

Title:

CLASSIFICATION OF  
REACTION TO FIRE  
PERFORMANCE  
IN ACCORDANCE WITH  
EN 13501-1:2018

Notified Body No:

0833

Product Name:

“Super Durable PPC  
Aluminium”

Report No:

WF 419155

Issue No:

1

Prepared for:

AkzoNobel Powder  
Coatings  
Stoneygate Lane,  
Felling,  
Gateshead,  
Tyne and Wear,  
NE10 0JY

Date:

22<sup>nd</sup> October 2019

## 1. Introduction

This classification report defines the classification assigned to “Super Durable PPC Aluminium”, a powder coated solid aluminium panel, in line with the procedures given in EN 13501-1:2018.

## 2. Details of classified product

### 2.1 General

The product, “Super Durable PPC Aluminium”, a powder coated solid aluminium panel, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The product, “Super Durable PPC Aluminium”, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Powder coated solid aluminium panel
Product reference		“Super Durable PPC Aluminium”
Name of manufacturer		AkzoNobel Powder Coatings
Thickness of composite		1mm (Stated by sponsor) 1.1mm (determined by Warringtonfire)
Density of composite		0.25g/cm <sup>3</sup> (determined by Warringtonfire)
Coating	Generic type	Polyester Powder Coating
	Product reference	“Interpon D2525”
	Name of manufacturer	AkzoNobel Powder Coatings
	Number of coats	One
	Thickness	60-90 microns
	Weight per unit area	0.065-0.100kg/m <sup>2</sup>
	Density	1.3g/cm <sup>3</sup>
	Application method	Automatic electrostatic spray
	Curing process per coat	20 minutes at 200°C
Flame retardant details		See Note 1 below
Substrate	Generic type	Aluminium solid panel
	Product reference	No specific product reference assigned
	Detailed description	1050 grade material
	Name of manufacturer	See Note 2 below
	Thickness	1mm
	Weight per unit area	2.7kg/m <sup>2</sup>
Flame retardant details		This component is inherently flame retardant
Mounting and fixing details		A 40mm ventilated cavity was situated between the reverse face of the specimens and the calcium silicate backing board
Brief description of manufacturing process		See Note 3 below

Note 1: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product / component.

Note 2: The sponsor was unable to provide this information.

Note 3: The sponsor was unwilling 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 Nos.	Test method
Warringtonfire	AkzoNobel Powder Coatings	WF 418986-ISSUE 2	EN ISO 1716
Warringtonfire	AkzoNobel Powder Coatings	WF 418985	BS EN 13823

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - Max/Mean (m)	Compliance parameters
BS EN 13823	FIGRA <sub>0.2MJ</sub>	3	0.00 W/s	Compliant
	FIGRA <sub>0.4MJ</sub>		0.00 W/S	Compliant
	THR <sub>600s</sub>		0.38 MJ	Compliant
	SMOGRA		0.00 m <sup>2</sup> s <sup>2</sup>	Compliant
	TSP <sub>600s</sub>		34.96 m <sup>2</sup>	Compliant
	Lateral Flame Spread to End of Specimen?		None	Compliant
	Fall of Flaming Drop/Particle?		None	Compliant
	Flaming of Fallen Particle Exceeding 10s?		None	Compliant
EN ISO 1716	Coating - PCS (b)	3	2.3051 MJ/m <sup>2</sup>	Compliant
	Substrate – PCS (a)	Deemed to satisfy (0.00)		Compliant
	For the product as a whole – PCS (e)	3	0.8233 MJ/kg	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 13501-1:2018.

##### 4.2 Classification

The product, to "Super durable PPC Aluminium", a Powder coated solid aluminium panel, in relation to its reaction to fire behaviour is classified:

A2

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	
A2	-	s	1	,	d	0

i.e. A2 – s1 , d0

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

##### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications applied over any substrate with a minimum density of 870kg/m<sup>3</sup>, having a minimum thickness of 11mm and a fire performance of A2-s1,d0 or better

This classification is also valid for the following product parameters:

Aluminium thickness	1mm and above
Coating colour	No variation allowed
Product density	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed
Coating application rate	Tested value or below allowed
Air gap details	≥0mm allowed

5. Limitations

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

SIGNED



.....  
Euan Gardner  
Junior Certification Engineer  
Technical Department

APPROVED



.....  
Matthew Dale  
Senior Certification Engineer  
Technical Department  
On behalf of Warringtonfire

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