**SAFETY, STRUCTURES AND FIRE DEPARTMENT**
Reaction to fire

# REACTION TO FIRE CLASSIFICATION REPORT No. RA11-0097 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:** | **ARCELORMITTAL LIEGE RESEARCH SCRL**<br>**Boulevard de Colonster, B57**<br>**4000 LIEGE**<br>**BELGIUM** |
| **Commercial brand(s):** | **GRANITE WOOD**<br>**GRANITE CLOUDY** |
| **Manufacturing unit(s):** | **ARCELORMITTAL SWIETOCHLOWICE**<br>**ul. Metalowcow 5**<br>**41-600 SWIETOCHLOWICE**<br>**POLAND** |
| **Brief description:** | **Metal sheets**<br>(see detailed description in paragraph 2) |
| **Date of issue:** | **April 08th, 2011** |

## 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 the back side with a polyester resin-based backcoat (12 µm thick) and on the visible side with a polyester resin-based primer (10 µm thick) and a polyester resin-based finishing paint (26 µm thick).
Nominal thickness of the steel sheet: 0.40 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** | **ARCELORMITTAL LIEGE RESEARCH SCRL Boulevard de Colonster, B57 4000 LIEGE BELGIUM** | **ES541100749** | RA11-0097 | EN 13823<br>EN ISO 1716 |
| | | **ES541041017** | RA08-0032 | EN ISO 1716 |

### 3.2 Tests results

| Test method | Product | Number of tests | Parameters | Results | |
|---|---|---|---|---|---|
| | | | | Continuous parameters : mean value | Compliance parameters |
| EN 13823 | GRANITE WOOD | 3 | $FIGRA_{0.2MJ}$(W/s)<br>$FIGRA_{0.4MJ}$(W/s)<br>LFS<br>$THR_{600s}$(MJ) | **1.5**<br>**1.5**<br>**-**<br>**0.8** | **-**<br>**-**<br>**Not reached**<br>**-** |
| | | | SMOGRA(m²/s²)<br>$TSP_{600s}$(m²) | **0.0**<br>**17.6** | **-**<br>**-** |
| | | | Flaming droplets or debris | **-** | **None** |
| EN ISO 1716 | External non substantial components (exposed side) | 3 | PCS (MJ/m²) | **1.1** | **-** |
| | External non substantial components (non-exposed side) | 3 | PCS (MJ/m²) | **0.4** | **-** |
| | Whole product (worst case) | - | PCS (MJ/kg) | **0.5** | **-** |

(-) means: not applicable

### 3.3 Additional test

| Test method | Product | Number of tests | Parameters | Results | |
|---|---|---|---|---|---|
| | | | | Continuous parameters : mean value | Compliance parameters |
| EN 13823 | GRANITE CLOUDY | 1 | $FIGRA_{0.2MJ}$(W/s)<br>$FIGRA_{0.4MJ}$(W/s)<br>LFS<br>$THR_{600s}$(MJ) | **0.0**<br>**0.0**<br>**-**<br>**0.5** | **-**<br>**-**<br>**Not reached**<br>**-** |
| | | | SMOGRA(m²/s²)<br>$TSP_{600s}$(m²) | **0.0**<br>**26.3** | **-**<br>**-** |
| | | | 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 11.8.2 of the NF EN 13501-1 standard.

### 4.2 Classification

| Fire behaviour | | Smoke production | | Flaming droplets or debris |
|---|---|---|---|---|
| **A1** | **-** | **Not applicable** | **,** | **Not applicable** |

**Classification: A1**

### 4.3 Field of application

This classification is valid for the following product parameters:

- A nominal thickness of steel sheet ≥ 0.40 mm.
- Various colours of polyester finish (10 µm thick primer + 26 µm thick finish) on the exposed side.
- A maximum polyester backcoat thickness of 12 µm on the non-exposed side.

Champs-sur-Marne, April 08th, 2011

**The Technician**
**Responsible for the test**

**Olivier BRAULT**

**The Head of Reaction to Fire laboratory**

P.O. Martial Bonhomme

**Gildas CREACH**

.....END OF THE CLASSIFICATION REPORT