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Formica Europe
284 80 PERSTORP

Reaction to fire classification report of Formica Europe laminate products

1. Introduction

This classification report defines the classification assigned to Formica Europe products in accordance with the procedure given in EN 13501-1.

2. Nature and end use application

2.1 General

The products below are defined as HPL (High Pressure Laminate) composite panels:

- “Formica VPF” glued to 12 mm calcium silicate board.
- “Formica HGF” glued to 12 mm calcium silicate board.

According to the owner of this classification report, the products complies with the European product specification EN 438-7:2005.

2.2 Description

According to the client:

High pressure laminate products produced at the plant in North Shields, Great Britain, consisting of flame retardant treated unbleached craft paper, décor paper, phenol and melamine resin. The flame retardant consists of phosphates. The craft and décor papers are impregnated with phenol and melamine resin and are then pressed together at high temperature and high pressure. The products have a nominal density of 1400 kg/m^3 . The thickness of the laminates ranges from 0.65 to 1.4 mm. The products are then glued with phenolic glue to both faces of a core of 12 mm calcium silicate board. The calcium silicate board has a density of $870 \pm 50 \text{ kg/m}^3$ and a thickness of $11 \pm 2 \text{ mm}$. The products are fully described in test report mentioned below.

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3. Test reports & test results in support of classification

3.1 Test reports

This classification is based on the test report listed below:

Name of laboratory	Name of sponsor	Test report ref no	Test method
SP	Formica Europe	P500075B	EN 13823 EN ISO 11925-2

3.2 Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean (m)	Compliance parameter
EN ISO 11925-2		6		
Edge flame attack				
30 s exposure	$F_s \leq 150$ mm		(-)	Yes
Flaming droplets/particles	Ignition of filter paper		(-)	No ignition of filter paper
Surface flame attack		6		
30 s exposure	$F_s \leq 150$ mm		(-)	Yes
Flaming droplets/particles	Ignition of filter paper		(-)	No ignition of filter paper
EN 13823		3		
	$FIGRA_{0,2MJ}$ (W/s)		8	(-)
	$FIGRA_{0,4MJ}$ (W/s)		0	(-)
	$LFS < edge$		(-)	Yes
	THR_{600s} , (MJ)		1.0	(-)
	$SMOGRA$, (m^2/s^2)		0	(-)
	TSP_{600s} , (m^2)		22	(-)
	Flaming droplets/particles		(-)	No flaming droplets/particles

(-) : not applicable

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8.2, 10.6, 10.9, 10.10 and 13 of EN 13501-1:2002. This classification has also been carried out in accordance with clause 4.2.1 and Annex B, point B.3 and B.4 of EN 438-7:2005.

4.2 Classification

The Formica Europe products in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

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

d0

The format of the reaction to fire classification for construction products excluding floorings is:

Fire Behaviour		Smoke Production			Flaming Droplets	
<i>B</i>	-	<i>s</i>	<i>1</i>	,	<i>d</i>	<i>0</i>

Reaction to fire classification: *B-s1,d0*

4.3 Field of application:

This classification is valid for the following end use conditions:

Mounting on frames:

Mechanically fixed with or without vertical joints according to EN 438-7 to wood based or all other types of frames (e.g. aluminium, steel frames). Centre fixing distance up to 800 mm. Further details of mounting is given in SP report P500075B.

Substrates:

Frame system applied to any end use substrate of Euroclasses A1 or A2 at least 6 mm thick, having a density $\geq 820 \text{ kg/m}^3$.

This classification is also valid for the following product parameters:

HPL laminate:

Range of thicknesses 0.65 mm to 1.4 mm

Nominal density 1400 kg/m³.

5. Limitations

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

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Fire Technology - Materials Reaction to Fire



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