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Testing. Advising. Assuring.



Title:

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1: 2009.

Notified Body No:

0833

Product Name:

"AC 630"

Report No:

WF 391882

Issue No:

1

Prepared for:

Jesmonite Limited, Love Lane Industrial Estate, Bishops Castle, Shropshire, SY9 5DW

Date: 16th November 2017



1. Introduction

This classification report defines the classification assigned to "AC630", a homogeneously dispersed polymer glass reinforced concrete product, in accordance with the procedures given in EN 13501-1:2007

2. Details of classified product

2.1 General

The product, "AC630", a polymer glass reinforced concrete, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "AC630", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

| General description | | Glass reinforced polymer concrete | | |
|--|------------------------------|--|--|--|
| Product reference of overall composite | | "AC630" | | |
| Name of manufacturer | | Jesmonite Limited | | |
| Thickness | | 10-15mm (stated by sponsor) | | |
| | | 14mm (determined by Exova Warringtonfire) | | |
| Weight per unit area | | 19-28kg/m ² (stated by sponsor) | | |
| | | 25.84kg/m ² (determined by Exova | | |
| | | Warringtonfire) | | |
| | Generic type | Polymer concrete | | |
| | Product reference | "AC630" | | |
| Dolymor | Detailed composition details | 1:1 cement & sand with 2% acrylic | | |
| Polymer concrete | Name of manufacturer | Jesmonite Limited | | |
| Concrete | Weight per unit area | 19 – 28.55kg/m ² | | |
| | Colour reference | "White" | | |
| | Flame retardant details | See note 1 below | | |
| | Generic type | Glass fibre | | |
| | Product reference | "AR Quadaxial Glass Fibre" | | |
| | Name of manufacturer | See note 2 below | | |
| Glass | Colour reference | "White" | | |
| reinforcement | Weight per unit area | 0.144kg/m ² | | |
| | Nature of the glass fibre | 2.5mm long glass fibre strands homogeneously | | |
| | - | dispersed throughout the polymer concrete | | |
| | Flame retardant details | See note 1 below | | |
| Mounting and fixing details | | The specimen was tested in direct contact with | | |
| | | the calcium silicate backing board (as specified | | |
| | | in EN 13283: 2010) | | |
| Brief description of manufacturing process | | See note 3 below | | |

- **Note 1:** The sponsor of the test has confirmed that no flame retardants were used in the production of this component.
- **Note 2:** The sponsor of the test was unwilling to provide this information.
- **Note 3:** The sponsor of the test was unable 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 | |
|-------------------------|----------------------|---|---|--|
| Exova warringtonfire | Jesmonite Limited | WF 390204 | EN 13823 | |
| Exova warringtonfire | Jesmonite Limited | WF 390674 | EN ISO 1716 | |

3.2 Test results

| Test method & | Parameter | No. tests | Results | | |
|---------------|---|--------------|---------------------------------------|-----------------------|--|
| test number | | | Continuous parameter - mean (m) | Compliance parameters | |
| EN 13823 | FIGRA _{0.2MJ} | | 3.43 | Compliant | |
| | FIGRA _{0.4MJ} | | 3.42 | Compliant | |
| | THR _{600s} | 3 | 0.83 | Compliant | |
| | LFS | | None | Compliant | |
| | SMOGRA | | 0.00 | Compliant | |
| | TSP _{600s} | | 2.88 | Compliant | |
| EN ISO 1716 | Polymer concrete with homogenously dispersed glass fibres PCS (a)(e) | 3 | 0.7099 MJ/kg | Compliant | |

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1: 2009.

4.2 Classification

The product, "AC630", a polymer glass reinforced concrete, 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:

d0

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

| Fire Behaviour | | Smoke Production | | | Flaming Droplets | |
|----------------|---|------------------|---|---|------------------|---|
| A2 | - | s | 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) Wall and ceiling applications
- ii) Used over any substrate

This classification is also valid for the following product parameters:

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Product thickness
Product density
Product composition

Any thickness allowed No variation allowed No variation allowed

5. Limitations

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

"The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Directive. The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate. The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested."

SIGNED APPROVED

Katie Williams

Certification Engineer

Janet Murrell

Technical Manager on behalf of **Exova warringtonfire**

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