

## REACTION TO FIRE CLASSIFICATION REPORT No. RA14-0265 ACCORDING TO THE EUROPEAN STANDARD NF EN 13501-1+A1:2013

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 14782:2006** "Self-supporting metal sheet for roofing, external cladding and internal lining - Product specification and requirements"

**NF EN 14783:2006** "Fully supported metal sheet and strip for roofing, external cladding and internal lining - Product specification and requirements"

<b>Owner:</b>	<b>ARCELORMITTAL LIEGE RESEARCH SCRL</b> <b>Boulevard de Colonster B57</b> <b>4000 LIEGE</b> <b>BELGIUM</b>
<b>Commercial brand(s):</b>	<b>Granite® FARM</b>
<b>Manufacturing unit(s):</b>	<b>The manufacturing unit appears in the associated test report</b>
<b>Brief description:</b>	<b>Metal sheets</b> (see detailed description in paragraph 2)
<b>Date of issue:</b>	<b>October 08<sup>th</sup>, 2014</b>

The indicated classification does not prejudice 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<sup>rd</sup>, 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 5 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+A1:2013 standard.

## 2. Product description

Steel sheet coated on the indoor side with the Granite<sup>®</sup> FARM 35 µm coating consisting of two polyester resin-based back coats (15 µm + 20 µm).

The steel sheet can be coated on the outdoor side of the coating with:

- Granite<sup>®</sup> STANDARD consisting of a polyester resin-based primer (5 µm) and a polyester resin-based finish (20 µm).
- or Granite<sup>®</sup> HD consisting of a polyester resin-based primer (5 µm) and a polyester resin-based finish (20 µm).
- or Granite<sup>®</sup> HDS consisting of a polyester resin-based primer (15 µm) and a polyester resin-based finish (20 µm).
- or Granite<sup>®</sup> HDX consisting of polyurethane resin-based primer with chromium VI (30 µm) or without chromium VI (25 µm) and a polyurethane resin-based finish without chromium VI (30 µm).
- or Granite<sup>®</sup> STANDARD back coats consisting of two polyester resin-based back coats (8 µm + 7 µm)
- or Granite<sup>®</sup> FARM 35 µm consisting of two polyester resin-based back coats (15 µm + 20 µm).

Nominal thickness of the sheet: 0.55 mm.

Colours: various (except metal colours for the Granite<sup>®</sup> HDX coating).

## 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
<b>CSTB</b>	<b>ARCELORMITTAL LIEGE RESEARCH SCRL Boulevard de Colonster B57 4000 LIEGE BELGIUM</b>	<b>ES541130313</b>	RA14-0265	EN ISO 1716 :2002 EN 13823:2002

**3.2 Tests results**

Test method	Product	Number of tests	Parameters	Results		
				Continuous parameters Mean values	Compliance parameters	
EN 13823	Granite® STANDARD 25 µm	3	FIGRA <sub>0.2MJ</sub> (W/s)	<b>0.0</b>	-	
			FIGRA <sub>0.4MJ</sub> (W/s)	<b>0.0</b>	-	
			LFS	-	<b>Not reached</b>	
				THR <sub>600s</sub> (MJ)	<b>0.3</b>	-
				SMOGRAM <sup>2</sup> /s <sup>2</sup> )	<b>0.0</b>	-
				TSP <sub>600s</sub> (m <sup>2</sup> )	<b>26.3</b>	-
				Flaming droplets or debris	-	<b>None</b>
	Granite® HD 25 µm	3	FIGRA <sub>0.2MJ</sub> (W/s)	<b>0.0</b>	-	
			FIGRA <sub>0.4MJ</sub> (W/s)	<b>0.0</b>	-	
			LFS	-	<b>Not reached</b>	
				THR <sub>600s</sub> (MJ)	<b>0.4</b>	-
				SMOGRAM <sup>2</sup> /s <sup>2</sup> )	<b>0.0</b>	-
			TSP <sub>600s</sub> (m <sup>2</sup> )	<b>19.3</b>	-	
			Flaming droplets or debris	-	<b>None</b>	
Granite® HDS 35 µm	3	FIGRA <sub>0.2MJ</sub> (W/s)	<b>0.0</b>	-		
		FIGRA <sub>0.4MJ</sub> (W/s)	<b>0.0</b>	-		
		LFS	-	<b>Not reached</b>		
			THR <sub>600s</sub> (MJ)	<b>0.3</b>	-	
			SMOGRAM <sup>2</sup> /s <sup>2</sup> )	<b>0.0</b>	-	
			TSP <sub>600s</sub> (m <sup>2</sup> )	<b>26.6</b>	-	
			Flaming droplets or debris	-	<b>None</b>	
Granite® HDX 60 µm	3	FIGRA <sub>0.2MJ</sub> (W/s)	<b>10.9</b>	-		
		FIGRA <sub>0.4MJ</sub> (W/s)	<b>9.5</b>	-		
		LFS	-	<b>Not reached</b>		
			THR <sub>600s</sub> (MJ)	<b>1.4</b>	-	
			SMOGRAM <sup>2</sup> /s <sup>2</sup> )	<b>0.0</b>	-	
			TSP <sub>600s</sub> (m <sup>2</sup> )	<b>27.0</b>	-	
			Flaming droplets or debris	-	<b>None</b>	

(-) means: not applicable

**3.2 Tests results (continuation)**

Test method	Product	Number of tests	Parameters	Results	
				Continuous parameters Mean values	Compliance parameters
EN 13823	Granite® FARM 35 µm	1	FIGRA <sub>0.2MJ</sub> (W/s)	<b>0.0</b>	-
			FIGRA <sub>0.4MJ</sub> (W/s)	<b>0.0</b>	-
			LFS	-	<b>Not reached</b>
			THR <sub>600s</sub> (MJ)	<b>0.4</b>	-
			SMOGRAM(m <sup>2</sup> /s <sup>2</sup> )	<b>12.8</b>	-
			TSP <sub>600s</sub> (m <sup>2</sup> )	<b>33.4</b>	-
			Flaming droplets or debris	-	<b>None</b>
EN ISO 1716	External non substantial component (outdoor side - worst case)	3 (per component)	PCS (MJ/m <sup>2</sup> )	<b>1.9</b>	-
	External non substantial component (indoor side)		PCS (MJ/m <sup>2</sup> )	<b>0.8</b>	
	Whole product (worst case)		PCS (MJ/kg)	<b>0.6</b>	

(-) 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+A1:2013 of the NF EN 13501-1 standard.

##### 4.2 Classification

<b>Fire behaviour</b>
<b>A1</b>

**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  $\geq 0.55$  mm.
- Various colours (except metal colours for the Granite<sup>®</sup> HDX coating).

#### 5. Limitations

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

The classification assigned to the product in this report is appropriate to a declaration of performance by the manufacturer within the context of system 3 attestation of conformity and CE marking under the European Construction Products Regulation (regulation UE no. 305/2011). The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

Champs-sur-Marne, October 08<sup>th</sup>, 2014

**The Head of Reaction to Fire unit**



**Gildas CREACH**

.....END OF THE CLASSIFICATION REPORT