



breglobal

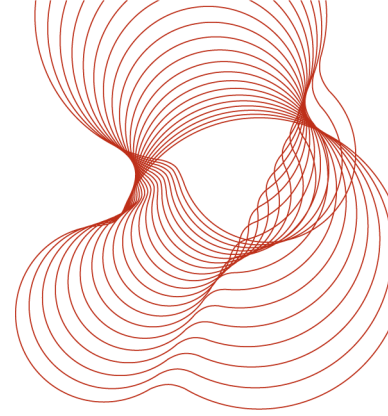
**Classification report for
roofs/roof coverings
exposed to external fire
in accordance with BS
EN 13501-5:
2005+A1:2009**

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

6th December 2012
Classification report no
282050A Issue 2



0578



Prepared on behalf of BRE Global by

Name S M Warbus

Position Senior Consultant

Signature 

Approved on behalf of BRE Global by

Name S J Howard

Position Principal Consultant

Date 06/12/12

Signature 

BRE Global
Bucknalls Lane
Watford
Herts
WD25 9XX
T + 44 (0) 1923 664100
F + 44 (0) 1923 664994
E enquiries@breglobal.com
www.breglobal.com

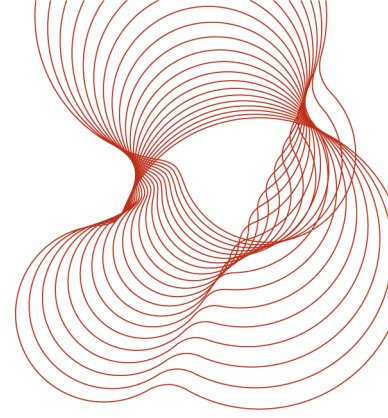
BRE Global is not UKAS accredited to make opinions and interpretation. Any opinions and interpretations included as part of this report are clearly marked as such.



0578

This report may only be distributed in its entirety and in accordance with the terms and conditions of the contract. Test results relate only to the items tested. We have no responsibility for the design, materials, workmanship or performance of the product or items tested. This report does not constitute an approval, certification or endorsement of the product tested.

This report is made on behalf of BRE Global. By receiving the report and action on it, the client accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence). No third party has any right to rely on this report.



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

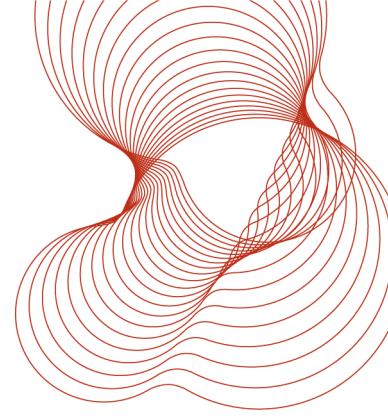
Product name: RubberBond FleeceBack EPDM on a plywood deck

Classification report No.: 282050A

Issue number: 2

Date of issue: 6th December 2012

This classification report consists of eight pages and may only be used or reproduced in its entirety



1 Introduction

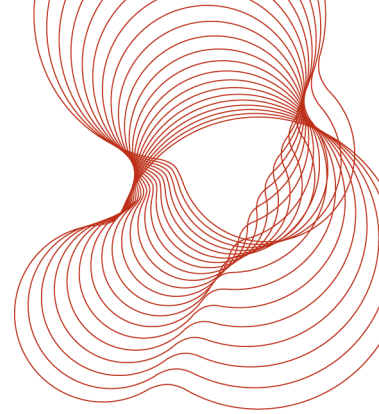
This classification report defines the classification assigned to RubberBond FleeceBack EPDM on a plywood deck in accordance with the procedures given in EN 13501-5:2005.

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>Name of Laboratory</i>	<i>Name of sponsor</i>	<i>Test report ref. no.</i>	<i>Test method</i>
BRE Global	Flex-R Ltd	282049A 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

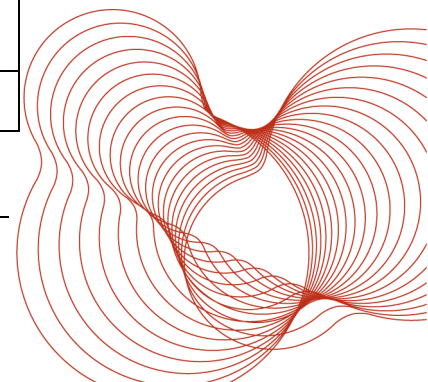
Preliminary test (stage 1)

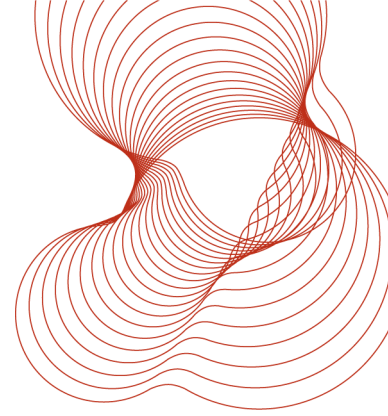
Parameter	Criteria				Test result	Compliance			
	Class B _{ROOF(t4)}	Class C _{ROOF(t4)}	Class D _{ROOF(t4)}	Class E _{ROOF(t4)}		Class B _{ROOF(t4)}	Class C _{ROOF(t4)}	Class D _{ROOF(t4)}	Class E _{ROOF(t4)}
Burn time	< 5 min	< 5 min	< 5 min	≥5 min	0 sec	Y	-	-	-
Flame spread distance	< 0,38m	< 0,38m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

Penetration test (stage 2)

Parameter	Criteria				Test results				Compliance			
	Class B _{ROOF(t4)}	Class C _{ROOF(t4)}	Class D _{ROOF(t4)}	Class E _{ROOF(t4)}	Specimen 1	Specimen 2	Specimen 3	Mean*	Class B _{ROOF(t4)}	Class C _{ROOF(t4)}	Class D _{ROOF(t4)}	Class E _{ROOF(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 RubberBond FleeceBack EPDM on a plywood deck in relation to its external fire performance is classified:

B_{ROOF}(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.

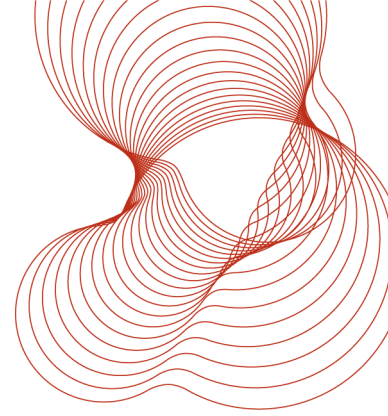
6 Limitations

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

This report is Issue 2 of BRE report 282050A dated 25th September 2012. At the request of the client, a correction to the product description has been made in this report. BRE report 282050A Issue 1 dated 25th September 2012 has been withdrawn with effect from the date of this report.

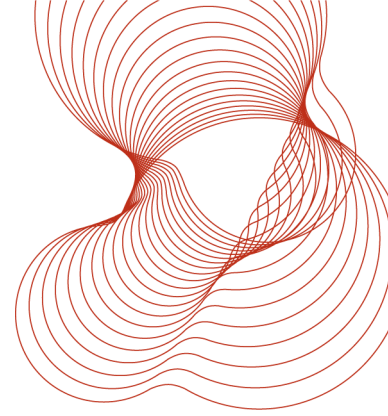
This classification document has been written with reference to a test carried out to CEN/TS 1187:2012, test 4². CEN/TS 1187:2012, test 4 supersedes ENV1187:2002 and is expected to be recognised in any update to EN 13501-5:2005+A1:2009³. There is no change to the test procedure in CEN/TS 1187:2012, test 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		RUBBERBOND FLEECEBACK EPDM/PLYWOOD
Product reference		RUBBERBOND FLEECEBACK EPDM
Specimen configuration		RUBBERBOND FLEECEBACK EPDM/PLY
Overall thickness		22MM
Overall weight per unit area		11.75KG
Waterproofing membrane (Test Face)	General description of membrane	1.2MM EPDM/1.4MM POLYESTER FLEECE
	Product reference of membrane	RUBBERBOND FLEECEBACK EPDM
	Overall weight per unit area	1.2KG
	Overall thickness of	2.6MM
	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=====