Exova Warringtonfire Holmesfield Road Warrington WA1 2DS United Kingdom T : +44 (0) 1925 655 116 F : +44 (0) 1925 655 419 E : warrington@exova.com W: www.exova.com

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:

"Expona Control"

Report No:

321542

Issue No:

1

Prepared for:

Polyflor Limited, PO Box 3, Radcliffe New Road, Whitefield, Manchester, M25 7NR

Date:

24th August 2012

1. Introduction

This classification report defines the classification assigned to "Expona Control", a luxury vinyl floor 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, "Expona Control", a luxury vinyl floor tile product, is defined as being suitable for floorcovering applications.

2.2 Product description

The product, "Expona Control", a luxury vinyl floor tile product, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

Product reference "Expona Control" Generic type Luxury vinyl floor tile Name of manufacturer Polyflor Limited Overall thickness 3.0mm Overall weight per unit area 5500/m² Colour reference Any colour Pattern reference Any pattern Trade name See 'Note 1' below Generic type Matt polyurethane (PU) coating Name of manufacturer See 'Note 1' below Generic type Matt polyurethane (PU) coating Name of manufacturer See 'Note 1' below Generic type Application rate Application method Roller coater Flame retardant details See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area 0.07mm Wear layer thickness 0.55mm Print layer thickness 0.07mm Middle layer thickness 1.24mm	General description of range			Luxury Vinyl Floor Tile		
Name of manufacturer Polyflor Limited Overall thickness 3.0mm Overall weight per unit area 5500/m² Colour reference Any colour Pattern reference Any pattern Pattern reference Any pattern Surface Trade name See 'Note 1' below Coating Mame of manufacturer See 'Note 1' below Coating Application rate See 'Note 1' below Application rate See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.55mm Print layer thickness 1.24mm Backing layer thickness 1.24mm Backing layer thickness 1.24mm Flame retardant de		Product reference				
Overall thickness 3.0mm Overall weight per unit area 5500/m² Colour reference Any colour Pattern reference Any pattern Pattern reference Any pattern Surface Generic type Matt polyurethane (PU) coating Surface Name of manufacturer See 'Note 1' below Application rate See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.07mm Middle layer thickness 1.24mm Backing layer thickness 1.24mm Flame retardant details See 'Note 1' below Trade name "Stycobond F44"' Generic type Acrylic based adhesive Name of manufacturer		Generic type				
Overall weight per unit area 5500/m² Colour reference Any colour Pattern reference Any pattern Pattern reference Any pattern Surface Trade name See 'Note 1' below Generic type Matt polyurethane (PU) coating Application rate Surface Name of manufacturer See 'Note 1' below Application rate See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.55mm Print layer thickness 1.24mm Backing layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below (floor covering to substrate) Generic type		Name of manufacturer		Polyflor Limited		
Colour reference Any colour Pattern reference Any pattern Pattern reference Any pattern Surface Generic type Matt polyurethane (PU) coating Surface Name of manufacturer See 'Note 1' below Coating Application rate See 'Note 1' below Application rate See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.55mm Print layer thickness 1.24mm Backing layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Middle layer thickness 1.14mm Flame retardant details See 'Note 1' below Middle layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Tra		Overall thickness		3.0mm		
Pattern reference Any pattern Surface Coating Trade name See 'Note 1' below Surface Coating Name of manufacturer See 'Note 1' below Application rate See 'Note 1' below Application rate See 'Note 2' below Flame retardant details See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.55mm Print layer thickness 0.07mm Middle layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Adhesive (floor covering to substrate) Trade name "Styccobond F44" Generic type Acrylic based adhesive Name of manufacturer Name of manufacturer F Ball & Co. Ltd Application rate Application method 'V' notched trowel Y' notched trowel		Overall weight per unit area		5500/m ²		
Surface Coating Trade name See 'Note 1' below Surface Coating Name of manufacturer See 'Note 1' below Application rate See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 2' below Trade name See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.55mm Print layer thickness 0.07mm Middle layer thickness 1.24mm Backing layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Trade name "Styccobond F44" Generic type Acrylic based adhesive Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m ² Application method 'V' notched trowel		Colour reference		Any colour		
Surface CoatingGeneric typeMatt polyurethane (PU) coatingSurface CoatingName of manufacturerSee 'Note 1' belowApplication rateSee 'Note 1' belowApplication methodRoller coaterFlame retardant detailsSee 'Note 2' belowTrade nameSee 'Note 1' belowGeneric typeCalendered Clear PVCName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowMiddle layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdApplication rate200 g/m²Application method'V' notched trowel		Pattern reference		Any pattern		
Surface Coating Name of manufacturer See 'Note 1' below Application rate See 'Note 1' below Application method Roller coater Flame retardant details See 'Note 2' below Trade name See 'Note 1' below Generic type Calendered Clear PVC Name of manufacturer Polyflor Limited Overall weight per unit area See 'Note 1' below Wear layer thickness 0.55mm Print layer thickness 0.07mm Middle layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Adhesive (floor covering to substrate) Trade name "Styccobond F44" Generic type Acrylic based adhesive Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m ² Application method 'V' notched trowel			Trade name	See 'Note 1' below		
CoatingApplication rateSee 'Note 1' belowApplication methodRoller coaterFlame retardant detailsSee 'Note 2' belowTrade nameSee 'Note 1' belowGeneric typeCalendered Clear PVCName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveAdhesive (floor covering to substrate)Name of manufacturerAdhesive (floor covering to substrate)Trade nameAdhesive (floor covering to substrate)Yeplication rateApplication method'V' notched trowel			Generic type	Matt polyurethane (PU) coating		
Floorcovering coreGeneric typeCalendered Clear PVCName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdApplication rate200 g/m²Application method'V' notched trowel	b		Name of manufacturer	See 'Note 1' below		
Floorcovering coreGeneric typeCalendered Clear PVCName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdApplication rate200 g/m²Application method'V' notched trowel	erii	Coating	Application rate	See 'Note 1' below		
Floorcovering coreGeneric typeCalendered Clear PVCName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdAdhesive (floor covering to substrate)Name of manufacturerApplication rate200 g/m²Application method'V' notched trowel	S S			Roller coater		
Floorcovering coreGeneric typeCalendered Clear PVCName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdAdhesive (floor covering to substrate)Name of manufacturerApplication rate200 g/m²Application method'V' notched trowel	0 0		Flame retardant details	See 'Note 2' below		
Floorcovering coreName of manufacturerPolyflor LimitedOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdAdhesive (floor covering to substrate)Name of manufacturerAdhesive 	핖		Trade name			
Floorcovering coreOverall weight per unit areaSee 'Note 1' belowWear layer thickness0.55mmPrint layer thickness0.07mmMiddle layer thickness1.24mmBacking layer thickness1.14mmFlame retardant detailsSee 'Note 1' belowTrade name"Styccobond F44"Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdApplication rate200 g/m²Application method'V' notched trowel						
Floorcovering core Wear layer thickness 0.55mm Print layer thickness 0.07mm Middle layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Trade name "Styccobond F44" Generic type Acrylic based adhesive Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m² Application method 'V' notched trowel		5	Name of manufacturer	· · ·		
core Wear layer thickness 0.55mm Print layer thickness 0.07mm Middle layer thickness 1.24mm Backing layer thickness 1.14mm Flame retardant details See 'Note 1' below Trade name "Styccobond F44" Generic type Acrylic based adhesive Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m² Application method 'V' notched trowel				See 'Note 1' below		
Adhesive Print layer thickness 0.07mm Adhesive Middle layer thickness 1.24mm Flame retardant details See 'Note 1' below Trade name "Styccobond F44" Generic type Acrylic based adhesive Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m² Application method 'V' notched trowel						
Adhesive Adhesive (floor covering to substrate) Name of manufacturer Application rate 200 g/m² Application method 'V' notched trowel				0.07mm		
Flame retardant details See 'Note 1' below Adhesive (floor covering to substrate) Trade name "Styccobond F44" Adhesive (floor covering to substrate) Generic type Acrylic based adhesive Adhesive (floor covering to substrate) Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m ² Application method 'V' notched trowel			· · ·	1.24mm		
Adhesive Trade name "Styccobond F44" Adhesive Generic type Acrylic based adhesive (floor covering to substrate) Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m² Application method 'V' notched trowel				1.14mm		
Adhesive (floor covering to substrate)Generic typeAcrylic based adhesiveName of manufacturerF Ball & Co. LtdApplication rate200 g/m²Application method'V' notched trowel			Flame retardant details			
Adnesive (floor covering to substrate) Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m ² Application method 'V' notched trowel		oor covering to	Trade name	"Styccobond F44"		
(floor covering to substrate) Name of manufacturer F Ball & Co. Ltd Application rate 200 g/m ² Application method 'V' notched trowel				Acrylic based adhesive		
substrate) Application method 'V' notched trowel	(fl		Name of manufacturer	F Ball & Co. Ltd		
Application method V notched trowel			Application rate			
Flame retardant details See 'Note 2' below			Application method	'V' notched trowel		
			Flame retardant details	See 'Note 2' below		

Continued on next page

	Generic type	Fibre cement board (ISO 390)
	Overall thickness	6 mm
Substrate	Overall weight per unit area	1800 kg/m ³
	Flame retardant details	The substrate is inherently flame retardant
	Preparation details	None
Brief description of manufacturing process of the		Calendering / Lamination
floor covering		

Note 1 – The sponsor was unwilling to provide this information.

Note 2 – The sponsor / manufacturer stated that no flame retardant additives were utilised in the construction of the component.

Note: The precise composition of the product submitted for test is regarded by the sponsor to be of a highly confidential nature and as a consequence this information is maintained by Polyflor at their Whitefield factory. This information can be inspected by Exova Warringtonfire at anytime and the information is checked, stamped, signed and dated by a member of Exova Warringtonfire to prevent misuse.

3. Test reports/extended application reports & test results in support of classification.

Name of Laboratory	Name of sponsor	Test reports / Classification report Nos.	Test method / extended application rules & date
Exova Warringtonfire	Polyflor Limited	WF 306936, WF 321541	EN/TS 15117
BTTG / BCTC	Polyflor Limited	2600135A/08/05, 2600135B/08/05, 2600907/07/09, 2600625/11/07, 2601146/10/10, 25/02546A/04/09, 2600647/12/07, 2600233A/02/06, 2600233A/02/06, 2600232A/02/06, 2600232B/02/06, 2601438	EN ISO 11925-2 / EN ISO 9239-1
Warringtonfire Limited 306940 / 3		WF 306937 / 306938 / 306939 / 306940 / 306942 / 306943 / 306944 / 306945 / 306946	EN 13501

3.1 Test reports/extended application reports.

Page 4 of 5

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	9.3 to ≥11.0	Compliant
		Smoke		25 to 181	Compliant
EN ISO 11925-2	(15s exposure – surface of decorative face)	Fs	6	None	Compliant
	(15s exposure – edge of decorative face)	Fs	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, "Expona Control", a luxury vinyl floor tile product, in relation to its reaction to fire behaviour is classified:

Bfl

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		
Bfl	-	S	1	

Page 5 of 5

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:

- Floorcovering applications bonded directly to 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) Installed directly to the substrate utilising 'F44' adhesive, applied at a nominal rate of 200g/m²

This classification is also valid for the following product parameters:

Floorcovering thickness Floorcovering weight per unit area Floorcovering composition Colour/Pattern

.....

No variation allowed No variation allowed Any variation allowed

SIGNED

NI

Matthew Dale Certification Engineer Technical Department APPROVED

Janet Murrell Technical Manager Technical Department on behalf of Exova Warringtonfire

This copy has been produced from a .pdf format electronic file that has been provided by Exova 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 Exova Warringtonfire. The original signed paper version of this report is the sole authentic version. Only original paper versions of this report bear authentic signatures of the responsible Exova Warringtonfire staff.