AIDIMME
INSTITUTO TECNOLÓGICO

# CLASIFICATION REPORT

ENAC ENSAYOS Nº 13/LE027

| | | |
|---|---|---|
| NUMBER | **251.C.1810.091.EN.01** | Work sheet: **21804940** |
| DATE OF ISSUE | **October 10th,2018** | |
| NOTIFIED BODY | **Notified body for the European Regulation of the Construction Products Nº 305/2011 with number nº 1981.** | |
| PAGES | **The report consists of 5 pages consecutively numbered, and an annex of 2 pages.** | |
| TEST SPECIMEN | **Type:** | **WALLS AND CEILINGS COVERINGS**<br>**FLOOR COVERINGS** |
| | **Reference:** | **"EVEREST MULTIPURPOSE BOARD"** |
| CONCERNING TO | **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** | |
| APPLICANT | **EVEREST INDUSTRIES LIMITED**<br>**D206, SECTOR 63**<br>**201301 NOIDA (UTTAR PRADESH) -INDIA** | |
| DATE/S OF TEST | **Reception of specimens:** | **07/03/2018 and 01/09/2018** |
| | **Beginning of tests:** | **12/03/2018** |
| | **End of tests:** | **04/10/2018** |

AUTORIZED SIGNATORIES

| | |
|---|---|
| **Signed: Ms. Raquel Cánovas Ruiz** | **Fdo.: Mr. Stephane García Malpartida** |
| **Technician Fire Lab** | **Head of Fire Lab** |

**Document digitally signed by a legal electronic signature**

**The test sample object of this report will remain in AIDIMME for a period of thirty days form the date of issuance thereof. After this period, the sample will be destroyed, so any claim must be carried out within these limits**

AIDIMME. INSTITUTO TECNOLÓGICO METALMECÁNICO, MUEBLE, MADERA, EMBALAJE Y AFINES

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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 pointed 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.

Samples corresponding to a 6mm thickness board made of Portland concrete, cellulose, silica, and ashes with an approximate density of 1250 Kg/$m^3$ and a lineal density of 7.5 kg/$m^2$, grey colour, all this according to the information provided by the client.

The direct applicability of the fire reaction classification, according to classification standard UNE EN 13501-1, may be valid for all the products within the same family, if as family we mean the range of products within defined limits of variability of their parameters, for which it can be shown that the fire reaction classification does not change.

Thus, it is intended to classify a range of products where a selection is made based on the parameters contemplated by the range (thickness). According to customer information, the range to be tested basically consists of:

- Thickness : 6mm, 8mm, 9mm, 10mm, 12mm, 15mm, 16mm, 18mm and 22mm

The tests, as well as the specimen selection are carried out taking as reference the different protocols defined by Sector Group SH02 (European body which coordinates all the aspects related to CE marking regarding the fire performance), and more specifically taking as reference document NB-CDP/SH02/06/029 "Classification following extended application: All specifications covering reaction to fire performance").

Likewise, also are used as reference documents, the document CEN/TS 15117:09 "Guidance on direct and extended application" and the recommendations given in the document EN 15725:2011/AC:2012 "Extended application reports on the fire performance of construction products and building elements".
Based on the above recommendations and the information provided by the customer, and according to the paragraph 7.5.2.2.5 of the standard EN 12467:2012+A1:2016: "Fibre-cement flat sheets – Product specification and test methods", the reaction to fire results are valid from the lower thickness tested up to any higher thickness, a representative selection of products of this range was adopted within the test plan:

- Thickness: 6mm

The classification shall be valid for all the products in the range as long as in the selected products the performance obtained can be reached by all the other products in the same classification.

The commercial references of the selected walls coverings according to the customer are:

- "EVEREST MP 6MM"
  (Ref. AIDIMME: 1810035-01)

The range of products, according to the information provided by the customer, is referenced as:

- "**EVEREST MULTIPURPOSE BOARD**"

## 3. TEST REPORTS SUPPORTING THE CLASSIFICATION

| Laboratory | Company/Customer | Test report reference | Test method |
|---|---|---|---|
| AIDIMME | EVEREST INDUSTRIES LIMITED | 251.I.1810.091.EN.01 | UNE EN ISO 1716:11 |
| AIDIMME | EVEREST INDUSTRIES LIMITED | 251.I.1810.091.EN.01 | UNE EN ISO 1182:11 |

## 4. TEST RESULTS SUPPORTING THE CLASSIFICATION

| Test method | Parameter | Number of tests | Results | |
|---|---|---|---|---|
| | | | Average of continuous parameter (m) | Parameter it has to fulfill |
| **UNE EN ISO 1182:11 (Furnace non combustibility)** "EVEREST MP 6MM" Ref. ADIMME: 1810035-01 | ΔT (ºC) | 5 | **6,0** | Not applicable |
| | Ignition | | Not applicable | yes |
| | Δt (s) | | **-** | Not applicable |
| | Δm (%) | | **16,5** | Not applicable |
| **UNE EN ISO 1716:11 (gross heat)** "EVEREST MP 6MM" Ref. AIDIMME: 1810035-01 | PCS (MJ/Kg) | **3** | **1,7** | Not applicable |

**Note**: The laboratory has estimated the uncertainties of the tests, which are available to the client.

## 5. CLASSIFICATION AND SCOPE OF APPLICATION

### 5.1. Classification.

The direct applicability of the fire reaction classification, according to classification standard UNE EN 13501-1, may be valid for all the products within the same family, if as family we mean the range of products within defined limits of variability of their parameters, for which it can be shown that the fire reaction classification does not change.

The classification is valid for all the products of the range since in the representative specimens selected according to the protocol defined by Sector Group SH02 (taking as reference document NB-CDP/SH02/06/029, document CEN/TS 15117:05 and document UNE EN 15725:11/AC:2012), a similar performance and the same classification are obtained.

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 "**EVEREST MULTIPURPOSE BOARD**", is classified in relation to the fire behaviour as:

| **Reaction to fire** (walls and ceilings coverings) | **Reaction to fire** (floor coverings) |
|---|---|
| **A1** | **$A1_{FL}$** |

### 5.2. Scope

The classified product is defined as walls and ceilings covering and as floor covering.

## 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 EXCLUDING FLOOR COVERINGS ACCORDING TO STANDARD UNE EN 13501-1:07 +A1: 2010

| Class | Test method (s) | Classification criteria | Additional declaration required |
|---|---|---|---|
| A1 | UNE-EN-ISO 1182:2011 (1); *and* | $\Delta T \leq 30°C$; *and*<br>$\Delta m \leq 50\%$; *and*<br>$t_f = 0$ (that is, no sustained flaming) | - |
| | UNE–EN-ISO 1716:2011 | PCS ≤ 2,0 MJ,kg$^{-1}$ (1); *and*<br>PCS ≤ 2,0 MJ,kg$^{-1}$ (2) (2a); and<br>PCS ≤ 1,4 MJ,m$^{-2}$ (3); and<br>PCS ≤ 2,0 MJ,kg$^{-1}$ (4) | - |
| A2 | UNE-EN-ISO 1182:2011 (1); *or* | $\Delta T \leq 50°C$; *and*<br>$\Delta m \leq 50\%$; *and*<br>$t_f \leq 20s$ | - |
| | UNE-EN-ISO 1716:2011; *and* | PCS ≤ 3,0 MJ,kg$^{-1}$ (1); *and*<br>PCS ≤ 4,0 MJ,m$^{-2}$ (2); and<br>PCS ≤ 4,0 MJ,m$^{-2}$ (3); and<br>PCS ≤ 3,0 MJ,kg$^{-1}$ (4) | - |
| | UNE-EN–13823:12+A1:16 (SBI) | FIGRA ≤ 120 W,s$^{-1}$; *and*<br>LFS < sample edge; and<br>$THR_{600s} \leq 7,5$ MJ | Smoke production(5); and<br>Flamming Drops/particles(6) |
| B | UNE-EN 13823:12+A1:16 (SBI); *and* | $FIGRA_{0,2} \leq 120$ W,s$^{-1}$; *and*<br>LFS < sample edge; *and*<br>$THR_{600s} \leq 7,5$ MJ | Smoke production(5); and<br>Flamming Drops/particles(6) |
| | UNE-EN-ISO 11925-2:2011(8): *Exposure = 30s* | Fs ≤ 150mm in 60s | |
| C | UNE-EN 13823:12+A1:16 (SBI); *and* | $FIGRA_{0,4} \leq 250$ W,s$^{-1}$; *and*<br>LFS < sample edge ; *and*<br>$THR_{600s} \leq 15$ MJ | Smoke production(5); and<br>Flamming Drops/particles(6) |
| | UNE-EN-ISO 11925-2:2011(8): *Exposure = 30s* | Fs ≤ 150mm in 60s | |
| D | UNE,EN 13823:12+A1:16 (SBI); *and* | $FIGRA_{0,4} \leq 750$ W,s$^{-1}$ | Smoke production(5); and<br>Flamming Drops/particles(6)) |
| | UNE-EN-ISO 11925-2:2011(8): *Exposure = 30s* | Fs ≤ 150mm in 60s | |
| E | UNE-EN-ISO 11925-2:2011(8): *Exposure = 15s* | Fs ≤ 150mm in 20s | Flamming Drops/particles(7) |
| F | UNE-EN-ISO 11925-2:2011(8): *Exposure = 15s* | Fs >150mm in 20s | Flamming Drops/particles(7) |

**(1)** **For homogeneous products and substantial components of non-homogeneous products**

**(2)** **For any non-substantial component of non-homogeneous products**

**(2a)** **Alternatively, for any non-substantial component having an PCS≤ 2,0 MJ/m$^2$, as long as the product meets the following criteria UNE-EN 13823:2012+A1:2016 (SBI): FIGRA≤ 20 W,s$^{-1}$, y LFS< sample margin; y $THR_{600s} \leq 4,0$ MJ; and s1; and d0,**

**(3)** **For any internal non-substantial component of non-homogeneous product**

**(4)** **For a product as a whole**

**(5)** **s1= SMOGRA ≤ 30m$^2$,s$^{-2}$ and $TSP_{600s} \leq 50$m$^2$ ; s2 = SMOGRA ≤ 180m$^2$,s$^{-2}$ *and* $TSP_{600s} \leq 200$m$^2$;s3 = neither s1 nor s2**

**(6)** **d0 = No fleming droplets and particles in UNE-EN 13823:2012+A1:2016 (SBI) in 600s; d1 = No Fleming droplets and parciles for more than 10s in UNE-EN 13823:2012+A1:2016 (SBI) in 600s; d2 = neither d0 nor d1; the ignition of the paper in UNE-EN-ISO 11925-2:2011 determines a classification d2,**

**(7)** **Success = no ignition of the paper (without classification) ; Fail = ignition of the paper (classification d2)**

**(8)** **Under conditions of surface flame attack and, if suitable for end conditions of product use, of edge flame attack.**

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

| Class | Test method(s) | Classification criteria | Additional declaration required |
|---|---|---|---|
| $A1_{FL}$ | UNE-EN-ISO 1182:2011 (1); *and* | $\Delta T \leq 30°C$; *y*<br>$\Delta m \leq 50\%$; *y*<br>$t_f = 0$ (that is, no sustained flaming) | - |
| | UNE-EN-ISO 1716:2011 | PCS ≤ 2.0 MJ.kg$^{-1}$ (1); *y*<br>PCS ≤ 2.0 MJ.kg$^{-1}$ (2); y<br>PCS ≤ 1.4 MJ.m$^{-2}$ (3); y<br>PCS ≤ 2.0 MJ.kg$^{-1}$ (4) | - |
| $A2_{FL}$ | UNE-EN-ISO 1182:2011 (1); *or* | $\Delta T \leq 50°C$; *y*<br>$\Delta m \leq 50\%$; *y*<br>$t_f \leq 20s$ | - |
| | UNE-EN-ISO 1716:2011; *and* | PCS ≤ 3.0 MJ.kg$^{-1}$ (1); *y*<br>PCS ≤ 4.0 MJ.m$^{-2}$ (2); y<br>PCS ≤ 4.0 MJ.m$^{-2}$ (3); y<br>PCS ≤ 3.0 MJ.kg$^{-1}$ (4) | - |
| | UNE-EN-ISO 9239-1:2011 (5) | Critical flow (6) ≥ 8,0 kW.m$^{-2}$ | Smoke production (7) |
| $B_{FL}$ | UNE-EN-ISO 9239-1:2011 (5) *and* | Critical flow (6) ≥ 8,0 kW.m$^{-2}$ | Smoke production (7) |
| | UNE-EN-ISO 11925-2:2011 (8) *Exposure = 15s.* | Fs ≤ 150mm en 20s | |
| $C_{FL}$ | UNE-EN-ISO 9239-1:2011 (5) *and* | Critical flow (6) ≥ 4.5 kW.m$^{-2}$ | Smoke production (7) |
| | UNE-EN-ISO 11925-2:2011 (8) *Exposure = 15s.* | Fs ≤ 150mm en 20s | |
| $D_{FL}$ | UNE–EN-ISO 9239-1:2011 (5) *and* | Critical flow (6) ≥ 3.0 kW.m$^{-2}$ | Smoke production (7) |
| | UNE-EN-ISO 11925-2:2011 (8) *Exposure = 15s.* | Fs ≤ 150mm en 20s | |
| $E_{FL}$ | UNE-EN-ISO 11925-2:2011 (8) *Exposure = 15s*. | Fs ≤ 150mm en 20s | - |
| $F_{FL}$ | UNE-EN-ISO 11925-2:2011(8): *Exposure = 15s* | Fs > 150mm in 20s | |

**(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 máximum of flow propagation flame).**

**(7) s1 = Smoke ≤ 750%.min; s2 = no s1**

**(8) Under conditions of surface flame attack and, if suitable for end conditions of product use, of edge flame attack.**