

**Title:**

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

**Notified Body No:**

0833

**Product Name:**

"Sentrin FRX Treated Timber"

**Report No:**

WF 409591

**Issue No:**

1

**Prepared for:**

PTG Treatments Ltd.  
F2 Rossington House  
Rossington Business Park  
West Carr Road  
Retford  
DN22 7SW

**Date:**

23rd April 2019

## 1. Introduction

This classification report defines the classification assigned to "Sentrin FRX Treated Timber" a modified Accoya timber board, treated with "Sentrin FRX flame retardant", in line with the procedures given in EN 13501-1:2007+A1: 2009.

## 2. Details of classified product

### 2.1 General

The product, "Sentrin FRX Treated Timber", is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The product, "Sentrin FRX Treated Timber", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Accoya modified timber boards treated with Sentrin FRX flame retardant fixed to battens
Trade name of treated product		"Sentrin FRX Treated Timber"
Manufacturer of treated product		PTG Treatments Limited
Timber details	Species	Accoya modified timber
	Width	145mm
	Thickness	18mm
	Density	430-600 kg/m <sup>3</sup>
	Treatment process	Vacuum Pressure Impregnation
Flame retardant details	Trade name	"Koppers Exterior Fire X"
	Generic type	WPA Type LR
	Supplier	Koppers Performance Chemicals
	Flame retardant treatment process conducted by	PTG Treatments Limited
	Solution strength	19.1 % w/v
	Impregnation date	17 <sup>th</sup> October 2018
	Net chemical retention	Not declared
	Cycle details	Initial Vacuum- An initial vacuum of between 540 and 600mmHg held for a period of 10 minutes Flood treatment vessel Pressure- A pressure of between 7450 and 10150mmHg for a period of 70 minutes. Empty treatment vessel Final Vacuum- A final vacuum of between 540 and 600mmHg held for a period of 20 minutes.
Mounting and fixing details		A 40mm ventilated cavity was situated between the reverse face of the specimens and the calcium silicate substrate

Continued on next page

Substrate	Product reference	"Promat – Brandschultzbauplatten; Promatect-H"
	Generic type	Calcium Silicate based board
	Name of manufacturer	Promat
	Thickness	12mm
	Density	870kg/m <sup>3</sup>
	Flame retardant details	The substrate is inherently flame retardant
Brief description of manufacturing process		Dilution of "FireX" solids in water with agitation then applied by a vacuum pressure treatment process

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

#### 3.1 Test reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
warringtonfire	PTG Treatments Limited	WF 409497	EN ISO 11925-2
		WF 409496	EN 13823

#### 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	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (30s exposure - edge)	F <sub>s</sub>	6	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA <sub>0.2MJ</sub>	3	70.73	Compliant
	FIGRA <sub>0.4MJ</sub>		70.26	Compliant
	THR <sub>600s</sub>		5.37	Compliant
	LFS		Nil	Compliant
	SMOGRA		8.72	Compliant
	TSP <sub>600s</sub>		62.39	Compliant
	Flaming of Fallen Particle Exceeding 10s?		None	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+A1:2009 and EN 13986.

##### 4.2 Classification

The product, "Sentrin FRX Treated Timber" a an modified Accoya timber board, treated with "Sentrin FRX flame retardant", in relation to its reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s2**

The additional classification in relation to flaming droplets / particles is:

**d0**

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming Droplets	
<b>B</b>	-	<b>s</b>	<b>2</b>	,	<b>d</b>	<b>0</b>

i.e. **B – s2 , d0**

**Reaction to fire classification: B – s2, d0**

##### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Construction installed with a minimum airgap of 40mm, over any substrate with a density equal to or greater than 870kg/m<sup>3</sup>, having a minimum thickness of 12 mm and a fire performance of A2-s1, d0 or better (excluding paper faced gypsum plasterboard).

This classification is also valid for the following product parameters:

Wood thickness	18mm or greater
Wood Density	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed
Flame retardant treatment	No variation allowed

## 5. Limitations

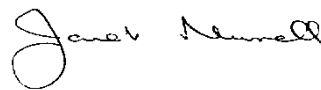
This document does not represent type approval or certification of the product.

### SIGNED



.....  
**Matthew Dale**  
Senior Certification Engineer  
Technical Department

### APPROVED



.....  
**Janet Murrell**  
Technical Manager  
Technical Department  
on behalf of **Warringtonfire**

This copy has been produced from a .pdf format electronic file that has been provided by **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 **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 **Warringtonfire** staff.

All work and services carried out by Warringtonfire Testing and Certification Limited are subject to, and conducted in accordance with, the Standard Terms and Conditions of Warringtonfire Testing and Certification Limited, which are available at <https://www.element.com/terms/terms-and-conditions> or upon request.