System Laboratories UK LTD Classification Report

Classification of reaction to fire performance of construction products and building elements in accordance with BS EN 13501-1:2018

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Report Number	590
Issue	A
Prepared for	Fairview Europe Ltd t/a Valcan
Date	24/01/2024

Issue	Date	Notes
A	24/01/2024	First issue

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1. Introduction

This classification report defines the classification assigned to Xtral, in accordance with the procedures given in BS EN 13501-1: 2018.

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

Sponsor:	Fairview Europe Ltd t/a Valcan
Prepared for:	Fairview Europe Ltd t/a Valcan
Place of manufacture:	Fairview Europe Ltd t/a Valcan - Dunball House, Unit N, Woodlands Court Business Park, Bristol Road, Bridgwater, Somerset, TA6 4FJ, UK
CAB Number:	N/A
Classification report No.:	590-A
Date of issue	24/01/2024

2. Details of classified product

2.1. General

Classification according to BS EN 13501-1:2018 of Xtral.

2.2. Traceability

The test sample was supplied by the sponsor. System Laboratories UK LTD was not involved in the sampling process and therefore cannot comment upon the relationship between the samples supplied for the test and the products supplied to the market.

2.3. Sample details

Test sponsor	Fairview Europe Ltd t/a Valcan Dunball House, Unit N Woodlands Court Business Park Bristol Road Bridgwater Somerset TA6 4FJ UK
Place of manufacture	As above
Trade name	Xtral
Sample description (as provided by sponsor)	Architectural rainscreen panel

Product data (as provided by sponsor)

Generic type of product	Pained aluminium architectural rainscreen panel
Nominal thickness (mm)	1.7
Density of core (kg/m^3)	2730
Mass per unit area (kg/m^2)	4.64 (Calculated by laboratory)
Colour	Any
Test face	Red/White/Black tested

Flame retardant added, or organic content limited during production	N/A

Substrate and ventilation conditioned

Substrate	Mineral Wool
Type of air gap	40 mm between sample and substrate

2.4. Detailed product description

The product is configured as detailed below, front to back.

Paint	Type of product/layer	Paint
	Product/layer reference	Paint
	Thickness	Sponsor could not provide information
	Colour	Any
	Construction form	Paint applied to aluminium planks
Aluminium Planks	Type of product/layer	Aluminium planks
	Product/layer reference	Aluminium planks
	Thickness	1.7 mm
	Colour	Metallic
	Construction form	Aluminium planks held together by aluminium brackets
Aluminium Brackets	Type of product/layer	Aluminium brackets
	Product/layer reference	Aluminium brackets
	Thickness	1 mm (Measured by laboratory)
	Colour	Metallic
	Construction form	Aluminium brackets
Mineral wool substrate	Type of product/layer	Mineral wool substrate
	Product/layer reference	Substrate
	Thickness	25 mm (Measured by laboratory)
	Colour	Beige
	Construction form	25mm mineral wool substrate according to BS EN 13238:2010

3. Reports and results in support of this classification

3.1. Reports

Name of laboratory	Name of test sponsor	Test report No.	Test method/field of applicatior
System Laboratories UK	Fairview Europe Ltd t/a Valcan	499A	BS EN ISO 1716:2018
System Laboratories UK	Fairview Europe Ltd t/a Valcan	586A	BS EN 13823:2020+A1:2022 Indicative
System Laboratories UK	Fairview Europe Ltd t/a Valcan	587A	BS EN 13823:2020+A1:2022 Indicative
System Laboratories UK	Fairview Europe Ltd t/a Valcan	588A	BS EN 13823:2020+A1:2022 Indicative
System Laboratories UK	Fairview Europe Ltd t/a Valcan	589A	BS EN 13823:2020+A1:2022

3.2. Results

Standard/Decision	Parameter	Number of tests	Results	
			Continuous parameter mean	Compliance with class A2-s1,d0
BS EN 13823:2020+A1:2022	$FIGRA_{0.2MJ}$	3	0 W/s	≤ 120 W/s **Compliant**
BS EN 13823:2020+A1:2022	THR_{600s}	3	0.33 MJ	≤ 7.5 MJ **Compliant**
BS EN 13823:2020+A1:2022	LFS	3	No spread to egde	No spread to edge **Compliant**
BS EN 13823:2020+A1:2022	TSP_{600s}	3	20.6 m^2	≤ 50 m^2 **Compliant**
BS EN 13823:2020+A1:2022	SMOGRA	3	0 m^2/s^2	≤ 30 m^2/s^2 **Compliant**
BS EN 13823:2020+A1:2022	Flaming droplets	3	No flaming droplets	No flaming droplets **Compliant**
BS EN ISO 1716:2018 (b) Paint	MJ/m^2	3	1.511 MJ/m^2	≤ 4 MJ/m^2 **Compliant**
BS EN ISO 1716:2018 (a) Aluminium	MJ/kg	0	0 MJ/kg	≤ 3 MJ/kg **Compliant**
BS EN ISO 1716:2018 (e) Product as a whole	MJ/kg	3	0.365 MJ/kg	≤ 3 MJ/kg **Compliant**

Note:
Metals were not tested due to BS EN ISO 1716:2018 clause 9.4.1 where metals are already deemed to have a calorfic value of 0.

4. Classification and field of application

4.1. Reference of classification

This classification has been carried out in accordance with BS EN 13501-1:2018.

4.2. Classification

The product Xtral, in relation to reaction to fire behaviour is classified:

Fire behaviour		Smoke production		Flaming droplets
A2	- s	1	, d	0

Reaction to fire classification: A2-s1,d0

4.3. Field of application

This classification is valid for the following product and mounting and fixing parameters:

Thickness	No variation allowed
Colour	Any colour (EGOLF 003 - 2016)
Composition/build up	No variation allowed
Density of core	No variation allowed
Mass per unit area	No variation allowed
Air gap	40 mm between panel and substrate
Substrate	Any A1 with a density of at least 75% of 50 kg/m^3

5. Limitations

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

The laboratory has played no part in sampling of the product.

6. References

BS EN 13501-1:2018 - Fire classification of construction products and building elements

BS EN 13823:2020+A1:2022 - Reaction to fire tests for building products. Building products excluding floorings exposed to the thermal attack by a single burning item

BS EN ISO 1716:2018 – Reaction to fire tests for products — Determination of the gross heat of combustion (calorific value)

EGOLF Reccommendation 003 - 2016

-End of Report-