

Report No.:

567-B

# 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 Unit 13 Apex Park Leighton Road Leighton Buzzard LU7 3RE United Kingdom

Report Number Issue Prepared for Date

CGL Systems Ltd. 05/02/2024

567

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| Issue | Date       | Notes                         |
|-------|------------|-------------------------------|
| А     | 12/01/2024 | First issue                   |
| В     | 05/02/2024 | Correction to product results |



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### 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   |

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### 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.<br>2 Young Place<br>Kelvin Industrial Estate<br>East Kilbride<br>Scotland<br>G75 0TD<br>UK  |
|---|--|
| Place of manufacture  | As above   |
| Trade name<br>Sample description (as<br>provided by sponsor)  | CGL Hook-On Cladding System<br>Aluminium Cladding Panel  |
| Generic type of product<br>Nominal thickness (mm)<br>Density of core (kg/m <sup>3</sup> )<br>Mass per unit area (kg/m <sup>2</sup> )<br>Colour<br>Test face | Product data (as provided by sponsor)<br>Aluminium Cladding Panel<br>2 ± 0.2<br>220 (Mineral wool)<br>5.42<br>Interpon D2525 Y2214F Bronze polyester powder coating<br>Painted aluminium |



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

|                 | 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.

|                              | Type of product/layer  | Interpon D2525 Y2214F Bronze polyester powder coating  |  |  |  |  |
|------------------------------|--|--|--|--|--|--|
| Deint                        | Product/layer reference  | Bronze paint   |  |  |  |  |
|                              | Thickness  | 80 μm (Provided by sponsor)  |  |  |  |  |
| Palifi                       | Colour   | Bronze   |  |  |  |  |
|                              | Construction form  | Bronze paint on aluminium sheet  |  |  |  |  |
|                              | Type of product/layer  | Aluminium sheet  |  |  |  |  |
|                              | Product/layer reference  | Aluminium sheet  |  |  |  |  |
| Aluminium                    | Thickness  | 2 mm (Provided by sponsor)   |  |  |  |  |
| Aluminium                    | Colour   | Metallic   |  |  |  |  |
|                              | Construction form  | Aluminium sheet  |  |  |  |  |
|                              |  |  |  |  |  |  |
|                              | Type of product/layer  | Rock Fibre Mineral Wool Slab   |  |  |  |  |
|                              | Type of product/layer<br>Product/layer reference   | Rock Fibre Mineral Wool Slab<br>Mineral Wool   |  |  |  |  |
| Minoral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness  | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)   |  |  |  |  |
| Mineral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour  | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)<br>Brown  |  |  |  |  |
| Mineral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form   | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)<br>Brown<br>Mineral wool sandwiched between   |  |  |  |  |
| Mineral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form   | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)<br>Brown<br>Mineral wool sandwiched between<br>aluminium sheet and gypsum board   |  |  |  |  |
| Mineral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form<br>Type of product/layer  | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)<br>Brown<br>Mineral wool sandwiched between<br>aluminium sheet and gypsum board<br>Glass Fibre Mat Faced Gypsum Board   |  |  |  |  |
| Mineral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form<br>Type of product/layer<br>Product/layer reference   | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)<br>Brown<br>Mineral wool sandwiched between<br>aluminium sheet and gypsum board<br>Glass Fibre Mat Faced Gypsum Board<br>Gypsum board   |  |  |  |  |
| Mineral Wool                 | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form<br>Type of product/layer<br>Product/layer reference<br>Thickness                                | Rock Fibre Mineral Wool SlabMineral Wool100 mm (Provided by sponsor)BrownMineral wool sandwiched between<br>aluminium sheet and gypsum boardGlass Fibre Mat Faced Gypsum BoardGypsum board12.5 mm (Provided by sponsor)                                      |  |  |  |  |
| Mineral Wool<br>Gypsum Board | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form<br>Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour                      | Rock Fibre Mineral Wool Slab<br>Mineral Wool<br>100 mm (Provided by sponsor)<br>Brown<br>Mineral wool sandwiched between<br>aluminium sheet and gypsum board<br>Glass Fibre Mat Faced Gypsum Board<br>Gypsum board<br>12.5 mm (Provided by sponsor)<br>Brown |  |  |  |  |
| Mineral Wool<br>Gypsum Board | Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form<br>Type of product/layer<br>Product/layer reference<br>Thickness<br>Colour<br>Construction form | Rock Fibre Mineral Wool SlabMineral Wool100 mm (Provided by sponsor)BrownMineral wool sandwiched between<br>aluminium sheet and gypsum boardGlass Fibre Mat Faced Gypsum BoardGypsum board12.5 mm (Provided by sponsor)BrownMineral wool sandwiched between  |  |  |  |  |



# 3. Reports and results in support of this classification

# 3.1. Reports

| Name of laboratory<br>System Laboratories UK | Name of test sponsor<br>CGL Systems Ltd. | Test report No.<br>527B | Test method/field of application<br>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

|                            |                      | Numbor  | Results                     |                                  |  |  |  |
|----------------------------|----------------------|---------|-----------------------------|----------------------------------|--|--|--|
| Standard/Decision          | Parameter            | oftosts | Continuous                  | <b>Compliance with class</b>     |  |  |  |
|                            |                      | ortests | parameter mean              | A2-s1,d0                         |  |  |  |
| RS EN 12022-2020+ 11-2022  | FIGRA                | 2       | 0 W/c                       | ≤ 120 W/s                        |  |  |  |
| D3 EN 13823.2020+A1.2022   | FIGRA <sub>0.2</sub> | 3       | 0 W/S                       | Compliant                        |  |  |  |
| DC EN 12022.2020 - 11.2022 | тир                  | 2       | 0 47 MI                     | ≤ 7.5 MJ                         |  |  |  |
| B3 EN 13823:2020+A1:2022   | 1111,600             | 5       | 0.47 MJ                     | Compliant                        |  |  |  |
| DC EN 12022.2020 - 11.2022 | LEC                  | 2       | No enroad to odgo           | No spread to edge                |  |  |  |
| B3 EN 13823:2020+A1:2022   | LFS                  | 3       | No spread to edge           | Compliant                        |  |  |  |
| BS FN 13823∙2020+∆1•2022   | SMOGRA               | 3       | $4.05 \text{ m}^2/s^2$      | $\leq 30 \text{ m}^2/\text{s}^2$ |  |  |  |
| D5 EN 15025.2020 (M1.2022  | SMOURA               | 5       | 4.95 III /S                 | Compliant                        |  |  |  |
| BS FN 13823·2020+∆1·2022   | тср                  | 3       | $27  \text{F2}  \text{m}^2$ | $\leq 50 \text{ m}^2$            |  |  |  |
| D5 EN 15025.2020 (M1.2022  | 151                  |         | 57.55 III                   | Compliant                        |  |  |  |
| BS EN ISO 1716:2018 (a)    | ML/lrg               | 2       | 0.244 MI /lrg               | ≤ 3 MJ/kg                        |  |  |  |
| Mineral Wool               | IVIJ/ Kg             | 3       | 0.544 MJ/Kg                 | Compliant                        |  |  |  |
| BS EN ISO 1716:2018 (b)    | MI ( <sup>2</sup>    | 2       | $2400 \text{ ML}/m^2$       | $\leq 4 \text{ MJ/m}^2$          |  |  |  |
| Paint                      | MJ/m                 | 3       | 3.488 MJ/M                  | Compliant                        |  |  |  |
| BS EN ISO 1716:2018 (e)    | ML/lra               | 2.2     | 0.4002 ML/lra               | ≤ 3 MJ/kg                        |  |  |  |
| Product as a whole         | ™IJ/кg               | ۵,۵     | 0.4005 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<br>A2 | -    | S  | Smoke production<br>1 | , | d | Flaming droplets<br>0 |
|----------------------|------|----|-----------------------|---|---|-----------------------|
| Reaction to fir      | e cl | as | sification:           |   | A | 2-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      | $\pm$ 50 kg/m <sup>3</sup> |
| 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-