

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+A1: 2009.

Notified Body No:

0833

Product Name:

"Aludecor – Firewall"

Report No:

WF 332968

Issue No:

2

Prepared for:

Aludecor Lamination PVT.
Limited, Suite No. 52 5th Floor,
Martin Burn Building, 1 RN
Mukherjee Road, Kolkatta,
India, 700001

Date:

2nd December 2013



0249

1. Introduction

This classification report defines the classification assigned to “Aludecor – Firewall”, a firewall composite panel product, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, “Aludecor – Firewall”, a firewall composite panel product, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, “Aludecor – Firewall”, a firewall composite panel product, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		A “Firewall composite panel” which was stated by Aludecor to be used for both interior and exterior purposes
Product reference of overall composite		“Aludecor – Firewall”
Name of manufacturer of overall composite		Aludecor Lamination PVT Ltd
Thickness of overall composite		4.1mm (stated by sponsor) 4.08mm (determined by Exova Warringtonfire)
Weight per unit area of overall composite		7.55kg/m ² (stated by sponsor) 7.20kg/m ² (determined by Exova Warringtonfire)
Product configuration		<ul style="list-style-type: none"> • PVDF Coating • Primer Coating • Aluminium Sheet • Adhesive • Core • Adhesive • Aluminium Sheet • Service Coat
PVDF Coating	Generic type	Polyvinylidene fluoride coating
	Product reference	“AD 508”
	Name of manufacturer	PPG Asian
	Colour reference	“ALUGOLD AD 508”
	Number of coats	One
	Application rate	24.5g/m ²
	Application method	Roller coating
	Curing process per coat	Hot air dry air
Flame retardant details		See Note 1 Below

Continued on next page



Primer Coating	Generic type	Polyurethane primer
	Product reference	"Yellow Primer"
	Name of manufacturer	PPG Asian
	Colour reference	"Yellow"
	Number of coats	One
	Application rate	24.5g/m ²
	Application method	Roller coating
	Curing process per coat	See Note 1 Below
	Flame retardant details	See Note 1 Below
Aluminium sheet	Generic type	Aluminium rolled sheet
	Product reference	"AA 3105"
	Name of manufacturer	Hindalco Limited
	Weight per unit area	2.8kg/m ²
	Thickness	0.5mm
Adhesive	Generic type	Low density polyethylene and ethylene acrylate polymer mix
	Product reference	"FR adhesive film"
	Name of manufacturer	Ecoplast Ltd
	Colour reference	"Translucent"
	Application rate	65g/m ²
	Application method	Hot roll lamination
Core	Flame retardant details	See Note 1 Below
	Generic type	Fire retardant low density polyethylene material
	Product reference	"FR Core"
	Composition details	Low Density Polyethylene = 23 % Magnesium Hydroxide = 72% Additives = 5%
	Name of manufacturer	Aludecor Lamination PVT Ltd
	Thickness	3.17mm
	Weight per unit area	4.75kg/m ²
	Colour reference	"White"
Flame retardant details	See Note 2 Below	
Service coating	Generic type	Polyurethane primer
	Product reference	"Gray Primer"
	Name of manufacturer	PPG Asian
	Colour reference	"Grey"
	Number of coats	One
	Application rate	24.4g/m ²
	Application method	Roller Coating
	Curing process per coat	Hot air oven
Flame retardant details	See Note 1 Below	
Brief description of manufacturing process		See Note 2 Below

Note 1: The sponsor of the test was unable to provide this information

Note 2: 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 & 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	Aludecor Lamination PVT. Limited	WF 335211	EN ISO 11925-2
Exova warringtonfire	Aludecor Lamination PVT. Limited	WF 331548	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	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (30s exposure - edge)	F _s	6	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA _{0.2MJ}	3	9.29	Compliant
	FIGRA _{0.4MJ}		9.29	Compliant
	THR _{600s}		1.15	Compliant
	LFS		None	Compliant
	SMOGRA		0.00	Compliant
	TSP _{600s}		8.74	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, "Aludecor – Firewall", a firewall composite panel product, 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 used over any substrate with a density equal to or greater than 870kg/m^3 , having a minimum thickness of 12mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).
- ii) Construction applications mechanically installed without the presence of a substrate with an air gap.

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

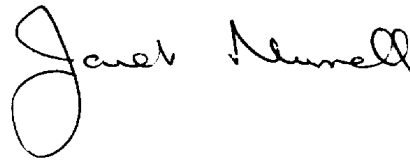
SIGNED



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Matthew Dale
Certification Engineer
Technical Department

APPROVED



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

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