

Exova Warringtonfire  
Holmesfield Road  
Warrington  
WA1 2DS  
United Kingdom

T : +44 (0) 1925 655 116  
F : +44 (0) 1925 655 419  
E : warrington@exova.com  
W: www.exova.com



Testing. Advising. Assuring.

**Title:**

CLASSIFICATION OF  
REACTION TO FIRE  
PERFORMANCE  
IN ACCORDANCE WITH  
EN 13501-1: 2007

**Notified Body No:**

0833

**Product Name:**

"Alpolic / A2"

**Report No:**

199787

**Issue No:**

1

**Prepared for:**

Mitsubishi Plastics, INC  
Composite Materials dept.  
Technical Gr.  
1-2-2, Nihonbashi-hongoku-  
cho  
Chuo-ku, Tokyo, 103-0021,  
Japan

**Date:**

13<sup>th</sup> December 2010

## 1. Introduction

This classification report defines the classification assigned to "Alpolic / A2", a composite light weight panel, in accordance with the procedures given in EN 13501-1:2007

## 2. Details of classified product

### 2.1 General

The product, "Alpolic / A2", a composite light weight panel is defined as a composite panel suitable for construction applications, excluding flooring and linear pipe thermal insulation. The product falls within the scope of ETAG 016, Composite Light Weight Panels.

### 2.2 Product description

The product, "Alpolic / A2", a composite light weight panel, is fully described in the test reports provided in support of classification listed in Clause 3.1. A summarised description is given below.

General description	Self-supporting double skin metal faced composite panel.	
Product reference	Alpolic / A2	
Colour reference	White, Sparkling Red, Sparkling Black	
<b>Product construction</b>		
Top coat	Generic type	Fluorocarbon coating
	Colour reference	Clear
	Application method	Coil coating
	Curing method	Oven cure
	Flame retardant details	<b>See Note 1</b>
Base coat	Generic type	Fluorocarbon coating
	Colour reference	Sparkling Black, Sparkling Red, White
	Application method	Coil coating
	Curing method	Oven cure
	Flame retardant details	<b>See Note 1</b>
Primer coat	Generic type	polyester coating
	Colour reference	White
	Application method	Coil coating
	Curing method	Oven cure
	Flame retardant details	<b>See Note 1</b>
Aluminium facing	Thickness	0.5 mm
Corrosion control coat	Colour reference	Yellow green
	Application method	Coil coating
	Curing method	Oven cure
	Flame retardant details	<b>See Note 1</b>
	Adhesive	Application method
Flame retardant details		<b>See Note 1</b>
Core material	Generic type	Polyethylene based mineral filled core
	Thickness	3 mm
	Flame retardant details	The core composition is of a flame retardant nature
	<b>The tested product was symmetrical around the core</b>	

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.

### 3. Test reports/extended application reports & test results in support of classification

#### 3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova warringtonfire	Mitsubishi Plastics Inc.	193402; 196976	EN 13823
Exova warringtonfire	Mitsubishi Plastics Inc.	192525; 198700; 198701	EN ISO 1716
Exova warringtonfire	Mitsubishi Plastics Inc.	199786	EN/TS 15117

#### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN ISO 1716	External coating system	9	1.56 MJ/m <sup>2</sup>	Compliant
	Combined internal non-substantial component	6	1.77 MJ/m <sup>2</sup>	Compliant
	Core material	6	2.14 MJ/kg	Compliant
	product as a whole		2.02 MJ/kg	Compliant
EN 13823	FIGRA <sub>0.2MJ</sub>	3	10 W/s	Compliant
	THR <sub>600s</sub>		1.6 MJ	Compliant
	LFS		N	Compliant
	SMOGRA		1.7 m <sup>2</sup> /s <sup>2</sup>	Compliant
	TSP <sub>600s</sub>		41 m <sup>2</sup>	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

### 4.2 Classification

The product, "Alpolic / A2", a composite light weight panel, in relation to its reaction to fire behaviour is classified:

**Reaction to fire classification: A2-s1, d0**

### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Wall, ceiling, and facade applications
- ii) Used over any substrate of class A2 or better, including paper faced gypsum plasterboard

This classification is also valid for the following product parameters:

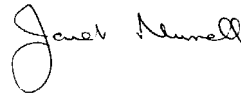
Metal facing material	any grade of aluminium
Metal facing thickness	0.5 – 1.0 mm nominal
Coating	any coating with a PCS value of 1.6 MJ/m <sup>2</sup> or less any colour
Core thickness	2 – 3 mm nominal
Product composition	within the limits tested
Product construction	No variation allowed
Joint construction	Up to 15 mm width with silicone sealant as tested Dry joint without sealant

**SIGNED**



.....  
**Frans Paap**  
Certification Engineer

**APPROVED**



.....  
**Janet Murrell**  
Technical Manager  
For and on behalf of:  
**Exova Warringtonfire**

This copy has been produced from a .pdf format electronic file that has been provided by Exova Warringtonfire to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of Exova Warringtonfire. The original signed paper version of this report is the sole authentic version. Only original paper versions of this report bear authentic signatures of the responsible Exova Warringtonfire staff.