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Title:

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

Notified Body No:

0833

Product Name:

”VulcaLap RAL/WOOD Finish“

Report No:

WF 407091

Issue No:

3

Prepared for:

Vulcan Cladding Systems Limited
4 Imperial Way
Croydon
CR0 4RR

Date:

8th January 2019

UKAS TESTING
0249

1. Introduction

This classification report defines the classification assigned to ”VulcaLap RAL/WOOD Finish”, a aluminium rainscreen plank with a polyester powder coating, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product,”VulcaLap RAL/WOOD Finish”, an aluminium rainscreen plank with a polyester powder coating, is defined as being suitable for external cladding applications.

2.2 Product description

The product, VulcaLap RAL/WOOD Finish”, an aluminium rainscreen plank with a polyester powder coating, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Aluminium rainscreen plank
Product reference of overall composite		”VulcaLap RAL/WOOD Finish“
Name of manufacturer of overall composite		Vulcan Cladding Systems Limited
Thickness of overall composite		2mm aluminium (overall profile standoff is 14mm)
Weight per unit area of overall composite		7.17kg/m^2
Coating	Generic type	Polyester powder coat
	Product reference	”VulcaLap RAL/WOOD Finish“
	Name of manufacturer	RAL - Akzo Nobel, Tiger, Valspar Syntha Pulvin WOOD – **See Note 1 below**
	Colour reference	Any
	Number of coats	One
	Thickness	60 - 80 microns
	Application rate	87.6g-116.8/m²
	Specific gravity	**See Note 2 below**
	Application method	Spray
	Curing process per coat	Cured at a temperature of 200°C for a duration of 15 minutes
	Flame retardant details	**See Note 3 below**
Cladding	Generic type	Aluminium
	Product reference	“VulcaLap Aluminium Plank”
	Detailed description / composition details	Extruded aluminium 6063 T6
	Name of manufacturer	Vulcan Cladding Systems Limited
	Thickness	2mm
	Weight per unit area	7.17kg/m^2
	Flame retardant details	This component is inherently flame retardant

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Fixing details		Aluminium clip/stainless steel screw
Angle bar	Generic type	Aluminium
	Product reference	“Support Frame”
	Thickness	3mm
Mounting and fixing details		A 40mm ventilated cavity was situated between the reverse face of the specimens and the calcium silicate backing board
Brief description of manufacturing process		Extruded aluminium

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

Note 2: The sponsor was unable to provide this information.

Note 3: 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	Vulcan Cladding Systems Limited	WF 399850 - Issue 2, WF 399851 - Issue 2, WF 399852 - Issue 2, WF 407703	EN ISO 1716
Warringtonfire	Vulcan Cladding Systems Limited	(full) WF 405981 - Issue 2, WF 405982 - Issue 2 (indicative) WF 399735, WF 399736 WF 400755, WF 400756 WF 400757, WF 400758,	EN ISO 13823
Warringtonfire	Vulcan Cladding Systems Limited	WF 408265 WF 408266	EN ISO 1716 Composite report
Warringtonfire	Vulcan Cladding Systems Limited	WF 407096 – Issue 3	EN TS 15117

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - Max/Mean (m)	Compliance parameters
EN ISO 1716	Coating - PCS (b)	3	2.3844 MJ/m^2 (RAL) 2.4760-2.8743 MJ/m^2 (Wood)	Compliant
	Aluminium – PCS (a)	Deemed to Satisfy - 0.00 MJ/kg		Compliant
	For the product as a whole – PCS (e)	3	0.3273 MJ/kg (RAL) 0.3945 MJ/kg (Wood)	Compliant
BS EN 13823	$FIGRA_{0.2MJ}$	3	0.0-1.09 W/s (full) 0.0 W/s (indicative)	Compliant
	$FIGRA_{0.4MJ}$		0.00-1.09 W/s (full) 0.0 W/s (indicative)	Compliant
	THR_{600s}		0.46-0.58 MJ (full) 0.24-0.76 MJ (indicative)	Compliant
	SMOGRA		0.0 m^2s^2 (full) 0.0 m^2s^2 (indicative)	Compliant
	TSP_{600s}		13.03-35.93 m^2 (full) 16.21-33.66 m^2 (indicative)	Compliant
	Lateral Flame Spread to End of Specimen?		None (full) None (indicative)	Compliant
	Fall of Flaming Drop/Particle?		None (full) None (indicative)	Compliant
	Flaming of Fallen Particle Exceeding 10s?		None (full) None (indicative)	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, VulcaLap RAL/WOOD Finish", an aluminium rainscreen plank with a polyester powder coating, in relation to its reaction to fire behaviour is 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- External cladding
ii) Construction applications applied over any Calcium Silicate substrate with a minimum density of 870kg/m³, having a minimum thickness of 11mm and a fire performance of A2 - s1, d0 or better, or any A1 or A2 rated standard substrate as listed in EN 13238 with the exception of Gypsum plasterboard
iii) Air gap details – Any air gap width allowed

This classification is also valid for the following product parameters:

Product colour	Any variation allowed
Product system	T&G or Shiplap
Product density	No variation allowed
Coating thickness	Up to 80 microns
Product composition	No variation allowed
Product construction	No variation allowed
Coating application rate	≤116.8/m² allowed
Air gap width	≥ 0 mm allowed

5. Limitations

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

SIGNED

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Euan Gardner
Junior Certification Engineer
Technical Department

APPROVED

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Janet Murrell
Technical Manager
Technical Department

Issue 2: Addition to F.O.A providing guidance regarding air gap width allowance. E. Gardner. 29th January 2020.
Issue 3: Modification to F.O.A at request of the sponsor. E Gardner. 28th May 2020