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# **Class 0 Summary Report**



Including Opinion Of Compliance With The Requirements For A Class 0 Surface As Defined In Paragraph A13(b) Of Approved Document B (Volumes 1 & 2), (2006 Edition) 'Fire Safety' To The Building Regulations 2000

A Report To: Baumit Ltd

Document Reference: 366429 & 366430

Date: 16<sup>th</sup> June 2016

Issue No.: 1

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# **Executive Summary**

#### **Objective** To assess the results of tests to BS 476:Part 6:1989+A1: 2009 and BS 476:Part 7:1997, obtained on specimens of the following product and to provide an opinion of compliance with the requirements for a Class 0 surface, as defined in Approved Document B to the Building Regulations 2000.

Generic Description	Product reference	Thickness	Weight per unit area or density	
External thermal insulated composite system	"StarSystem EPS 15/5082"	43mm	18kg/m <sup>2</sup>	
Individual components used to manufacture composite:				
Coating	"Baumit SilikonTop K1.5"	1.5mm	2.5kg/m <sup>2</sup>	
Basecoat / contact mortar	"Baumit StarContact WHITE"	3mm	Not stated	
Scrim	"Baumit StarTex Fine"	Unwilling to provide	160g/m <sup>2</sup>	
EPS	"Jablite HP"	25mm	16.5kg/m <sup>2</sup>	
Plywood	No specific product reference	12mm	8kg/m <sup>2</sup>	
Please see pages 5 & 6 of this test report for the full description of the product tested				

**Test Sponsor** Baumit Ltd, Unit 2 Westmead, New Hythe Lane, Aylesford, Kent, ME15 0ER

We consider the results of the tests to BS 476:Part 6:1989+A1: 2009 and BS **Opinion:** 476:Part 7: 1997, demonstrate that the product, as tested, complies with the requirements for Class 0, as defined in paragraph A13(b) of Approved Document B, `Fire Safety', to the Building Regulations 2000.

27<sup>th</sup> May 2016 **Date of Test** 

# **Signatories**

C Men

**Responsible Officer** C. Meachin \* Technical Officer

\* For and on behalf of Exova Warringtonfire.

Authorised S. Deeming \* **Business Unit Head** 

Report Issued: 16<sup>th</sup> June 2016

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## **Test Details**

Terms Reference	Of	To assess the 476:Part 7:199 of compliance Approved Docu	e results of tests to BS 476 7, obtained on specimens of a with the requirements for a ument B to the Building Regula	Part 6: product Class tions 20	1989+A1: 2009 and BS and to provide an opinion 0 surface, as defined in 00.
Introduction		Specimens of a product have been tested in accordance with the test methods specified in BS 476: Part 6: 1989+A1: 2009 'Method of test for fire propagation for products' and BS 476: Part 7: 1997 'Method of test to determine the classification of the surface spread of flame of products'. The results of the tests are fully reported in the <b>Exova Warringtonfire</b> test reports No's. 366429 and 366430.			
		This summary relates the res material or co Document B, `l	test report has been prepared ults of the tests to the require mposite product, as defined in Fire Safety', to the Building Reg	at the re ments fe n parag gulations	equest of the sponsor and or a Class 0 surface of a raph A13(b) of Approved a 2000.
		This summary substitute for, 366430. Those relevant to the	should be read in conjunction the <b>Exova Warringtonfire</b> test reports may include addread assessment of the potential fire	on with, test re litional i e hazard	and not accepted as a ports No's. 366429 and nformation which may be of the product.
Face subjected tests	to	The specimens were mounted in the test positions such that the coated face was exposed to the heating conditions of the tests.			
Results of test		The following r	esults were obtained for the sp	ecimens	, which were tested.
BS 476: Part 6: 1989+A1: 2009	6:		Fire propagation index, I	=	1.9
			subindex, i <sub>1</sub>	=	0.4
		subindex, i <sub>2</sub>	=	1.3	
			subindex, i <sub>3</sub>	=	0.2
BS 476: Part 1997	7:		Class 1 surface spread of flam	ie	

The test results relate only to the behaviour of the test specimens of the product under the particular conditions of the test, they are not intended to be the sole criterion for assessing the potential hazard of the product in use.

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## **Description of Test Specimens**

The description of the specimens given below has been prepared from information provided by the sponsor of the test. All values quoted are nominal, unless tolerances are given.

General description		External thermal insulated composite system		
Product reference		"StarSystem EPS 15/5082"		
Name of manufacturer		Baumit GmbH		
Thickness		43mm (stated by sponsor)		
		44.1mm (determined by Exova		
		Warringtonfire)		
Weight per unit area	3	18kg/m <sup>2</sup> (stated by sponsor)		
		17.4kg/m <sup>2</sup> (determined by <b>Exova</b>		
		Warringtonfire)		
Product configuration	n	Coating		
		Basecoat mortar		
		<ul> <li>Scrim (embedded in basecoat)</li> </ul>		
		Basecoat mortar		
		EPS		
		Contact mortar		
		Plywood		
	Generic type	See Note 1 Below		
	Product reference	"Baumit SilikonTop K1.5"		
	Name of manufacturer	Baumit GmbH		
	Colour reference	"General Material – 0019"		
Quality	Number of coats	One		
	Application thickness per	1.5mm		
Coaling	coat			
	Application rate per coat	2.5kg/m <sup>2</sup>		
	Specific gravity	See Note 1 Below		
	Application method	Trowel applied by hand		
	Curing process per coat	24 hours		
	Flame retardant details	See Note 2 Below		
Basecoat / contact mortar	Generic type	Mineral-based multi-purpose contact mortar		
	Product reference	"Baumit StarContact WHITE"		
	Name of manufacturer	Baumit GmbH		
	Size of aggregate	0.6 - 1.0mm		
	Colour reference	"White"		
	Application thickness	3mm		
	Application method	Trowel applied by hand		
	Flame retardant details	See Note 2 Below		
	Curing process	Air drying for 3 to 5 days dependent on		
		conditions		

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	General description	Alkaline resistant glass fibre textile mesh
Scrim	Generic type	See Note 1 Below
	Product reference	"Baumit StarTex Fine"
	Name of manufacturer	Baumit GmbH
(embedded in	Colour reference	See Note 1 Below
basecoat)	Thickness	See Note 1 Below
	Weight per unit area	160g/m <sup>2</sup>
	Cell dimensions	4 x 4mm
	Flame retardant details	See Note 2 Below
	Generic type	Expanded polystyrene (EPS) insulating boards
	Product reference	"Jablite HP"
	Detailed description	Comprises of expanded beads of low lambda
	·	polystyrene preformed and fused together in a
500		steam-heated mould under pressure
EPS	Name of manufacturer	Jablite
	Thickness	25mm
	Density	16.5kg/m <sup>3</sup>
	Colour reference	See Note 1 Below
	Flame retardant details	See Note 2 Below
	Generic type	External grade plywood
	Product reference	No specific product reference
	Timber species	See Note 3 Below
	Thickness	12mm
	Weight per unit area	8kg/m²
Dhavood	No. of Ply's	Seven
Fiywood	Trade name of adhesive	See Note 3 Below
	used to bond the wood	
	together	
	Name of supplier	Travis Perkins Plc.
	Flame retardant details	See Note 2 Below
	Cycle details	See Note 3 Below
Brief description of manufacturing process		The ETICS system is constructed in layers.
		In the case of the sample tested the 12mm
		plywood in used to represent the substrate.
		The StarContact WHITE product is mixed with
		water and then trowel applied to the substrate
		and used to adhere the EPS boards to the
		substrate.
		Once dried StarContact is also applied to the
		face layer of the EPS, the reinforcing mesh is
		laid in to the first coat and then a further coat of
		StarContact is applied to cover the mesh.
		Once this mesh coat layer has dried the top
		coal can be applied using a trowel and tinished

Note 1: The sponsor was unwilling to provide this information.

Note 2: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

Note 3: The sponsor was unable to provide this information.

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# Classification

Opinion	We consider the results of the tests detailed above demonstrate that the product, as tested, complies with the requirements for Class 0, as defined in paragraph A13(b) of Approved Document B, `Fire Safety', to the Building Regulations 2000.
Validity of opinion	This opinion is based on the requirements of the Building Regulations at the date of this report. If the Building Regulations are revised or amended in any way subsequent to that date, care must be taken to ensure that this opinion is not invalidated by those revisions or amendments.
	The opinion has been formulated on the assumption that the specimens are representative of the product in practice. <b>Exova Warringtonfire</b> was not involved in any sampling or selection procedures which would confirm this or in any audit testing which would provide confidence in the consistency of the product in the tests.
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# **Revision History**

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