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This document cancels and replaces the document n° F060261 – CEMATE/5
and is an extension of the corresponding classification report.

EUROPEAN REACTION TO FIRE CLASSIFICATION REPORT IN ACCORDANCE WITH EN 13501-1: 2002

And the French modified Arrêté, dated 21 November 2002, concerning the reaction to fire of construction and fitting-out products.

N° F060261 - CEMATE/7

Sponsor : DAGARD S.A.
Route du Stade
23600 BOUSSAC
FRANCE

Producer : DAGARD S.A.
Route du Stade
23600 BOUSSAC
FRANCE

Commercial trademark : LA - LG

Brief description : Sandwich panel made up of polyurethane foam (expanded with pentane), referenced 2005/1, covered on its two faces by a galvanized steel sheet, interior and external sides thickness 0,6 mm and a top coat (25 µm white Polyester).

Thicknesses : equal or higher than 40 mm.
Density (PUR foam): (39 ± 2) kg/m³.

Period of validity : 5 years from the 29 July 2005.

The quoted results are only applicable to the samples, the products or materials described in this document.

**The full document can be copied.
It is composed of 6 pages**

1. INTRODUCTION

This classification report defines the classification assigned to product in accordance with the procedures given in EN 13501-1:2002.

2. DETAILS OF CLASSIFIED PRODUCT

2.1. NATURE AND END USE APPLICATION

Sandwich panel made up of polyurethane foam (expanded with pentane), referenced 2005/1, covered on its two faces by a galvanized steel sheet, interior and external sides thickness 0,6 mm and a top coat (25 µm white Polyester).

End use : Sandwiches panels for covering of industrial warehouses.

2.2. DESCRIPTION

The tested product referenced are fully described in the test reports referenced File F060261 - Documents CEMATE/1, CEMATE/2 and CEMATE/3.

Main characteristics of tested products :

Commercial trademark	Density (foam)	Panel thicknesses	Facing color
LA - LG	$(39 \pm 2) \text{ kg/m}^3$	(40 and 100) mm	White

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3. TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

3.1. TEST REPORTS

Name of laboratory	Name of sponsor	Test report ref. n°	Test method
LABORATOIRE NATIONAL D'ESSAIS 29 av. Roger Hennequin 78197 TRAPPES Cedex FRANCE Notified Body : 0071	DAGARD S.A. Route du Stade 23600 BOUSSAC FRANCE	F060261 :	Ignability EN ISO 11925-2
		CEMATE/1	
		CEMATE/2 CEMATE/3	SBI test EN 13823

3.2. TEST RESULTS FOR CONSTRUCTION PRODUCTS EXCEPT FLOORINGS

Test Method	Parameter	Number of tests	Results	
			Continous parameters mean m	Compliance parameter
EN ISO 11925-2. Surface application. 30 s exposure	$F_s \leq 150$ mm	6	—	YES
	Flaming droplets / particules with a filter paper ignition		—	NO

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Test Method	Parameter	Number of tests	Results	
			Continuous parameters mean m	Compliance parameter
EN 13823. LA - LG (thickness : 40 mm)	FIGRA _{0.2 MJ} (W/s)	3	56	-
	FIGRA _{0.4 MJ} (W/s)		52	-
	LFS < edge		-	YES
EN 13823. LA - LG (thickness : 100 mm)	THR _{600s} (MJ)	3	2,8	-
	SMOGRA (m ² /s ²)		21	-
	TSP _{600s} (m ²)		121	-
EN 13823. LA - LG (thickness : 40 mm)	Flaming droplets / particules:	3	-	NO
	FDP (≤10 s)		-	-
	FDP (> 10 s)		-	-
EN 13823. LA - LG (thickness : 100 mm)	FIGRA _{0.2 MJ} (W/s)	3	61	-
	FIGRA _{0.4 MJ} (W/s)		61	-
	LFS < edge		-	YES
EN 13823. LA - LG (thickness : 100 mm)	THR _{600s} (MJ)	3	5,3	-
	SMOGRA (m ² /s ²)		17	-
	TSP _{600s} (m ²)		139	-
EN 13823. LA - LG (thickness : 100 mm)	Flaming droplets / particules:	3	-	NO
	FDP (≤10 s)		-	-
	FDP (> 10 s)		-	-

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4. CLASSIFICATION AND DIRECT FIELD APPLICATION

4.1. CLASSIFICATION

The classification has been carried out in accordance with clause 10 of EN 13501-1 : 2002.

Fire behaviour	Smoke production	Flaming droplets
B	s2	d0

Classification : **B – s2, d0**

4.2. FIELD OF APPLICATION

The classification is valid for the following product parameters :

- thickness of metal facing excluding organic coatings : between 0,6 mm and 1,2 mm for internal and external sides,
- profile geometry of facing : smooth or small until 5 mm,
- polyester 25 µm of various colours, identical or different organic coating external,
- valid only for the preformed joints and of sealing out of silicone mastic such as that subjected to the test and those equivalent or lower than PCS value,
- expanded polyurethane foam (Polyol from the company DOW referenced CM 577) blown with pentan with the same chemical composition and a density of (39 ± 6) kg/m³,
- total thickness of the panel : equal or higher than 40 mm,
- steel corner flashings with dimensions and thicknesses equal or greater than the ones used for tests, that is to say ≥ 50 mm x 50 mm x 0,5 mm for the internal corner flashing,
- space between fixings for steel corner flashings : ≤ 400 mm.

The classification is valid for the following end use conditions :

- for all end use vertical and horizontal applications, non-suspended.

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5. LIMITATIONS

5.1. RESTRICTIONS CONCERNING THE VALIDITY PERIOD OF THE CLASSIFICATION REPORT

Period of validity : 5 years from the 29 July 2005.

5.2. WARNING

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

Trappes, the 19 September 2005

The Head of the Fire
Behaviour Division



Alain SAINRAT



The technical manager



Romain FRIGOT