

## CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1:2009

<b>Sponsor</b>	ISOSYSTEMS Malmedyer Weg, 62 B-4770 AMEL/SCHOPPEN Belgium
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<b>Notified Body no.</b>	1234
<b>Product name</b>	Brick system panels
<b>Classification report no</b>	2012-Efectis-R0395
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This classification report consists of five pages and may only be used in its entirety.

## 1. Introduction

This classification report defines the classification assigned to **Isosystems “Brick” panels** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

## 2. Details of classified product

### 2.1 General

The product, **Isosystems “Brick” panels**, is defined as a façade cladding system.

### 2.2 Product description

According to the sponsor the product is composed of:

- Brickslips, 15-20 mm, 1500-2200 kg/m<sup>3</sup>;
- PUR foam, 40-45mm; ≥ 35 kg/m<sup>3</sup>.

The standard product has a total thickness of 60 mm and a mass per unit area of approx. 27-33 kg/m<sup>2</sup> (depending the used brickslip type).

The maximum total thickness is 160 mm and a mass per unit area of approx. 30-39 kg/m<sup>2</sup> (depending the used brickslip type).

In this case an additional insulation layer is applied behind the standard panel which gives a total PUR thickness of 140-145 mm.

### 2.3 Manufacturer/Importer

ISOSYSTEMS  
Malmedyer Weg, 62  
B-4770 AMEL/SCHOPPEN  
Belgium

## 3. Standards, reports, results and criteria in support of this classification

### 3.1 Reports

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV The Netherlands	Isosystems The Netherlands	2012-Efectis-R0393 2012-Efectis-R0394	EN ISO 11925-2:2010 EN 13823:2010

### 3.2 Test results

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
<b>EN-ISO 11925-2</b>				
surface flame impingement	Fs ≤150 mm	6	15	-
	Ignition of filter paper		-	Compliant
edge flame impingement	Fs ≤150 mm	6	15	-
	Ignition of filter paper		-	Compliant
Side flame impingement	Fs ≤150 mm	6	123	-
	Ignition of filter paper		-	Compliant
<b>EN 13823</b>				
thickness PUR 140-145 mm	FIGRA0.2MJ [W/s]	3	8	-
	FIGRA0.4MJ [W/s]		8	-
	THR600s [MJ]		0.5	-
	LFS < edge		-	Compliant
	SMOGRA [m2/s2]		4.8	-
	TSP600s [m2]		33	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		-	Compliant Compliant
thickness PUR 40-45 mm	FIGRA0.2MJ [W/s]	1	6	-
	FIGRA0.4MJ [W/s]		6	-
	THR600s [MJ]		4	-
	LFS < edge		-	Compliant
	SMOGRA [m2/s2]		5.3	-
	TSP600s [m2]		1	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		-	Compliant Compliant

## Classification criteria

Classification criteria of the Single Burning Item (SBI) test			
Class	Fire	Class	Smoke
A2	FIGRA <sub>0,2 MJ</sub> ≤ 120 W/s LFS < edge of the long wing specimen THR <sub>600s</sub> ≤ 7,5 MJ	s1	SMOGRA ≤ 30 m <sup>2</sup> /s <sup>2</sup> TSP <sub>600s</sub> ≤ 50 m <sup>2</sup>
B	FIGRA <sub>0,2 MJ</sub> ≤ 120 W/s LFS < edge of the long wing specimen THR <sub>600s</sub> ≤ 7,5 MJ	s2	SMOGRA ≤ 180 m <sup>2</sup> /s <sup>2</sup> TSP <sub>600s</sub> ≤ 200 m <sup>2</sup>
C	FIGRA <sub>0,4 MJ</sub> ≤ 250 W/s LFS < edge of the long wing specimen THR <sub>600s</sub> ≤ 15 MJ	Class	Droplets
		d0	No flaming droplets/particles
		d1	Flaming droplets/particles < 10 s
D	FIGRA ≤ 750 W/s	d2	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 13501-1:2007+A1:2009.

### 4.2 Classification

The product, **Isosystems “Brick” panels**, in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s1**

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

**d0**

**Reaction to fire classification: B – s1, d0**

### 4.3 Field of application

This classification is valid for the following product parameters:

- Thickness PUR foam: 40-145 mm  
total product: 160 mm
- Density PUR foam:  $\geq 35 \text{ kg/m}^3$   
total product: 27-39  $\text{kg/m}^2$ , depending on thickness

This classification is valid for the following end use applications:

- Substrate Cement particle board, or a substrate with an equal or better fire class
- Air gap none
- Methods and means of fixing mechanically
- Joints only vertical, must be used or equivalent products with the same performance

### 4.4 Duration of the validity of this classification report

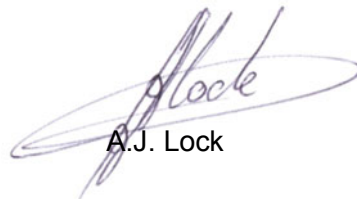
There are no limitations in time on the validity of this report.

## 5. Limitations

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



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