

Title:

CLASSIFICATION OF
REACTION TO FIRE
PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1:2018

Notified Body No:

0833

Product Name:

"Ultraglaze NC 2"

Report No:

WF 417194

Issue No:

1

Prepared for:

Newbrel Limited
Gainsford Drive,
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Date:

8th October 2019

1. Introduction

This classification report defines the classification assigned to "Ultraglaze NC 2", a cladding panel, in line with the procedures given in EN 13501-1:2018.

2. Details of classified product

2.1 General

The product, "Ultraglaze NC 2", a cladding panel, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "Ultraglaze NC 2", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

| | | |
|---|-------------------------|--|
| General description | | Cladding Panel |
| Product reference of overall composite | | "Ultraglaze NC 2" |
| Name of manufacturer of overall composite | | Newbrel Ltd |
| Thickness of overall composite | | 24-100mm (determined by Warringtonfire) |
| Weight per unit area of overall composite | | 11.5-31.8kg/m ² (determined by Warringtonfire) |
| Product configuration | | <ul style="list-style-type: none"> • Coating • Aluminium • Adhesive • Core • Adhesive • Aluminium • Coating |
| Coating | Generic type | Polyester powder coating |
| | Product reference | "Interpon/D1000 Series" |
| | Name of manufacturer | Akzo Nobel |
| | Colour reference | "White" (as observed by Warringtonfire) |
| | Number of coats | One |
| | Thickness | 60 microns |
| | Weight per unit area | 13.6g/m ² |
| | Application method | Spray |
| | Curing process per coat | Drying Ovens |
| | Flame retardant details | See Note 1 below |
| Substrate | Generic type | Aluminium |
| | Product reference | "Aluminium" |
| | Name of manufacturer | See Note 2 below |
| | Thickness | 1.5mm |
| | Weight per unit area | 4050g/m ² |
| | Flame retardant details | See Note 1 below |

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| | | |
|--|----------------------------|--|
| Adhesive | Generic type | Moisture Curing Polyurethane |
| | Product reference | "Solfre" |
| | Name of manufacturer | Chemique |
| | Colour reference | See Note 2 below |
| | Application rate | 40-50g/m ² |
| | Application method | See Note 2 below |
| | Flame retardant details | See Note 1 below |
| Core | Curing process | Moisture curing under pressure |
| | Generic type | Mineral Wool |
| | Product reference | "Rockwool Panel Board" |
| | Name of manufacturer | Rockwool |
| | Thickness | 21-97mm |
| | Density | 160kg/m ³ |
| | Colour | "Brown" |
| | Generic type of resin | See Note 2 below |
| | Product reference of resin | See Note 2 below |
| | Amount of resin | See Note 2 below |
| | Generic type of oil | See Note 2 below |
| | Product reference of oil | See Note 2 below |
| | Amount of oil | See Note 2 below |
| Flame retardant details | See Note 1 below | |
| Adhesive | Generic type | Moisture Curing Polyurethane |
| | Product reference | Solfre |
| | Name of manufacturer | Chemique |
| | Colour reference | See Note 2 below |
| | Application rate | 40-50g/m ² |
| | Application method | See Note 2 below |
| | Flame retardant details | See Note 1 below |
| Substrate | Curing process | Moisture curing under pressure |
| | Generic type | Aluminium |
| | Product reference | "Aluminium" |
| | Name of manufacturer | See Note 2 below |
| | Thickness | 1.5mm |
| Coating | Weight per unit area | 4050g/m ² |
| | Flame retardant details | See Note 1 below |
| | Generic type | Polyester powder coating |
| | Product reference | "Interpon/D1000 Series" |
| | Name of manufacturer | Akzo Nobel |
| | Colour reference | "White" (as observed by Warringtonfire) |
| | Number of coats | One |
| | Thickness | 60 microns |
| | Weight per unit area | 13.6g/m ² |
| Application method | Spray | |
| Brief description of manufacturing process | Curing process per coat | Drying Ovens |
| | Flame retardant details | See Note 1 below |
| Brief description of manufacturing process | | See Note 3 below |

See Note 1 - The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product / component

See Note 2 - The sponsor was unable to provide this information

See Note 3 - The sponsor was unwilling to provide this information

3. Test reports & test results in support of classification.

3.1 Test reports / classification reports

| Name of Laboratory | Name of sponsor | Test reports/extended application report Nos. | Test method / extended application rules & date |
|--------------------|-----------------|---|---|
| Warringtonfire | Newbrel Limited | WF 393115, 409616, 393121, 418645 | EN ISO 1716 |
| Warringtonfire | Newbrel Limited | WF 393115 | EN ISO 1716 – Supplementary report No.1 |
| Warringtonfire | Newbrel Limited | WF 416469, 416468 | BS EN 13823 |
| Warringtonfire | Newbrel Limited | WF 417194 | BS EN 13501-1 |
| Warringtonfire | Newbrel Limited | WF 419782 | EN ISO 1716 - Summary |

3.2 Test results

| Test method & test number | Parameter | No. tests | Results | |
|---------------------------|--------------------------------|-----------|--|----------------------------|
| | | | Continuous parameter - Mean (m) | Compliance with parameters |
| BS EN 13823 | FIGRA _{0.2MJ} | 3 | 54.55 W/s (21mm) 43.27 W/s (97mm) | Compliant |
| | FIGRA _{0.4MJ} | | 27.51 W/S (21mm) 14.37 W/S (97mm) | Compliant |
| | THR _{600s} | | 1.09 MJ (21mm) 1.07 MJ (97mm) | Compliant |
| | LFS | | None | Compliant |
| | SMOGRA | | 4.68 m ² s ² (21mm) 4.24 m ² s ² (97mm) | Compliant |
| | TSP _{600s} | | 34.30 m ² (21mm) 45.85 m ² (97mm) | Compliant |
| | Flaming droplets lasting > 10s | | None | Compliant |

| | | | | |
|-------------|--------------------------------------|--------------------------|--------------------------|-----------|
| EN ISO 1716 | Interpon Coating - PCS (b) | 3 | 0.2893 MJ/m ² | Compliant |
| | Aluminium – PCS (a) | Deemed to satisfy (0.00) | | Compliant |
| | Solfre - PCS (d) | 3 | 1.5415 MJ/m ² | Compliant |
| | Mineral Wool – PCS (a) | | MJ/kg | Compliant |
| | Solfre - PCS (d) | | 1.5415 MJ/m ² | Compliant |
| | Aluminium – PCS (a) | Deemed to satisfy (0.00) | | Compliant |
| | Interpon Coating - PCS (b) | 3 | 0.2893 MJ/m ² | Compliant |
| | For the product as a whole – PCS (e) | N/a | 0.4881 MJ/kg | Compliant |

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2018, EN 14509:2013, EN/TS 15117 and EN 15725.

4.2 Classification

The product, "Ultraglaze NC 2", a cladding panel, in relation to its reaction to fire behaviour is classified:

A2

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

| Fire Behaviour | | Smoke Production | | | Flaming Droplets | |
|----------------|---|------------------|----------|---|------------------|----------|
| A2 | - | s | 1 | , | d | 0 |

i.e. **A2 – s1 , d0**

Reaction to fire classification: A2- s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

- 1.) Construction applications applied over any substrate with a minimum density of 870kg/m^3 , having a minimum thickness of 11mm and a fire performance of A2-s1,d0 or better

This classification is also valid for the following product parameters:

| | |
|-----------------------------|---|
| Grade of facing | Valid for all grades |
| Facing thickness | 1.5mm-3mm |
| Profile geometry | Valid for other types of light profile |
| Surface coating colour | Valid for all colours |
| Surface coating type | Valid for all coatings in the range 0-4 MJ/m ² |
| Adhesive type and app. rate | Valid for alternative adhesive with PCS (MJ/m ²) lower than that tested |
| Insulation thickness | 21-97mm allowed |
| Insulation density | $160\text{kg/m}^3 \pm 15\%$ allowed |
| Product composition | No further variation allowed |
| Product construction | No further variation allowed |

5. Limitations

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

SIGNED



Euan Gardner

Junior Certification Engineer
Technical Department

APPROVED



Matthew Dale

Senior Certification Engineer
Technical Department
On behalf of **Warringtonfire**

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