



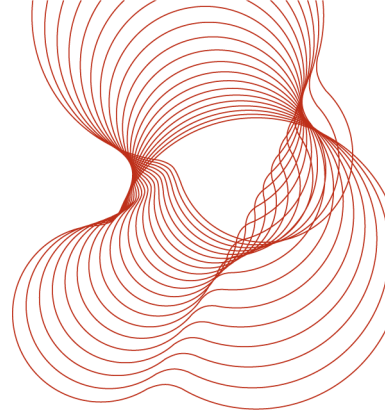
**Classification report for  
roofs/roof coverings  
exposed to external fire  
in accordance with BS  
EN 13501-5:  
2005+A1:2009**

Prepared for:  
Flex-R Ltd  
Unit 5 Central Park  
Bellfield Road  
High Wycombe  
Bucks  
HP13 5HG

6<sup>th</sup> December 2012  
Classification report no  
282046A Issue 2



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## Prepared on behalf of BRE Global by

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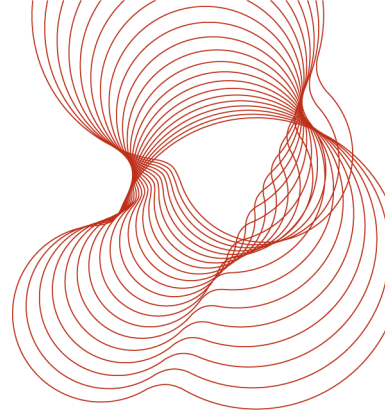
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## CLASSIFICATION REPORT FOR ROOFS/ROOF COVERINGS EXPOSED TO EXTERNAL FIRE

**Sponsor:** Flex-R Ltd, Unit 5 Central Park, Bellfield Road, High Wycombe, Bucks, HP13 5HG

**Prepared by:** BRE Global, BRE, Bucknalls Lane, Garston, Watford, WD25 9XX, England

**Notified Body No:** 1576

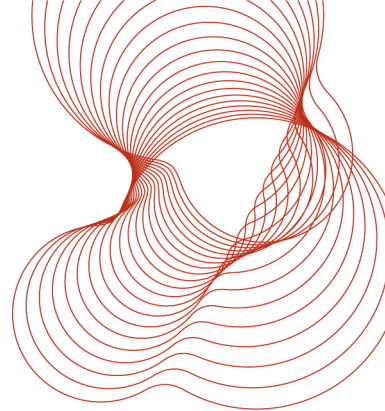
**Product name:** ClassicBond EPDM 1.2mm on a plywood deck

**Classification report No.:** 282046A

**Issue number:** 2

**Date of issue:** 6<sup>th</sup> December 2012

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## 1 Introduction

This classification report defines the classification assigned to ClassicBond EPDM 1.2mm on a plywood deck in accordance with the procedures given in EN 13501-5:2005<sup>1</sup>.

## 2 Product description

Details of the sample provided by the sponsor are given in Annex 1.

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

<i><b>Name of Laboratory</b></i>	<i><b>Name of sponsor</b></i>	<i><b>Test report ref. no.</b></i>	<i><b>Test method</b></i>
BRE Global	Flex-R Ltd	282045A revision 1	CEN/TS 1187:2012, test 4

## 4 Test results

### Test conditions:

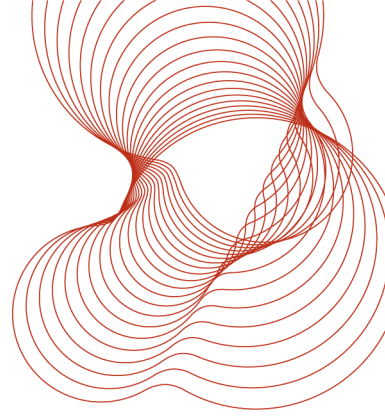
Test pitch: Flat  
Deck: As product description, Section 2  
Supporting structure As product description, Section 2

### Preliminary test (stage 1)

Parameter	Criteria				Test result	Compliance			
	Class B <sub>ROOF</sub> (t4)	Class C <sub>ROOF</sub> (t4)	Class D <sub>ROOF</sub> (t4)	Class E <sub>ROOF</sub> (t4)		Class B <sub>ROOF</sub> (t4)	Class C <sub>ROOF</sub> (t4)	Class D <sub>ROOF</sub> (t4)	Class E <sub>ROOF</sub> (t4)
Burn time	< 5 min	< 5 min	< 5 min	≥ 5 min	0 sec	Y	-	-	-
Flame spread distance	< 0,38m	< 0,38m	< 0,38m	No limit	None	Y	-	-	-
Penetration	None	None	None	None	None	Y	-	-	-

### Penetration test (stage 2)

Parameter	Criteria				Test results				Compliance			
	Class B <sub>ROOF</sub> (t4)	Class C <sub>ROOF</sub> (t4)	Class D <sub>ROOF</sub> (t4)	Class E <sub>ROOF</sub> (t4)	Specimen 1	Specimen 2	Specimen 3	Mean*	Class B <sub>ROOF</sub> (t4)	Class C <sub>ROOF</sub> (t4)	Class D <sub>ROOF</sub> (t4)	Class E <sub>ROOF</sub> (t4)
Penetration time	≥ 60 min	< 60 min > 30 min	≤ 30 min	≤ 30 min	60 min	60 min	60 min	60 min	Y	-	-	-
* If one or two of the specimens have not failed at one hour, a time of 60 min shall be used in calculating the mean time of penetration												



## 5 Classification and field of application

### 5.1 Reference of classification

This classification has been carried out in accordance with Table 1 of EN 13501-5:2005+A1:2009.

### 5.2 Classification

The roof / roof covering, ClassicBond EPDM 1.2mm on a plywood deck in relation to its external fire performance is classified:

**B<sub>ROOF</sub>(t4)**

### 5.3 Field of application

This classification is valid for the following conditions:

Range of pitches

$$0^{\circ} \leq \text{pitch} \leq 10^{\circ}$$

Deck and supporting structure

The classification is valid only for the deck and supporting structure tested.

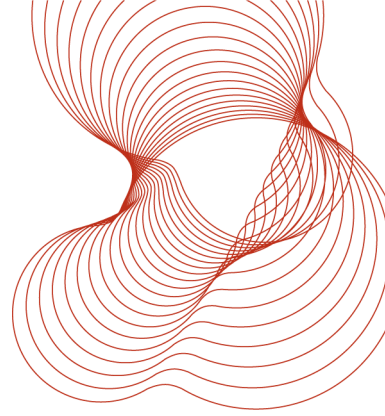
## 6 Limitations

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

This report is Issue 2 of BRE report 282046A dated 25<sup>th</sup> September 2012. At the request of the client, a correction to the product description has been made in this report. BRE report 282046A Issue 1 dated 25<sup>th</sup> September 2012 has been withdrawn with effect from the date of this report.

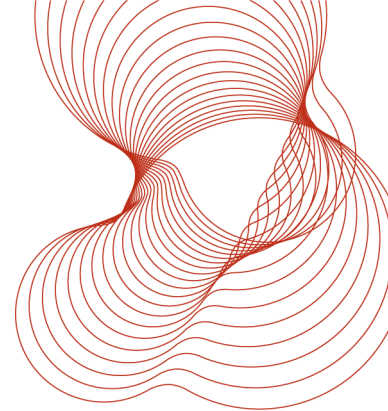
This classification document has been written with reference to a test carried out to CEN/TS 1187:2012, test 4<sup>2</sup>. CEN/TS 1187:2012, test 4 supersedes ENV1187:2002 and is expected to be recognised in any update to EN 13501-5:2005+A1:2009<sup>3</sup>. There is no change to the test procedure in CEN/TS 1187:2012, test 4.

The specification and interpretation of fire test methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons, it is recommended that the relevance of test and classification reports over five years old should be considered by the user. The laboratory that issued the report will be able to offer, on behalf of the legal owner, a review of the procedures adopted for a particular test or classification to ensure that they are consistent with current practices, and if required may endorse the report.



## 7 Reference

- 1 BS EN 13501-5:2005+A1:2009 incorporating corrigendum November 2006. British Standards Institution, London.
- 2 Test methods for external fire exposure to roofs. Test 4 – Two stage method incorporating burning brands, wind and supplementary radiant heat. CEN/TS 1187:2012, test 4. British Standards Institution, London, 2012.
- 3 Test methods for external fire exposure to roofs. Test 4 – Two stage method incorporating burning brands, wind and supplementary radiant heat. ENV 1187, May 2002 with amendment A1:2005. British Standards Institution, London, 2005.



## Annex 1

General description		FLEX-R CLASSICBOND 1.2mm EPDM/PLYWOOD
Product reference		CLASSICBOND 1.2mm EPDM
Specimen configuration		CLASSICBOND 1.2mm EPDM/PLY
Overall thickness		20MM
Overall weight per unit area		11.5KG
Waterproofing membrane (Test Face)	General description of membrane	1.2MM EPDM
	Product reference of membrane	CLASSICBOND 1.2mm EPDM
	Overall weight per unit area	1.0 KG
	Overall thickness of	1.2MM
	Generic type	EPDM
	Name of manufacturer	CARLISLE SYNTEC
	Colour reference	SLATE GREY
	Trade name of flame retardant	OPTION 4
	Generic type of flame retardant	OPTION 4
	Amount of flame retardant	OPTION 4
Bonding details (membrane to plywood)		
Adhesive	Product reference	WBA
	Generic type	ACRYLIC ADHESIVE
	Name of manufacturer	OPTION 3
	Application rate	250ML/M2
	Colour reference	WHITE
	Trade name of flame retardant	OPTION 4
	Generic type of flame retardant	OPTION 4
	Amount of flame retardant	OPTION 4
Deck	Product reference	PLYWOOD
	Generic type	PLYWOOD
	Name of manufacturer	OPTION 2
	Thickness	18MM
	Density / weight per unit area	10.50KG
	Colour reference	BROWN
	Trade name of flame retardant	OPTION 4
	Generic type of flame retardant	OPTION 4
	Amount of flame retardant	OPTION 4

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

OPTION 2. – The sponsor was unable to provide this information.

OPTION 3. – The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

OPTION 4. - The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product / component.

=====REPORT ENDS=====