ERA LABORATUVARLARI A.Ş.

ERA Fire Test Laboratory

Accredited Body
No: AB-0330-T

TÜRKAK
Test
TS EN ISO/IEC 17025
AB-0330-T

CLASSIFICATION OF REACTION TO FIRE IN ACCORDANCE WITH EN 13501-1:2007+A1:2009

Sponsor	: GENTAŞ GENEL METAL SAN.ve TİC. A.Ş G.O.S.B. Serpek Mevki 14841 Mengen, BOLU / TURKEY
Prepared by	: ERA LABORATUVARLARI A.Ş. TOSB TAYSAD Organize San. Böl. 1. CD. 15. Yol No: 1 Şekerpınar - Çayırova KOCAELİ, TURKEY
Product name	: HPL(HIGH PRESSURE DECORATIVE LAMINATES) COMPOSITE PANELS
Classification report No.	: ERA - 14 - 095
Issue Number	: 1/2
Date of issue	: 22.10.2014

This classification report consists of 6 pages and may only be used or reproduced in its entirety.

Address: TOSB TAYSAD Organize San. Böl. 1. CD. ,15. Yol No: 1 Şekerpınar - Çayırova
Kocaeli, TURKEY
Tel: 0262 6581662 Fax: 0262 6581669 E-mail:info@erayonetim.com
Web: www.erayonetim.com

1. INTRODUCTION

This classification report defines the classification assigned to *"HPL(HIGH PRESSURE DECORATIVE LAMINATES) COMPOSITE PANELS"* in accordance with the procedures given in EN 13501-1:2007+A1:200

2. DETAILS OF CLASSIFIED PRODUCT

2.1. General:

The product *HPL(HIGH PRESSURE DECORATIVE LAMINATES) COMPOSITE PANELS are* defined as a „type c classified product". Its classification is valid for the following end use application:

TS EN 438-7: High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (Usually called Laminates) - Part 7: Compact laminate and HPL composite panels for internal and external wall an ceiling finishes

2.2. Description:

The product *HPL(HIGH PRESSURE DECORATIVE LAMINATES) COMPOSITE PANELS* are fully described in th test reports in support of the classification listed in clause 3.

Product Name	Density of panel [g/cm³]	Coating		Thickness of panel (mm)	Mass per unit area of filler material (gsm/m²)
		Thickness	Mass per unit area (gsm/m²)		
G-Fire (fire retardent laminate) 6 mm / G-Fire CGF 6 mm	1,40 ± 0,05	0,225±0,075	97,5±27,5	6	187,5±67,5
G-Ext (exterior panels) 6 mm / G-Ext Fire EDF 6 mm	1,40 ± 0,05	0,275±0,025	250 g/m²	6	187,5±67,5

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.	GENTAŞ GENEL METAL SAN. ve TİC. A.Ş.	FTST14394	TS EN 13823
		FTST14395	TS EN ISO 11925-2
		FTST14396	TS EN ISO 11925-2
		FTST14397	TS EN 13823
		FTST14398	TS EN ISO 11925-2
		FTST14399	TS EN ISO 11925-2

3.2. Results

Test method	Parameter	Number of test	Results	
			Continuous parameter mean (m)	Compliance parameters
TS EN ISO 11925-2[a] Flame exposition: 30 s	*Fs* ≤ 150 mm(1) ignition of filter paper (1) *Fs* ≤ 150 mm(2) ignition of filter paper (2)	6 6 6 6	(-) (-) (-) (-)	Yes No Yes No
TS EN 13823[a]	$FIGRA_{0,2\ MJ}$ (W/s) LFS > edge $THR_{600\ s}$ (MJ)	3 3 3	47,6 (-) 4,8	(-) No (-)
	SMOGRA (m^2/s^2) $TSP_{600\ s}$ (m^2)	3 3	1,7 25,3	(-) (-)
	Flaming droplet(s)/particle (s)	3	(-)	No
TS EN ISO 11925-2[b] Flame exposition: 30 s	*Fs* ≤ 150 mm(1) ignition of filter paper (1) *Fs* ≤ 150 mm(2) ignition of filter paper (2)	6 6 6 6	(-) (-) (-) (-)	Yes No Yes No
TS EN 13823[b]	$FIGRA_{0,2\ MJ}$ (W/s) LFS > edge $THR_{600\ s}$ (MJ)	3 3 3	46,1 (-) 4,7	(-) No (-)
	SMOGRA (m^2/s^2) $TSP_{600\ s}$ (m^2)	3 3	1,6 24,1	(-) (-)
	Flaming droplet(s)/particle (s)	3	(-)	No

(-): Not applicable
(1): Surface flame attack
(2): Edge flame attack

(a): G-Fire (fire retardent laminate) 6 mm / G-Fire CGF 6 mm
(b): G-Ext (exterior panels) 6 mm / G-Ext Fire EDF 6 mm

Test method	Parameter	Parameter	Compliance parameters
TS EN ISO 11925-2[(a)]	*Fs* ≤ 150 mm ignition of filter paper	Yes No	Yes (B - D) No (d0)
TS EN 13823[(a)]	$FIGRA_{0,2MJ}$ [W/s]	47,6	**≤ 120(B)**
	THR_{600s} [MJ]	4,8	≤ 7,5(B)
	LFS < edge	yes	Yes (B)
	SMOGRA [m^2/s^2]	1,7	≤ 30 (s1)
	TSP_{600s} [m^2]	25,3	**≤ 50 (s1)**
	Burning time of flaming droplets/particles [s]	None	No(d0)
TS EN ISO 11925-2[(b)]	*Fs* ≤ 150 mm ignition of filter paper	Yes No	Yes (B - D) No (d0)
TS EN 13823[(b)]	$FIGRA_{0,2MJ}$ [W/s]	46,1	**≤ 120(B)**
	THR_{600s} [MJ]	4,7	≤ 7,5(B)
	LFS < edge	yes	Yes (B)
	SMOGRA [m^2/s^2]	1,6	≤ 30 (s1)
	TSP_{600s} [m^2]	24,1	**≤ 50 (s1)**
	Burning time of flaming droplets/particles [s]	None	No(d0)

(-): Not applicable
(1): Surface flame attack
(2): Edge flame attack

(a): G-Fire (fire retardent laminate) 6 mm / G-Fire CGF 6 mm
(b): G-Ext (exterior panels) 6 mm / G-Ext Fire EDF 6 mm

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1. Reference of classification

This classification has been carried out in accordance with the clauses 11.6, 11.9.2 and 11.10.1 of EN 13501-1:2007+A1:2009

4.2. Classification

The product, *HPL(HIGH PRESSURE DECORATIVE LAMINATES) COMPOSITE PANELS*, in relation to it reaction to fire behaviour is classified:

B

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 *HPL(HIGH PRESSURE DECORATIVE LAMINATES) COMPOSITE PANELS* are:

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

Reaction to fire classification: B-s1-d0

4.3. Field of application

This classification is valid for the following product parameters:

Product Name	Density of panel [g/cm³]	Coating		Thickness of panel (mm)	Mass per unit area of filler material (gsm/m²)
		Thickness	Mass per unit area (gsm/m²)		
G-Fire (fire retardent laminate) 6 mm / G-Fire CGF 6 mm	1,40 ± 0,05	0,225±0,075	97,5±27,5	≥6	187,5±67,5
G-Ext (exterior panels) 6 mm / G-Ext Fire EDF 6 mm	1,40 ± 0,05	0,275±0,025	250 g/m²	≥6	187,5±67,5

The classification is valid for the following end use applications:

- The long wing of test specimen consists of four parts separated by horizontal joint at distance 500 mm from lower edge and vertical joint at distance 200 mm from the corner line. Th panels were mounted according to the appendix B, B.3 a of TS EN 438-7. The back of the wooder frame was filled with stone wool which have a density 50 kg/m³, thickness of 50 mm. Test sampl were fixed to give 30 mm air gap between frame and backing board. This provides the most onerous conditions and the result of a test using the standard frame of wood-based battens is valid for all other types of frame (e.g. aluminium, steel frames)

5. LIMITATIONS

5.1. Restrictions

This classification report is valid provided that the technical specifications of product are within the limits in accordance with the field of application clause 4.3.

5.2. Warning

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

Signed:

ERA LABORATUVARLARI A.Ş. ERA

Approved:

.....
Gülden YÜZER
Person in the charge of tests

.....
Onur DAĞ
Laboratory Manager