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

System Laboratories UK LTD
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Report Number	567
Issue	B
Prepared for	CGL Systems Ltd.
Date	05/02/2024

Issue	Date	Notes
A	12/01/2024	First issue
B	05/02/2024	Correction to product results

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Contents

1. Introduction

This classification report defines the classification assigned to CGL Hook-On Cladding System, 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:	CGL Systems Ltd.
Prepared for:	CGL Systems Ltd.
Place of manufacture:	CGL Systems Ltd, 2 Young Place, Kelvin Industrial Estate, East Kilbride, Scotland, G75 0TD, UK
CAB Number:	N/A
Classification report No.:	567-B
Date of issue	05/02/2024

2. Details of classified product

2.1. General

Classification according to BS EN 13501-1:2018 of CGL Hook-On Cladding System.

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	CGL Systems Ltd. 2 Young Place Kelvin Industrial Estate East Kilbride Scotland G75 0TD UK
Place of manufacture	As above
Trade name	CGL Hook-On Cladding System
Sample description (as provided by sponsor)	Aluminium Cladding Panel

Product data (as provided by sponsor)

Generic type of product	Aluminium Cladding Panel
Nominal thickness (mm)	2 ± 0.2
Density of core (kg/m^3)	220 (Mineral wool)
Mass per unit area (kg/m^2)	5.42
Colour	Interpon D2525 Y2214F Bronze polyester powder coating
Test face	Painted aluminium

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

Substrate and ventilation conditioned

Substrate	Glass Fibre Mat Faced Gypsum Board
Type of air gap	50 mm

2.4. Detailed product description

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

Paint	Type of product/layer	Interpon D2525 Y2214F Bronze polyester powder coating
	Product/layer reference	Bronze paint
	Thickness	80 µm (Provided by sponsor)
	Colour	Bronze
	Construction form	Bronze paint on aluminium sheet
Aluminium	Type of product/layer	Aluminium sheet
	Product/layer reference	Aluminium sheet
	Thickness	2 mm (Provided by sponsor)
	Colour	Metallic
	Construction form	Aluminium sheet
Mineral Wool	Type of product/layer	Rock Fibre Mineral Wool Slab
	Product/layer reference	Mineral Wool
	Thickness	100 mm (Provided by sponsor)
	Colour	Brown
	Construction form	Mineral wool sandwiched between aluminium sheet and gypsum board
Gypsum Board	Type of product/layer	Glass Fibre Mat Faced Gypsum Board
	Product/layer reference	Gypsum board
	Thickness	12.5 mm (Provided by sponsor)
	Colour	Brown
	Construction form	Mineral wool sandwiched between aluminium sheet and gypsum board

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	CGL Systems Ltd.	527B	BS EN 13823:2020+A1:2022
System Laboratories UK	CGL Systems Ltd.	529A	BS EN ISO 1716:2018
System Laboratories UK	CGL Systems Ltd.	530A	BS EN ISO 1716:2018

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	$FIGRA_{0.2}$	3	0 W/s	≤ 120 W/s **Compliant**
BS EN 13823:2020+A1:2022	THR_{600}	3	0.47 MJ	≤ 7.5 MJ **Compliant**
BS EN 13823:2020+A1:2022	LFS	3	No spread to edge	No spread to edge **Compliant**
BS EN 13823:2020+A1:2022	SMOGRA	3	4.95 m^2/s^2	≤ 30 m^2/s^2 **Compliant**
BS EN 13823:2020+A1:2022	TSP	3	37.53 m^2	≤ 50 m^2 **Compliant**
BS EN ISO 1716:2018 (a) Mineral Wool	MJ/kg	3	0.344 MJ/kg	≤ 3 MJ/kg **Compliant**
BS EN ISO 1716:2018 (b) Paint	MJ/m^2	3	3.488 MJ/m^2	≤ 4 MJ/m^2 **Compliant**
BS EN ISO 1716:2018 (e) Product as a whole	MJ/kg	3,3	0.4003 MJ/kg	≤ 3 MJ/kg **Compliant**

Note:
Metals were not tested in the calorimeter due to BS EN ISO 1716:2018 clause 9.4.1 where metals are deemed to have a calorific 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 CGL Hook-On Cladding System, 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	No variation allowed
Composition/build up	No variation allowed
Density of core	± 50 kg/m^3
Mass per unit area	No variation allowed
Substrate	A2-s1,d0 or better

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 - 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)

-End of Report-