

Exova Warringtonfire  
Holmesfield Road  
Warrington  
WA1 2DS  
United Kingdom

T : +44 (0) 1925 655 116  
F : +44 (0) 1925 655 419  
E : warrington@exova.com  
W: www.exova.com



Testing. Advising. Assuring.

**Title:**

CLASSIFICATION OF  
REACTION TO FIRE  
PERFORMANCE  
IN ACCORDANCE WITH  
EN 13501-1:2007+A1: 2009.

**Notified Body No:**

0833

**Product Name:**

"PU coated glass fibre fabric"

**Report No:**

WF 346733

**Issue No:**

1

**Prepared for:**

Valmiera Glass UK Ltd  
Westbury  
Sherborne  
Dorset  
DT9 3RB  
UK

**Date:**

14<sup>th</sup> November 2014



## 1. Introduction

This classification report defines the classification assigned to "PU coated glass fibre fabric", a product group of flame retardant grade coated glass fabric, in accordance with the procedures given in EN 13501-1:2007+A1: 2009.

## 2. Details of classified product

### 2.1 General

The product group, "PU coated glass fibre fabric", a range of flame retardant grade coated glass fabrics, is defined as being suitable for construction applications.

### 2.2 Product range overview

The individual products in the product group, "PU coated glass fibre fabric", covered in this classification report, with some composition details, is listed below.

Type designation	Fabric type	1- or 2-sided coat	coating type	coating weight (g/m <sup>2</sup> )
1032-1-SP	1032	1	SP	15
1032-1-SP(SC)	1032	1	SP(SC)	15
1032-1-SP(HP)	1032	1	SP(HP)	15
1032-1-PW	1032	1	PW	15
3200-1-SP	3200	1	SP	20
3200-1-SP(SC)	3200	1	SP(SC)	20
3200-1-SP(HP)	3200	1	SP(HP)	20
3200-1-PW	3200	1	PW	20
4415-1-SP	4415	1	SP	25
4415-1-SP(SC)	4415	1	SP(SC)	25
4415-1-SP(HP)	4415	1	SP(HP)	25
4415-1-PW	4415	1	PW	25
TG-430-G-PU-1	TG430	1	SP	20
KA-600-G-PU-1	KA600	1	SP	25

## 2.3 Product description

The product group, "PU coated glass fibre fabric", a group of flame retardant grade coated glass fabrics, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		woven glass fabric coated with a flame retardant grade polyurethane coating
Product reference		See separate listing in section 2.2
Name of manufacturer		Valmiera Glass UK Limited
Overall nominal thickness		0.2 – 0.4 mm
Overall nominal weight		220 - 690 g/m <sup>2</sup>
Product configuration		PU Coating Glass Fibre Fabric PU Coating (back side optional)
PU Coating	Product reference	SP; SP(SC); PW; SP(HP); G-PU
	Generic type	Polyurethane coating with aluminium or white mineral filler
	Name of manufacturer	<b>See Note 1 below</b>
	Weight per unit area	15 – 25 g/m <sup>2</sup> (for a one-sided coat)
	Colour	"silver" or "white"
	Flame retardant details	<b>See Note 2 below</b>
Glass fibre fabric	Product reference	1032; 3200; 4415; TG430; KA600
	Generic type	E-glass fibres, with optionally steel fibres included in the fabric
	Name of manufacturer	<b>See Note 1 below</b>
	Weight per unit area	206 – 640 g/m <sup>2</sup>
	Flame retardant details	<b>See Note 3 below</b>
Brief description of manufacturing process		The fabric component is woven and then coated
Mounting and fixing details		The specimens were tested clamped into a "window" frame manufactured from 5mm steel sheet.
Air space details		A 180mm ventilated cavity was situated between the reverse face of each specimen and the calcium silicate backing board (defined in EN 13238: 2010)
Brief description of manufacturing process		The fabric component is woven and then coated

Note 1: The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

Note 2: The sponsor was unwilling to provide this information.

Note 3: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

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

#### 3.1 Test reports and Extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova warringtonfire	Valmiera Glass UK Ltd	WF 339618, WF 339620	EN 13823
Exova warringtonfire	Valmiera Glass UK Ltd	WF 339612, WF 339613, WF 343220, WF 343222	EN ISO 1716
Exova warringtonfire	Valmiera Glass UK Ltd	WF 346709	EN/TS 15117

#### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	Figra <sub>0.2 MJ</sub> (W/s)	3 + 3	2.9	Compliant
	THR <sub>600 s</sub> (MJ)		0.63	Compliant
	Smogra (m <sup>2</sup> /s <sup>2</sup> )		0	Compliant
	TSP <sub>600 s</sub> (m <sup>2</sup> )		17.7	Compliant
	LFS (y/n)		N	Compliant
	Flaming droplets (y/n) <10 s (y/n) >10 s (y/n)		N	Compliant
EN ISO 1716	PCS glass fibre fabric Type 1032	3	0.331 MJ/kg 0.068 MJ/m <sup>2</sup>	Compliant
	Type 3200	3	0.456 MJ/kg <0.274 MJ/m <sup>2</sup>	Compliant
	PCS Polyurethane SP; G-PU	3	23.74 MJ/kg <0.594 MJ/m <sup>2</sup>	Compliant
	SP(SC)	3	23.34 MJ/kg <0.584 MJ/m <sup>2</sup>	Compliant
	PW	3	19.71 MJ/kg <0.493 MJ/m <sup>2</sup>	Compliant
	SP(HP)	3	19.58 MJ/kg <0.490 MJ/m <sup>2</sup>	Compliant
	Product as a whole	Calculated	< 2.0 MJ/kg	Compliant

The values listed are the 'worst case' results for a full set of test results achieved on the product range covered in this report.

#### 4. Classification and field of application

##### 4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1:2009.

##### 4.2 Classification

The product group, "PU coated glass fibre fabric", a range of flame retardant grade coated glass fabrics, in relation to its reaction to fire behaviour is classified:

**Reaction to fire classification: A1**

##### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications; free standing

This classification is valid for the product parameters as defined in the Table in section 2.2. No further variations are allowed.

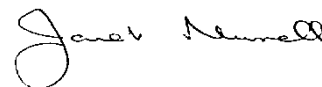
#### SIGNED



.....

**Frans Paap**  
Certification Engineer

#### APPROVED



.....

**Janet Murrell**  
Technical Manager  
on behalf of **Exova warringtonfire**

This copy has been produced from a .pdf format electronic file that has been provided by Exova Warringtonfire to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of Exova Warringtonfire. The pdf copy supplied is the sole authentic version of this document. All pdf versions of this report bear authentic signatures of the responsible Exova Warringtonfire staff.