

Title:

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

Product Name:

“Bailey Platinum
Rainscreen”

Report No:

WF 419146

Issue No:

2

Prepared for:

Bailey,
Blatchford Close,
Horsham,
West Sussex,
RH13 5RF

Date:

20th January 2020



1. Introduction

This classification report defines the classification assigned to “Bailey Platinum Rainscreen”, a powder coated aluminium panel, in line with the procedures given in EN 13501-1:2018.

2. Details of classified product

2.1 General

The product, “Bailey Platinum Rainscreen”, a powder coated aluminium panel, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, “Bailey Platinum Rainscreen”, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Powder coated aluminium panel
Product reference		“Bailey Platinum Rainscreen”
Name of manufacturer		Bailey Total Building Envelope
Thickness		3mm (stated by sponsor) 3.24mm (determined by Exova Warringtonfire)
Weight per unit area		9.08kg/m ² (determined by Warringtonfire)
Coating (test face)	Generic type	Polyester powder coat
	Product reference	See Note 1 below
	Name of manufacturer	Akzo Nobel
	Colour reference	“RAL 7012” (stated by sponsor) “Grey” (observed by Warringtonfire)
	Number of coats	One
	Application thickness per coat	60-90 microns
	Weight per unit area	100g/m ²
	Application method	Free flowing dry powder spray
	Flame retardant details	See Note 2 below
	Curing process per coat	Cure powder in oven at 220°C for 20 minutes then 5 minutes cool to room temperature
Aluminium Panel	Generic type	1050 Grade Aluminium
	Product reference	See Note 1 below
	Detailed description / composition details	3mm sheet formed into panel with 3.8mm radius edge folds
	Name of manufacturer	Bailey Total Building Envelope
	Thickness	3mm
	Weight per unit area	8.1kg/m ²
	Density	2700kg/m ³
	Flame retardant details	This component is inherently flame retardant

Continued on next page...

Brief description of manufacturing process	Cut and fold aluminium sheet. Clean and treat panel prior to powder coating. Apply dry powder to seen faces of panel (electrostatically charged). Cure powder in oven at 220°C for 20 minutes. Allow to cool before packing
Mounting and fixing details	This product was tested with a 40mm air gap to an EN 13238 standardised Calcium Silicate backing board

Note 1: The sponsor of the test 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 & test results in support of classification.

3.1 Test reports.

Name of Laboratory	Name of sponsor	Test reports Nos.	Test method
Warringtonfire	Bailey	WF 388356-Issue 2	EN ISO 1716:2010
Warringtonfire	Bailey	WF 422948-ISSUE 2	EN ISO 1716: 2018 Composite Report
Warringtonfire	Bailey	WF 420045-ISSUE 2	BS EN 13823:2010+A1:2014

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - Max/Mean (m)	Compliance parameters
BS EN 13823	FIGRA _{0.2MJ}	3	0 W/s	-
	FIGRA _{0.4MJ}		0 W/S	-
	THR _{600s}		0.3 MJ	-
	SMOGRA		0 m ² s ²	-
	TSP _{600s}		17 m ²	-
	Lateral Flame Spread to End of Specimen?		-	Compliant
	Fall of Flaming Drop/Particle?		-	Compliant
	Flaming of Fallen Particle Exceeding 10s?		-	Compliant

EN ISO 1716	Coating - PCS (b/c)*	3	19.3 MJ/kg (b) 1.9 MJ/m ² (c)	-
	Al Panel – PCS (a)	Deemed to satisfy (0.0 MJ/kg)		-
	For the product as a whole – PCS (e)	N/a	0.2 MJ/kg	-
* The product did not pass the requirements for PCS (b), however, the product is deemed to be compliant if in accordance with Table 1, Note C of EN 13501-1, any external non-substantial component having a PCS (c) ≤ 2.0 MJ/m ² , provided that the product satisfies the following criteria of EN 13823: FIGRA ≤ 20 W/s & LFS < edge of specimen & THR ≤ 4.0MJ & s1 & d0				

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, “Bailey Platinum Rainscreen”, a powder coated aluminium panel, in relation to its reaction to fire behaviour is classified:

Reaction to fire classification: A1

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/m³, having a minimum thickness of 9mm and a fire performance of A2-s1,d0 or better

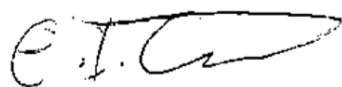
This classification is also valid for the following product parameters:

Aluminium thickness	3mm and greater allowed
Aluminium weight per area	9.08kg/m ² and greater allowed
Product colour	“Grey”
Coating application rate	100g/m ² or lower allowed
Product composition	No further variation allowed
Product construction	No further variation allowed
Joints	Allowed with and without both vertical and horizontal joints
Air gap details	≥40mm allowed

5. Limitations

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

SIGNED



.....
Euan Gardner
Certification Engineer
Technical Department

APPROVED



.....
Matthew Dale
Principal Engineer
Technical Department
On behalf of **Warringtonfire**

Issue 2: Change made to product reference at request of client. Modification of test report references to Issue 2's in Table 3.1. Correction of decimal points in Table 3.2. Removal of Notified Body Number. Correction to Air gap details. E Gardner. 25th February 2021.

This copy has been produced from a .pdf format electronic file that has been provided by 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 Warringtonfire. The pdf copy supplied is the sole authentic version of this document. All pdf versions of this report bear authentic signatures of the responsible Warringtonfire staff.

This report may only be reproduced in full. Extracts or abridgements of reports shall not be published without permission of Warringtonfire. All work and services carried out by Warringtonfire Testing and Certification Limited are subject to, and conducted in accordance with, the Standard Terms and Conditions of Warringtonfire Testing and Certification Limited, which are available at <https://www.element.com/terms/terms-and-conditions> or upon request.