

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

Classification no.	2021-Efectis-R000817
Sponsor	Mobilane Building Green P.O. Box 2 3956 ZR LEERSUM THE NETHERLANDS
Product name	<b>MobiPanel FR</b> With plants
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	B.R. Knottnerus B.Sc. A.J. Lock
Project number	ENL-21-000384
Date of issue	July 2021
Number of pages	6

## 1. INTRODUCTION

---

This classification report defines the classification assigned to **MobiPanel FR** in accordance with the procedures given in EN 13501-1:2018.

## 2. DETAILS OF CLASSIFIED PRODUCT

---

### 2.1 GENERAL

The product, **MobiPanel FR**, is defined as a wall panel.

### 2.2 MANUFACTURER

Mobilane Building Green  
Viola 3,  
6681 RA Bommel  
THE NETHERLANDS

### 2.3 PRODUCT DESCRIPTION

The product is made up of corrosion-resistant omega profiles which form the bearing structure for plant carrier modules, so called cassettes and pixels (quarter cassettes). The plant cassettes measure 400 x 400 mm and have two slots providing space for six to eight plants, whereas the pixels are 200 x 200 mm and have one slot. Each cassette and pixel is fitted with a special microfibre textile with capillary action to ensure even distribution of water in the cassette. Water is supplied by an automatic controlled irrigation system.

Product specifications:

- Overall dimensions:
  - Cassette w x h x d: 400 x 400 x 170 mm;
  - Pixel w x h x d: 200 x 200 x 170 mm;
  - Profile w x d: 100 x 18 mm; variable length;
- Materials:
  - Cassette and pixel: EPP FR front side (expanded polypropylene with fire retardant) with polypropylene FR back-side.
  - Irrigation fabric: 20% polyamide / 80% polyester;
  - Cover: EPP FR;
  - Omega profiles: Magnelis steel;
  - Not lignifying organic vegetation;
- Weights:
  - Empty cassette 0.90 kg;
  - Empty pixel 0.24 kg.

The maximum installed weight (including cassettes, soil, plants and profiles) is 40 kg/m<sup>2</sup>.

### 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	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	Mobilane Building Green THE NETHERLANDS	2021-Efectis-R000815 2021-Efectis-R000816	EN ISO 11925-2:2020 EN 13823:2020

#### 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	F <sub>s</sub> ≤150 mm	6	35	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	F <sub>s</sub> ≤150 mm	6	40	-
	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>				
MobiPanel FR with plants	FIGRA <sub>0.2MJ</sub> [W/s]	5	92	-
	FIGRA <sub>0.4MJ</sub> [W/s]		66	-
	THR <sub>600s</sub> [MJ]		1.9	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		76.4	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		53	-
	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	F <sub>s</sub> ≤ 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, **MobiPanel FR**, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s2**

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

**d0**

**Reaction to fire classification: B – s2, d0**

#### 4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness	The maximum thickness of a cassette is 40 mm
Surface density	The maximum installed weight (including cassettes, soil, plants and profiles) is 40 kg/m <sup>2</sup> .
Materials	EPP FR front side (expanded polypropylene with fire retardant) with polypropylene FR back-side
Other properties	Production specifications as described in §2.3

This classification is valid for the following end use applications:

Substrate	Non-combustible (class A1/A2 according to EN 13238:2010)
Application	Wall panel
Air gap	No
Methods and means of fixing	Mechanically fixed to the substrate
Joints	Yes
Other aspects of end use conditions	Closed surface, no openings or 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

---

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



B.R. Knottnerus B.Sc.  
Project leader Reaction to Fire



A.J. Lock  
Manager Testing Reaction to Fire