

SAFETY, STRUCTURES AND FIRE DEPARTMENT

Reaction to fire

REACTION TO FIRE CLASSIFICATION REPORT No. RA13-0021 **ACCORDING TO THE EUROPEAN STANDARD** NF EN 13501-1

Notification by the French Government to the European Commission under no 0679. Seule la version française fait foi. The french version is legally acceptable

Product standards

NF EN 14782: "Self-supporting metal sheet for roofing, external cladding and internal lining -Product specification and requirements"

NF EN 14783: "Fully supported metal sheet and strip for roofing, external cladding and internal lining -Product specification and requirements"

Owner: **AC&CS SCRL**

Boulevard de Colonster, B57

4000 LIEGE BELGIUM

ESTETIC® FLEX / GRANITE® FLEX Commercial brand(s):

Manufacturing unit(s): **Polyester version: Polyurethane version:**

ARCELORMITTAL

EISENHUTTENSTADT GmbH

Kaltwalzwerk/OV

15888 EISENHUTTENSTADT

GERMANY

ARCELORMITTAL LIEGE Rue Sompré, 1

4400 RAMET

BELGIUM

Brief description: Metal sheets

(see detailed description in paragraph 2)

January 16th, 2013 Date of issue:

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 to L 115-33 and R 115-1 to R 115-3 articles of the consumption's code.

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

Steel sheet coated on both sides.

Steel sheet coated on the back side with a polyester resin-based backcoat (12 μ m thick) and on the top side with a polyester resin-based primer (5 μ m thick) and a polyurethane or polyester resin-based finishing coat (20 μ m thick).

Nominal thickness of the steel sheet: 0.45 mm.

Colours: various.

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	AC&CS SCRL Boulevard de Colonster, B57 4000 LIEGE BELGIUM	ES541100746	RA13-0021	EN 13823 EN ISO 1716
	I-R&D ARCELOR FCSE Centre Industrie liège SSDC / Metalworking Bld de Colonster, B57 4000 LIEGE BELGIUM	ES541051109	RA07-0494	EN ISO 1716



3.2 Tests results

Test method	Product	Number of tests		Results	
			Parameters	Continuous parameters : mean value	Compliance parameters
EN 13823	ESTETIC [®] FLEX / GRANITE [®] FLEX with polyurethane finish	3	FIGRA _{0.2MJ} (W/s) FIGRA _{0.4MJ} (W/s) LFS THR _{600s} (MJ)	0.0 0.0 - 0.4	- Not reached -
			SMOGRA(m²/s²) TSP _{600s} (m²)	0.0 24.9	
			Flaming droplets or debris	-	None
	ESTETIC [®] FLEX / GRANITE [®] FLEX with polyester finish	1	FIGRA _{0.2MJ} (W/s) FIGRA _{0.4MJ} (W/s) LFS THR _{600s} (MJ)	0.0 0.0 - 0.2	- Not reached -
			SMOGRA(m²/s²) TSP _{600s} (m²)	0.0 20.3	
			Flaming droplets or debris	-	None
EN ISO 1716	External non-substantial component (non-exposed side), polyurethane and polyester versions	3	PCS (MJ/m²)	0.3	
	External non-substantial component (exposed side), polyurethane version	, 3	PCS (MJ/m²)	0.8	-
	External non-substantial component (non-exposed side), polyester version	(per component)		1.0	-
	Whole product, polyurethane version		PCS (MJ/kg)	0.3	-
	Whole product, polyester version			0.4	

⁽⁻⁾ 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 clause 11.8.2 of the NF EN 13501-1 standard.

4.2 Classification

Fire behaviour

Classification: A1

4.3 Field of application

This classification is valid for the following product parameters:

- The product described in paragraph 2.
- A nominal thickness of steel sheet ≥ 0.45 mm.
- Various colours of polyurethane finish (polyester primer 5 μm + polyurethane finish 20 μm) on the exposed side.
- Various colours of polyester finish (polyester primer 5 μ m + polyester finish 20 μ m) on the exposed side.
- A polyester backcoat maximum thickness of 12 μm on the non-exposed side.

Champs-sur-Marne, January 16th, 2013

The Technician Responsible for the test

Franck GOGUEL

The Head of Reaction to Fire laboratory

Gildas CREACH

......END OF THE CLASSIFICATION REPORT