

SAFETY, STRUCTURES AND FIRE DEPARTMENT Reaction to fire

REACTION TO FIRE CLASSIFICATION REPORT No. RA11-0032 ACCORDING TO THE EUROPEAN STANDARD NF EN 13501-1

Provided the Ordinance from the Ministry of the interior, November 21, 2002. Pilot laboratory approved by the Ministry of the Interior (Ordinance of February 5, 1959, amended) Seule la version française fait foi. Only the French version is legally acceptable.

Valid 5 years from February 09th, 2011

| Owner: | ALCOA ARCHITECTURAL PRODUCTS S.A.S. 1 rue du Ballon 68500 MERXHEIM FRANCE |
|----------------------|--|
| Commercial brand(s): | REYNOBOND [®] 55 PE Riveted system |
| Brief description: | Composite panel with polyethylene core covered on both sides with aluminium sheets (see detailed description in paragraph 2) |
| Date of issue: | February 09 th , 2011 |

The indicated classification does not prejudge the conformity of marketed materials with the samples submitted to the tests and under no circumstances, this document should not be considered as type approval or certification of the product in the sense of the L 115-27 article of the consumption's code and of the law dated June 3^{rd} , 1994.

If this report is being issued by e-mail and/or on an electronic medium, only the hard copy of the report signed by CSTB shall prevail in the event of a dispute.

The reproduction of this classification report is only authorised in its integral form. It comprises 4 pages.



1. Introduction

This classification report defines the classification assigned to the above-mentioned product(s) in accordance with the procedures given in the NF EN 13501-1 standard.

2. Product description

Composite panel consisting of two precoated aluminium sheets thermally bonded on either side of a low density polyethylene core. System tested riveted on metal substructure. Tested finish: Duragloss[®] 5000 35 μm .

Overall nominal thickness: 4 mm. Nominal thickness of the aluminium sheets: 0.5 mm. Overall nominal weight per unit area: 5.5 kg/m². Colour: grey.



3. Tests reports and tests results in support of this classification

3.1 Tests reports

| Name of laboratory | Name of sponsor | Test identification | Test report Nos. | Test method |
|-----------------------|---|------------------------|---------------------|----------------------------|
| CSTB | ALCOA ARCHITECTURAL PRODUCTS S.A.S. 1 rue du Ballon 68500 MERXHEIM FRANCE | ES541100127 | RA11-0032 | EN ISO 11925-2 EN 13823 |

3.2 Tests results

| Test method | Product Number of tests Para | | Parameters | Results Compliance parameters |
|----------------------|---------------------------------|---|--------------|-------------------------------------|
| EN ISO 11925-2 | REYNOBOND [®] 55 PE | 6 | Fs > 150 mm | Not reached |
| 30s surface exposure | Riveted system | | Filter paper | Not ignited |
| EN ISO 11925-2 | REYNOBOND [®] 55 PE | 6 | Fs > 150 mm | Not reached |
| 30s edge exposure | Riveted system | | Filter paper | Not ignited |

| | | | | Resu | ults |
|----------------|---------------------------------------|------------------------------------|---|--------------------------|--------------------------|
| Test method | Product | Product Number of tests Parameters | Continuous parameters : mean value | Compliance parameters | |
| 511 42022 | 23 REYNOBOND® 55 PE Riveted system | 3 | FIGRA _{0.2MJ} (W/s) FIGRA _{0.4MJ} (W/s) LFS THR _{600s} (MJ) | 96.0 96.0 - 2.2 | - Not reached - |
| EN 13823 | | | SMOGRA(m ² /s ²) TSP _{600s} (m ²) | 6.4 47.7 | |
| | | | Flaming droplets or debris | - | None |

(-) means: not applicable



4. Classification and direct field of application

4.1 Reference of the classification

This classification has been carried out in accordance with clauses 11.6, 11.9.2 and 11.10.1 of the NF EN 13501-1 standard.

4.2 Classification

| Fire behaviour | | Smoke production | | Flaming droplets or debris |
|----------------|---|------------------|---|----------------------------|
| В | - | s1 | , | dO |

| Classification: B - s1, d0 |
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|-----------------------------------|

4.3 Field of application

This classification is valid for the following product parameters:

- The system described in paragraph 2.
- An overall nominal thickness of 4 mm.
- An overall nominal weight per unit area of 5.5 kg/m².
- A 35 μ m thick Duragloss[®] 5000 finish.
- A grey colour.

This classification is valid for the following end use conditions:

- System riveted on metal substructure.
- With a minimum air gap of 50 mm.
- Without substrate or with any A1 or A2-s1,d0 class substrate with a density \geq 820 kg/m³.



Olivier BRAULT

Champs-sur-Marne, February 09th, 2011

The Head of Reaction to Fire laboratory

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