

Title:

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

Notified Body No:

0833

Product Names:

“VitraDual”

Report No:

WF 431748

Issue No:

2

Prepared for:

Fairview Europe Ltd, 7
Robins Drive,
Castlefields Industrial
Estate,
Bridgwater,
Somerset,
TA6 4DL

Date:

17th August 2020

1. Introduction

This classification report defines the classification assigned to “VitraDual”, a pre-coated aluminium panel, in line with the procedures given in BS EN 13501-1:2018.

2. Details of classified product

2.1 General

The product, “VitraDual”, a pre-coated aluminium panel, is defined as being suitable for construction and flooring applications.

2.2 Product description

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

General description		Pre-coated aluminium panel
Product reference		“VitraDual”
Name of manufacturer		Fairview Europe Ltd
Thickness		3.13mm (determined by Warringtonfire)
Weight per unit area		7.36kg/m ² (determined by Warringtonfire at 3mm)
Top coat (test face)	Generic type	PVDF paint
	Product reference	“PVDF Paint”
	Name of manufacturer	SALCHI / ALCEA / BECKER
	Colour reference	Any
	Number of coats	2-3
	Specific gravity	1.3-1.5
	Application rate (total)	0.032-0.059kg/m ²
	Application thickness (total)	25-40 microns
	Application method	Coil coated
	Curing process	Heat cure
	Flame retardant details	See Note 1 below
Primer	Generic type	Polyurethane primer
	Product reference	“Polyurethane Primer”
	Name of manufacturer	PPG / SALCHI / ALCEA
	Colour reference	“White”
	Number of coats	1
	Specific gravity	1.20
	Application rate	0.007kg/m ²
	Application thickness	5 microns
	Application method	Coil coated
	Curing process	Heat cure
	Flame retardant details	See Note 1 below

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Aluminium	Generic type	Aluminum
	Product reference	“Aluminium”
	Name of manufacturer	See Note 1 below
	Thickness	2-3mm
	Weight per unit area	5.42 kg/m ² - 8.13kg/m ²
	Density	2710kg/m ³
	Flame retardant details	This component is inherently flame retardant
Primer (rear face)	Generic type	Epoxy primer
	Product reference	“Epoxy Primer”
	Name of manufacturer	Becker Coating
	Colour reference	“Grey”
	Number of coats	1
	Application rate	0.012kg/m ²
	Application thickness	8 microns
	Application method	Coil coated
	Curing process	Heat cure
Flame retardant details	See Note 1 below	
Mounting and fixing details	The specimen was tested with vertical and horizontal joints as detailed in BS EN 13823. The test specimens were mechanically fixed to a metal frame	
Air space details	In each test a 40mm ventilated cavity was situated between the reverse face of the specimens and the substrate	
Brief description of manufacturing process	See Note 1 below	

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

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	Fairview Europe Ltd	WF 420455, 420456, 420457, 420458, 420459 (full) WF 428809 (indic)	EN ISO 1716:2018
Warringtonfire	Fairview Europe Ltd	WF 421113	EN ISO 1716:2018 Composite report
Warringtonfire	Fairview Europe Ltd	WF 420021 (full) WF 420020, 420022, 421907, 423741, 431692 (indicative)	BS EN 13823:2010+ A1:2014
Warringtonfire	Fairview Europe Ltd	WF 431749	EN/TS 15117:2005 EN 15725:2010

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - Max/ Mean (m)	Compliance with parameters
BS EN 13823	FIGRA _{0.2MJ}	3 (full) 1 (indic)	0.00 W/s (full) 0.00, 0.00, 0.00, 0.00 W/s (indicative)	-
	FIGRA _{0.4MJ}		0.00 W/S (full) 0.00, 0.00, 0.00, 0.00 W/S (indicative)	-
	THR _{600s}		0.33 MJ (full) 0.00, 0.04, 0.26, 0.28 MJ (indicative)	-
	LFS		-	Compliant
	SMOGRA		0.00 m ² s ² (full) 0.00, 0.00, 0.00, 0.00 m ² s ² (indicative)	-
	TSP _{600s}		0.00 m ² (full) 0.00, 0.00, 6.59, 9.39 m ² (indicative)	-
	Flaming droplets?		-	Compliant
	Flaming droplets lasting > 10s		-	Compliant

EN ISO 1716	Top Coat - PCS (b)	3 (full) 1 (indic)	1.1846 MJ/m ² (Black)	-
			0.7358 MJ/m ² (White)	
			1.1253 MJ/m ² (Orange)	
			1.1333 MJ/m ² (Red)	
	Polyurethane Primer – PCS (b)		0.1278 MJ/m ²	-
	Aluminium – PCS (a)	Deemed to satisfy (0.0000 MJ/kg)		-
	Epoxy Primer – PCS (b)	3	0.3495 MJ/m ²	-
External non-substantial components – PCS (c)	N/a	1.3124 MJ/m ²	-	
For the product as a whole – PCS (e)		0.2025 MJ/kg	-	
* The product as a whole is deemed to be A1 by virtue of it satisfying the BS EN 13823 requirements (FIGRA < 20W/s, THR _{600s} < 4.0MJ, LFS < edge of specimen and s1, d0) and the associated EN ISO 1716 requirement for the external non-substantial components (PCS < 2.0MJ/m ²)				

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 and 9 of BS EN 13501-1:2018.

4.2 Classification

The product, “VitraDual”, a pre-coated aluminium panel, in relation to its reaction to fire behaviour is classified:

Reaction to fire classification: A1/ A1_{FI}

4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications applied over any combustible wooden based substrate with a minimum density of 450kg/m³, a minimum thickness of 9mm and a fire performance of D-s2,d0 or better or any standardised A1 or A2-s1,d0 rated substrate listed in BS EN 13238
- ii) Construction applications over a Rock fibre mineral wool substrate with a minimum thickness of 20mm, minimum density of 30kg/m³ and an A1 Reaction to fire classification.
- iii) Air gap details - Any air gap allowed
- iv) Wall, ceiling and façade applications

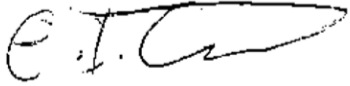
This classification is also valid for the following product parameters:

Aluminium thickness	2mm or greater allowed
Top Coat application thickness	40 microns or less
Product colour	Any variation allowed
Product composition	No further variation allowed
Product construction	No further variation allowed
Joint details	Vertical and horizontal joints allowed
Air gap details	Any air gap allowed

5. Limitations

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

SIGNED



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Euan Gardner
Certification Engineer
Technical Department

APPROVED



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Katie Williams
Certification Engineer
Technical Department
On behalf of **Warringtonfire**

Issue 2: Correction to BS EN 13501-1. 15th October 2020. E Gardner.

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