

# classification report

**Title:**

CLASSIFICATION OF  
REACTION TO FIRE  
PERFORMANCE  
IN ACCORDANCE WITH  
EN 13501-1: 2007

**Notified Body No:**

0833

**Product Name:**

Palsun, Palsun UV2, Paltuf

**Report No:**

185769

**Issue No:**

1

**Prepared for:**

Palram UK  
Unit 2  
Doncaster Carr  
Industrial Estate  
White Rose Way  
Doncaster  
DN4 5JH

**Date:**

13<sup>th</sup> August 2009

This classification report defines the classification assigned to 'Palsun, Palsun UV2, Paltuf' a family of extruded solid polycarbonate flat sheets, in line with the procedures given in EN 13501-1:2007

## 2. Details of classified product

### 2.1 General

The products, 'Palsun, Palsun UV2, Paltuf' a family of extruded solid polycarbonate flat sheets, are defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The products, 'Palsun, Palsun UV2, Paltuf' are fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	Extruded solid polycarbonate flat sheet
Trade name / product reference	"Palsun," "Palsun UV2," " Paltuf"
Detailed description / composition details	Polycarbonate
Name of manufacturer	Palram
Density / weight per unit area	1.2g/cm <sup>3</sup> (Stated by sponsor)
Thickness	3 - 6mm (Stated by sponsor)
Colour	Clear, transparent
Flame retardant details	See Note 1
Brief description of manufacturing process	Extrusion
Mounting and fixing details	The specimens were tested clamped into a "window" frame manufactured from 5mm steel sheet. A one piece, 'L' shaped frame was placed into the test position with the product butted up behind it. A rectangular shaped frame was then butted up behind each wall of the sample and clamped into place at the top and bottom. 5mm thick steel angle (40mm x 40mm) was placed along the full length of the unexposed edge of the corner joint and clamped into position to secure it utilising bars at the top and bottom of the angle, each extending 200mm along each wing such that each could be retained by the clamps nearest to the corner joint.
Air space details	A 180mm ventilated cavity was situated between the reverse face of each specimen and the backing board

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

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

#### 3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Bodycote warringtonfire	Palram UK	WF 184563	EN ISO 11925-2
Bodycote warringtonfire	Palram UK	WF 184561, 184562	EN 13823
Bodycote warringtonfire	Palram UK	WF 185770	EN/TS 15117

#### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN ISO 11925-2 (30s exposure - surface)	F <sub>s</sub>	6	0	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (30s exposure – edge)	F <sub>s</sub>	6	48.3	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA <sub>0.2MJ</sub>	3	21.53, 5.85	Compliant
	FIGRA <sub>0.4 MJ</sub>		21.53, 5.85	Compliant
	THR <sub>600s</sub>		1.33, 0.41	Compliant
	LFS		N	Compliant
	SMOGRA		7.94, 1.96	Compliant
	TSP <sub>600s</sub>		40.98, 16.17	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 13501-1:2007

##### 4.2 Classification

The products, 'Palsun, Palsun UV2, Paltuf' a family of extruded solid polycarbonate flat sheets, in relation to their reaction to fire behaviour are classified:

**B**

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 products excluding floorings is:

Fire Behaviour		Smoke Production			Flaming Droplets	
<b>B</b>	-	<b>s</b>	<b>1</b>	,	<b>d</b>	<b>0</b>

i.e. **B – s1 , d0**

**Reaction to fire classification: B – s1 , d0**

##### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction applications mechanically installed without the presence of a substrate and with a minimum air gap of 180mm.

This classification is also valid for the following product parameters:

Product thickness	Between 3 – 6mm
Product density	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed
Product colour	No variation allowed

## 5. Limitations

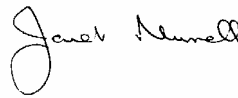
This document does not represent type approval or certification of the product

### SIGNED



.....  
**Simon Ince**  
Technical Officer  
Technical Department

### APPROVED



.....  
**Janet Murrell**  
Technical Manager  
Technical Department  
on behalf of:  
**Bodycote warringtonfire**

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Bodycote warringtonfire • Head Office • Holmesfield Road • Warrington • Cheshire • WA1 2DS • United Kingdom  
Tel: +44 (0) 1925 655 116 • Fax: +44 (0) 1925 655 419 • Email: [Info@warringtonfire.net](mailto:Info@warringtonfire.net) • Website: [www.warringtonfire.net](http://www.warringtonfire.net)

