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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:**

"Jesmonite AC730 Flex Metal Composite"

## **Report No:**

WF 393978

**Issue No:** 

1

## Prepared for:

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

#### Date:

8<sup>th</sup> January 2018



### 1. Introduction

This classification report defines the classification assigned to "Jesmonite AC730 Flex Metal Composite", a coated 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, "Jesmonite AC730 Flex Metal Composite", a coated polymer glass reinforced concrete product, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

## 2.2 Product description

The product, "Jesmonite AC730 Flex Metal Composite", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	on	Coated glass reinforced polymer concrete				
Product reference of overall composite		"Jesmonite AC730 Flex Metal Composite"				
Name of manufacturer		Jesmonite Limited				
Thickness		10-15mm (stated by sponsor)				
		14mm (determined by <b>Exova</b>				
		Warringtonfire)				
Weight per unit area		19-28kg/m <sup>2</sup> (stated by sponsor)				
		25.84kg/m <sup>2</sup> (determined by <b>Exova</b>				
		Warringtonfire)				
	Generic type	Metallic coating				
	Product reference	"Flex Metal"				
	Name of manufacturer	Jesmonite Limited				
	Colour reference	"Bronze/Brass/Copper/Silver"				
		"Silver/Grey" (observed by <b>Exova</b>				
Coating		Warringtonfire)				
Coating	Number of coats	One				
	Application thickness per coat	1.0mm – 1.5mm				
	Application rate	0.12-0.24kg/m <sup>2</sup>				
	Application method	Brush applied into mould				
	Curing process per coat	Open air at room temperature				
	Flame retardant details	See note 1 below				
	Generic type	Polymer concrete				
<del> </del>	Product reference	"AC730"				
S Polymer	Detailed composition details	1:1 cement & sand with 3% acrylic				
	Name of manufacturer	Jesmonite Limited				
ည္ concrete	Weight per unit area	18.5 – 27.75kg/m <sup>2</sup>				
	Colour reference	"White"				
	Flame retardant details	See note 1 below				

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		Generic type	Glass fibre		
ět		Product reference	"AR Quadaxial Glass Fibre"		
Sheet	Glass	Name of manufacturer	See note 2 below		
11	reinforcement	Colour reference	"White"		
GF		Weight per unit area	1.92kg/m <sup>2</sup>		
		Flame retardant details	See note 1 below		
Мо	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		f 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 390203	BS EN 13823	
Exova warringtonfire	Jesmonite Limited	WF 393036	BS EN ISO 11925-2	

# 3.2 Test results

Test method &	Parameter	No. tests	Results		
test number			Continuous parameter - mean (m)	Compliance parameters	
	FIGRA <sub>0.2MJ</sub>	3	10.61	Compliant	
	FIGRA <sub>0.4MJ</sub>		7.24	Compliant	
EN 42002	THR <sub>600s</sub>		1.17	Compliant	
EN 13823	LFS		None	Compliant	
	SMOGRA		0.00	Compliant	
	TSP <sub>600s</sub>		5.11	Compliant	
EN ISO 11925-2	F <sub>s</sub>	6	Nil	Compliant	
(30s exposure - surface)	Flaming droplets/ particles		None	Compliant	
EN ISO 11925-2	F <sub>s</sub>	6	Nil	Compliant	
(30s exposure – edge)	Flaming droplets/ particles		None	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, "Jesmonite AC730 Flex Metal Composite", a coated polymer glass reinforced concrete product, 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 products 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 12mm 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 No variation allowed Product density No variation allowed Product composition No variation allowed

### 5. Limitations

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

**SIGNED** 

**Katie Williams** 

Junior Certification Engineer Technical Department

**APPROVED** 

Janet Murrell

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