



warringtonfiregent  
global safety

## **Classification report Nr 11915F**

### **Owner of the classification report**

SVK N.V.  
Aerschotstraat 114  
B-9100 SINT-NIKLAAS  
BELGIUM

### **Introduction**

This classification report defines the classification assigned to the product '**Neptunus**' in accordance with the procedures given in the standard EN 13501-1: 2002: Fire classification of construction products and building elements part 1: classification using data from reaction to fire tests.

**This classification report consists of 7 pages**



FOUNDING MEMBER

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NOTIFICATIE  
BPR-DPC 1173



256-T

## 1. DETAILS OF CLASSIFIED PRODUCT

### a) Nature and end use application

The product “**Neptunus**” is defined as a ‘fibre-cement profiled sheet and fitting’.

This classification is valid for the following end use applications:

‘External layer for discontinuously laid roof coverings, used as internal wall finishes and used as external ceiling finishes, as per the scope of application defined in Section 1 of EN 494:2004’.

### b) Description

The tested material consists of a fibre cement corrugated sheet with reinforcement strips. The sheet is made of cement, micro-silica cellulose, fibres and filler material and has got a density of 1600 kg/m<sup>3</sup>. On the front side a water based acrylate dispersion primer (20 g/m<sup>2</sup>) and paint (60 g/m<sup>2</sup>) were applied. The paint contains blue pigments.

Mounting specifications: see annex 1 - page 6 of 7 and 7 of 7

|   | Nominal values |
|---|----------------|
| Thickness (mm)                                  | 6,5            |
| Total surface mass (g/m <sup>2</sup> )          | 10480          |
| Mass per unit area - primer (g/m <sup>2</sup> ) | 20             |
| Mass per unit area – paint (g/m <sup>2</sup> )  | 60             |
| Height of the corrugations (mm)                 | 51             |
| Pitch of the profiles (mm)                      | 177            |

## 2. TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

### a) Test reports

| Name of the laboratory         | Name of sponsor | Test report ref. no.              | Test method                    |
|--------------------------------|-----------------|-----------------------------------|--------------------------------|
| WFRGENT N.V.<br>Ghent, Belgium | SVK N.V.        | 11915E                            | EN 13823<br>(February 2002)    |
| WFRGENT N.V.<br>Ghent, Belgium | SVK N.V.        | 11915A, 11915B,<br>11915C, 11915D | EN ISO 1716<br>(February 2002) |

b) Test results

| Test method     | Parameter                                | Number of tests | Results                   |                      | Criteria for Class A2-s2,d0 |                      |
|-----------------|--|-----------------|---------------------------|----------------------|-----------------------------|----------------------|
|                 |  |                 | Continuous parameter mean | Compliance parameter | Continuous parameter        | Compliance parameter |
| EN ISO 1716 (4) | PCS (MJ/kg) (1)                          | 3               | 0,8                       | (-)                  | 3,0                         | (-)                  |
|                 | PCS (MJ/m <sup>2</sup> ) (2)             |                 | /                         | (-)                  | 4,0                         | (-)                  |
|                 | PCS (MJ/kg) (3)                          |                 | 1,2 (*)                   | (-)                  | 3,0                         | (-)                  |
| EN ISO 1716 (5) | PCS (MJ/kg) (1)                          | 3               | /                         | (-)                  | 3,0                         | (-)                  |
|                 | PCS (MJ/m <sup>2</sup> ) (2)             |                 | 0,4                       | (-)                  | 4,0                         | (-)                  |
|                 | PCS (MJ/kg) (3)                          |                 | 1,2 (*)                   | (-)                  | 3,0                         | (-)                  |
| EN ISO 1716 (6) | PCS (MJ/kg) (1)                          | 3               | /                         | (-)                  | 3,0                         | (-)                  |
|                 | PCS (MJ/m <sup>2</sup> ) (2)             |                 | 1,0 (***)                 | (-)                  | 4,0                         | (-)                  |
|                 | PCS (MJ/kg) (3)                          |                 | 1,2 (*)                   | (-)                  | 3,0                         | (-)                  |
| EN ISO 1716 (7) | PCS (MJ/kg) (2)                          | 4               | 16,9 (**)                 | (-)                  | /                           | (-)                  |
|                 | PCS (MJ/kg) (2)                          |                 | 17,4 (***)                | (-)                  | /                           | (-)                  |
| EN 13823 (8)    | FIGRA <sub>0,2MJ</sub> (W/s)             | 3               | 27                        | (-)                  | ≤ 120                       | (-)                  |
|                 | FIGRA <sub>0,4MJ</sub> (W/s)             |                 | (-)                       | (-)                  | (-)                         | (-)                  |
|                 | LFS < edge                               |                 | (-)                       | Yes                  | (-)                         | Yes                  |
|                 | THR <sub>600s</sub> (MJ)                 |                 | 0,4                       | (-)                  | ≤ 7,5                       | (-)                  |
|                 | SMOGRA (m <sup>2</sup> /s <sup>2</sup> ) |                 | 4                         | (-)                  | ≤ 30                        | (-)                  |
|                 | TSP <sub>600s</sub> (m <sup>2</sup> )    |                 | 34                        | (-)                  | ≤ 50                        | (-)                  |
|                 | Flaming droplets/Particles f<10s         |                 | (-)                       | Yes                  | (-)                         | Yes                  |
|                 | Flaming droplets/Particles f>10s         |                 | (-)                       | No                   | (-)                         | No                   |

- (1) For homogeneous products and substantial components of non-homogeneous products  
(2) For any external non-substantial component of non-homogeneous products  
(3) For the product as a whole  
(4) These test results are based on the test results obtained in the test report nr 11915A – “Base sheet”  
(5) These test results are based on the test results obtained in the test report nr 11915B – “Primer 336D”  
(6) These test results are based on the test results obtained in the test report nr 11915C – “Coating 334D”  
(7) These test results are based on the test results obtained in the test report nr 11915D – “Indicative tests on lightest and darkest colour - topcoat”  
(8) These test results are based on the test results obtained in the test report nr 11915E – “Neptunus”  
(-) Not applicable  
(\*) Calculation of the product as a whole on the basis of (4), (5), (6), (7) and (8)  
(\*\*) lightest colour  
(\*\*\*) darkest colour

### 3. CLASSIFICATION AND DIRECT FIELD OF APPLICATION

a) Reference and direct field of application

This classification has been carried out in accordance with clause 10.7. of EN 13501-1: 2002 and the EN 494:2004/prA2:2005 – Fibre cement profiled sheets and fittings – Product specification and test methods.

b) Classification

The product “**Neptunus**” in relation to his reaction to fire behavior is classified as:

| Fire behavior | Additional classification |    |
|---------------|---------------------------|----|
| A2            | s1                        | d0 |

c) Field of application

The classification applies to fibre cement profiled sheet and fitting of the same mix formulation as the base sheet, same thickness, same density and same facing or coating thickness as used for the test and within a field determined by the normal manufacturing tolerances.

This classification is valid for the tested assembly described in clause 1.b), the specimen was assembled in accordance with the guidance provided in EN 494:2004/prA2:2005. The test specimens shall be fixed directly over any substrate with a minimum density of 680kg/m<sup>3</sup>, having a minimum thickness of 12mm and a reaction to fire performance class D or better.

The classification also applies to fibre cement profiled sheet and fitting:

- with different types of profiles, with different height of corrugations, with different sheet length and width as long as the mix formulation is of the same type, but with different dimensions of length and width.
- with a thickness of 6,5 mm or higher.
- with a different surface (smooth or embossed).
- density of 1600 kg/m<sup>3</sup>, within a range of  $\pm 150$  kg/m<sup>3</sup>.
- with vertical and horizontal joints having a width of 3 mm or smaller.
- fixed with all other types of mechanical devices such as metal nails or rivets.
- fixed at different (wider or closer) horizontal or vertical fixing centres.
- fixed to wooden or metallic profiles.
- without thermal insulation in the cavity or with other types of insulation having a minimum class A2 (acc. EN13501-1), a minimum nominal thickness of 50 mm and a minimum nominal density of  $(70 \pm 20)$  kg/m<sup>3</sup> as long as a ventilated air gap of at least  $40 \pm 1$  mm directly behind the sheets is present.
- without finishes or with different finishes or coatings
- all colours

#### 4. DURATION OF THE VALIDITY

At the time the standard EN 13501-1 (February 2002) was published, no decision was made concerning the duration of validity of a classification report.

#### 5. WARNING



This classification report does not represent type approval nor certification of the product.

The following statement is included in accordance with Fire Sector Group Recommendation 001:

"The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of a system 3 attestation of conformity and CE marking under the Construction Products Directive.

The manufacturer has made a declaration, which is held on file. This confirms that the product's 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.

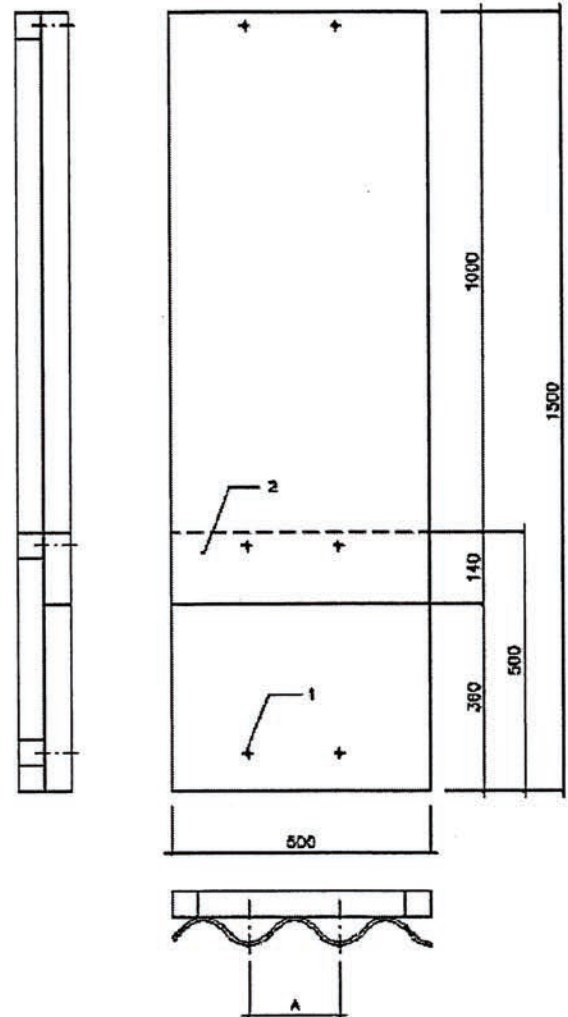
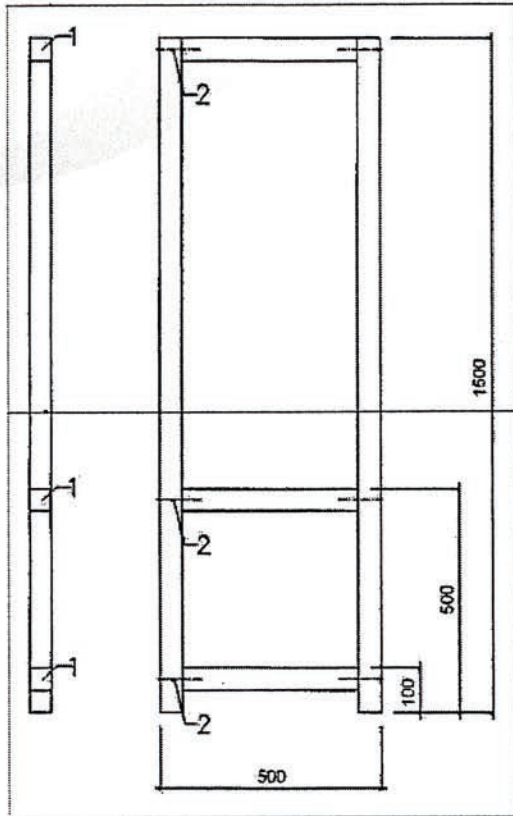
The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references to the manufacturer's factory production control that is aimed to be relevant to the samples tested and that will provide for their traceability."

| Report                                  | Name                          | Signature (*)  | Date         |
|---|-------------------------------|--|--------------|
| Prepared by                             | Ing. Frans DUTRIEUE           |  | 20 JUNI 2006 |
| Reviewed by                             | Prof. Dr. Ir. Paul VANDEVELDE |  | 20 JUNI 2006 |
| (*) For and on behalf of "WFRGent N.V." |                               |  |              |

EN 13501-1 B-C Eng nr 6

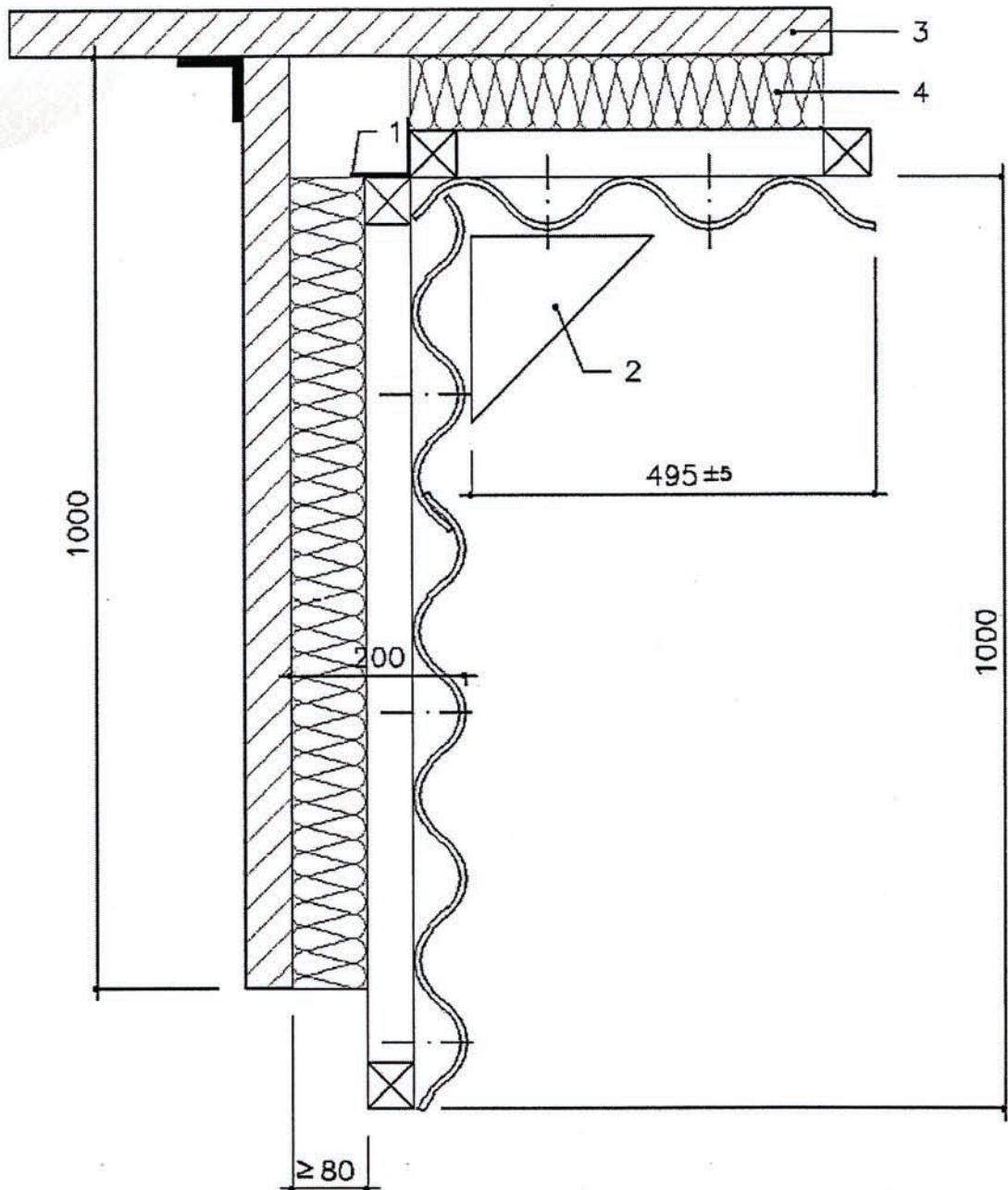
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**Key**  
 1 Timber member (50 ± 1) mm x (50 ± 1) mm  
 2 Screw or nail

**Key**  
 A Pitch of de profile  
 1 Screw fix into crown  
 2 end lap (horizontal)



**Key**

- 1 Metal bracket or profile for connecting both frames
- 2 Test burner
- 3 Backing board
- 4 Insulation – mineral wool