	508045 (Issue 2)	0 W/s	-
		1	521087	0 W/s	-
	THR _{600s}	3	508045 (Issue 2)	0.6 MJ	-
		1	521087	0.6 MJ	-
	LFS	3	508045 (Issue 2)	-	Compliant
		1	521087	-	Compliant
	SMOGRA	3	508045 (Issue 2)	3 m ² /s ²	-
		1	521087	0 m ² /s ²	-
	TSP _{600s}	3	508045 (Issue 2)	44 m ²	-
		1	521087	21 m ²	-
	Fall of Flaming Droplet/Particle?	3	508045 (Issue 2)	-	Compliant
		1	521087	-	Compliant
Flaming of Fallen Particle Exceeding 10s?	3	508045 (Issue 2)	-	Compliant	
	1	521087	-	Compliant	
EN ISO 1716 Individual component results	511881 – Topcoat, 'Grey'		3	20.4 MJ/kg	-
	511882 – Topcoat, 'Sand'		3	17.0 MJ/kg	-
EN ISO 1716 Worst case composite calculation, (as per composite summary report)	Topcoat - PCS (b)		3	3.1 MJ/m ²	-
	Aluminium - PCS (a)		Deemed to satisfy (0.0)		-
	For the product as a whole PCS (e)		Summary result	0.3 MJ/kg	-

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, EN 15725:2010 and EN/TS 15117:2005.

4.2 Classification

The products, "Alupave® Aluminium Decking & Flat Roofing System", a family of coated aluminium products, in relation to their reaction to fire behaviour are classified:

A2

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	
A2	-	s	1	,	d	0

i.e. **A2 – s1, d0**

Reaction to fire classification: A2 – s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications used with a minimum air gap of 40mm over any metallic substrate with a density equal to or greater than 2025kg/m³, a melting point of >500°C, having a minimum thickness of 0.8mm and a fire performance of A1.

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product weight per unit area	No variation allowed
Product colour	Grey or Sand
Coating weight per unit area	140 – 150g/m ²
Product composition	No variation allowed
Product construction	No variation allowed
Joints	Vertical joints allowed

5. Limitations

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

SIGNED



Katie Williams

Product Assessor
Technical Department

APPROVED



Stacey Deeming

Principal Product Assessor
Technical Department
on behalf of [Warringtonfire](#)

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