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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:**

"ARRAN"

**Report No:**

198752

**Issue No:**

1

**Prepared for:**

Forbo Flooring UK Limited  
Unit 92, Seedlee Road  
Walton Summit Centre  
Bamber Bridge  
Preston  
Lancashire  
PR7 8AE

**Date:**

5<sup>th</sup> November 2010

## 1. Introduction

This classification report defines the classification assigned to "ARRAN", loop pile tufted carpet tile product, in accordance with the procedures given in EN 13501-1:2007+A1: 2009.

## 2. Details of classified product

### 2.1 General

The product, "ARRAN", loop pile tufted carpet tile product, is defined as being suitable for floor covering applications.

### 2.2 Product description

The product, "ARRAN", loop pile tufted carpet tile product, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		A loop pile tufted carpet tile bonded to a nominally 6mm thick fibre cement board substrate utilising 'Balls F41' adhesive	
Thickness of composite		13.10mm (determined by <b>Exova Warringtonfire</b> )	
Weight per unit area of composite		15.44kg/m <sup>2</sup> (determined by <b>Exova Warringtonfire</b> )	
Carpet tile	General description	Loop pile tufted carpet tile	
	Product reference of carpet tile	"ARRAN"	
	Name of manufacturer of carpet tile	Forbo Flooring Ltd	
	Thickness	7.2mm	
	Weight per unit area	4565g/m <sup>2</sup>	
	Colour / pattern	Any colour / pattern	
	Pattern reference of carpet tile	<b>See Note 1 below</b>	
	Pile	Product reference	<b>See Note 2 below</b>
		Generic type	Nylon
		Name of manufacturer	Invista
		Pile height above the backing	4.2mm
		Weight per unit area	950g/m <sup>2</sup>
		Flame retardant details	<b>See Note 3 below</b>
	Primary Backing	Product reference	"SM120"
		Generic type	Spunbond nylon
Name of manufacturer		Colbond	
Thickness		0.1mm	
Weight per unit area		120g/m <sup>2</sup>	
Flame retardant details	<b>See Note 3 below</b>		

Continued on next page

Carpet tile (continued)	Backing	Product reference	<b>See Note 2 below</b>
		Generic type	100% Polyester
		Name of manufacturer	Johns Manville
		Thickness	0.2mm
		Weight per unit area	95g/m <sup>2</sup>
		Flame retardant details	<b>See Note 3 below</b>
	Back Coating	Product reference	"PMB"
		Generic type	Modified bitumen/limestone mix
		Name of manufacturer	Shell/Loncliffe
		Thickness	2.5mm
		Weight per unit area	2500g/m <sup>2</sup>
		Flame retardant details	<b>See Note 3 below</b>
	Back coating applied to reverse face	Product reference	"LC6715"
		Generic type	Latex
		Name of manufacturer	ILC
		Thickness	0.2mm
		Weight per unit area	900g/m <sup>2</sup>
		Flame retardant details	<b>See Note 3 below</b>
Adhesive (carpet tile to substrate)	Product reference	"Balls Styccobond F41' Surface Tackifier"	
	Generic type	Solvent free acrylic polymer emulsion adhesive	
	Name of manufacturer	F Ball & Co. Limited	
	Application rate	7m <sup>2</sup> per litre	
	Application method	Brush	
	Flame retardant details	<b>Exova Warringtonfire</b> was unable to obtain this information from the manufacturer of the adhesive	
Substrate	Product reference	"NT D4 604"	
	Generic type	Fibre cement board	
	Name of supplier	Scheerders van de Kerkhove (SVK)	
	Thickness	6mm	
	Density	1800kg/m <sup>3</sup>	
	Flame retardant details	The substrate is inherently flame retardant	
Brief description of manufacturing process utilised in the production of the carpet tile		Tufting, latexing, bitumining, tile cutting	

**Note 1: The sponsor was unwilling to provide this information.**

**Note2: The sponsor confirmed that there is no specific trade name or product reference associated with this component.**

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

### 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
Exova warringtonfire	Forbo Flooring UK Limited	WF 198154	EN ISO 11925-2
Exova warringtonfire	Forbo Flooring UK Limited	WF 198155	EN ISO 9239-1

#### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance with parameters
EN ISO 9239-1	Critical flux	3	8.9	Compliant
	Smoke		310.84%	Compliant
EN ISO 11925-2 (15s exposure – surface of decorative face)	F <sub>s</sub>	6	Nil	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (15s exposure – edge of decorative face)	F <sub>s</sub>	6	Nil	Compliant
	Flaming droplets/ particles		None	Compliant

#### 4. Classification and field of application

##### 4.1 Reference of classification

This classification has been carried out in accordance with clause 9 of EN 13501-1:2007+A1:2009.

##### 4.2 Classification

The product, "ARRAN", loop pile tufted carpet tile product, in relation to its reaction to fire behaviour is classified:

**B<sub>FL</sub>**

The additional classification in relation to smoke production is:

**s1**

The format of the reaction to fire classification for floorings is:

Fire Behaviour		Smoke Production	
<b>B<sub>FL</sub></b>	-	<b>s</b>	<b>1</b>

i.e. **B<sub>FL</sub> – s1**

**Reaction to fire classification: B<sub>FL</sub> – s1**

##### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Flooring applications, used over any substrate with a density equal to or greater than 1800Kg/m<sup>3</sup>, having a minimum thickness of 6mm and a fire performance of A2<sub>FL</sub> or better.
- ii) Installed using "Balls Styccobond F41' Surface Tackifier", a solvent free acrylic polymer emulsion adhesive at an application rate of 7m<sup>2</sup> per litre.

This classification is also valid for the following product parameters:

Floorcovering thickness	No variation allowed
Floorcovering weight per unit area	No variation allowed
Colour / pattern	Any variation allowed
Floorcovering composition	No variation allowed
Floorcovering construction	No variation allowed

## 5. Limitations

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

### SIGNED

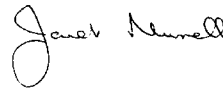


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#### Matthew Dale

Certification Engineer  
Technical Department

### APPROVED



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#### Janet Murrell

Technical Manager  
Technical Department  
on behalf of **Exova warringtonfire**

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