ERA LABORATUVARLARI A.Ş.

ERA Fire Test Laboratory

Accredited Body
No: AB-0330-T

Notified Body
No: 2184

CLASSIFICATION OF REACTION TO FIRE IN ACCORDANCE WITH TS EN 13501-1:2007+A1:2010

Sponsor	: İZOCAM TİC. VE SAN. A.Ş. , Organize Sanayi Bölgesi 3. Cadde No: 4, Yukarı Dudullu, İSTANBUL / TURKEY
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Product name	: İZOCAM TEKİZ - Mineral Wool Insulated Panels
Classification report No.	: ERA - 10 - 109
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1. INTRODUCTION

This classification report defines the classification assigned to *"İZOCAM TEKİZ - Mineral Wool Insulated Panels"* in accordance with the procedures given in TS EN 13501-1:2007+A1:2010

2. DETAILS OF CLASSIFIED PRODUCT

2.1. General:

The product *İZOCAM TEKİZ - Mineral Wool Insulated Panels* is defined as a „type of classified product". Its classification is valid for the following end use application:

Sandwich panel products according to the EN 14509 standard:
Self supporting double skin metal faced insulating panels – Factory made products - Specifications

2.2. Description:

The product *İZOCAM TEKİZ - Mineral Wool Insulated Panels ELS* is fully described in the test reports in support of the classification listed in clause 3. Classification is valid for the product types which were indicated below:

- *ROCK WOOL FILLED WALL PANELS*
- *ROCK WOOL FILLED ROOF PANELS*

3. REPORTS AND RESULTS IN SUPPORT OF CLASSIFICATION

3.1. Reports

Name of laboratory	Name of sponsor	Test report ref. no.	Test method
ERA LABORATUVARLARI A.Ş.	İZOCAM TİC. VE SAN. A.Ş.	FTST10345	TS EN ISO 1716
		FTST10348	
		FTST10346	TS EN 13823
		FTST10347	
		FTST10349	
		FTST10350	

3.2. Results

Test method	Parameter	Number of test	Results	
			Continuous parameter mean (m)	Compliance parameters
TS EN ISO 1716 [a]	PCS [MJ/kg] [1]	3	1,29	(-)
	PCS [MJ/m^2] [2]	3	1,07	(-)
	PCS [MJ/m^2] [3]	3	3,55	(-)
	PCS [MJ/m^2] [4]	3	0,00	(-)
	PCS [MJ/kg] [5]	3	1,24	(-)
TS EN ISO 1716 [b]	PCS [MJ/kg] [1]	3	1,20	(-)
	PCS [MJ/m^2] [2]	3	1,07	(-)
	PCS [MJ/m^2] [3]	3	3,55	(-)
	PCS [MJ/m^2] [4]	3	0,00	(-)
	PCS [MJ/kg] [5]	3	1,17	(-)
TS EN 13823 [c]	FIGRA$_{0,2\ MJ}$ (W/s)	3	0,0	(-)
	LFS > edge	3	(-)	No
	THR$_{600\ s}$ (MJ)	3	0,5	(-)
	SMOGRA (m^2/s^2)	3	6,2	(-)
	TSP$_{600\ s}$ (m^2)	3	27,7	(-)
	Flaming droplet(s)/particle (s)	3	(-)	No
TS EN 13823 [d]	FIGRA$_{0,2\ MJ}$ (W/s)	3	0,0	(-)
	LFS > edge	3	(-)	No
	THR$_{600\ s}$ (MJ)	3	0,5	(-)
	SMOGRA (m^2/s^2)	3	4,4	(-)
	TSP$_{600\ s}$ (m^2)	3	29,6	(-)
	Flaming droplet(s)/particle (s)	3	(-)	No
TS EN 13823 [e]	FIGRA$_{0,2\ MJ}$ (W/s)	3	0,0	(-)
	LFS > edge	3	(-)	No
	THR$_{600\ s}$ (MJ)	3	0,5	(-)
	SMOGRA (m^2/s^2)	3	5,1	(-)
	TSP$_{600\ s}$ (m^2)	3	29,2	(-)
	Flaming droplet(s)/particle (s)	3	(-)	No
TS EN 13823 [f]	FIGRA$_{0,2\ MJ}$ (W/s)	3	0,0	(-)
	LFS > edge	3	(-)	No
	THR$_{600\ s}$ (MJ)	3	0,4	(-)
	SMOGRA (m^2/s^2)	3	5,1	(-)
	TSP$_{600\ s}$ (m^2)	3	30,6	(-)
	Flaming droplet(s)/particle (s)	3	(-)	No

(-): Not applicable
[1]: for rock wool substantial component
[2]: for paint coating (external non-substantial component)
[3]: for adhesive (external non-substantial component)
[4]: for galvanized steel sheet (external non-substantial component)
[5]: for the product as a whole

[a]: for *Mineral Wool Insulated Wall Panels*
[b]: for *Mineral Wool Insulated Roof Panels*
[c]: for *50 mm WALL PANELS*
[d]: for *100 mm WALL PANELS*
[e]: for *50 mm ROOF PANELS*
[f]: for *100 mm ROOF PANELS*

Test method	Parameter	Parameter	Compliance parameters
TS EN ISO 1716 [a]	PCS [MJ/kg] [1]	1,29	≤ 3 MJ/kg (A1)
	PCS [MJ/m^2] [2]	1,07	≤ 4 MJ/m^2 (A1)
	PCS [MJ/m^2] [3]	3,55	≤ 4 MJ/m^2 (A1)
	PCS [MJ/m^2] [4]	0,00	≤ 4 MJ/m^2 (A1)

	PCS [MJ/kg] [5]	1,24	≤ 3 MJ/kg (A1)
TS EN ISO 1716 [b]	PCS [MJ/kg] [1] PCS [MJ/m^2] [2] PCS [MJ/m^2] [3] PCS [MJ/m^2] [4] PCS [MJ/kg] [5]	1,20 1,07 3,55 0,00 1,17	≤ 3 MJ/kg (A1) ≤ 4 MJ/m^2 (A1) ≤ 4 MJ/m^2 (A1) ≤ 4 MJ/m^2 (A1) ≤ 3 MJ/kg (A1)
TS EN 13823 [a]	$FIGRA_{0,2MJ}$ [W/s]	0,0	≤ 120 (A2)
	THR_{600s} [MJ]	0,5	≤ 7,5 (A2)
	LFS < edge	Yes	Yes (A2)
	SMOGRA [m^2/s^2]	6,2	≤ 30 (s1)
	TSP_{600s} [m^2]	27,7	≤ 50 (s1)
	Burning time of flaming droplets/particles [s]	None	No (d0)
TS EN 13823 [b]	$FIGRA_{0,2MJ}$ [W/s]	0,0	≤ 120 (A2)
	THR_{600s} [MJ]	0,5	≤ 7,5 (A2)
	LFS < edge	Yes	yes (A2)
	SMOGRA [m^2/s^2]	4,4	≤ 30 (s1)
	TSP_{600s} [m^2]	29,6	≤ 50 (s1)
	Burning time of flaming droplets/particles [s]	None	No (d0)
TS EN 13823 [b]	$FIGRA_{0,2MJ}$ [W/s]	0,0	≤ 120 (A2)
	THR_{600s} [MJ]	0,5	≤ 7,5 (A2)
	LFS < edge	Yes	yes (A2)
	SMOGRA [m^2/s^2]	5,1	≤ 30 (s1)
	TSP_{600s} [m^2]	29,2	≤ 50 (s1)
	Burning time of flaming droplets/particles [s]	None	No (d0)
TS EN 13823 [b]	$FIGRA_{0,2MJ}$ [W/s]	0,0	≤ 120 (A2)
	THR_{600s} [MJ]	0,4	≤ 7,5 (A2)
	LFS < edge	Yes	yes (A2)
	SMOGRA [m^2/s^2]	5,1	≤ 30 (s1)
	TSP_{600s} [m^2]	30,6	≤ 50 (s1)
	Burning time of flaming droplets/particles [s]	None	No (d0)

(-): Not applicable
[1]: for rock wool substantial component
[2]: for paint coating (external non-substantial component)
[3]: for adhesive (external non-substantial component)
[4]: for galvanized steel sheet (external non-substantial component)
[5]: for the product as a whole

[a]: for *Mineral Wool Insulated Wall Panels*
[b]: for *Mineral Wool Insulated Roof Panels*
[c]: for *50 mm WALL PANELS*
[d]: for *100 mm WALL PANELS*
[e]: for *50 mm ROOF PANELS*
[f]: for *100 mm ROOF PANELS*

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. Reference of classification

This classification has been carried out in accordance with the clauses 11.7.3, 11.9.2 and 11.10.1. of TS EN 13501-1:2007+A1:2010

4.2. Classification

The product, *İZOCAM TEKİZ - Mineral Wool Insulated Panels*, in relation to its reaction to fire behaviour is classified:

A2

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for *İZOCAM TEKİZ - Mineral Wool Insulated Panels* is:

Fire behaviour		Smoke production			Flaming droplets	
A2	-	s	1	,	d	0

Reaction to fire classification: A2-s1, d0

4.3. Field of application

This classification is valid for the following product parameters:

- For wall panels:
    - Nominal thickness of panel ≥ (50 ± %15) mm
    - Density of core material: (100 ± %15) kg/m^3
    - Mass per unit area of one side outer organic coating ≤ 0,073 kg/m^2
    - Mass per unit area of Polyurethane adhesive ≤ 0,125 kg/m^2
    - Thickness of galvanized steel plates: 0,4 – 0,8 mm
- For roof panels:
    - Nominal thickness of panel ≥ (50 ± %15) mm
    - Density of core material: (100 ± %15) kg/m^3
    - Mass per unit area of one side outer organic coating ≤ 0,073 kg/m^2
    - Mass per unit area of Polyurethane adhesive ≤ 0,125 kg/m^2
    - Thickness of galvanized steel plates: 0,4 – 0,8 mm
    - Height of outer profile surfaces ≤ 40 mm

The classification is valid for the following end use applications:

- Product fixed as free standing without backing boards with vertical joints and inner/outer corner "L" profiles.

5. LIMITATIONS

5.1. Restrictions

This classification report is valid until 29th of December 2015, provided that the technical specifications of the product will not be changed.

5.2. Warning

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

The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Directive.

The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested

Signed:

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Ali BAYRAKTAR

ERA LABORATUVARLARI A.Ş. ERA

Approved:

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Onur DAĞ
Laboratory Manager