

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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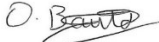
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Issue B
Prepared for The Millboard Company Ltd.
Date 23/06/2023

| Issue | Date | Notes |
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| A | 21/06/2023 | First issue |
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1. Introduction

This classification report defines the classification assigned to Board & Batten+ Cladding, 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: The Millboard Company Ltd.
Prepared for: The Millboard Company Ltd.
Place of manufacture: Ryton Lodge, Oxford Road, Coventry, CV8 3EJ, UK

CAB Number: N/A
Classification report No.: 319-B
Date of issue: 23/06/2023

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2. Details of classified product

2.1. General

Classification according to BS EN 13501-1:2018 of Board & Batten + Cladding.

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 | The Millboard Company Ltd. Unit A Castle Court Bodmin Road Coventry CV2 5DB UK |
| Place of manufacture | The Millboard Company Ltd. Ryton Lodge Oxford Road Coventry CV8 3EJ UK |
| Trade name | Board & Batten + Cladding |
| Sample description (as provided by sponsor) | Millboard Board & Batten + cladding, fixed through the tongue to treated timber battens with Millboard Corner Profiles and aluminium trims |
| | Product data (as provided by sponsor) |
| Generic type of product | Composite cladding made with recycled natural minerals blended in a polymer resin with long fibre reinforcement |
| Nominal thickness (mm) | 26mm (Provided by sponsor, excluding battens) |
| Density of core (kg/m ³) | 530kg/m ³ (Provided by sponsor, excluding battens) |
| Mass per unit area (kg/m ²) | 12.7kg/m ² (Provided by sponsor, excluding battens) |
| Colour | Burnt Cedar (Black), Limed Oak (White), Jarrah (Red) |
| Test face | 2K Coated fire rated elastomeric surface layer. |

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

Substrate and ventilation conditioned

Substrate N/A
 Type of air gap N/A

2.4. Detailed product description

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

| | | |
|-------------------|-------------------------|--|
| Cladding | Type of product/layer | Board & Batten + Cladding board |
| | Product/layer reference | Cladding |
| | Thickness | 26mm (provided by sponsor) |
| | Colour | Jarrah (Red), Limed Oak (White), Burnt Cedar (Black) |
| | Construction form | Fixed through the tongue and board face to treated battens |
| Corner Profile | Type of product/layer | Board & Batten + Corner Profile |
| | Product/layer reference | Corner Profile |
| | Dimensions | 50x50x3050mm (provided by sponsor) |
| | Colour | Jarrah (Red), Limed Oak (White), Burnt Cedar (Black) |
| | Construction form | Fixed with perforated closure and accessories fixings |
| Aluminium Trims | Type of product/layer | Envello Aluminium Trims |
| | Product/layer reference | Aluminium Trims |
| | Dimensions | 50x25mm (provided by sponsor) |
| | Colour | Metallic |
| | Construction form | Fixed with accessories fixings |
| Timber Battens | Type of product/layer | Treated Timber Battens |
| | Product/layer reference | Timber Battens |
| | Dimensions | 50x25mm (provided by sponsor) |
| | Colour | Timber Colour |
| | Construction form | Fixed to wall framing with external grade fixings |
| Breather Membrane | Type of product/layer | Breather Membrane |
| | Product/layer reference | Membrane |
| | Thickness | 0.7mm (provided by sponsor) |
| | Colour | Black |
| | Construction form | Stapled to sheathing board |

| | | |
|-----------------|-------------------------|----------------------------|
| Sheathing Board | Type of product/layer | OSB Sheathing Board |
| | Product/layer reference | Sheathing Board |
| | Thickness | 12mm (provided by sponsor) |
| | Colour | Timber Colour |
| | Construction form | Fixed to wall framing |

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 application |
|------------------------|----------------------------|-----------------|----------------------------------|
| System Laboratories UK | The Millboard Company Ltd. | 289B | 13823:2020 Indicative SBI |
| System Laboratories UK | The Millboard Company Ltd. | 290B | 13823:2020 Indicative SBI |
| System Laboratories UK | The Millboard Company Ltd. | 291B | 13823:2020 Indicative SBI |
| System Laboratories UK | The Millboard Company Ltd. | 310A | BS EN ISO 11925-2:2020 |
| System Laboratories UK | The Millboard Company Ltd. | 311A | BS EN ISO 11925-2:2020 |
| System Laboratories UK | The Millboard Company Ltd. | 312A | BS EN ISO 11925-2:2020 |
| System Laboratories UK | The Millboard Company Ltd. | 313A | BS EN 13823:2020 |

White, Black and Red colours were tested to extend the field of application to all colours in accordance with EGOLF Recommendation 003-2016

3.2. Results

| Standard/Decision | Parameter | Number of tests | Results | |
|---|----------------------|-----------------|---------------------------|---|
| | | | Continuous parameter mean | Compliance with class D-s3,d0 |
| BS EN 13823:2020 | FIGRA _{0,4} | 3 | 226.3 W/s | ≤750 W/s Compliant |
| BS EN 13823:2020 | Flaming Droplets | 3 | No flaming droplets | No flaming droplets Compliant |
| BS EN ISO 11925-2:2020 Jarrah (Red) | F _s | 6,6,6 | <150mm within 60s | <150mm within 60s Compliant |
| BS EN ISO 11925-2:2020 Limed Oak (White) | F _s | 6,6,6 | <150mm within 60s | <150mm within 60s Compliant |
| BS EN ISO 11925-2:2020 Burnt Cedar (Black) | F _s | 6,6,6 | <150mm within 60s | <150mm within 60s Compliant |

The product was given s3 smoke classification as it had achieved 560.8 m² TSP_{600s}, thus failing the requirement of s2

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 Board & Batten + Cladding, in relation to reaction to fire behaviour is classified:

Fire behaviour Smoke production Flaming droplets
D - s 3 , d 0

| | |
|----------------------------------|----------------|
| Reaction to fire classification: | D-s3,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 |
| Composition | No variation allowed |
| Mass Per Unit Area | ±5% of tested samples |
| Joints | Vertical and horizontal |
| Orientation | Vertical and horizontal |

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.

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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 11925-2:2020 - Reaction to fire tests. Ignitability of products subjected to direct impingement of flame - Single-flame source test

EGOLF Recommendation 003-2016

-End of Report-