

BRE Global Test Report

BS 476: Part 3: 2004 + A1: 2006 + A2: 2007 External fire exposure to roofs test on Cover It on 18 mm OSB Test Date 30 October 2020

Prepared for: JJ Roofing Supplies Ltd
Date: 17 June 2021
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Date 17 June 2021

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1 Objective

To classify the sample described in Section 2 according to its capacity to resist penetration by fire and its spread of flame characteristics, using the external fire exposure to roofs tests and criteria specified in BS 476: Part 3: 2004 Incorporating Amendment 1: 2006 and Amendment 2: 2007¹.

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. The results apply to the sample as received.

2.2 Description of sample and test format.

Unless otherwise stated all measurements are nominal.

Test Sponsor	JJ Roofing Supplies Ltd
Manufacturer of sample	Note 2
Sample name/reference	Cover It - GRP roof waterproofing system on OSB Deck
Place of manufacture	Furness House, Castle Park Industrial Estate, Flint, Flintshire CH6 5XA
Sample description (as provided by test sponsor/manufacturer)	GRP roof waterproofing system on OSB deck. A product definition as supplied by the test sponsor has been included in this report as Appendix A
Description of sample (as received by BRE Global)	Grey coated membrane on OSB base. Photographs of the sample are given in Appendix B.
Sample receipt date	22 October 2020
Test face	Coated membrane
Test format	The test was carried out in the flat position
Date of test	30 October 2020
Purchase order	RM 234321



Test operator	P Potter
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3 Conditioning

The specimens were conditioned as required by the standard.

4 Results

4.1 Preliminary ignition test

Specimen reference	Joint	Ambient	Flame spread mm	Flame duration min:sec	Penetration min:sec
E13133/1	None	18.8 °C 68.9 %RH	0	0:00	None

4.2 Spread of flame test

Specimen reference	Joint	Ambient	Flame spread mm	Flame duration min:sec
E13133/2	None	18.9 °C 71.7 %RH	570	49:15 No significant observations
E13133/3	None	19.0 °C 72.0 %RH	520	29:20 No significant observations
E13133/4	None	19.8 °C 67.5 %RH	500	42:58 No significant observations

The mean flame spread was 530 mm



4.3 Penetration test

Specimen reference	Joint	Ambient	Penetration min:sec	Observations
E13133/5	OSB (butt)	20.0 °C 69.7 %RH	None	Severe flaming from approx. 6 – 8 minutes. Subsided to minor flaming by 9 minutes. See note 1
E13133/6	None	20.3 °C 72.1 %RH	None	Did not ignite. See note 1
E13133/7	None	20.5 °C 71.8 %RH	None	Did not ignite. See note 1

Note 1: between 19 – 20 minutes edges flexed and broke air seal on sample. From this time until end of test no negative pressure could be applied.

4.4 Observations

No dripping of material occurred from the underside of any specimen tested, nor was any mechanical failure, or development of holes, observed.

5 Designation of specimens

The designation of specimens subject to conditions of external fire shall be according to both the time of penetration and the distance of spread of flame along their external surface.

Each category designation shall consist of two letters, e.g. AA, AC, BB, these being determined as follows:

First letters:

- A. Those specimens which have not been penetrated within 1 hour.
- B. Those specimens which are penetrated in not less than ½ hour.
- C. Those specimens which are penetrated in less than ½ hour.
- D. Those specimens which are penetrated in the preliminary flame ignition test.

Second letters:

- A. Those specimens on which there is no spread of flame.
- B. Those specimens on which there is not more than 533mm spread of flame.
- C. Those specimens on which there is more than 533mm spread of flame.
- D. Those specimens which continue to burn for 5 minutes after the withdrawal of the test flame or spread more than 381mm across the region of burning in the preliminary test.



- 5.3 Attention shall be drawn to dripping from the underside of the specimen, any mechanical failures, and any development of holes, by adding a suffix 'X' to the designation to denote that one or more of these took place during the test.
- 5.4 When it is required to indicate test results obtained on the sample by designation, the following method shall be used:

The designation letter for penetration shall be given followed by that for spread of flame and preceded by the letters EXT.F. or EXT.S. according to whether the flat or inclined test has been made and when necessary the suffix 'X' shall be added. Thus, for example:

EXT.F.AA; EXT.F.ACX;

EXT.S.BA; EXT.S.CCX.

6 Classification and field of application

6.1 Reference of classification

This classification has been carried out in accordance with BS 476: Part 3: 2004 + A1: 2006 + A2: 2007.

6.2 Classification

The roof / roof covering Cover It on 18 mm OSB, as described in Section 2 above and Appendix A, in relation to its external fire performance is classified:

EXT.F.AB.

6.3 Field of application

This classification is valid for the following conditions:

Range of pitches	$0^{\circ} \leq \text{pitch} \leq 10^{\circ}$
Substrate/deck and supporting structure	As tested, no variation allowed.
Product configuration	As tested, no variation allowed.
Product composition	As tested, no variation allowed.
Product application method	As tested, no variation allowed.
Product thickness	As tested, no variation allowed.
Product colour	As tested, no variation allowed.
Supporting structure	As tested, no variation allowed.
Joints	As tested, no variation allowed.



7 Validity

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

The information in section 2.2 and Appendix A of this report, other than that indicated otherwise, has been supplied by the test sponsor and has not been independently verified by BRE Global. The validity of the results is conditional on the accuracy of that data.

Because of the nature of reaction to fire testing and the consequent difficulty in quantifying the uncertainty of measurement of reaction to fire, it is not possible to provide a stated degree of accuracy of the results.

This report is additional to that issued as P118949-1000 Issue 1 and dated 24 February 2021. The original report remains valid and is not replaced by the Additional Report. The product has not been retested and the Additional Report does not involve technical change or technical review of the original report. The original and new name of the product and the name of the company commercially responsible for the product are documented by the laboratory and maintained in laboratory records.

The manufacturer has made a declaration, which is held on file, that the product placed in the market place, named in section 2.2 of this report and produced at the manufacturing plant listed therein, is exactly the same as the product that was tested on 30 October 2020. This has not been verified by BRE Global

8 Reference

1 British Standard 476-3: 2004 Incorporating Amendment 1: 2006 and Amendment 2: 2007. Fire tests on building materials and structures. Part 3. Classification and method of test for external fire exposure to roofs. British Standards Institution, London, 2007.



Appendix A Product description provided by the test sponsor

PRODUCT DEFINITION

Test sponsor (Company name and address): Note 2	
(Certificate in name of “JJ Roofing Supplies”)	
Trade name	Cover It
Product reference/number	Note 1
General description	GRP roof waterproofing system on OSB Deck
Manufacturer of the roofing product (Company name and address)	Note 2
Place of manufacture	Furness House Castle Park Industrial Estate Flint Flintshire CH6 5XA
Test specimens assembled by (if not by roof product manufacturer)	Note 1
Thickness (overall depth of roof structure tested)	20mm
Mass per unit area (overall value for the roof structure tested)	Approx 14.0 Kg
Flame retardant treatment added or organic content limited during production (yes/no), if yes give details	Note 2



<p>Test sponsor (Company name and address): Note 2</p> <p>(Certificate in name of “JJ Roofing Supplies”)</p>	
Trade name	Cover It
Harmonised EN product standard, and AVCP System No. if applicable	ETAG 005 - 04(2000) System 3
<p>Test face - Name/reference (Layer 1) - Manufacturer</p> <ul style="list-style-type: none"> - Type - Thickness - Mass per unit area - Colour - Application method - Joint details (fixing method, overlap, etc) - Fire retardant (trade name, generic type, amount) 	<p>Cover It Top Coat (B/No RT0909 010)</p> <p>Note 2</p> <p>GRP roof waterproofing top coat</p> <p>0.5mm</p> <p>0.5ltr/m2</p> <p>Grey</p> <p>Roller</p> <p>Note 1</p> <p>Note 2</p>



Test sponsor (Company name and address): **Note 2**

(Certificate in name of “JJ Roofing Supplies”)

Trade name	Cover It
<p>Layer 2</p> <ul style="list-style-type: none"> - Name/reference - Manufacturer - Type - Thickness - Mass per unit area - Colour - Application method - Joint details (fixing method, overlap, etc) - Fire retardant (trade name, generic type, amount) 	<p>Cover It Base Resin (B/No: RB0809 010)</p> <p>Note 2</p> <p>GRP waterproofing base coat</p> <p>1.0mm</p> <p>1.0ltr/m²</p> <p>Translucent</p> <p>Roller</p> <p>Note 1</p> <p>Note 2</p>
<p>Layer 3</p> <ul style="list-style-type: none"> - Name/reference - Manufacturer - Type - Thickness - Mass per unit area - Colour - Application method - Joint details (fixing method, overlap, etc) - Fire retardant (trade name, generic type, amount) 	<p>Cover It Chopped Strand Mat (Batch No: 45200929).</p> <p>Note 2</p> <p>Chopped strand glass reinforcing mat</p> <p>Note 1</p> <p>450g/m²</p> <p>Note 1</p> <p>(Note : This is within layer 2)</p> <p>Note 1</p> <p>Note 1</p>



Test sponsor (Company name and address): **Note 2**

(Certificate in name of “JJ Roofing Supplies”)

Trade name	Cover It
Layer 4 <ul style="list-style-type: none"> - Name/reference - Manufacturer - Type - Thickness - Mass per unit area - Colour - Application method - Joint details (fixing method, overlap, etc) - Fire retardant (trade name, generic type, amount) 	Sterling OSB3 Note 2 Oriented strand board 18mm 11.6kg/m2 N/A N/A N/A N/A

Note 1: This information was not provided by the test sponsor.

Note 2: At the request of the test sponsor this commercially sensitive information which forms part of the definition of the product tested/classified has been withheld from the report and is held on a confidential client file by BRE Global.



Appendix B Photographs of the test specimens

