

Title:

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

Notified Body No:

0833

Product Name:

"A-DEK20"

Report No:

WF 424311

Issue No:

1

Prepared for:

Ecodek,
Unit 13,
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Wrexham,
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Date:

12th February 2020

1. Introduction

This classification report defines the classification assigned to "A-DEK20", a powder coated aluminium decking profile, in accordance with the procedures given in EN 13501-1:2018.



2. Details of classified product

2.1 General

The product, "A-DEK20", a powder coated aluminium decking profile, is defined as being suitable for floorcovering applications.

2.2 Product description

The product, "A-DEK20", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Powder coated aluminium decking profile
Product reference		"A-DEK20"
Name of manufacturer		Ecodek
Profile thickness		20mm (stated by sponsor) 20.16mm (determined by Warringtonfire)
Overall weight per unit area		13.3kg/m ² (determined by Warringtonfire)
Coating	Generic type	Polyester powder coating
	Product reference	"SL316G"
	Name of manufacturer	Akzo Nobel
	Colour reference	"RAL7016 – Anthracite Grey"
	Number of coats	Single coat
	Application thickness	60-100um
	Application rate	0.145kg/m ²
	Density	1.45g/cm ³
	Application method	Spray applied
	Curing process	Heat cured (170 - 190°C)
Flame retardant details		See Note 1 Below
Aluminium	Generic type	Aluminium
	Product reference	"Alloy grade 6063 T6"
	Name of manufacturer	Cortizo
	Thickness	2.5mm
	Weight per unit area	3.002kg/m ²
	Colour reference	RAL7016 – Anthracite Grey
	Flame retardant details	
Diagram of profile		
Diagram of channel cover		
Brief description of manufacturing process		Billet aluminium extruded through die blocks

Note 1: The sponsor of the test has confirmed that no flame retardants were used in the production of this component.

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
Warringtonfire	Ecodek	WF 423366 – Issue 2	EN ISO 9239-1
Warringtonfire	Ecodek	WF 421075 – Issue 2	EN ISO 1716
Warringtonfire	Ecodek	WF 424068 - Issue 2	EN ISO 1716 Composite report

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance with parameters
EN ISO 9239-1	Critical flux	3	$\geq 11.0 \text{ kW/m}^2$	Compliant
	Smoke		2.36 %min	Compliant
EN ISO 1716	Coating - PCS (b)	3	2.9687 MJ/m^2	Compliant
	Aluminium – PCS (a)	Deemed to satisfy (0.00)		Compliant
	For the product as a whole – PCS (e)	3	0.9434 MJ/kg	Compliant

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, "A-DEK20", a powder coated aluminium decking profile, 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 floorings 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) Flooring applications

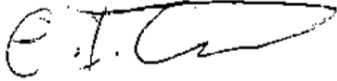
This classification is also valid for the following product parameters:

Aluminium thickness	2.5mm and greater allowed
Aluminium weight/area	3.002kg/m ² and greater allowed
Coating application rate	0.145kg/m ² and below allowed
Coating application thickness	100um and below allowed
Coating type	No variation allowed
Profile design and thickness	No variation allowed
Floorcovering composition	No further variation allowed
Floorcovering construction	No further variation allowed

5. Limitations

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

SIGNED



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Euan Gardner
Certification Engineer
Technical Department

APPROVED



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Stacey Deeming
Principal Certification Engineer
Technical Department
On behalf of **Warringtonfire**

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