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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:

"AC100"

Report No:

WF 399129

Issue No:

1

Prepared for:

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

Date:

26th April 2018



1. Introduction

This classification report defines the classification assigned to "AC100" a glass reinforced polymer concrete, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, "AC100", is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "AC100", 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		"AC100"		
Name of manufacturer		Jesmonite Limited		
Thickness		10-15mm (stated by sponsor)		
		13.75mm (determined by Exova Warringtonfire)		
Weight per unit area		23.43kg/m ² (determined by Exova Warringtonfire)		
	Generic type	Polymer concrete		
	Product reference	"AC100"		
Polymer concrete	Detailed composition details	Water based acrylic polymer modified gypsum		
	Name of manufacturer	Jesmonite Limited		
	Density	1700kg/m ³		
	Colour reference	"White"		
	Flame retardant details	See note 1 below		
	Generic type	Glass fibre		
	Product reference	"Quadaxial Glass Fibre"		
	Name of manufacturer	See note 2 below		
Glass	Colour reference	"White"		
reinforcement	Weight per unit area	0.144kg/m ²		
	Type of weave / cell	3 3		
	dimensions	Stitch length-2.5mm		
		Stich Type- Pillar		
	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 397220	EN ISO 11925-2	
Exova warringtonfire	Jesmonite Limited	WF 394207	EN 13823	

3.2 Test results

Test			Results		
method & test number	Parameter	No. tests	Continuous parameter - mean (m)	Compliance parameters	
EN ISO 11925-2 (30s exposure - surface)	F_s		Nil	Compliant	
	Flaming droplets/ particles	6	None	Compliant	
EN ISO 11925-2 (30s exposure – edge)	F_s		Nil	Compliant	
	Flaming droplets/ particles	6	None	Compliant	
EN 13823	FIGRA _{0.2MJ}		17.60	Compliant	
	FIGRA _{0.4MJ}		16.52	Compliant	
	THR _{600s}	2	2.18	Compliant	
	LFS	3	None	Compliant	
	SMOGRA		0.93	Compliant	
	TSP _{600s}		24.99	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, "AC100" a glass reinforced polymer concrete, in relation to its reaction to fire behaviour is classified:

В

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 applications, excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming Droplets	
В	-	s	1	,	d	0

i.e. B - s1, d0

Reaction to fire classification: B - s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

i) Construction applications used over any substrate with a density equal to or greater than 870kg/m³, having a minimum thickness of 12.5 mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).

This classification is also valid for the following product parameters:

Product thickness
Product weight per unit area / density
Product colour/pattern
Product composition
Product construction
No variation allowed
No variation allowed
No variation allowed

5. Limitations

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

SIGNED

Matthew Dale

Senior Certification Engineer Technical Department **APPROVED**

Janet Murrell

Technical Manager
Technical Department
on behalf of **Exova warringtonfire**

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