

Title:

Classification of reaction to
fire performance
In accordance with
EN 13501-1:2007+A1: 2009.

Notified Body No:

0833

Product Name:

"Flotex Tile"

Report No:

WF 312666

Issue No:

3

Prepared for:

Forbo Flooring UK Limited
High Holborn Road
Ripley
Derbyshire
DE5 3NT

Date:

15th January 2019



1. Introduction

This classification report defines the classification assigned to "Flotex Tile", a family of Flocked floorcovering tiles, in accordance with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, "Flotex Tile", a family of Flocked floorcovering tiles, is defined as being suitable for floorcovering applications.

2.2 Product description

The product, "Flotex Tile", a family of Flocked floorcovering tiles, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Flock floorcovering	
Carpet tile	Product reference	"Flotex Tile"	
	Name of manufacturer	Forbo Flooring UK Limited	
	Thickness	5.0mm	
	Weight per unit area	4800g/m²	
	Pattern / style reference	Any pattern	
	Colour reference	Any colour	
	Pile	Product reference	"RA 110"
		Generic type	Nylon 6.6
		Name of manufacturer	Invista and Rhodia
		Pile height above the backing	2mm
		Weight per unit area	250g/m ²
	Flame retardant details	The sponsor stated that there were no flame retardant additives used in the production of the component	
	Primary Backing	Product reference	"RA150" and "RA152"
		Generic type	Fibreglass nonwoven / Fibreglass scrim
Name of manufacturer		Owens Corning / Fothergill Crenette	
Thickness		0.55mm	
Weight per unit area		85g/m²	
Flame retardant details	The sponsor stated that there were no flame retardant additives used in the production of the component		

Continued on next page

Carpet tile continued...	Backing	Product reference	"RWP02 Adhesive"
		Generic type	PVC plastisol compound
		Name of manufacturer	Forbo Flooring UK Ltd.
		Thickness	0.25mm
		Weight per unit area	370 g/m ² nominal
		Flame retardant details	Antimony Trioxide / Zinc Borate
	Back coating	Product reference	"RWP14 / Recycled Vinyl Backing"
		Generic type	Recycled vinyl backing laminated to the pile surface with a PVC plastisol
		Name of manufacturer	Forbo Flooring Ltd
		Thickness	2.2mm
		Weight per unit area	Approx 4060g/m²
		Flame retardant details	The sponsor stated that there were no flame retardant additives used in the production of the component
	Secondary backing	Product reference	"RA146"
		Generic type	Cellulose / polyester nonwoven
		Name of manufacturer	Ahlstrom
		Thickness	0.12mm
		Weight per unit area	30g/m²
		Flame retardant details	The manufacturers stated that no flame retardant additives were utilised in the production of the material
Substrate	Trade name	The sponsor stated that a product reference is not assigned to this component	
	Generic Description	Non-Fire Retardant Treated Particle Board	
	Overall thickness	20mm	
	Overall density	680 ± 50kg/m³	
Brief description of manufacturing process utilised in the production of the carpet tile		The back coating is applied to the fibreglass nonwoven. After gelling, the material is inverted and the flock adhesive is applied. The pile is then electrostatically flocked into the adhesive. After curing, the product is printed. A recycled vinyl backing and secondary nonwoven is then laminated to the back using a PVC plastisol before being cut into tiles.	

Information in bold above depicts the changes in the formulation since November 2011. The changes in formulation are described in Extended Application report WF 312665 (Issue 3). The original information remains on Warringtonfire's confidential technical file and also document reference "WF 312666 Issue 2".

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	Forbo Flooring UK Limited	WARRES 125058, 125059, 125060, 125061, 125062 WF No. 312675 WF 405487	EN ISO 9239-1
Warringtonfire	Forbo Flooring UK Limited	WARRES 125071	EN ISO 11925-2
Warringtonfire	Forbo Flooring UK Limited	WF 312665 (Issue 3)	EN/TS 15117

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, 3, 1,	8.5, 9.2, 9.8, 10.0, 9.7, 10, 10.8, 9.1	Compliant	
	Smoke	1, 1, 1, 1, 1, 1	293.27, 398.24, 324.31, 258.17, 270.78, 226.54, 251.66, 310.10	Compliant	
EN ISO 11925-2	(15s exposure – surface of decorative face)	F _s	6	50	Compliant
		Flaming droplets/ particles	6	None	Compliant
	(15s exposure – edge of decorative face)	F _s	6	57	Compliant
		Flaming droplets/ particles	6	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, "Flotex Tile", a family of Flocked floorcovering tiles, in relation to its reaction to fire behaviour is classified:

B_{FL}

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_{FL}	-	s	1

i.e. **B_{FL} – s1**

Reaction to fire classification: B_{FL} – s1

4.3 Field of application

This classification is valid for the following end use applications:

- i) Floorcovering applications applied over any substrate with a minimum density of 1800kg/m³, having a minimum thickness of 6mm and a fire performance of A2_{FL} or better.
- ii) Floorcovering applications applied over any wooden substrate with a minimum density of 680kg/m³, having a minimum thickness of 20mm and a fire performance of C_{FL} – s1 or better.
- iii) Loose laid or bonded with acrylic adhesive specified by Forbo Flooring UK Limited

This classification is also valid for the following product parameters:

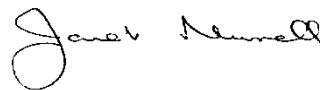
- | | |
|-------------------|--|
| ▪ Total thickness | No variation allowed |
| ▪ Total weight | No variation allowed |
| ▪ Colour | Any colour allowed |
| ▪ Pattern | Any pattern allowed |
| ▪ Application | Loose laid or Bonded |
| ▪ Adhesive | Bonded with acrylic adhesive specified by Forbo
Flooring UK Limited |

SIGNED



Matthew Dale
Senior Certification Engineer
Technical Department

APPROVED



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

Issue 3: 21st January 2019

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.