

# CLASSIFICATION REPORT

<b>NUMBER</b>	<b>221.Z.1505.029.EN.01</b>	Work sheet: <b>21500751</b>
<b>DATE OF ISSUE</b>	<b>May 18<sup>th</sup>, 2015</b>	
<b>NOTIFIED BODY</b>	<b>Notified body for the European Regulation of the Construction Products Nº 305/2011 with number nº 1981.</b>	
<b>PAGES</b>	<b>The report consists of 5 pages consecutively numbered, and an ANNEX of 2 pages.</b>	
<b>TEST SPECIMEN</b>	<b>Type: FLOOR COVERINGS</b> <b>Reference: "FAUS. AVENTINO ITALIANO"</b>	
<b>CONCERNING TO</b>	<b>CLASSIFICATION OF FIRE PERFORMANCE OF CONSTRUCTION PRODUCTS AND BUILDING ELEMENTS. CLASSIFICATION USING DATA OBTAINED IN REACTION TO FIRE TESTS. ACCORDING TO STANDARD UNE EN 13501-1:07+A1:2010</b>	
<b>APPLICANT</b>	<b>FAUS INTERNATIONAL FLOORING, S.L.U.</b> <b>AVENIDA ARQUERIETA 19</b> <b>46727 REAL DE GANDIA (VALENCIA)</b>	
<b>DATE/S OF TEST</b>	<b>Reception of specimens:</b>	<b>01/04/2015</b>
	<b>Beginning of tests:</b>	<b>20/04/2015</b>
	<b>End of tests:</b>	<b>05/05/2015</b>

## AUTHORIZED SIGNATORIES



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The result of this/these test/s only refers to the object/s tested.

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## 1. INTRODUCTION

This classification report defines the classification assigned to the product described in paragraph 2, in accordance with the procedures painted in the UNE-EN 13501-1: 2007+A1: 2010 "Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests".



## 2. PRODUCT DATA CLASSIFIED

### 2.1. Description and identification of the test item.

Sample corresponding to a flooring covering system that consist of a laminate flooring 8mm thickness of clear color and stone appearance, consisting of fiberboard HDF of 7.6 mm and compensating Kraft 120 g/m<sup>2</sup> + melamine finish overlay (paper + corundum ) and melamine. The flooring has a density of 940 kg/m<sup>3</sup>, all this, according to information provided by the customer, and referenced by the same as:

- "FAUS. AVENTINO ITALIANO" (Ref.:1504032-01)

## 3. TEST REPORT SUPPORTING THE CLASIFICACION

Laboratory	Company/Customer	Test report reference	Test method
AIDIMA	FAUS INTERNATIONAL FLOORING, S.L.U.	221.I.1505.029.ES.01	UNE EN ISO 9239-1:11
AIDIMA	FAUS INTERNATIONAL FLOORING, S.L.U.	221.I.1505.029.ES.01	UNE EN ISO 11925-2:11

#### 4. TEST RESULTS SUPPORTING THE CLASSIFICATION

Test method	Parameter	Number of test	Results	
			Average of continuous parameter (m)	Parameters it has to fulfill
<b>UNE EN ISO 11925-2:11 (little burner)</b> "FAUS. AVENTINO ITALIANO" (Ref.: 1504032-01)	$F_s \leq 150\text{mm}$	6	No applicable	Yes
	Ignition of the paper filter		No applicable	yes
<b>UNE EN ISO 9239-1:11 (radiant panel)</b> "FAUS. AVENTINO ITALIANO" (Ref.: 1504032-01)	CHF / HF ( $\text{kW}/\text{m}^2$ )	3	8,50	No applicable
	Light attenuation (% x min)		6,44	No applicable



#### 5. CLASSIFICATION AND DIRECT SCOPE OF APPLICATION

##### 5.1. Classification.

Therefore, according to standard UNE-EN 13501-1: 07+A1: 2010, and in view of the tests results and the classification criteria are attached at the Annex (Table 1 of the mentioned standard), the sample described in section 2.1 of this report, all according to the information provided by the customer and referenced by the same as "FAUS. AVENTINO ITALIANO", is classified in relation to the fire behavior as:

Fire reaction behaviour	Smoke production
<b>B<sub>FI</sub></b>	<b>s1</b>

### 5.2. Direct scope.

The classified product is defined as floors coverings.

## **6. LIMITATIONS**

The result of this report only refers to the products described in paragraph 2 thereof.

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

The duration of the validity of this classification report is subject to applicable law at the time of issue.



**ANNEX****CLASSES OF BEHAVIOUR TO FIRE REACTION FOR CONSTRUCTION PRODUCTS FOR FLOOR COVERINGS ACCORDING TO STANDARD UNE EN 13501-1:07+ A1:2010**

Class	Test method(s)	Classification criteria	Additional declaration required
<b>A1<sub>FL</sub></b>	UNE-EN-ISO 1182:2011 <sup>(1)</sup> ; <i>and</i>	$\Delta T \leq 30^{\circ}\text{C}$ ; $y$ $\Delta m \leq 50\%$ ; $y$ $t_f = 0$ (that is, no sustained flaming)	-
	UNE-EN-ISO 1716:2011	$\text{PCS} \leq 2.0 \text{ MJ.kg}^{-1}$ <sup>(1)</sup> ; $y$ $\text{PCS} \leq 2.0 \text{ MJ.kg}^{-1}$ <sup>(2)</sup> ; $y$ $\text{PCS} \leq 1.4 \text{ MJ.m}^{-2}$ <sup>(3)</sup> ; $y$ $\text{PCS} \leq 2.0 \text{ MJ.kg}^{-1}$ <sup>(4)</sup>	-
<b>A2<sub>FL</sub></b>	UNE-EN-ISO 1182:2011 <sup>(1)</sup> ; <i>or</i>	$\Delta T \leq 50^{\circ}\text{C}$ ; $y$ $\Delta m \leq 50\%$ ; $y$ $t_f \leq 20\text{s}$	-
	UNE-EN-ISO 1716:2011; <i>and</i>	$\text{PCS} \leq 3.0 \text{ MJ.kg}^{-1}$ <sup>(1)</sup> ; $y$ $\text{PCS} \leq 4.0 \text{ MJ.m}^{-2}$ <sup>(2)</sup> ; $y$ $\text{PCS} \leq 4.0 \text{ MJ.m}^{-2}$ <sup>(3)</sup> ; $y$ $\text{PCS} \leq 3.0 \text{ MJ.kg}^{-1}$ <sup>(4)</sup>	-
	UNE-EN-ISO 9239-1:2011 <sup>(5)</sup>	Critical flow <sup>(6)</sup> $\geq 8,0 \text{ kW.m}^{-2}$	Smoke production <sup>(7)</sup>
<b>B<sub>FL</sub></b>	UNE-EN-ISO 9239-1:2011 <sup>(5)</sup> <i>and</i>	Critical flow <sup>(6)</sup> $\geq 8,0 \text{ kW.m}^{-2}$	Smoke production <sup>(7)</sup>
	UNE-EN-ISO 11925-2:2011 <sup>(8)</sup> <i>Exposure = 15s.</i>	$F_s \leq 150\text{mm}$ en 20s	
<b>C<sub>FL</sub></b>	UNE-EN-ISO 9239-1:2011 <sup>(5)</sup> <i>and</i>	Critical flow <sup>(6)</sup> $\geq 4.5 \text{ kW.m}^{-2}$	Smoke production <sup>(7)</sup>
	UNE-EN-ISO 11925-2:2011 <sup>(8)</sup> <i>Exposure = 15s.</i>	$F_s \leq 150\text{mm}$ en 20s	
<b>D<sub>FL</sub></b>	UNE-EN-ISO 9239-1:2011 <sup>(5)</sup> <i>and</i>	Critical flow <sup>(6)</sup> $\geq 3.0 \text{ kW.m}^{-2}$	Smoke production <sup>(7)</sup>
	UNE-EN-ISO 11925-2:2011 <sup>(8)</sup> <i>Exposure = 15s.</i>	$F_s \leq 150\text{mm}$ en 20s	
<b>E<sub>FL</sub></b>	UNE-EN-ISO 11925-2:2011 <sup>(8)</sup> <i>Exposure = 15s.</i>	$F_s \leq 150\text{mm}$ en 20s	-
<b>F<sub>FL</sub></b>	No properties determined		

- (1) For homogeneous products and substantial components of non-homogeneous products
- (2) For any external non-substantial component of non-homogeneous products
- (3) For any internal non-substantial component of non-homogeneous products
- (4) For the product as a whole
- (5) Duration of test = 30 minutes
- (6) The critical flow is defined as the radiation flow which determines the extinction of the flame or radiant flow after a test period of 30 minutes, depending on which of the two is lower (that is, corresponding to the maximum of flow propagation flame).
- (7)  $s_1 = \text{Smoke} \leq 750\%.\text{min}$ ;  $s_2 = \text{no } s_1$
- (8) Under conditions of surface flame attack and, if suitable for end conditions of product use, of edge flame attack.

The result of this report only refers to the objet tested

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**INFORMATIVE ANNEX (excluded from the scope of accreditation):****CLASSIFICATION SYSTEM OF FIRE REACTION ACCORDING TO STANDARD UNE EN 13.501-1:07 + A1: 2010**

The European classification system as far as the materials behaviour in their reaction to fire includes 7 euroclasses or main classifications: A1, A2, B, C, D, E and F.

Euroclasses A1, A2 and B correspond to the non-combustible and little combustible product classes. They represent those construction products which are safer regarding safety against fire.

Euroclasses C, D and E correspond to classified products as combustible and represent the most dangerous construction products regarding their behaviour against fire.

Finally, the products classified with Euroclass F do not undergo any kind of evaluation regarding their benefits with respect to their reaction to fire.

On the same normative base, a specific system in order to classify the products for floor panelling has been developed: A1fl, A2 fl, B fl, C fl, D, E fl y F fl (subscript "fl" means ground panelling -floor).

Except for classes A1 and F, in the case of materials for panelling of walls and ceilings, the rest of classes are complemented by two new subclassifications, one regarding the production and opacity of smoke and the other regarding the production of burning drops or particles.

The levels of these parameters are three:

- For the smoke opacity, levels s1 (low amount and speed of smoke emission), s2 (middle amount and speed of smoke emissions) and s3 (high amount and speed of smoke emissions).
- For burning drops or particles, the levels are d0 (burning drops/particles are not produced), d1 (there are not any burning drops/particles whose duration is longer than 10 seconds) and d2 (products which are not classified neither as d0 nor as d1).

In the case of floor panelling, with the exception also of classes A1 and F, the subclassification only affects at the levels of emission and opacity of smoke and they are only two, s1 (low percentage of smoke emission and production) and s2 (products for which no behaviour regarding the smoke is declared or those who do not meet the condition of s1).

**Class A1:** materials which cannot contribute in any phase of the FIRE including the corresponding one to the totally developed fire. *It is not affected by the additional classification of smokes and fall of drops.*

**Class A2:** they have to meet the same criteria as class B. Besides, in conditions of totally developed fire, these products do not have to contribute significantly to the fire load and the growth of the fire. *Additional classification of smoke production and fall of drops.*

**Classes B:** very limited contribution to fire. It is like class C but meeting strictest requirements. *It is affected especially by the additional classification of smoke production and fall of drops.* Besides, in case of a totally developed fire, these products will not increase significantly the thermal load of the premises and the development of the fire.

**Class C:** limited contribution to fire. It is like class D but meeting the strictest requirements. Besides, under thermal etching by a single burning item they have to offer a side propagation of the limited flame. *It is affected especially by the additional classification of smoke production and fall of drops.*

**Class D: acceptable contribution to fire.** Products which meet the criteria corresponding to class E and which are able to resist, during a longer period of time, the etching of a small flame without producing a substantial propagation of the flame. Besides, they have to be able to resist thermal etching of a single burning item with a sufficient delay and with a limited heat release. *It is affected especially by the additional classification of smoke production and fall of drops.*

**Class E:** Products which are able to resist, during a short period of time, the etching of a flame without producing a substantial propagation of the flame. *It is only affected by the additional classification of fall of drops*

**Class F:** without a determined behaviour. Materials for which characteristics of fire reaction have not been specified or which cannot be classified into any of the other classes

subclasses related to smoke production	subclasses related to the production of burning drops/particles
S1 (low amount and speed of smoke emission)	d0 (no burning drops/particles are produced)
S2 (middle amount and speed of smoke emission)	d1 (there are not burning drops/particles whose duration is longer than 10s)
S3 (high amount and speed of smoke emission)	d2 (products which are not classified neither as d0 nor as d1)

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