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Testing. Advising. Assuring.

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**

Summary of WF Report Numbers

189789 & 189790 (Issue 2)

Date:

5th February 2010

Test Sponsor:

**Tengzhou City Huahai New
Thermal Insulation Material
Co.,Ltd**

No.388 Hengyuan Road,
Tengzhou City,
Shandong Province,
Republic of China

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 assembly 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
Aluminium foil faced and backed phenolic foam core	"Metal Surface Foam Insulation"	20.5mm	1.64kg/m ²
Individual components used to manufacture composite:			
Embossed Aluminium Foil	"Aluminum foil"	0.8mm	181g/m ²
Insulation foam	"Phenolic foam"	20mm	60kg/m ³
Please see page 5 of this test report for the full description of the product tested			

Test Sponsor Tengzhou City Huahai New Thermal Insulation Material Co.,Ltd, No.388 Hengyuan Road, Tengzhou City, Shandong Province, Republic of China

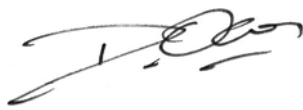
Opinion: We consider the results of the tests to BS 476:Part 6:1989+A1: 2009 and BS 476:Part 7: 1997, demonstrate that the product, as tested, complies with the requirements for Class 0, as defined in paragraph A13(b) of Approved Document B, 'Fire Safety', to the Building Regulations 2000.

Date of Test 14th & 15th January 2010


Signatories



Responsible Officer
T. Benyon *
Technical Officer



Approved
D. J. Owen *
Senior Technical Officer



Authorised
C. Dean *
Operations Manager

* For and on behalf of **Exova Warringtonfire**.

Report Issued: 5th February 2010

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CONTENTS	PAGE NO.
EXECUTIVE SUMMARY	2
SIGNATORIES.....	2
TEST DETAILS.....	4
DESCRIPTION OF TEST SPECIMENS.....	5
CLASSIFICATION	6

Test Details

Terms Of 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 189789 and 189790.

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 189789 and 189790. Those test reports may include additional information which may be relevant to the assessment of the potential fire hazard of the product.

The specimens were tested with an airgap positioned behind the product as described in test report No 189789 and test report No 189790.

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

Fire propagation index, I = 5.7

subindex, i_1 = 2.3

subindex, i_2 = 2.8

subindex, i_3 = 0.6

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.

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		Aluminium foil faced and backed phenolic foam core
Product reference of composite		"Metal Surface Foam Insulation"
Manufacturer of composite		Tengzhou City Huahai New Thermal Insulation Material Co.,Ltd
Overall thickness		20.5mm (stated by sponsor) 20.5mm (determined by Exova warringtonfire)
Overall weight per unit area		1.64Kg/m ² (determined by Exova warringtonfire)
Product configuration		<ul style="list-style-type: none"> • Foil facing • Foam insulation • Foil facing
Aluminium Foil Facing	Product reference	"Aluminum foil"
	Generic type	Embossed Aluminum
	Name of manufacturer	Hangzhou Dingcheng aluminum Co.,Ltd
	Weight per unit area	181g/m ² (determined by Exova warringtonfire)
	Thickness	0.8mm
	Colour	"Silvery grey"
	Flame retardant details	The component is inherently flame retardant
Insulation	Generic type	Phenolic foam
	Product reference	"Phenolic foam"
	Name of manufacturer	Tengzhou City Huahai New Thermal Insulation Material Co.,Ltd
	Thickness	20mm
	Colour	Pink
	Density	60kg/m ³
	Flame retardant details	See Note 1 below
Brief description of manufacturing process		Mechanised production line in which foil facing is auto bonded to foam insulation.

Note 1: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of this component.

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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