

## **Reaction to fire classification report Nr 12552C**

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

BOSTIK B.V.

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THE NETHERLANDS

### **Introduction**

This classification report defines the classification assigned to the product **'TRESPA METEON FR bonded with SIMSON PANELTACK'** 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 8 pages, including 1 annex**

## 1. DETAILS OF CLASSIFIED PRODUCT

### a) Nature and end use application

The product **TRESPA METEON FR** is defined as a 'high-pressure decorative laminate (HPL) – sheet based on thermosetting resins'.

Its classification is valid for the following end use application(s):

'Used as HPL composite panel for exterior wall and ceiling finishes'

'Bonded with SIMSON PANELTACK on all types of supporting frames'.

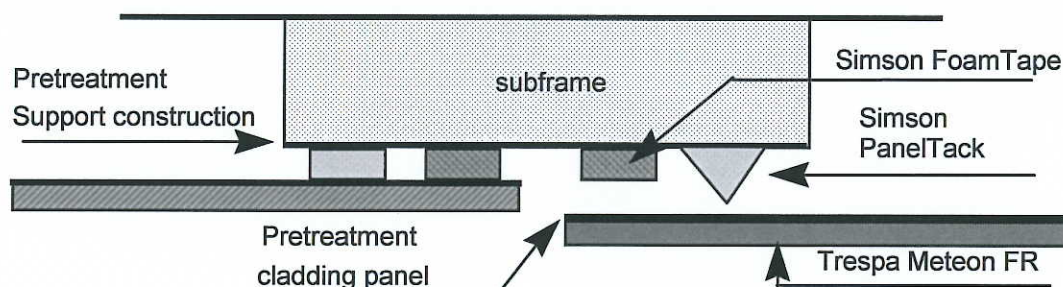
### b) Description

The product "TRESPA METEON FR" is a flat panel for exterior applications, based on thermosetting resins and fire retardant additives, homogeneously reinforced with cellulose fibres and manufactured under high pressure and temperature. On both sides the panels have an integrated decorative surface based on pigmented resins. On the exposed side the colour is white. On the back side the colour is black.

	Nominal values
Thickness (mm)	6
Total mass per unit area (g/m <sup>2</sup> )	8700
Density (kg/m <sup>3</sup> )	1450

The bonding system consists of:

- Simson PanelTack (Art. code 131670; batch no. A60928156): highly elastic adhesive
- Simson FoamTape (Art. code 182771; batch no. 390605-18): for the initial bonding of the panel and to guarantee a sufficient mass thickness of the applied adhesive
- Pretreatment for support construction: for wood Simson Primer SX Black (Art. code 23350; batch no. 63928)
- Pretreatment for cladding panel: Simson Primer PanelTack (Art. code 22111; batch no. 6241011)





Simson Primer SX Black (density 1.03 g/ml) has been applied on the vertical parts of the supporting frame (using a roller) prior to bonding.

After 1 hour drying of Primer SX Black, Simson FoamTape was applied on the wooden battens. Simson FoamTape is a flexible HDPE foam backing double sided coated with an adhesive. Its functions are to maintain the cladding during the curing of the adhesive and ensure the necessary space for the adhesive. Colour grey. The tape has a thickness of 3 mm and a width of 12 mm. It has a nominal density of 50kg/m<sup>3</sup>.

Besides the FoamTape the glue was applied on the wood.

Simson PanelTack is a one component, moisture curing highly elastic adhesive based on SMP (Silyl Modified Polymer) with a nominal density of 1.4 g/ml. Colour grey.

Simson Primer PanelTack (density 0.76 g/ml) has been used to clean, degrease and pre-treat the bonding side of the Trespa Meteon prior to bonding the panels by positioning and pressing the panels onto the FoamTape and glue.

All panels were tested with an air gap at the backside created by the depth of the wooden battens and covered with 50 mm thick rock fibre insulation slabs (density 60kg/m<sup>3</sup>). A vertical and horizontal joint has been constructed in these specimen (see annex 1).

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

### a) Test reports

Name of the laboratory	Name of the sponsor	Test report ref. Nr.	Test method
WFRGENT N.V. Ghent, Belgium	BOSTIK B.V.	12552A	EN 13823 (February 2002)
WFRGENT N.V. Ghent, Belgium	BOSTIK B.V.	12552B	EN ISO 11925-2 (February 2002)

b) Test results

Test method	Parameter	Number of tests	Results		Criteria for Class B-s2,d0		
			Continuous parameters Mean	Compliance parameters	Continuous parameters	Compliance parameters	
EN ISO 11925-2 (*) 30s flame application: <u>Surface exposure</u> - front side <u>Edge exposure</u> - front side - turned 90° behind surface	$F_s \leq 150\text{mm}$	6	(-)	Yes	(-)	Yes	
	Ignition filter paper		(-)	No	(-)	No	
	$F_s \leq 150\text{mm}$	6	(-)	Yes	(-)	Yes	
	Ignition filter paper		(-)	No	(-)	No	
	$F_s \leq 150\text{mm}$	6	(-)	Yes	(-)	Yes	
	Ignition filter paper		(-)	No	(-)	No	
EN 13823	FIGRA <sub>0,2 MJ</sub> (W/s)	3	99	(-)	$\leq 120$	(-)	
	FIGRA <sub>0,4 MJ</sub> (W/s)		(-)	(-)	(-)	(-)	
	LFS <sub>&lt;edge</sub>		(-)	Yes	(-)	Yes	
	THR <sub>600s</sub> (MJ)		5,9	(-)	$\leq 7,5$	(-)	
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )		14	(-)	$\leq 180$	(-)	
	TSP <sub>600s</sub> (m <sup>2</sup> )		109	(-)	$\leq 200$	(-)	
	Flaming droplets/particles						
	f<10s		(-)	Yes	(-)	Yes	
	f>10s		(-)	No	(-)	No	

(-) Not applicable

(\*) The material did not melt nor pull away from the pilot burner.

### 3. CLASSIFICATION AND DIRECT FIELD OF APPLICATION

a) Reference and direct field of application

This classification has been carried out in accordance with clause 10.6 of EN 13501-1: 2002 and EN 438-7: 2005.

b) Classification

The product **TRESPA METEON FR bonded with (the bonding system) SIMSON PANELTACK** in relation to its reaction to fire behavior is classified as:

Fire behavior	Smoke production	Flaming droplets
<b>B</b>	<b>s2</b>	<b>d0</b>



c) Field of application

This classification for the product as described in §1b, is valid for the following end use conditions :

- all types of supporting frames
- open air-gaps
- insulation as tested or without insulation
- fixing: glued onto the frame with the **Simson PanelTack bonding system**.
- with a vertical and horizontal joint in HPL panel, without the horizontal joint or with any type of closed horizontal joint

This classification is valid for the following product parameters:

- thicknesses of HPL panel: minimum 6 mm and all greater thicknesses
- surface mass HPL panel: 8700 g/m<sup>2</sup>
- density of the insulation : between 30 kg/m<sup>3</sup> and 70 kg/m<sup>3</sup>
- organic content of the insulation: ≤ 5 %
- melting point of the insulation: > 1000 °C
- nominal thickness insulation: 50 mm

**Bonding system**

- thickness of the adhesive 3 mm, width 12 mm
- On each (intermediate) supporting frame one vertical (uninterrupted) bead of adhesive and foam tape is to be applied. Exact quantity of adhesive therefore depends on the heart-to-heart distances of the supporting frames.

#### 4. RESTRICTIONS


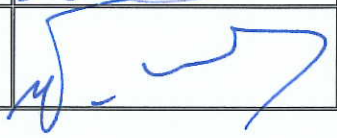
At the time the standard EN 13501-1 (February 2002) was published, no decision was made concerning the duration of validity of a classification report.

#### 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 certification body within the context of a system 1 attestation of conformity and CE marking under the Construction Products Directive, as the sampling was performed by a notified body.

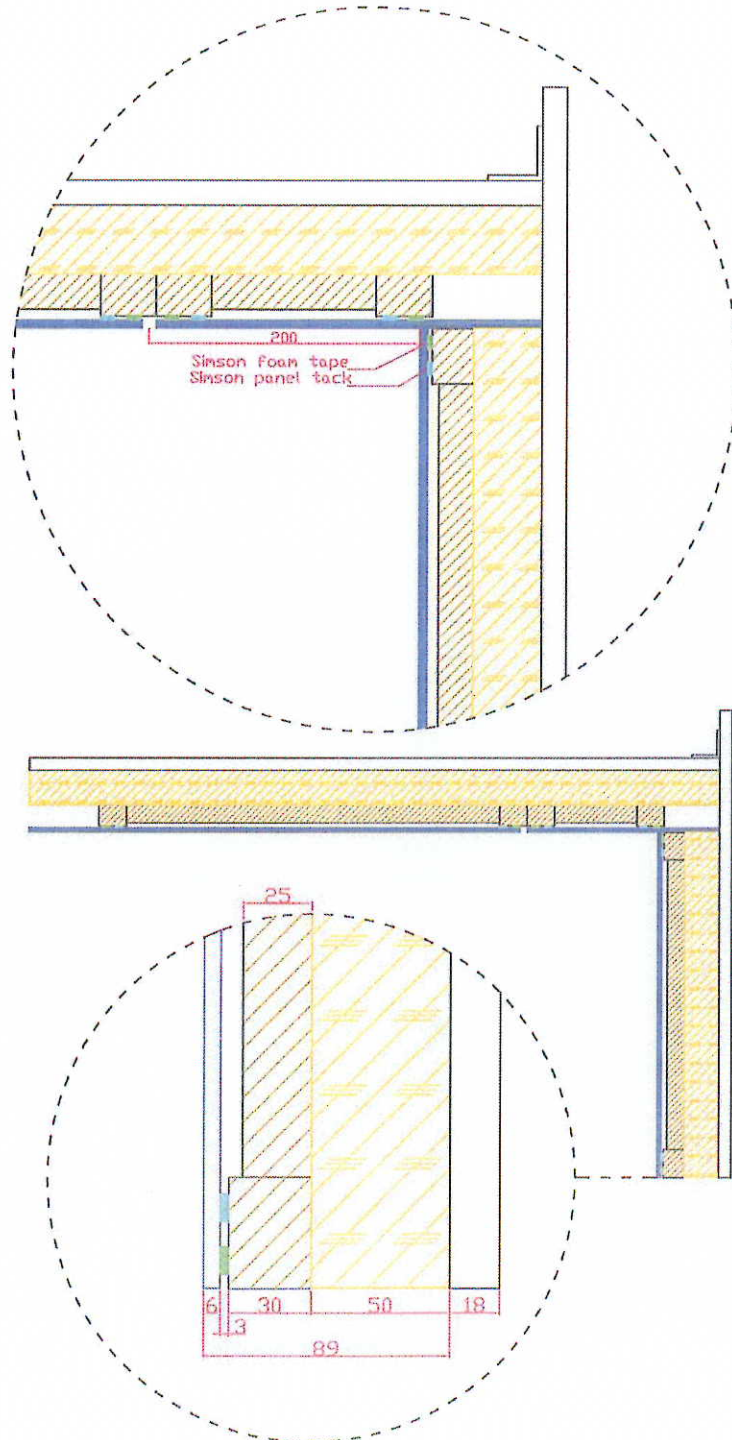
Report	Name	Signature (*)	Date
Prepared by	Ing. Frans DUTRIEUE		06 FEB. 2007
Reviewed by	Prof. Dr. Ir. Paul VANDEVELDE		06 FEB. 2007
(*) For and on behalf of "WFRGENT N.V."			

EN 13501-1 B-C-D WG 2E\*

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**Mounting specifications (\*)**



(\*) Drawing not to scale



