

REACTION TO FIRE - CLASSIFICATION REPORT No EUI-23-000128

1. INTRODUCTION

This classification report defines the classification assigned to Unity Aluminium Rainscreen Panel with Polyester Powder Coating, in accordance with the procedures given in BS EN 13501-1:2018.

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

Sponsor :	Metalline (Services) Ltd. Hollies Park Road WS11 1DB United Kingdom
Product name:	Unity Aluminium Rainscreen Panel with Polyester Powder Coating
Classification report No.:	EUI-23-000128
Issue number:	1
Date of issue:	26 October, 2023

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2. DOCUMENT TRACKING

<i>Revision Index.</i>	<i>Modification</i>
0	Original document

3. DESCRIPTION OF THE PRODUCT

3.1. GENERAL

The product, Unity Aluminium Rainscreen Panel with Polyester Powder Coating, is defined as an aluminium coated panel.

3.2. PRODUCT DESCRIPTION

The product, Unity Aluminium Rainscreen Panel with Polyester Powder Coating, is described below or is described in the reports provided in support of classification listed in 3.1.

Product description	
Trade mark	Unity Aluminium Rainscreen Panel with Polyester Powder Coating
Composition	Polyester powder coated aluminium panel Detailed information available in test report but withheld from this report for commercially sensitive reasons
Thickness	Coating : 60 – 120 µm Aluminium : 3 mm
Mass per unit area	8.21 – 8.32 kg/m ²
Density	~ 2710 kg/m ³
Colour	Various

4. REPORTS AND RESULTS IN SUPPORT OF THIS CLASSIFICATION

4.1. REPORTS

Name of Laboratory	Name of sponsor	Report ref. no	Test method and date field of application rules and date
EFFECTIS UK/Ireland	Metalline (Services) Ltd.	EUI-23-SBI-000128	BS EN 13823:2020+A1:2022
EFFECTIS France	Metalline (Services) Ltd.	EFR-21-HC-001664A	NF EN ISO 1716 :2018

4.2. RESULTS

Test method and test number	Parameter	No. Tests ^{a)}	Results			
			Continuous parameter - mean (m)		Compliance with parameters	
BS EN 13823:2020+A1:2022 EUI-23-SBI-000128	FIGRA _{0,2 MJ} (W/s)	6	0		-	
	FIGRA _{0,4 MJ} (W/s)		0		-	
	THR _{600 s} (MJ)		0.3		-	
	LFS		-		Compliant	
	SMOGRA		0		-	
	TSP _{600s} (m ²)		22		-	
	Flaming droplets or particles		-		Compliant	
NF EN ISO 1716 :2018 EFR-21-HC-001664A	PCS (MJ/kg) GCV (MJ/kg)	3	Red coating	22.9 MJ/kg	3.7 MJ/m ²	-
		1	Black coating	19.3 MJ/kg	3.4 MJ/m ²	
		1	White Coating	17.5 MJ/kg	3.5 MJ/m ²	
		-	Aluminium Sheet*	0*	0*	
		-	Product as a whole	0.4 MJ/kg	3.7 MJ/m ²	

a) Not for extended application

(-) means not applicable

* Metallic components shall not be tested. Their gross heat of combustion shall be deemed to be zero according to BS EN ISO 1716:2018

5. CLASSIFICATION AND FIELD OF APPLICATION

5.1. REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with BS EN 13501-1:2018.

5.2. CLASSIFICATION

The product, Unity Aluminium Rainscreen Panel with Polyester Powder Coating, 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 products excluding floorings and linear pipe thermal insulation products is:

Fire behaviour		Smoke production			Flaming droplets	
A2	-	s	1	,	d	0

i.e. **A2-s1,d0**

Reaction to fire classification	A2-s1,d0
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5.3. FIELD OF APPLICATION

According to the standard BS EN 13501-1, this classification is valid for the following product parameters and end-use applications:

Thickness of the aluminium	Valid for 3 mm or greater
Thickness of the coating	Valid for 60 - 120 μm
Density	Valid for the tested density
Type of product/ facings	Valid for the tested type of product only (same formulation)
Asymmetry	Valid for fire on either side
Colour	Valid for all colours
Substrate	Valid for any substrate of class A1 or A2-s1,d0 with a density of at least 37.5 kg/m^3
Airgap/ cavities	Valid with airgap/ cavities of at least 15 mm between the product and the substrate
Size and positioning of the test specimen	Valid for all product sizes
Joints	Valid for horizontal and vertical joints as tested

6. LIMITATIONS

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

SIGNED



Vitor Oliveira
Project Leader

APPROVED



Damien Flammier
Technical Manager