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Title:

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

Product Name:

"Aliclad Flow Board"

Report No:

WF 503326

Issue No:

1

Prepared for:

Milwood Group (Alideck)

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Date:

5th August 2021



1. Introduction

This classification report defines the classification assigned to "Aliclad Flow Board", a coated aluminium decking board, in line with the procedures given in EN 13501-1: 2018.

2. Details of classified product

2.1 General

The product, "Aliclad Flow Board", is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "Aliclad Flow Board", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

| General description | | Coated aluminium decking board | | |
|-----------------------|-------------------------|--|--|--|
| Product reference | | "Aliclad Flow Board" | | |
| Name of manufacturer | | Canoports UK Ltd | | |
| Overall thickn | ness | 1.5mm (sheet, stated by sponsor) | | |
| | | 12.6mm (profiled product – determined by Warringtonfire) | | |
| Overall weigh | it per unit length | 1.26 kg/lm (determined by Warringtonfire) | | |
| Profile detail | | 140mm x 12.6mm | | |
| Photograph of profile | | | | |
| | | FE JIIL 3 | | |
| | Generic type | Polyester | | |
| | Product reference | "QD9128985MRT.90" | | |
| | Name of manufacturer | Sherwin Williams Syntha Pulvin | | |
| | Colour reference | "Grey" | | |
| | Number of coats | One | | |
| Coating | Application thickness | 60-80 microns | | |
| | Application rate | 128g/m ² | | |
| | Specific gravity | 1.6 | | |
| | Application method | Corona | | |
| | Curing process | 200°C for 10 minutes | | |
| | Flame retardant details | See Note 1 Below | | |

Continued on next page

| | Generic type | Aluminium | | |
|------------------------------------|-------------------------|--|--|--|
| | Product reference | "6063T6" | | |
| | Name of manufacturer | Canoports UK Ltd | | |
| Aluminium | Thickness | 1.5mm (sheet) formed into a 12.6mm profile | | |
| | Weight per unit area | 1.865kg/m ² (flat sheet) | | |
| | | 10.64kg/m ² (profiled product) | | |
| | Flame retardant details | See Note 1 Below | | |
| Air space deta | nils | A 40mm ventilated cavity was situated between the reverse | | |
| · | | face of the specimens and the calcium silicate substrate a | | |
| | | defined in EN 13238:2010 | | |
| Brief description of manufacturing | | Aluminium extrusion + powder coating | | |
| process | | | | |

Note 1: The sponsor of the test was unwilling 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 | Milwood Group T/A Canoports UK Ltd | WF 418174 | EN ISO 1716: 2018 | |
| Warringtonfire | Milwood Group (Alideck) | WF 503375 (Issue 2) | EN ISO 1716: 2018 Composite summary report | |
| Warringtonfire | Milwood Group (Alideck) | WF 502398 | EN 13823: 2020 | |

3.2 Test results

| Test | | | Results | | |
|----------------------------|---|--------------------------|---------------------------------------|-----------------------|--|
| method & test number | Parameter | No. tests | Continuous parameter - mean (m) | Compliance parameters | |
| | FIGRA _{0.2MJ} | | 0 W/s | - | |
| | FIGRA _{0.4MJ} | | 0 W/s | - | |
| | THR _{600s} | | 0.4 MJ | - | |
| | LFS | | - | Compliant | |
| EN 13823 | SMOGRA | 3 | 1 m ² s ² | - | |
| | TSP _{600s} | | 26 m ² | - | |
| | Fall of Flaming Droplet/Particle? | | - | Compliant | |
| | Flaming of Fallen Particle Exceeding 10s? | | - | Compliant | |
| | Coating- PCS (b) | 3 | 2.1 MJ/m ² | - | |
| EN ISO 1716 | Aluminium - PCS (a) | Deemed to satisfy (0.00) | | - | |
| | For the product as a whole PCS (e) | Summary result | 1.1 MJ/Kg | - | |

4. Classification and field of application

4.1 Reference of classification

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

4.2 Classification

The product, "Aliclad Flow Board", a coated aluminium decking board, in relation to its reaction to fire behaviour is classified:

A2

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

| Fire Behaviour | | Smoke Production | | | Flaming Droplets | |
|----------------|---|------------------|---|---|------------------|---|
| A2 | - | s | 1 | 1 | d | 0 |

i.e. A2 - s1, d0

Reaction to fire classification: A2 - s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications mounted with a minimum 40mm airspace over any substrate with a density equal to or greater than 652.5kg/m³, having a minimum thickness of 9mm and a fire performance of A2-s1,d0 or better (excluding paper faced gypsum plasterboard).
- ii) Air gap: ≥40mm

This classification is also valid for the following product parameters:

Coating thickness
Coating application rate
Coating density
Coating colour
Product composition
Aluminium thickness
No variation allowed

Product orientation Mounted vertically (vertical joints)

Product composition No variation allowed Product construction No variation allowed

5. Limitations

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

SIGNED

Stacey Deeming

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Principal Engineer Technical Department **APPROVED**

Matthew Dale

Principal Certification Engineer Technical Department on behalf of Warringtonfire

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