

Pretty Plastic Panels (Second High)

# Fire Classification 2024



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

Classification no.	2024-Efectis-R000425[Rev.1]
Sponsor	Pretty Plastic Karperweg 41 1075 LB AMSTERDAM THE NETHERLANDS
Product name	<b>Second High recycled PVC tile on aluminium frame</b>
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## 1. INTRODUCTION

This classification report defines the classification assigned to **Second High recycled PVC tile on aluminium frame**, in accordance with the procedures given in EN 13501-1:2018.

### 1.1 REVISION INFORMATION

This is a revised version of this report. This version supersedes all previous versions of this reports that are hereby withdrawn. Details on the changes can be found in the tables below.

*Table 1.1: Revision information*

Issue	Date of issue	Report no.
First issue	May of 2024	2024-Efectis-R000425
First revision	June of 2024	2024-Efectis-R000425[Rev.1]

#### 1.1.1 First revision detailed information

*Table 1.2: First revision information*

Chapter of revision	Paragraph 2.3: Product description
Reason of revision	<ol style="list-style-type: none"><li>1. Erroneously listed product: "huntite and magnesite";</li><li>2. Supplemental fire retardant: aluminium hydroxide.</li></ol>
Consequences of revision	<ol style="list-style-type: none"><li>1. Textual consequences only;</li><li>2. Addition of applicable fire retardant.</li></ol>

## 2. DETAILS OF CLASSIFIED PRODUCT

### 2.1 GENERAL

The product, **Second High recycled PVC tile on aluminium frame**, is defined as a wall covering.

### 2.2 MANUFACTURER

Pretty Plastic  
Karperweg 41  
1075 LB AMSTERDAM  
THE NETHERLANDS

### 2.3 PRODUCT DESCRIPTION

According to the sponsor, the product is composed of recycled rigid PVC supplier DECEUNINCK N.V. (Recycled Material category A, according to EN 12608-1:2016 par. 3.4: RM<sub>a</sub>):

- with 3 % fire retardant additives containing a minimum of 99.0 % Aluminium Hydroxide (Al(OH)<sub>3</sub>), a maximum of 0.02 % iron oxide (Fe<sub>2</sub>O<sub>3</sub>) and a maximum of 0.01 % silicon dioxide SiO<sub>2</sub>, "silica");
- attached to aluminium omega-profiles (25x40mm).

The product has a total thickness (height) of 67 mm, a density of 600 kg/m<sup>3</sup> and a mass per unit area of 13.3 kg/m<sup>2</sup>. A single tile measures 294 × 294 mm and weighs 1.2 kg. The type is referred to as "T2".

### 3. STANDARDS, REPORTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION

#### 3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2020	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2020+A1:2022	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13238:2010	Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates
EN 13501-1:2018	Fire classification of construction products and building elements Part 1: Classification using data from reaction to fire tests

#### 3.2 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	Pretty Plastic THE NETHERLANDS	2024-Efectis-R000423[Rev.1] 2024-Efectis-R000424[Rev.1]	EN ISO 11925-2:2020 EN 13823:2020+A1:2022

#### 3.3 TEST RESULTS

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – maximum	Compliance with parameters
<b>EN ISO 11925-2</b>				
Surface flame impingement	Fs ≤150 mm	6	55	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	45	-
	Ignition of filter paper		-	Compliant

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
<b>EN 13823</b>				
Second High PVC with additives	FIGRA <sub>0.2MJ</sub> [W/s]	3	82	-
	FIGRA <sub>0.4MJ</sub> [W/s]		80	-
	THR <sub>600s</sub> [MJ]		6.9	-
	LFS < edge		-	Compliant

	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		83.6	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		561	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

### 3.4 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products			
Classification criteria			
Class Test method(s)	B	C	D
<b>EN ISO 11925-2</b> Exposure = 30 s	Fs ≤ 150 mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
<b>EN 13823</b>	FIGRA <sub>0.2 MJ</sub> ≤ 120 W/s LFS < edge of specimen THR <sub>600s</sub> ≤ 7.5 MJ	FIGRA <sub>0.4 MJ</sub> ≤ 250 W/s LFS < edge of specimen THR <sub>600s</sub> ≤ 15 MJ	FIGRA <sub>0.4 MJ</sub> ≤ 750 W/s
Additional classification			
Smoke production	<b>s1</b> = SMOGRA ≤ 30 m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> ≤ 50 m <sup>2</sup> ; <b>s2</b> = SMOGRA ≤ 180 m <sup>2</sup> /s <sup>2</sup> and TSP <sub>600s</sub> ≤ 200 m <sup>2</sup> ; <b>s3</b> = not s1 or s2		
Flaming Droplets/particles	<b>d0</b> = no flaming droplets/ particles in EN 13823 within 600 s; <b>d1</b> = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s; <b>d2</b> = not d0 or d1.		

## 4. CLASSIFICATION AND FIELD OF APPLICATION

### 4.1 REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018.

### 4.2 CLASSIFICATION

The product, **Second High**, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s3**

The additional classification in relation to flaming droplets / particles is:

**d0**

**Reaction to fire classification: B – s3, d0**



### 4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness	67 mm
Surface density	13.3 kg/m <sup>2</sup>
Other properties	Reference T2. Attached to aluminium omega-profiles. Tile dimensions 294x294 mm. Specified for one colour (grey). Applicable fire retardants: <ul style="list-style-type: none"><li>• Kemipal 80/200 (Kemira Oyj);</li><li>• Portaflame SG-E (Sibelco).</li></ul>

This classification is valid for the following end use applications:

Substrate	Non-combustible (class A1/A2, 870 kg/m <sup>3</sup> , according to EN 13238:2010).
Application	Applied to a wall.
Air gap	Yes, 25 mm with omega profiles.
Methods and means of fixing	PVC tiles mechanically attached to aluminium frame. Aluminium frame mechanically attached to wall.
Joints	Yes.
Other aspects of end use conditions	Open surface with gaps between components.

### 4.4 DURATION OF THE VALIDITY OF THIS CLASSIFICATION REPORT

Consult classification standard and national laws and regulations for limitations on the period of validity of the classification.

## 5. LIMITATIONS

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



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