

# BRE Global Classification Report

**Classification report for roofs/roof coverings exposed to external fire (flat) in accordance with EN 13501-5: 2016 on Deckmaster System R, 8mm cement panel deck**

**Prepared for:** Resdev Ltd.

**Date:** 16 December 2021

**Report Number:** P120854-1002 Issue 1

**Test date:** 27 August 2021

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Prepared for

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## Prepared by

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Name P Potter

Position Senior Technician

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A handwritten signature in blue ink, appearing to read 'P Potter'.

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## Authorised by

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Name J Hunter

Position Section Leader, Reaction to Fire

Date 16 December 2021

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# BRE Global

## EXTERNAL EXPOSURE TO FIRE CLASSIFICATION REPORT OF Deckmaster System R, 8mm cement panel deck

<b>Classification report No.:</b>	P120854-1002
<b>Issue number:</b>	1
<b>Sponsor:</b>	Resdev Ltd, Pumaflor House, Ainleys Industrial Estate, Eland, West Yorkshire, HX5 9JP
<b>Product name:</b>	Deckmaster System R
<b>Prepared by:</b>	BRE Global Ltd., Bucknalls Lane, Garston, Watford, WD25 9XX, England.
<b>Notified Body Number</b>	0832
<b>Date of issue:</b>	16 December 2021

This classification report consists of 13 pages and may only be used or reproduced in its entirety.



## 1 Introduction

This classification report defines the classification (flat) assigned to roof/roof covering Deckmaster System R in accordance with the procedures given in EN 13501-5: 2016.

## 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 the roof/roof covering

Unless otherwise stated all measurements are nominal.

Test Sponsor	Resdev Ltd, Pumaflor House, Ainleys Industrial Estate, Eland, West Yorkshire, HX5 9JP
Manufacturer of sample	Resdev Ltd, Pumaflor House, Ainleys Industrial Estate, Eland, West Yorkshire, HX5 9JP
Sample name/reference	Deckmaster System R
Sample description (as provided by test sponsor/manufacturer)	A crack bridging, trafficable and slip resistant deck waterproofing. 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)	1) Light grey layer with granular textured effect (test face) 2) Dark grey layer variable thickness. 3) Light grey cementitious base board approx. 8 mm thickness 4) Total thickness variable 12.05 mm to 12.27mm.
Sample receipt date	17 June 2021
Test face	Deckmaster UVR Finish
Test format	The test was carried out in the <b>flat</b> position
Date of test	27 August 2021



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### 3 Reports in support of classification

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Name of Laboratory	Name of sponsor	Test report ref. no.	Test method
BRE Global	Resdev Ltd	P120854-1001	CEN/TS 1187: 2012 Test 4

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### 4 Test results in support of classification

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#### 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 <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	0 mm	Y	-	-	-
Penetration	None	None	None	None	None	Y	-	-	-

## 4.3 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												

Note: the system tested does not include joints.



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## 5 Classification and field of application

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### 5.1 Reference of classification

This classification (flat) has been carried out in accordance with EN 13501-5: 2016.

### 5.2 Classification

The roof / roof covering Deckmaster System R, as described in 2.2 above and Appendix A, 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° ≤ pitch ≤ 10°
Substrate / deck	8mm Cembrit fibre cement panel. As tested, no variation allowed
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
Joints	As tested, no variation allowed

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## 6 Limitations

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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.

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## 7 Reference

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- 1 EN 13501-5: 2016 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. 2016.
- 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.





## Appendix A Product description provided by the test sponsor

### PRODUCT DEFINITION

Test sponsor (Company name and address): Resdev Ltd Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire. HX5 9JP.		
Product name of roof covering tested	Deckmaster System R	
Product reference/number	NA	
General description of roofing product tested and build up	<b>Deckmaster System R</b> is a highly crack bridging, trafficable and slip resistant deck waterproofing.	
	<b>Deckmaster System R</b>	<b>Product</b>
	Primer	Deckmaster DPM Primer
	Aggregate washed dried and graded	Quartz 0.4-0.7mm
	Membrane first coat	Deckmaster membrane
	Membrane second coat	Deckmaster membrane
	Aggregate washed dried and graded	Quartz 0.7-1.2mm
	Sealer	Deckmaster UVR Finish
Manufacturer of the roofing product (Company name and address)	Resdev Ltd Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire. HX5 9JP.	
Place of manufacture	Elland, West Yorkshire, UK	
Test specimens assembled by (if not by roof product manufacturer)	Resdev Ltd	
Thickness (overall depth of roof structure tested)	Approx 12mm	
Mass per unit area (overall value for the roof structure tested)	17.5 kg/m	
Flame retardant treatment added, or organic content limited during production (yes/no), if yes give details	No	



Test sponsor (Company name and address): Resdev Ltd Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire. HX5 9JP.		
Product name of roof covering tested		Deckmaster System R
Harmonised EN product standard, and AVCP System No. if applicable		EN 1504-2:2004 AVCP system 2+
<b>Please describe the roof build up, layer by layer, starting with the upper roof surface. Please add or remove rows as required.</b>		
Test face (Layer 1)	<ul style="list-style-type: none"><li>- Name/reference</li><li>- Manufacturer</li><li>- Type</li><li>- Thickness</li><li>- Mass per unit area</li><li>- Colour</li><li>- Application method</li><li>- Joint details (fixing method, overlap, etc)</li><li>- Fire retardant (trade name, generic type, amount)</li></ul>	Deckmaster UVR Finish Resdev LTD Aliphatic polyurethane 0.2mm 0.9kg/m <sup>2</sup> Mid grey Roller NA  NA
Layer 2	<ul style="list-style-type: none"><li>- Name/reference</li><li>- Manufacturer</li><li>- Type</li><li>- Thickness</li><li>- Mass per unit area</li><li>- Colour</li><li>- Application method</li><li>- Joint details (fixing method, overlap, etc)</li><li>- Fire retardant (trade name, generic type, amount)</li></ul>	Deckmaster Membrane. Fully scattered with dried silica sand (0.7-1.2mm). Excess sand swept off before applying layer 1) Resdev Ltd Polyurethane 0.3mm 1 kg/m <sup>2</sup> Black Trowel & spiked roller NA  NA
Layer 3	<ul style="list-style-type: none"><li>- Name/reference</li><li>- Manufacturer</li><li>- Type</li><li>- Thickness</li><li>- Mass per unit area</li><li>- Colour</li><li>- Application method</li><li>- Joint details (fixing method, overlap, etc)</li><li>- Fire retardant (trade name, generic type, amount)</li></ul>	Deckmaster Membrane. Resdev Ltd Polyurethane 0.3mm 1.5 kg/m <sup>2</sup> Black Trowel & spiked roller NA  NA



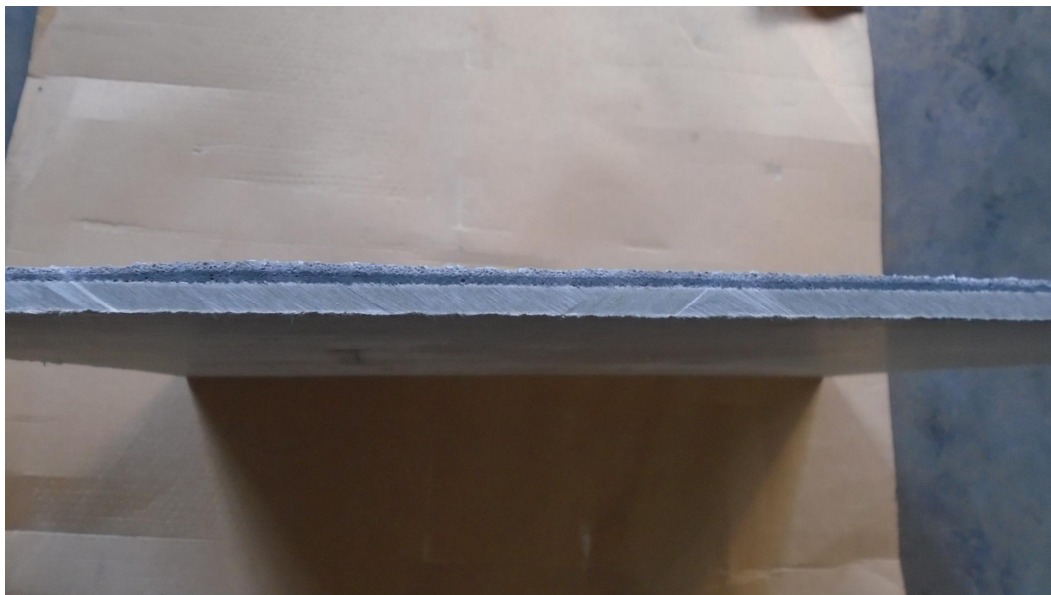
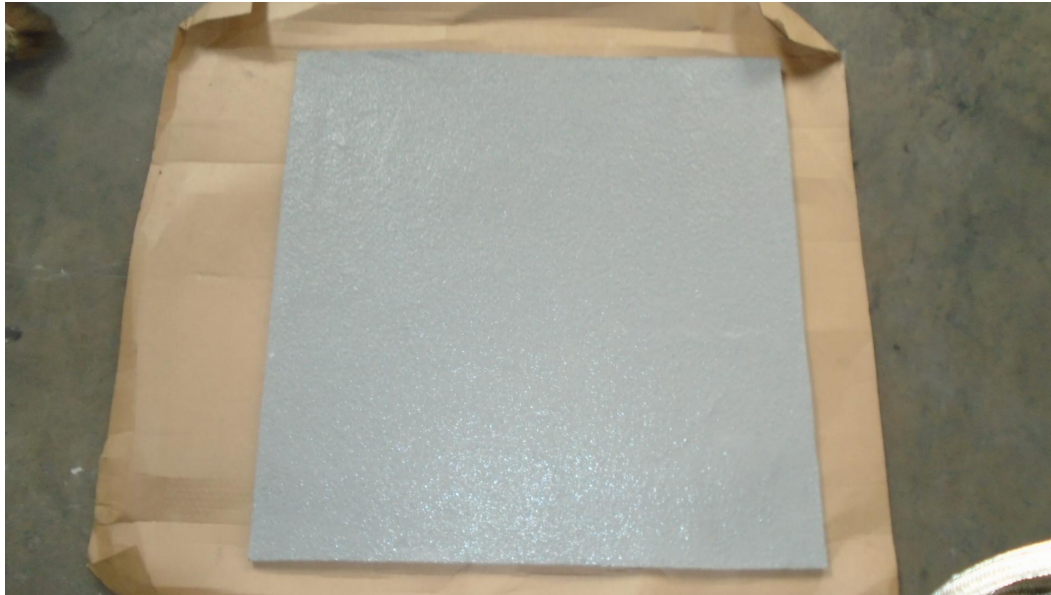
Test sponsor (Company name and address): Resdev Ltd Pumaflor House, Ainleys Industrial Estate, Elland, West Yorkshire. HX5 9JP.	
Product name of roof covering tested	Deckmaster System R
Layer 4      - Name/reference - Manufacturer - Type - Thickness - Mass per unit area - Colour - Application method - Joint details (fixing method, overlap, etc) - Fire retardant (trade name, generic type, amount)	Deckmaster DPM Primer. Fully scattered with 0.4-0.8 mm dried silica sand at 1 kg/m <sup>2</sup> Resdev Ltd Epoxy 0.25mm 0.4kg/mm <sup>2</sup> Translucent yellow Roller NA NA
Substrate	8mm Cembrit fibre cement panel



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## Appendix B      Photographs of the test specimens

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