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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:**

"Eurobond FR Class B1"

**Report No:**

WF 366741

**Issue No:**

1

**Prepared for:**

Euro Panel Products Pvt. Ltd.  
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Mumbai – 400092  
Maharashtra  
India.

**Date:**

31<sup>st</sup> May 2016



## 1. Introduction

This classification report defines the classification assigned to “Eurobond FR Class B1”, a polyvinyl diene fluoride (PVDF) coated mineral filled flame retardant grade aluminium composite panel, in line with the procedures given in EN 13501-1:2007+A1: 2009.

## 2. Details of classified product

### 2.1 General

The product, “Eurobond FR Class B1”, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The product, “Eurobond FR Class B1”, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Polyvinyl diene fluoride (PVDF) coated mineral filled flame retardant grade aluminium composite panel
Product reference		“Eurobond FR Class B1”
Name of manufacturer		<b>See Note 1 below</b>
Thickness		4.0±0.2mm (stated by sponsor) 4.0mm (determined by <b>Exova Warringtonfire</b> )
Weight per unit area		7.6kg/m <sup>2</sup> ±5% (stated by sponsor) 7.02kg/m <sup>2</sup> (determined by <b>Exova Warringtonfire</b> )
Product configuration		<ul style="list-style-type: none"> <li>• Coating (test face)</li> <li>• Aluminium</li> <li>• Adhesive</li> <li>• Core</li> <li>• Adhesive</li> <li>• Aluminium</li> </ul>
Coating (Test face)	Generic type	PVDF
	Product reference	“PVDF”
	Name of manufacturer	<b>See Note 1 below</b>
	Colour reference	“ER 908 Milky White”
	Number of coats	Two
	Application thickness per coat	25±3microns
	Specific gravity	<b>See Note 1 below</b>
	Application method	Thermo – cured coil coating
	Curing process per coat	<b>See Note 1 below</b>
Flame retardant details	<b>See Note 2 Below</b>	

Continued on next page

Aluminium	Generic type	Aluminium
	Product reference	"Aluminium Coil"
	Name of manufacturer	<b>See Note 1 below</b>
	Thickness	0.50±0.02mm
	Density	2.71g/cm <sup>3</sup>
	Colour reference	<b>See Note 1 below</b>
	Flame retardant details	The component is inherently flame retardant
Adhesive	Generic type	Polyethylene
	Product reference	"Adhesive Film"
	Name of manufacturer	Dupont
	Application thickness	<b>See Note 1 below</b>
	Application method	Lamination
	Flame retardant details	<b>See Note 2 below</b>
	Curing process	<b>See Note 1 below</b>
Core	Generic type	<b>See Note 1 below</b>
	Product reference	"Mineral Filled Non-Combustible/Fire Retardant Core"
	Detailed description	<b>See Note 1 below</b>
	Name of manufacturer	<b>See Note 1 below</b>
	Thickness	3.00±0.02mm
	Density	1.3 - 1.4g/cm <sup>3</sup>
	Colour reference	"White"
Flame retardant details	<b>See Note 1 below</b>	
Mounting and fixing details		An 80mm ventilated cavity was situated between the reverse face of the specimens and the calcium silicate backing board (as defined in EN 13238: 2010).
Joints		The product was tested without joints
Brief description of manufacturing process		Extrusion lamination

Note 1: The sponsor was unwilling to provide this information.

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

### 3. Test reports & 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
<b>Exova Warringtonfire</b>	Euro Panel Products Pvt. Ltd	WF 364261	EN ISO 11925-2
<b>Exova Warringtonfire</b>	Euro Panel Products Pvt. Ltd	WF 364260	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 <sub>s</sub>	6	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (30s exposure - edge)	F <sub>s</sub>	6	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA <sub>0.2MJ</sub>	3	3.10	Compliant
	FIGRA <sub>0.4MJ</sub>		3.10	Compliant
	THR <sub>600s</sub>		0.92	Compliant
	LFS		None	Compliant
	SMOGRA		1.37	Compliant
	TSP <sub>600s</sub>		31.45	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, "Eurobond FR Class B1", a polyvinyl diene fluoride (PVDF) coated mineral filled flame retardant grade aluminium composite 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>B</b>	-	<b>s</b>	<b>1</b>	,	<b>d</b>	<b>0</b>

**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 installed without a substrate
- ii) Construction applications used over any substrate with a density equal to or greater than  $870\text{kg/m}^3$ , 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	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

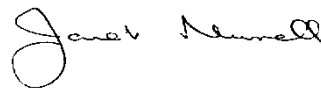


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#### Matthew Dale

Senior Certification Engineer  
Technical Department

#### APPROVED



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#### Janet Murrell

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

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