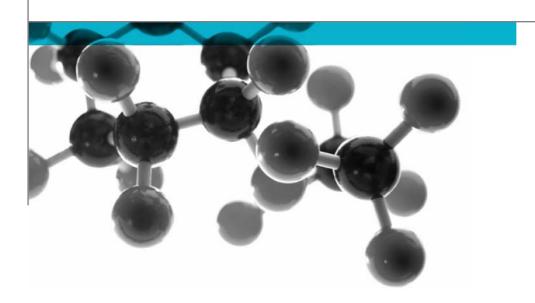
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Class 0 Summary Report



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: SAKE Co., Ltd.

Document Reference: 345369 & 345370

Date: 16th October 2014

Issue No.: 1

Page 1



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		
Poly-isocyanurate (PIR) foam with embossed aluminium foil face and backing	,	20mm	1.5kg/m ²		
Individual components used to manufacture composite:					
Embossed aluminium foil (each face)	Unwilling to provide	80 microns	0.25kg/m²		
Foam	"Poly-isocyanurate Board"	20mm	50kg/m ³		
Please see page 5 of this test report for the full description of the product tested					

Test Sponsor SAKE Co., Ltd., #151-59, Maeryeong-gil, Gobuk-myeon, Seosan-si,

Chungcheongnam-do, Korea, 356-811.

Opinion: We consider the results of the tests to BS 476:Part 6:1989+A1: 2009 and BS

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.

Date of Test 8th & 14th October 2014

Signatories

Responsible Officer
C. Meachin *
Technical Officer

Operations Manager

C Men.

Report Issued: 16th October 2014

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^{*} For and on behalf of Exova Warringtonfire.

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SAKE Co., Ltd. Client: Issue No.:



Test Details

Terms Reference

To assess the results of tests to BS 476:Part 6:1989+A1: 2009 and BS 476:Part 7:1997, obtained on specimens of a 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.

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 **Exova Warringtonfire** test reports No's. 345369 and 345370.

This summary test report has been prepared at the request of the sponsor and relates the results of the tests to the requirements for a Class 0 surface of a material or composite product, as defined in paragraph A13(b) of Approved Document B, `Fire Safety', to the Building Regulations 2000.

This summary should be read in conjunction with, and not accepted as a substitute for, the **Exova Warringtonfire** test reports No's. 345369 and 345370. Those test reports may include additional information which may be relevant to the assessment of the potential fire hazard of the product.

Face subjected to tests

The specimens were mounted in the test positions such that one of two identical faces was exposed to the heating conditions of the tests.

Results of test

The following results were obtained for the specimens, which were tested.

BS	476:	Part	6:	
1989	9			

Fire propagation index, I = 5.1R

subindex, i₁

= 1.9

subindex, i₂

= 2.4

subindex, i₃

= 0.8

BS 476: Part 7: 1997

Class 1 surface spread of flame

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		Poly-isocyanurate (PIR) foam with embossed aluminium foil face and backing	
Product reference		"Aluminium Foil Faced Poly-Isocyanurate Board"	
Name of manufactu	ırer	SAKE Co., Ltd.	
Thickness		20mm (stated by sponsor) 21.02mm (determined by Exova Warringtonfire)	
Weight per unit area		1.5kg/m² (stated by sponsor) 1.64kg/m² (determined by Exova Warringtonfire)	
Product configuration		Embossed aluminium foilFoamEmbossed aluminium foil	
	Generic type	Embossed aluminium foil	
	Product reference	See Note 1 below	
	Name of manufacturer	See Note 1 Below	
Embossed	Thickness	80 microns	
aluminium foil	Weight per unit area	0.25kg/m ²	
	Colour reference	See Note 1 Below "Silver" (observed by Exova Warringtonfire)	
	Flame retardant details	See Note 2 Below	
	Generic type	PIR	
	Product reference	"Poly-isocyanurate Board"	
	Name of manufacturer	SAKE Co., Ltd.	
Foam	Thickness	20mm	
	Density	50kg/m³	
	Weight per unit area	1kg/m²	
	Colour reference	"Beige"	
	Flame retardant details	See Note 1 Below	
Brief description of	manufacturing process	Foaming Poly-isocyanurate between aluminium foils and curing between double moving belt continuously	

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.

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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. **Exova Warringtonfire** 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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Author: C. Meachin Issue Date: 16th October 2014