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## Title:

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

## **Notified Body No:**

0833

Product Name:

"Warmshell Woodfibre Interior"

## **Report No:**

353471

Issue No:

1

#### Prepared for:

Lime Green Products Ltd, Coates Kiln, Stretton Road, Much Wenlock, TF13 6DG, United Kingdom.

#### Date:

30<sup>th</sup> June 2015



## 1. Introduction

This classification report defines the classification assigned to "Warmshell Woodfibre Interior", a composite insulation system with plaster finish, in accordance with the procedures given in EN 13501-1:2007 + A1: 2009

## 2. Details of classified product

## 2.1 General

The product, "Warmshell Woodfibre Interior", a composite insulation system with plaster finish is defined as suitable for construction applications, excluding flooring and linear pipe thermal insulation. The test specimen build-up is as described in ETAG 004 for ETIC systems and the field of application of the test results and the possible construction variations will be defined accordingly.

#### 2.2 Product description

The product, "Warmshell Woodfibre Interior", a composite insulation system with plaster finish, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Internal wall insulation system	
Product reference of overall composite		"Warmshell Interior"	
Name of manufacturer of overall composite		Lime Green Products Ltd	
Thickness of overall composite		200 mm	
Density of overall composite		164 kg/m <sup>3</sup>	
	Generic type	Water-based paint	
	Product reference	"Interior silicate paint <5% Organic content"	
	Name of manufacturer	Beeck	
	Colour reference	"White"	
Final coating	Number of coats	One	
product (test face)	Thickness	<0.5 mm	
	Application rate	1.4 kg/l	
	Application method	Brush	
	Flame retardant details	See Note 1 below	
	Curing process per coat	24 hours air drying	
	Generic type	Water-based paint	
	Product reference	"Fixative: waterglass primer 0% Organic	
		content"	
	Name of manufacturer	Beeck	
Third coating product	Colour reference	clear	
	Number of coats	One	
	Thickness	<0.5 mm	
	Application rate	1.2 kg/l	
	Application method	Brush	
	Flame retardant details	See Note 1 below	
	Curing process per coat	24 hours air drying	

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	Generic type	Glass fibre mesh
	Product reference	"Lime Green Glass Fibre Mesh 660"
	Name of manufacturer	Vitrulan
Fibre	Colour reference	"Orange"
reinforcement	Thickness	1-2 mm
	Weight per unit area	146 g/m <sup>2</sup>
	Cell dimensions	6 mm x 6mm
	Flame retardant details	See Note 1 below
	Generic type	Natural hydraulic lime based plaster system
	Product reference	Lime Green Solo
	Name of manufacturer	Lime Green
	Colour reference	off white
First coating	Number of coats	One
product	Thickness	10 mm
	Density	1650 kg/m <sup>3</sup>
	Application method	Plastering
	Curing process per coat	3-5 days air drying
	Flame retardant details	See Note 1 below
	Generic type	Woodfibre
	Product reference	Therm
	Name of manufacturer	Steico
Insulation	Colour reference	brown
	Thickness	180 mm
	Density	160 kg/m <sup>3</sup> (tested : 250 kg/m <sup>3</sup> )
	Flame retardant details	See Note 1 below
Fixing details (insulation to plywood)		Ejot STR-H fixings
Plywood	Generic type	Plywood (EN 13238)
	Thickness	8.50 mm
	Density	580-610 kg/m <sup>3.</sup>
Brief description of manufacturing process		See Note 2 below

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

Note 2 - The sponsor was unable to provide this information.

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

## 3.1 Test reports

Name of Laboratory	Name of sponsor	Test report Nos.	Test method
Exova warringtonfire	Lime Green Products Ltd	WFR 332132	EN 13823
Exova warringtonfire	Lime Green Products Ltd	WFR 332133	EN ISO 11925-2

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# 3.2 Test results

Test method &		No. tests	Results	
test number	Parameter		Continuous parameter - mean (m)	Compliance parameters
EN 13823	Figra <sub>0.2 MJ</sub> (W/s)		6.4	Compliant
	THR <sub>600 s</sub> (MJ)		0.93	Compliant
	Smogra (m²/s²)	3	0	Compliant
	TSP <sub>600 s</sub> (m <sup>2</sup> )	3	14.0	Compliant
	LFS (y/n)		Ν	Compliant
	Flaming droplets (y/n) <10 s (y/n) >10 s (y/n)		None	Compliant
EN ISO 11925-2				
30 s surface exposure	Flame spread (mm)	6	Nil	Compliant
	Flaming droplets (y/n)		None	Compliant
30 s edge exposure	Flame spread (mm)	6	Nil	Compliant
	Flaming droplets (y/n)		None	Compliant
30 s exposure after turning 90° exposing insulation	Flame spread (mm)	6	Nil	Compliant
	Flaming droplets (y/n)		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

## 4.2 Classification

The product, "Warmshell Woodfibre Interior", a composite insulation system with plaster finish, in relation to its reaction to fire behaviour is classified:

# Reaction to fire classification: B-s1, d0

## 4.3 Field of application

This classification is valid for the following end use applications:

i) Wall and ceiling applications

- ii) Used over any substrate of class A2 or better,
- iii) Used on any wood-based substrate with a density of 340 kg/m<sup>3</sup> or higher

This classification is also valid for the following product parameters:

Insulation thickness	from minimum practical application thickness upward
Insulation density	Up to 250 kg/m <sup>3</sup>
Finishing top coat	in any colour

#### 5 Limitations

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

## SIGNED

APPROVED

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Frans Paap

**Certification Engineer** 

Matthew Dale Senior Certification Engineer on behalf of Exova warringtonfire

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