

BRE Global Classification Report

Classification report for roofs/roof coverings exposed to external fire in accordance with EN 13501-5: 2005 + A1:2009 on Fatrafol FF807V membrane over Powerdeck F PIR insulation board on a plywood deck

Prepared for: Fatra UK Ltd
Date: 18 June 2015
Report Number: P100616-1000-3 Issue 1

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[Table of Contents](#)

1	Introduction	4
2	Sample	4
2.1	Traceability	4
2.2	Description of sample and test format.	4
3	Reports in support of classification	4
4	Test results in support of classification	4
4.1	Test conditions:	4
4.2	Preliminary test (stage 1)	5
4.3	Penetration test (stage 2)	5
5	Classification and field of application	6
5.1	Reference of classification	6
5.2	Classification	6
5.3	Field of application	6
6	Limitations	6
7	Reference	7
	Appendix A	8



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EXTERNAL EXPOSURE TO FIRE CLASSIFICATION REPORT OF FATRAFOL FF807V MEMBRANE OVER POWERDECK F PIR INSULATION BOARD ON A PLYWOOD DECK

Classification report No.:	P100616-1000-3
Issue number:	1
Sponsor:	Fatra UK Ltd, Unit 12, The Timber Yard, East Moors Road, Ocean Park, Cardiff, CF24 5EE
Product name:	Fatrafol FF807V membrane over Powerdeck F PIR insulation board on a plywood deck
Prepared by:	BRE Global Ltd., Bucknalls Lane, Garston, Watford, WD25 9XX, England.
Notified Body Number	0832
Date of issue:	05 June 2015

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1 Introduction

This classification report defines the classification assigned to roof/roof covering Fatrafol FF807V membrane over Powerdeck F PIR insulation board on a plywood deck in accordance with the procedures given in EN 13501-5: 2005 + A1: 2009¹.

2 Sample

2.1 Traceability

The test samples were supplied by the client. BRE Global were not involved in the sample selection process and therefore cannot comment upon the relationship between samples supplied for test and the product supplied to market.

2.2 Description of sample and test format.

The roof / roof covering comprises:

Sample description (as provided by test sponsor/manufacturer)	Details of the sample as supplied by the sponsor are given in Appendix A
Description of sample (as received)	The samples comprised: Plywood, 18mm thick Foil faced bituminous layer Tissue faced foam, 120mm thick Membrane, 1.9mm thick, with grey upper face

No further details of the specimen have been given.

3 Reports in support of classification

Name of Laboratory	Name of sponsor	Test report ref. no.	Test method
BRE Global	Fatra UK Ltd	P100616-1000-2	CEN/TS 1187: 2012 Test 4

4 Test results in support of classification

4.1 Test conditions:

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



4.2 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	2 sec	Y	-	-	-
Flame spread distance	< 0,38m	< 0,38m	< 0,38m	No limit	0 mm	Y	-	-	-
Penetration	None	None	None	None	None	Y	-	-	-

4.3 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, Fatrafol FF807V membrane over Powerdeck F PIR insulation board 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 classification document has been written with reference to a test carried out to CEN/TS 1187: 2012. CEN/TS 1187: 2012, supersedes ENV 1187: 2002 and is expected to be recognised in any update to EN 13501-5: 2005 + A1: 2009. 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 EN 13501-5: 2005 + A1: 2009 incorporating corrigendum November 2006 Fire classification of construction products and building elements – Part 5: Classification using data from external fire exposure to roofs tests. CEN, Avenue Marnix 17, B-1000, Brussels, Belgium. 2009.
- 2 CEN/TS 1187: 2012 Test methods for external fire exposure to roofs. Test 4 – Two stage method incorporating burning brands, wind and supplementary radiant heat. CEN, Avenue Marnix 17, B-1000, Brussels, Belgium. 2012.
- 3 ENV 1187: 2002 + A1: 2005. Test methods for external fire exposure to roofs. Test 4 – Two stage method incorporating burning brands, wind and supplementary radiant heat. CEN, Avenue Marnix 17, B-1000, Brussels, Belgium. 2002



Appendix A

PRODUCT DEFINITION

Trade name	Fatrafol FF807V
Product reference/number	FF807V
Manufacturer	Fatra as
General description	Fully adhered fleece backed PVC single ply membrane
Thickness	1.9mm
Density or mass per unit area	2.04kg/m ²
Layer 1 (Test Face) General description Product reference Overall weight per unit area Overall thickness of Generic type Name of manufacturer Colour reference Trade name of flame retardant Generic type of flame retardant Amount of flame retardant	Fully adhered fleece backed PVC single ply membrane FF807v 2.04kg/m ² 1.9mm PVC single ply membrane Fatra as Grey Option 1 Option 1 Option 1
Layer 2 General description Product reference Overall weight per unit area Overall thickness of Generic type Name of manufacturer Colour reference Trade name of flame retardant Generic type of flame retardant Amount of flame retardant	PIR Insulation Board Powerdeck F 4.3 Kg/m ² 120mm N/A Recticel Insulation Ltd N/A N/A N/A N/A
Layer 3 General description Product reference Overall weight per unit area Overall thickness of Generic type Name of manufacturer Colour reference Trade name of flame retardant Generic type of flame retardant Amount of flame retardant	Self-adhesive aluminium faced vapour barrier Elotene DSN600 0.74kg/m ² 0.6mm N/A Isoltena SpA N/A Option 4 Option 4 Option 4



Layer 4	
General description	Plywood
Product reference	
Overall weight per unit area	
Overall thickness of	18mm
Generic type	
Name of manufacturer	
Colour reference	
Trade name of flame retardant	
Generic type of flame retardant	
Amount of flame retardant	-

Where appropriate the following statements may be used -

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