



Fire Test Classification Report

European

Marlon ClickFix 1040

Test Result/Classification: **B-s1, d0**

Test Method/Standard: **EN 13501-1**

Exova Warringtonfire
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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:

"Marlon Clickfix 1040"

Report No:

303219

Issue No:

1

Prepared for:

Brett Martin Limited,
24 Roughfort Road
Mallusk
Co. Antrim
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Northern Ireland



Date:

22nd December 2010

1. Introduction

This classification report defines the classification assigned to "Marlon Clickfix 1040", a multiwall polycarbonate modular panel, in line with the procedures given in EN 13501-1:2007+A1: 2009.

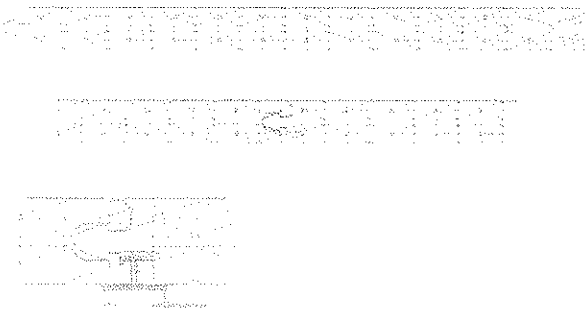
2. Details of classified product

2.1 General

The product, "Marlon Clickfix 1040", a multiwall polycarbonate modular panel, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "Marlon Clickfix 1040", a multiwall polycarbonate modular panel, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Multiwall polycarbonate modular panel
Trade name		"Marlon Clickfix 1040"
Name of manufacturer		Brett Martin Ltd.
Thickness		40mm (stated by sponsor) 40.18mm (determined by Exova Warringtonfire)
Weight per unit area		4.2kg/m ² (stated by sponsor) 4.13kg/m ² (determined by Exova Warringtonfire)
Orientation of ribs for purpose of test		Vertical
Diagram of cross section of multi-wall wall polycarbonate sheet		
Internal skin (test face)	Product reference	See Note 1 below
	Generic type	Polycarbonate
	Density	1.2g/cm ³
	Composition details	See Note 1 below
	Thickness	See Note 1 below
	Colour	"Transparent, Colourless"
	Flame retardant details	See Note 2 below

Continued on next page

Inner skin	Product reference	See Note 1 below
	Generic type	Polycarbonate
	Density	1.2g/cm ³
	Composition details	See Note 1 below
	Thickness	See Note 1 below
	Colour	"Transparent, Colourless"
	Flame retardant details	See Note 2 below
	Location	All horizontal and sloping inner membranes
Ribs	Product reference	See Note 1 below
	Generic type	Polycarbonate
	Density	1.2g/cm ³
	Composition details	See Note 1 below
	Thickness	See Note 1 below
	Colour	"Transparent, Colourless"
	Flame retardant details	See Note 2 below
	Rib spacing (centre to centre)	20mm
Outer, UV protected skin (reverse face)	Product reference	See Note 1 below
	Generic type	Polycarbonate
	Density	1.2g/cm ³
	Composition details	See Note 1 below
	Thickness	See Note 1 below
	Colour	"Transparent, Colourless"
	Flame retardant details	See Note 2 below
	UV protection details	See Note 1 below
Brief description of manufacturing process		Manufactured by extrusion
Mounting and fixing details	The specimens were tested clamped into a "window" frame manufactured from 5mm steel sheet. A one piece, 'L' shaped frame was placed into the test position with the product butted up behind it. A rectangular shaped frame was then butted up behind each wall of the sample and clamped into place at the top and bottom. 5mm thick steel angle (40mm x 40mm) was placed along the full length of the unexposed edge of the corner joint and clamped into position to secure it utilising bars at the top and bottom of the angle, each extending 200mm along each wing such that each could be retained by the clamps nearest to the corner joint.	
Air space details		A 180mm ventilated cavity was situated between the reverse face of each specimen and the backing board

Note 1. The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

Note 2. The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product / component.



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	Brett Martin Limited	WF 198734	EN ISO 11925-2
Exova warringtonfire	Brett Martin Limited	WF 198733	EN 13823

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN ISO 11925-2 (30s exposure - surface)	F _s	6	42	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA _{0.2MJ}	3	11.04	Compliant
	FIGRA _{0.4MJ}		8.71	Compliant
	THR _{600s}		0.91	Compliant
	LFS		None	Compliant
	SMOGRA		3.83	Compliant
	TSP _{600s}		31.12	Compliant

The product must be installed with no exposed edges. If the product is installed with exposed edges, the classification is not valid.

4. Classification and field of application

4.1 Reference of classification

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

4.2 Classification

The product, "Marlon Clickfix 1040", a multiwall polycarbonate modular panel, in relation to its reaction to fire behaviour is classified:

B

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	
B	-	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:

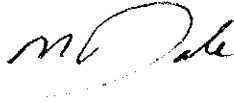
- i) Construction applications mechanically installed without the presence of a substrate and with a minimum air gap of 180mm.
- ii) The product must be installed with no exposed edges. If the product is installed with exposed edges, the classification is not valid.

This classification is also valid for the following product parameters:

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



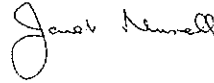
SIGNED



Matthew Dale

Certification Engineer
Technical Department

APPROVED



Janet Murrell

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

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