המעבדה למכניקה והידראוליקה)

מכון התקנים הישראלי



תעודת סיווג מס' 7213222011 בהתאם לסעיף 12 לחוק התקנים תשי"ג - 1953

		פרטי ההזמנה
		שם המזמין: אינו בילד בעיימ
		מענו : ז'בוטינסקי 155 רמת גן
		19/10/2022 : מאריך ההזמנה
יח לירה רצבע לבו	מערב בערבעם מ-4 מייח ול איים ו	תאור המוצר לוח אלומיניום מרוכב בגוונים כסף ולב
ערביות.	, אפון בעוביים <i>נו ד כו כו עו ס כו כו כו</i> ALLICOPA	תוצרת .NEL MIDDLE EAST L.L.C.
	THE	INCE MIDDLE EAST E.E.C. JI SIJ
		פרטי הנטילה
		הדוגמה ניטלה בתאריך: 19/10/2022
		הדוגמה נבחרה עייי בא כוח: המזמין
		מקום הנטילה: אין מידע
		20 (00000000 4)
		מהות הבדיקה
יה ואלמנטי בניין – שיטות בדיקה אם	תייו 755 יי סיווג בשרפה של מוצרי בני מיי 755 יי סיווג בשרפה של מוצרי בני	סיווג המוצר בשרפה לפי תקן ישראלי
.EIV	20) זהה לתקן אירופי 13501-1:200 <i>7</i>	וסיווג לפי תוצאות הבדיקה " (יולי 13כ
	תוצאות הבדיקה במטמך זה	מסמך זה מכיל דף אחד ונספח
	מתייחסות רק לפריט שנבדק	של 5 דפים ואין להשתמש בו אלא במלואו

סיכום

על בסיס תעודת סיווג מסי PART 2 MI 16/12570-1550 מתאריך 21.09.2022 של מעבדה APPLUS LGAI (ספרד) המצורפת בזאת, לוח אלומיניום מרוכב בגוונים כסף ולבן/אפור בעוביים מ-4 מיימ עד 6 מיימ עם ליבה בצבע לבן תוצרת ALUCOPANEL MIDDLE EAST L.L.C. (דובאי-ברית אמירויות הערביות) כמפורט בתיאור המוצר, סווג לפי תגובתו בשרפה B-s1, d0.

שם החותם: דודו וארום תפקידו : ראש ענף חלונות מערכות מיגון שם החותם: ננאדי ברלין תפקידו : מהגדס בכיר

19/10/2022 : תאריך

LGAI

LGAI Technological Center, S.A.
Campus UAB-Ronda de la Font del Carme, s/n
E - 08193 Bellaterra (Barcelona)
T +34 93 567 20 00
F +34 93 567 20 01
www.appluslaboratories.com



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Bellaterra:

21th September, 2022

File number:

16/12570-1550 Part 2 M1

Reference of the

ALUCOPANEL MIDDLE EAST L.L.C.

petitioner:

National Industries Complex P.O. Box 18022, Dubai-UAE



Activities marked with (*) are not covered by the ENAC accreditation

Description of the modification: Due to a typographic mistake, the file number is changed. The changes are shown in italics.

The present report supersedes the test report number 16/12570-1550 Part 2 dated on 6th September, 2016.

It is responsibility of the client to replace the original and all the copies.

CLASSIFICATION REPORT

1- CHARACTERISTICS OF THE PRODUCT

Commercial product reference: ALUCOPANEL U.S.A FR

SAMPLE 1 - Thickness 4 mm

The product has eight layers:

- Layer 1: Coating-Polyvinylidene fluoride paint (PVDF), with 0.02 mm (first coat)/0.01 mm (second coat) in thickness, 0.07 kg/m² in superficial density and bright silver colour.
- Layer 2: Primer coating-Solvent based paint (Polyester (PE) coating), with 0.007 mm in thickness, 0.02 kg/m² in superficial density and white/grey colour.
- Layer 3: Aluminium (Aluminium Alloy Skin 3105 grade), with 0.5 mm in thickness and 2.7 g/cm³ in density.
- Layer 4: Adhesive film (Bonding film), with 70 microns in thickness and 0.920 g/cm³ in density.
- Layer 5: Mineral filled/flame retardant Euroclass B core, with 3 mm in thickness, 1.6 g/cm³ in density and white colour.

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- Layer 6: Adhesive film (Bonding film), with 70 microns in thickness and 0.920 g/cm³ in density.
- Layer 7: Aluminium (Aluminium Alloy Skin 3105 grade), with 0.5 mm in thickness and 2.7 g/cm³ in density.
- Layer 8: Primer coating-Solvent based paint (Polyester (PE) coating), with 0.007 mm in thickness, 0.02 kg/m² in superficial density and white/grey colour.

SAMPLE 2 - Thickness 6 mm

The product has eight layers:

- Layer 1: Coating-Polyvinylidene fluoride paint (PVDF), with 0.02 mm (first coat)/0.01 mm (second coat) in thickness, 0.07 kg/m² in superficial density and bright silver colour.
- Layer 2: Primer coating-Solvent based paint (Polyester (PE) coating), with 0.007 mm in thickness, 0.02 kg/m² in superficial density and white/grey colour.
- Layer 3: Aluminium (Aluminium Alloy Skin 3105 grade), with 0.5 mm in thickness and 2.7 g/cm³ in density.
- Layer 4: Adhesive film (Bonding film), with 70 microns in thickness and 0.920 g/cm³ in density.
- Layer 5: Mineral filled/flame retardant Euroclass B core, with 5 mm in thickness, 1.6 g/cm³ in density and white colour.
- Layer 6: Adhesive film (Bonding film), with 70 microns in thickness and 0.920 g/cm³ in density.
- Layer 7: Aluminium (Aluminium Alloy Skin 3105 grade), with 0.5 mm in thickness and 2.7 g/cm³ in density.
- Layer 8: Primer coating-Solvent based paint (Polyester (PE) coating), with 0.007 mm in thickness, 0.02 kg/m² in superficial density and white/grey colour.

Manufacturer: ALUCOPANEL MIDDLE EAST L.L.C. Address: National Industries Complex – P.O. Box 18022, Dubai – UAE

2- CLASSIFICATION AND DIRECT APPLICATION FIELD

This classification has been made in compliance with the procedures provided in Standard UNE-EN 13501-1:2007+A1:2010: "Classification in terms of the behaviour to fire of construction products and building elements. Part 1: Classification made from the data gathered during fire reaction tests".



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2.1- Test Reports

Name of Laboratory	Applus – LGAI			
Name of Petitioner ALUCOPANEL MIDDLE EAS				
Test Report Number	16/12570-1550 Part 1 M1			
Testing method	UNE-EN-ISO 11925-2:2011			
	UNE-EN 13823:2012+A1:2016			

2.2- Results of the Tests

Test Method	RESULTS - SAMPLE 1 - Thickness 4 mm					
	CRITERIA CLASS B	Nº TESTS	MEAN VALUE	COMPLIANCE		
UNE-EN-ISO 11925:2011	Fs ≤ 150 mm within 60 s	12	Fs < 150 mm	YES		
UNE-EN 13823:2012 +A1:2016	FIGRA _{0.2 MJ} ≤ 120 W/s	3	0.00	YES		
	LFS < edge of the sample	3	< to edge	YES		
	THR _{600s} ≤ 7.5 MJ	3	0.41	YES		
	CRITERIA subclass 's1'	Nº TESTS	MEAN VALUE	COMPLIANCE		
	SMOGRA \leq 30 m ² /s ²	3	0.00	YES		
	$TSP_{600s} \leq 50 \text{ m}^2$	3	32.12	YES		
	CRITERIA subclass 'd0'	Nº TESTS	MEAN VALUE	COMPLIANCE		
	Fall of droplets/particles in flames within 600 s	3	NO	YES		

Test Method	RESULTS - SAMPLE 2 - Thickness 6 mm					
	CRITERIA CLASS B	Nº TESTS	MEAN VALUE	COMPLIANCE		
UNE-EN-ISO 11925:2011	Fs ≤ 150 mm within 60 s	12	Fs < 150 mm	YES		
UNE-EN 13823:2012 +A1:2016	FIGRA _{0.2 MJ} ≤ 120 W/s	3	2.73	YES		
	LFS < edge of the sample	3	< to edge	YES		
	THR _{600s} ≤ 7.5 MJ	3	0.59	YES		
	CRITERIA subclass 's1'	Nº TESTS	MEAN VALUE	COMPLIANCE		
	SMOGRA \leq 30 m ² /s ²	3	0.00	YES		
	$TSP_{600s} \leq 50 \text{ m}^2$	3	29.33	YES		
	CRITERIA subclass 'd0'	Nº TESTS	MEAN VALUE	COMPLIANCE		
	Fall of droplets/particles in flames within 600 s	3	NO	YES		



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CLASSIFICATION

The product, ALUCOPANEL U.S.A FR, related to their fire reaction behaviour, is classified as:

Fire Behaviour B		Smoke Production			Drops in flames		
	-	S	1		d	0	

Fire Reaction Classification: CLASS B-s1,d0
This classification is only valid for the final conditions of use described in the present report.

2.3- Field of application (*)

This classification is valid for the following product parameters:

The classification is only valid for the product characteristics shown, and may extend to the following parameters:

Variable parameter 1: SUBSTRATE

Having performed the tests with the product applied over the substrate of board of calcium silicate, with a density of $870 \pm 50 \text{ kg/m}^3$, a thickness of $11 \pm 2 \text{ mm}$, the results are valid for substrates of final use of the classes A1 and A2-s1,d0, as it is indicated in the standard UNE EN 13238:2011.

Variable parameter 2: AIR CHAMBER

Air chamber tested: 25 mm. The obtained results are also valid for smaller air chambers than the tested one, even without air chamber, because the presence of air chamber is considered the most unfavourable.

Variable parameter 3: THICKNESS

Products with commercial reference: ALUCOPANEL U.S.A FR are manufactured in different thicknesses, with the thickness of the core layer as a variable parameter.

After performing the test with the smallest thickness 4 mm and the greatest thickness 6 mm, noting that the results comply with the same classification, by extension it is concluded that:

The product range ALUCOPANEL U.S.A FR with a thickness between 4 mm and 6 mm, is included in the following Euroclass:



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Fire Reaction Classification: CLASS B-s1,d0
This classification is only valid for the final conditions of use described in the present report.

The classification is valid for the following final use applications:

Exterior façade architecture cladding of midrise and highrise towers. Interior wall, column and beam cladding. Ceiling application. Signage application.

2.4- Limitations

This classification standard does not represent any type approval neither a product certification



Technician Responsible of Euroclases LGAI Technological Center S.A. (APPLUS)

The results refer exclusively to the samples tested at the time and under the conditions indicated.

The uncertainties expressed in this document pertain to the expanded uncertainty, which has been obtained by multiplying the typical measurement uncertainty by the coverage factor k=2 which, for a regular distribution, corresponds to a coverage probability of approximately 95%.

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