

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

Classification no.	2015-Efectis-R001505[Rev.1]
Sponsor	Hunter Douglas Europe BV P.O. Box 5072 3008 AB ROTTERDAM THE NETHERLANDS
Product name	<b>Felt ceiling, type HeartFelt<sup>®</sup></b>
Prepared by	Efectis Nederland BV
Notified body no.	1234
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## 1. INTRODUCTION

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### 1.1 PRODUCT NAME

This classification report defines the classification assigned to **felt ceiling, type HeartFelt®** in accordance with the procedures given in EN 13501-1:2007+A1:2009.

### 1.2 REVISION INFORMATION

The colour brown for the felt ceiling added to the classification.  
Original date of issue: December 2015

## 2. DETAILS OF CLASSIFIED PRODUCT

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### 2.1 GENERAL

The product, **felt ceiling, type HeartFelt®**, is defined as a ceiling.

### 2.2 MANUFACTURER

Hunter Douglas Europe BV  
P.O. Box 5072  
3008 AB ROTTERDAM  
THE NETHERLANDS

### 2.3 PRODUCT DESCRIPTION

Product description:

- 100% PES  
(see test reports appendix Specifications: PES-FR/PES-BIFR 600 light grey)

Density: 300 kg/m<sup>3</sup>

Mass: 600 g/m<sup>2</sup>

Thickness: 2 mm

- Felt profile

Dimensions: approx. 40 x 53.5 mm [W x H]

Mass: 113 g/m (measured on the product)

- Felt colours (between):

- Grey with 3% graphite

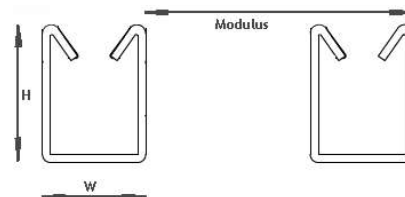
- Grey with 42% graphite

or

- 7575 crème                    40% biko white/ 10% brown/ 2% black/ 48% homo white
- 7576 light brown            40% biko white/ 20% brown/ 4% black/ 36% homo white
- 7577 medium brown        40% biko white/ 30% brown/ 6% black/ 24% homo white
- 7578 dark brown            40% biko white/ 40% brown/ 8% black/ 12% homo white
- 7579 umber                    40% biko white/ 50% brown/ 10% black

- Aluminium mounting profile

Modulus: between 50 - 100 mm



The product has a total thickness (assembled ceiling system) of 80 mm and a mass per unit area of felt profiles between 1130 - 565 g/m<sup>2</sup> (aluminium mounting profiles not included).

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

#### 3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2010	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2010+A1:2014	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13501-:2007+A1:2009	Fire classification of construction products and building elements Part 1: Classification using data from reaction to fire tests
EN 13964:2004	Suspended ceilings – Requirements and test methods

#### 3.2 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	Hunter Douglas Europe BV THE NETHERLANDS	2015-Efectis-R001503 2015-Efectis-R001504 2017-Efectis-R000472	EN ISO 11925-2:2010 EN 13823:2014 EN 13823:2014

#### 3.3 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	34	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	32	-
	Ignition of filter paper		-	Compliant
<b>EN 13823</b>				
Grey Modulus: 50 mm	FIGRA <sub>0.2MJ</sub> [W/s]	3	0	-
	FIGRA <sub>0.4MJ</sub> [W/s]		0	-
	THR <sub>600s</sub> [MJ]		0.4	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		7.5	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		41	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

Grey Modulus: 100 mm	FIGRA <sub>0.2MJ</sub> [W/s]	1	0	-
	FIGRA <sub>0.4MJ</sub> [W/s]		0	-
	THR <sub>600s</sub> [MJ]		0.4	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		0.0	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		32	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant
Dark grey Modulus: 50 mm	FIGRA <sub>0.2MJ</sub> [W/s]	1	0	-
	FIGRA <sub>0.4MJ</sub> [W/s]		21	-
	THR <sub>600s</sub> [MJ]		0.5	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		10.5	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		48	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant
Dark brown Modulus: 50 mm	FIGRA <sub>0.2MJ</sub> [W/s]	3	0	-
	FIGRA <sub>0.4MJ</sub> [W/s]		0	-
	THR <sub>600s</sub> [MJ]		0.7	-
	LFS < edge		-	Compliant
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		11.0	-
	TSP <sub>600s</sub> [m <sup>2</sup> ]		46	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

### 3.4 CLASSIFICATION CRITERIA

<b>Fire classification of construction products and building elements</b> Excluding floorings and linear pipe thermal insulation products			
<b>Classification criteria</b>			
Class Test method(s)	<b>B</b>	<b>C</b>	<b>D</b>
<b>EN ISO 11925-2</b> Exposure = 30 s	$F_s \leq 150$ 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
<b>Additional classification</b>			
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 13501-1:2007+A1:2009.

### 4.2 CLASSIFICATION

The product, **felt ceiling, type HeartFelt®**, 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:

<b>Thickness</b> <ul style="list-style-type: none"> <li>• Total ceiling system</li> <li>• Felt profile</li> <li>• Felt material</li> </ul>	80 mm Approx. 53.5 mm 2 mm
<b>Surface density (felt profiles only)</b>	1570 g/m <sup>2</sup>
<b>Other properties</b> <ul style="list-style-type: none"> <li>• Colours</li> </ul>	Between: <ul style="list-style-type: none"> <li>• Grey with 3% graphite</li> <li>• Grey with 42% graphite</li> <li>or</li> <li>• Crème</li> <li>• Dark brown</li> </ul>
<ul style="list-style-type: none"> <li>• Modulus</li> <li>• Number of profiles per m</li> </ul>	50 - 100 20 - 10

This classification is valid for the following end use applications:

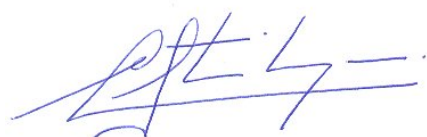
Substrate	Not applicable
Application	Free standing
Methods and means of fixing	Felt profiles are clicked in to aluminium profiles, which are screwed to the structure
Joints	Including joints
Other aspects of end use conditions	Used as ceiling

#### 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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