

CLASSIFICATION REPORT

SUBJECT Nº/REPORT: P-20-21873/2/I

COMPANY: AGRUMACA, A.I.E

ADDRESS: C/Moll de Ponent s/n Local C3-C4,
08800 VILANOVA I LA GELTRÚ (Barcelona)

PRODUCT NAME: FLAME RETARDED FORESCOLOR TREATED BOARD

Nº OF PAGES

10

(INCLUDING THIS COVER SHEET)

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This test report is a translation of the original P-20-21873/2 in Spanish. In case any conflict arises, the Spanish version will prevail.

ENAC is a signatory to the Multilateral Agreement (MLA), MRA Mutual Recognition Agreement) of the European Cooperation for Accreditation (EA) and the International Laboratory Accreditation Cooperation (ILAC), in testing.


A. Matellanes

E & C Coordination

Zamudio, 13th May 2020

1. INTRODUCTION

This classification report defines the classification of the product **FLAME RETARDED FORESCOLOR TREATED BOARD** in accordance with the procedures set out in EN 13501-1:2007+A1:2009 standard.

Sponsors:

(Name and address)

AGRUMACA, A.I.E

C/Moll de Ponent s/n Local C3-C4,
08800 VILANOVA I LA GELTRÚ (Barcelona)
Contact: Blanca Solé Papiol

Prepared by:

GAIKER

Parque Tecnológico de Bizkaia Edif. 202
E-48170 ZAMUDIO

Product name:

FLAME RETARDED FORESCOLOR TREATED BOARD

Classification report number:

P-20-21873/2/I

Distribution number:

01-P-20-21873/2/I

Issue date:

13th.05.2020

2. CLASSIFIED PRODUCT DATA

2.1 General:

The product **FLAME RETARDED FORESCOLOR TREATED BOARD** is described as a black MDF board, approximately 8 mm thick and flame retarded with IGNIMAD LA-33 by means of a vacuum-vacuum autoclave. Boards treatment and supply have been carried out by test applicant.

2.2 Description of the product

The product **FLAME RETARDED FORESCOLOR TREATED BOARD** is described as follows according to the information supplied by the client:

Not treated board characteristics:

Type:	MDF board
Composition:	Wood (70%), organic component (24%) and water (6%)
Manufacturer:	FORESCO CO LTD
Reference:	FORESCOLOR
Thickness tested:	8 mm
Colour tested:	Black
Density:	780 kg/m ³ approx.
Reaction to fire (Euroclass):	D-s2, d0 according to Certificate of Conformity of the Factory Production Control annexed.

Flame retardant product characteristics:

Reference:	IGNIMAD LA-33
Amount applied:	Retention of 50 l/m ³ in the FORESCOLOR referenced board.
Method and number of applications:	Treatment in vacuum-vacuum autoclave ensuring a retention of 50 l/m ³ in one cycle.

Test applicant does not supply more information about the product for testing.

3. TEST REPORTS AND RESULTS THAT SUPPORT THIS CLASSIFICATION

3.1 Test reports

Name of the laboratory	Name of the sponsor	Test report reference number	Test methods and date Field of application rules and date
GAIKER	AGUMACA A.I.E	P-20-21873/1/I Test date: 13 th .02.2020 to 05 th .05.2020	<u>Métodos de ensayo</u> EN ISO 11925-2:2010 EN 13823:2010+ A1:2014

3.2 Test results

Test method	Parameter	Number of tests	Continuous parameter mean value (m)	Parameters to fulfill B-s1, d0 classification
EN 13823:2010 + A1:2014	FIGRA 0,2 MJ (W/s)	3	8 W/s	≤ 120 W/s
	THR 600 s (MJ)	3	1,3 MJ	≤ 7,5 MJ
	Lateral flame spread (LFS)	3	LSF < edge of the specimen	LSF < edge of the specimen
	SMOGRA (m ² /s ²) ⁽¹⁾	3	2 m ² /s ²	≤ 30 m ² /s ²
	TSP 600 s (m ²) ⁽¹⁾	3	37 m ²	≤ 50 m ²
	Flaming droplets/particles generation	3	NO No droplets/particles	NO No droplets/particles
EN ISO 11925-2:2010	Fs	12 ⁽²⁾	Fs ≤ 150 mm in 60 s	Fs ≤ 150 mm in 60 s
Impingement 30 s	Does the filter paper ignite? (YES/NO)	12 ⁽²⁾	NO	NO

(1) Smoke generation characteristics determination has been carried out following the guidelines collected in EN 13823:2010 + A1:2014 standard, section A.6.1.2 (baseline obtained from principal burner data).

(2) Tested 6 specimens with edge flame impingement on the exposed face (3 lengthwise + 3 crosswise) and 6 specimens with surface flame impingement on the exposed face (3 lengthwise + 3 crosswise)

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1 Reference classification

This classification has been carried out in accordance with the Standard EN 13501-1: 2007 + A1: 2009.

4.2 Classification

The product **FLAME RETARDED FORESCOLOR TREATED BOARD** in relation to its behavior to the reaction to fire is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to the production of flaming drops / particles is:

d0

Fire behavior		Smoke production		Flaming droplets
B	-	s1	,	d0

Reaction to fire classification: B-s1, d0

4.3 Field of application

This classification is valid for the following product parameters:

- for the product which shows the characteristics collected in the description of the classified product section, black MDF board and 8 mm approximately thick,
- for the MDF board flame retarded with IGNIMAD LA-33 applied by means of vacuum-vacuum autoclave ensuring a minimum retention of 50 liters of flame retardant per m³ of board in one cycle
- for the treated board tested free standing with an 80 mm deep air gap.

5. LIMITATIONS

This classification standard does not imply any approval or certification of the product.



Jesús Ballester Maestu
Maximun Responsible for the test
Zamudio, 13th May 2020

Dedal Attestation &
Certification

Notified body No. 1922
Bulgaria, 8230 Nesebar
Mladost #50

CERTIFICATE

of Conformity of the Factory Production Control

1922 - CPR - 0481

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Wood panels with medium density - MDF - HLS, FORESCOLOR, thicknesses 5 mm; 8 mm; 9 mm; 12 mm; 15 mm; 16 mm; 18 mm; 19 mm
(For list of the controlled characteristics of the product, see Annex I, an inseparable part of this certificate.)

produced by the manufacturer

FORESCO Co. Ltd

212, Bongsu-daero, Seo-gu, Incheon, Republic of Korea

and produced in the manufacturing plant in

FORESCO Co. Ltd

212, Bongsu-daero, Seo-gu, Incheon, Republic of Korea

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 13986:2004

under system 2+ were applied and the factory production control fulfils all the prescribed requirements set out above.

This certificate was first issued on 31.08.2015 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly. The certificate is supported through annual surveillance audit and is reissued after each surveillance audit. This certificate should be reissued not later than 31.08.2016. The validity of this certificate can be verified in the CE register on www.dedal-bg.net.



Issued:
Burgas, 18 December 2015

Embossed stamp of "Dedal - A&C" Ltd.

Manager:



arch. Galina Vasileva

**ANNEX I TO CERTIFICATE OF CONFORMITY
OF THE FACTORY PRODUCTION CONTROL 1922-CPR-0481/18.12.2015**

List of the controlled characteristics of wood panels with medium density- MDF-HLS, FORESCOLOR, acc. to EN 13986:2004

Characteristic, dimension	Method	Value/Result							
		5mm (FSB5 E0)	8mm (FSB8 E0)	9mm (FSB9 E0)	12mm (FSB12 E0)	15mm (FSB15 E0)	16mm (FSB16 E0)	18mm (FSB18 E0)	19mm (FSB19 E0)
Swelling in thickness, %	EN 317	17	10,9	11	9,3	7	6,4	6,8	5,6
Bending strenght, N/mm ²	EN 310	37	44	38,6	33	31	31,8	31,4	34
Modulus of Elasticity in bending, N/mm ²	EN 310	6966	4027	3878,8	3272	3749	3717,3	3225	3441,5
Internal bond, N/mm ²	EN 319	0,80	0,92	0,895	0,94	1,02	0,99	0,81	1
Swelling in thickness after cyclic testing, %	EN 317	8,27	12,72	11	15,01	14,37	12,8	14	11,3
Internal bond after cyclic testing, N/mm ²	EN 319	0,42	0,37	0,34	0,27	0,25	0,31	0,24	0,27
Formaldehyde emission	EN 120	E1	E1	E1	E1	E1	E1	E1	E1
Class of reaction to fire	EN 13501-1	NPD	NPD	D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0
Density, kg/m ³	EN 323	790	764	758	737	740	748	765	750

This certificate was first issued on 31.08.2015 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly. The certificate is supported through annual surveillance audit and is reissued after each surveillance audit. This certificate should be reissued not later than 31.08.2016. The validity of this certificate can be verified in the CE register on www.dedal-bg.net.



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Manager



arch. Galina Vasileva

FICHA INFORMATIVA EN 13501-1 (*)
INFORMATIVE FORM EN 13501-1 (*)



REVESTIMIENTOS DE TECHOS, PAREDES Y SUELOS
CEILING, WALL AND FLOOR COVERINGS

RAZON SOCIAL DEL SOLICITANTE:

TEST APPLICANT IDENTIFICATION AND ADDRESS:

AGRUMACA, A.I.E.

C/ Moll de Ponent s/n Local C3-C4, 08800 Vilanova I la Geltrú (Barcelona)

CIF: V60229598

NOMBRE Y DIRECCIÓN DEL FABRICANTE:

MANUFACTURER IDENTIFICATION AND ADDRESS:

FORESCO CO. LTD

212 BONGSU-DAERO, SEO-GU, INCHEON, KOREA 22831

REFERENCIA COMERCIAL DEL PRODUCTO:

PRODUCT TRADE NAME:

TABLERO FORESCOLOR TRATADO IGNÍFUGO

CARACTERÍSTICAS:

CHARACTERISTICS:

De la cara vista (External face):

- **Composición:**
Composition: WOOD 70%, ORGANIC 24%, WATER 6%
- **Espesor:**
Thickness: 8mm
- **Masa por metro cuadrado:**
Surface mass/area (kg/m2): 262 (8X1220X2440mm)
- **Color y aspecto:**
Colour and aspect: NEGRO (BLACK)

De las capas interiores (Internal layers):

- **Tipo:**
Material: WOOD
- **Composición:**
Composition: WOOD 70%, ORGANIC 24%, WATER 6%
- **Espesor:**
Thickness: 8mm
- **Masa por metro cuadrado:**
Surface mass/area (kg/m2): 262 (8X1220X2440mm)

Del recubrimiento (Covering layer): N/A

- **Tipo:**
Material:
- **Composición:**
Composition:
- **Espesor:**
Thickness:
- **Masa por metro cuadrado:**
Surface mass/area (kg/m2):

De la cara trasera (Back layer (not exposed face)): N/A

- **Tipo:**
Material:
- **Composición:**
Composition:
- **Espesor:**
Thickness:
- **Masa por metro cuadrado:**
Surface mass/area (kg/m2):

FICHA INFORMATIVA EN 13501-1 (*)
INFORMATIVE FORM EN 13501-1 (*)



REVESTIMIENTOS DE TECHOS, PAREDES Y SUELOS
CEILING, WALL AND FLOOR COVERINGS

Características del soporte (Substrate characteristics):

- Naturaleza del soporte:
Nature of the substrate: WOOD
- Espesor:
Thickness: 8MM
- Densidad:
Density: 780 KG/M3
- CLASIFICACIÓN DE REACCIÓN AL FUEGO D-s2, do

Modo de colocación (Mounting method): N/A

- Sistema de fijación:
Fixing system:
- Juntas de unión:
Joints:
- Naturaleza y denominación de la cola utilizada:
Identification and nature of the glue:
- Cantidad de cola aplicada:
Amount of glue applied:

IGNIFUGACION:

FLAME RETARDANCY:

- Referencia del producto de ignifugación: Ignimad La-33
Flame retardant reference:
- Peso del producto aplicado (seco y húmedo): TABLERO FORESCOLOR TRATADO CON UNA RETENCIÓN DE 50 L/m3
Amount of material applied (dried and moisted):
- Método y número de aplicaciones: TRATADO EN AUTOCLAVE, VACIO-VACIO, ASEGURANDO UNA RETENCIÓN DE 50 L/m3
Application procedure and number of applications: 1 CICLO

CONDICIONES DE MANTENIMIENTO Y LIMPIEZA:

MAINTENANCE AND CLEANING CONDITIONS:

PERSONA DE CONTACTO (NOMBRE Y NÚMERO DE TELÉFONO):

CONTACT PERSON (NAME AND TELEPHONE NUMBER):

BLANCA SOLÉ PAPIOL
600.999.859

FIRMA Y SELLO DEL SOLICITANTE:

TEST APPLICANT SIGNATURE AND STAMP:

AGRUMACA
GRUP
C/ Molí del Perallut, local C3-C4
08900 Viladomene del Geltrú (BCN)

(*) Esta ficha, necesaria para la elaboración del informe de ensayo correspondiente, quedará en poder del Laboratorio que asegura la total confidencialidad de los datos reflejados. En caso de desconocimiento o información confidencial y estratégica, los datos podrán ser omitidos indicando el motivo.

(*) This informative form, necessary for TEST REPORT elaboration, must be suitable filled and returned to the Test Laboratory. The Laboratory assures total reservation for the information received. In case of ignorance or confidential information considered, this can be omitted pointing out the reason.