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**Title:**

Classification of  
Fire Resistance Performance  
in accordance with  
EN 13501-2: 2009 for Paroc  
Panel AST F

**WF Report No:**

152749 (Issue 3)

**Prepared for:**

**Paroc Panel System Oy Ab**

Skräbböentie 14-16

FI-21600 Parainen

Finland

**Date:** 31<sup>st</sup> March 2006

## **1. Introduction**

This classification report defines the classification assigned to non-loadbearing wall constructions comprising Paroc Panel AST F, in accordance with the procedures given in EN 13501-2:2009.

## **2. Details of classified product**

### **2.1 General**

The element, Paroc Panel AST F, is defined as a non-loadbearing element (partition). Its function is to resist fire in respect of the fire performance characteristics given in Clause 5 of EN 13501-2:2009.

### **2.2 Product description**

The element, Paroc Panel AST F, is fully described in the test reports and Extended Field of Application report provided in support of this classification, which are listed in Clause 3.1.

Product description:

The product that is the subject of this report is a stone wool cored sandwich panel, faced with steel sheet (0.5 mm to 0.7 mm thick), as manufactured by Paroc Panel System Oy Ab, Skräbböentie 14-16, FI-21600 Parainen, Finland, having a nominal thickness of 50, 80, 100, 120, 150, 175, 200 and 240 mm and a nominal density of 115 kg/m<sup>3</sup>.

The stone wool insulation was manufactured to the tolerances and specifications detailed in the formulation specification for the product having been produced at Paroc Oy Ab, Stone Wool Plant, FIN-21600 Pargas, Finland.

The product, Paroc Panel AST F, is fully described in the test reports provided in support of the classification listed in 3.1.

### 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
warringtonfire	Paroc Panel System Oy Ab	WF Test Report No. 146976	EN 1364-1:1999
warringtonfire	Paroc Panel System Oy Ab	WF Test Report No. 150108	EN 1364-1:1999
Instytut Techniki Budowlanej	Paroc Panel System Oy Ab	LP 706.2/05	EN 1364-1:1999
warringtonfire	Paroc Panel System Oy Ab	WF Report No. 152747	EN 15254-5: 2009, Extended application of results from fire resistance tests – Non-loadbearing walls – Part 5: Metal sandwich panel construction

#### 3.2 Test results

Test method & Test number	Parameter		Results
EN 1364-1:1999  WF Test Report No. 146976	Integrity	cotton pad	362 minutes*
		gap gauges	362 minutes*
		sustained flaming	362 minutes*
	Insulation	mean temperature rise	320 minutes
		maximum temperature rise	286 minutes
EN 1364-1:1999  WF Test Report No. 150108	Integrity	cotton pad	46 minutes
		gap gauges	46 minutes
		sustained flaming	46 minutes
	Insulation	mean temperature rise	46 minutes
		maximum temperature rise	47 minutes

Test method & Test number	Parameter		Results
EN 1364-1:1999  LP 706.2/05	Integrity	cotton pad	133 minutes*
		gap gauges	133 minutes*
		sustained flaming	133 minutes*
	Insulation	mean temperature rise	133 minutes*
		maximum temperature rise	132 minutes*

\*test discontinued

#### 4. Classification and field of application

##### 4.1 Reference of classification

This classification has been carried out in accordance with Clause 7.5 of EN 13501-2:2009.

##### 4.2 Classification

The element, Paroc Panel AST F is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W	t	-	M	C	S	IncSlow	sn	ef	r
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##### 4.2.1 50 mm Thickness

<p><b>Fire resistance classifications:</b> <i>EI 45</i> <i>EW 30</i></p>
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##### 4.2.2 80 mm Thickness

<p><b>Fire resistance classifications:</b> <i>EI 90</i> <i>EW 90</i></p>
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#### 4.2.3 100 mm Thickness

**Fire resistance classifications:**

*EI 120*  
*EW 120*

#### 4.2.4 120 mm Thickness

**Fire resistance classifications:**

*EI 120*  
*EW 120*

#### 4.2.5 150 mm Thickness

**Fire resistance classifications:**

*EI 180*  
*EW 120*

#### 4.2.6 175 mm Thickness

**Fire resistance classifications:**

*EI 240*  
*EW 120*

#### 4.2.7 $\geq 200$ mm Thickness

**Fire resistance classifications:**

*EI 240*  
*EW 120*



## 5. Limitations

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

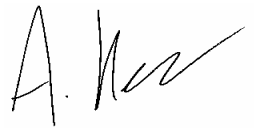
### SIGNED



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**D. Hankinson**

Principal Certification Engineer

### APPROVED



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**A. Kearns**

Technical Manager

Issue 2: Inclusion of 150 mm panel thickness (12<sup>th</sup> July 2006)

Issue 3: Changes to document due to update of WF Report No. 152747 (26<sup>th</sup> April 2010)

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