

**Title:**

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

**Notified Body No:**

0833

**Product Name:**

"MyDek Decking Systems"

**Report No:**

WF 419229

**Issue No:**

3

**Prepared for:**

MyDek Limited,  
Regus House,  
Fairbourne Drive,  
Milton Keynes,  
MK10 9RG

**Date:**

13<sup>th</sup> December 2019

**1. Introduction**

This classification report defines the classification assigned to “MyDek Decking Systems”, a polyester powder coated aluminium profile, in line with the procedures given in EN 13501-1:2018.

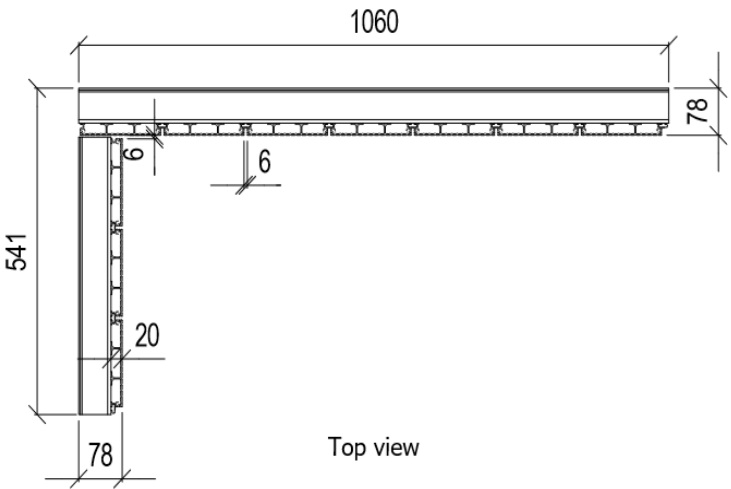
**2. Details of classified product**

**2.1 General**

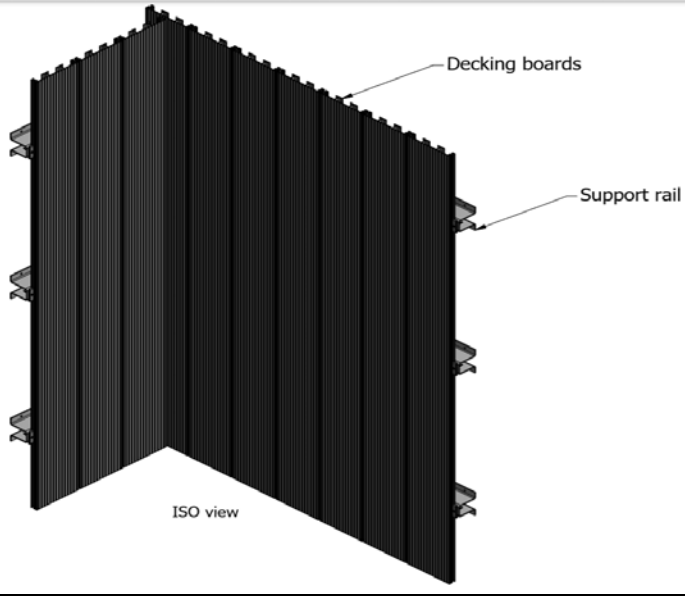
The product, “MyDek Decking Systems”, a polyester powder coated aluminium profile, is defined as being suitable for construction applications.

**2.2 Product description**

The product, “MyDek Decking Systems”, a polyester powder coated aluminium profile, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	Polyester powder coated profile
Product reference of overall composite	“MyDek Decking Systems”
Name of manufacturer of overall composite	MyDek Limited
Thickness of overall composite	20mm (determined by Warringtonfire)
Density	1700kg/m <sup>3</sup> (stated by sponsor) 416.28kg/m <sup>3</sup> (determined by Warringtonfire)
Profile of tested specimens	 <p style="text-align: right;">Top view</p>

*Continued on next page...*

<p>Diagram of tested specimens</p>	 <p>The diagram shows a series of vertical decking boards supported by a rail. The boards are arranged in a row, and the rail is positioned below them. The view is labeled 'ISO view'. Labels 'Decking boards' and 'Support rail' point to the respective components.</p>	
<p>Optional Graphical print</p>	<p>Generic type</p>	<p>Film applied print</p>
	<p>Product reference</p>	<p><b>See Note 2 below</b></p>
	<p>Name of manufacturer</p>	<p><b>See Note 2 below</b></p>
	<p>Colour reference</p>	<p>Any</p>
	<p>Number of coats</p>	<p>One</p>
	<p>Density / specific gravity</p>	<p>&lt;1 g/m<sup>3</sup></p>
	<p>Application method</p>	<p>Film applied</p>
	<p>Curing process per coat</p>	<p>Oven cured at 200°C</p>
	<p>Flame retardant details</p>	<p><b>See Note 1 Below</b></p>
<p>Coating (test face)</p>	<p>Generic type</p>	<p>Polyester powder coating</p>
	<p>Product reference</p>	<p><b>See Note 2 below</b></p>
	<p>Name of manufacturer</p>	<p><b>See Note 2 below</b></p>
	<p>Colour reference</p>	<p>Any</p>
	<p>Number of coats</p>	<p>One</p>
	<p>Thickness per coat</p>	<p>80 micron</p>
	<p>Density</p>	<p>1400kg/m<sup>3</sup></p>
	<p>Application method</p>	<p>Spray</p>
	<p>Curing process per coat</p>	<p>Oven cured</p>
<p>Flame retardant details</p>	<p><b>See Note 1 below</b></p>	
<p>Aluminium profile</p>	<p>Generic type</p>	<p>Aluminium</p>
	<p>Product reference</p>	<p><b>See Note 2 below</b></p>
	<p>Detailed description / composition details</p>	<p>Solid aluminium extrusion 144 x 20mm</p>
	<p>Name of manufacturer</p>	<p>MyDek Limited</p>
	<p>Thickness</p>	<p>2.5mm</p>
	<p>Weight per unit area</p>	<p>11kg/m<sup>2</sup></p>
	<p>Colour reference</p>	<p>N/A</p>
	<p>Flame retardant details</p>	<p><b>See Note 1 below</b></p>
<p>Mounting and Fixing details</p>	<p>Tested freestanding with an 80mm air gap between the reverse side of the sample and a Calcium Silicate backing board</p>	
<p>Brief description of manufacturing process</p>	<p>Powder coating applied to aluminium product using static spray process and then oven-baked to cure</p>	

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

**Note 2:** The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

### 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	MyDek Limited	WF 419209 (full) WF 419210 (indic)	EN ISO 1716
Warringtonfire	MyDek Limited	WF 421728 (full) WF 421729, WF 422239 (indic)	BS EN 13823
Warringtonfire	MyDek Limited	WF 419230 - Issue 3	EN 15117

### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - Max/ Mean (m)	Compliance with parameters
BS EN 13823	FIGRA <sub>0.2MJ</sub>	3 (full) 1 (indic)	1.41 W/s (Red – full) 0.00, 0.00 W/s (indic)	Compliant
	FIGRA <sub>0.4MJ</sub>		1.41 W/S (Red – full) 0.00, 0.00 W/S (indic)	Compliant
	THR <sub>600s</sub>		0.55 MJ (Red – full) 0.12, 0.24 MJ (indic)	Compliant
	LFS		None (Red – full) None (indic)	Compliant
	SMOGRA		0.00 m <sup>2</sup> s <sup>2</sup> (Red – full) 0.00, 0.00 m <sup>2</sup> s <sup>2</sup> (indic)	Compliant
	TSP <sub>600s</sub>		21.50 m <sup>2</sup> (Red – full) 25.00, 28.62 m <sup>2</sup> (indic)	Compliant
	Flaming droplets lasting > 10s		None (Red – full) None (indic)	Compliant
EN ISO 1716	Coating - PCS (b)	3 (full) 1 (indic)	2.49 MJ/m <sup>2</sup> (Formal - Sublimated) 2.59 MJ/m <sup>2</sup> (Indicative - Non-sublimated)	Compliant
	Aluminium – PCS (a)		Deemed to satisfy (0.00)	Compliant
	For the product as a whole – PCS (e)	N/a	0.224 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, "MyDek Decking Systems", a polyester powder coated aluminium profile, 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:

Fire Behaviour		Smoke Production			Flaming Droplets	
<b>A2</b>	-	<b>s</b>	<b>1</b>	,	<b>d</b>	<b>0</b>

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) Freestanding applications
- ii) Construction applications

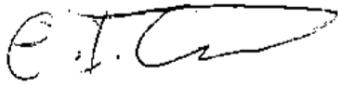
This classification is also valid for the following product parameters:

Coating colour	Any allowed
Graphical print presence	Allowed with or without
Coating thickness	80 microns and below
Coating density	1400kg/m <sup>3</sup> only allowed
Aluminium profile thickness	2.5mm and greater allowed
Composite thickness and width	20mm and greater allowed if Aluminium only increased
Product composition	No further variation allowed
Product construction	No further variation allowed
Air gap details	≥ 80mm 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**

**Issue 2:** Correction to product description at request of client. E Gardner. 16<sup>th</sup> December 2019.

**Issue 3:** Correction to product description at request of client. E Gardner. 6<sup>th</sup> January 2020.

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.

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.