

Title:

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

Notified Body No:

0833

Product Name:

“Aluminium Decking System”

Report No:

WF 432326

Issue No:

1

Prepared for:

Mextru Ltd

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Hazel Road
Four Marks
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Date:

7th October 2020

1. Introduction

This classification report defines the classification assigned to "Aluminium Decking System", a coated aluminium decking product, in line with the procedures given in EN 13501-1: 2018.

2. Details of classified product

2.1 General

The product, "Aluminium Decking System", is defined as being suitable for flooring applications.

2.2 Product description

The product, "Aluminium Decking System", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Coated aluminium decking
Product reference of overall composite		"Aluminium Decking System"
Name of manufacturer of overall composite		Mextru Ltd
Thickness of overall composite		2.20-2.45mm (stated by sponsor) 2.55mm (determined by Warringtonfire)
Density		2710kg/m ³ (stated by sponsor) 4040.29kg/m ³ (determined by Warringtonfire)
Overall profile depth		30mm (determined by Warringtonfire)
Coating (Test face)	Generic type	See Note 1 below
	Product reference	See Note 1 below
	Name of manufacturer	See Note 1 below
	Colour reference	"Grey / White / Black"
	Number of coats	One
	Application thickness	See Note 1 below
	Density / specific gravity	1600kg/m ³
	Application method	Power coating
	Curing process	Heating
	Flame retardant details	See Note 2 below
Aluminium	Generic type	Aluminium 6063
	Product reference	"Aluminium Decking"
	Name of manufacturer	Mextru Ltd
	Thickness	2.20 – 2.45mm
	Density	2700kg/m ³
	Colour reference	"Silver"
	Flame retardant details	The substrate is inherently flame retardant

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Substrate	The specimens were tested with a nominally 8mm thick fibre cement board (as specified in EN 13238: 2010) present.
Brief description of manufacturing process	Extruded aluminium board with powder coated paint finish

Note 1: The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the test report and are instead held on the confidential file relating to this investigation.

Note 2: The sponsor was unable 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/extended application report Nos.	Test method / extended application rules & date
Crepim	Protech-Oxyplast Belgium NV	DO-19-0882\A-R1	NF EN ISO 1716: 2018
Warringtonfire	Mextru Ltd	WF 432007 (Issue 2)	EN ISO 9239-1: 2010

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN ISO 9239-1	Critical flux	3	$\geq 11.0 \text{ kW/m}^2$	-
	Smoke		4.27 % min	-
NF EN ISO 1716	Coating - PCS (b)	3	2.2656 MJ/m ² (17.7 MJ/Kg)	-
	Aluminium - PCS (a)	Deemed to satisfy (0.00)		-
	For the product as a whole PCS (d)	Summary result	0.3734 MJ/Kg	-

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 9 of EN 13501-1: 2018.

4.2 Classification

The product, "Aluminium Decking System", a coated aluminium decking product in relation to its reaction to fire behaviour is classified:

A2_{fl}

The additional classification in relation to smoke production is:

s1

The format of the reaction to fire classification for flooring applications is:

Fire Behaviour		Smoke Production	
A2_{fl}	-	s	1

i.e. **A2_{fl} – s1**

Reaction to fire classification: A2_{fl} – s1

4.3 Field of application

This classification is valid for the following end use applications:

- i) Floorcovering applications applied over any substrate with a minimum density of 1800kg/m³, having a minimum thickness of 6mm and a fire performance of A2_{fl}-s1 or better.
- ii) Installed with or without adhesive.

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product weight per unit area	No variation allowed
Coating colour/pattern	No variation allowed
Coating thickness	No variation allowed
Coating application rate	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed

5. Limitations

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

SIGNED



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Stacey Deeming

Principal Engineer
Technical Department

APPROVED



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Matthew Dale

Principal Certification Engineer
Technical Department
on behalf of [Warringtonfire](#)

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