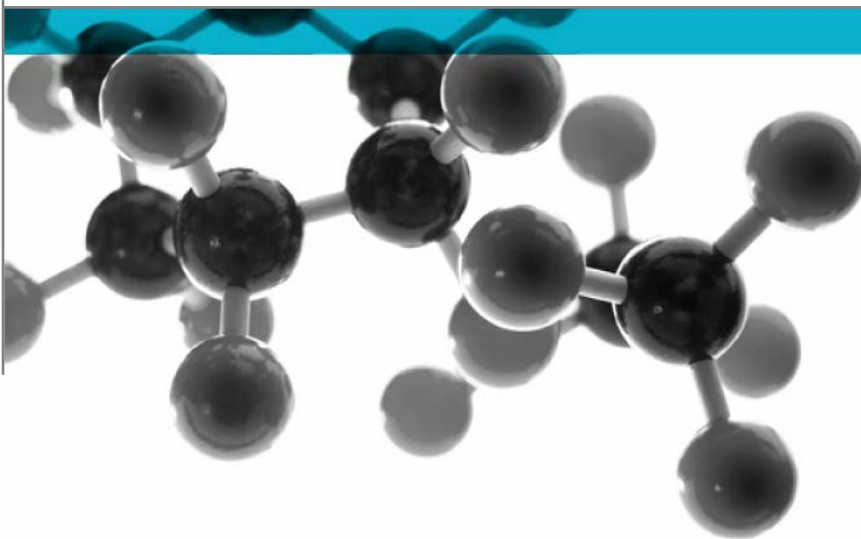


Class 0 Summary Report



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

Date: 29th June 2016

Issue No.: 1

Page 1

A Report To: Unigulf Air Conditioning Industries L.L.C.

Document Reference: 366997 & 366998

**Testing
Advising
Assuring**

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
An aluminium foil faced ducting panel with flame retardant grade PIR insulating material	"12 AS 31 EASY DUCTING PANEL"	30.5±0.5mm	1.65 - 1.90kg/m ²
Individual components used to manufacture composite:			
Foil (test face)	Unable to provide	80 microns	2700 - 2850kg/m ³
Adhesive	Unable to provide	Unable to provide	Not stated
Foam	Unable to provide	30mm	42 - 48kg/m ³
Please see pages 5 & 6 of this test report for the full description of the product tested			

Test Sponsor Unigulf Air Conditioning Industries L.L.C., P.O. Box: 116145, Dubai, U.A.E.


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 16th June 2016

Signatories



Responsible Officer
C. Meachin *
Technical Officer



Authorised
S. Deeming *
Business Unit Head

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

Report Issued: 29th June 2016

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Test Details

Terms Reference **Of** 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. 366997 and 366998.

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. 366997 and 366998. 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+A1: 2009	Fire propagation index, I	=	6.9
	subindex, i_1	=	2.5
	subindex, i_2	=	2.3
	subindex, i_3	=	2.1

**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		An aluminium foil faced ducting panel with flame retardant grade PIR insulating material
Product reference		"12 AS 31 EASY DUCTING PANEL"
Name of manufacturer		Unigulf Air Conditioning Industries L.L.C.
Thickness		30.5±0.5mm (stated by sponsor) 29.63mm (determined by Exova Warringtonfire)
Weight per unit area		1.65 - 1.90kg/m ² (stated by sponsor) 1.80kg/m ² (determined by Exova Warringtonfire)
Product configuration		<ul style="list-style-type: none"> Foil (test face) Adhesive Foam Adhesive Foil (reverse face)
Foil (Test face)	Generic type	Embossed aluminium
	Product reference	See Note 1 Below
	Detailed description	See Note 1 Below
	Name of manufacturer	See Note 2 Below
	Thickness	80 microns
	Density	2700 - 2850kg/m ³
	Colour reference	"Silver / Aluminium"
	Flame retardant details	See Note 1 Below
Adhesive	General description	Heat sealing lacquer
	Generic type	See Note 1 Below
	Product reference	See Note 1 Below
	Name of manufacturer	See Note 2 Below
	Application rate	See Note 1 Below
	Application method	See Note 1 Below
	Flame retardant details	See Note 1 Below
	Curing process	See Note 1 Below
Foam	Generic type	Rigid PIR insulation foam comprising polyol and isocyanate
	Product reference	See Note 1 Below
	Detailed description	Polyisocyanurate rigid foam from fire retardant grade polyol and isocyanate
	Name of manufacturer	Unigulf Air Conditioning Industries L.L.C.
	Thickness	30mm
	Density	42 - 48kg/m ³
	Colour reference	"Light Blue"
	Flame retardant details	See Note 1 Below

Continued on next page

Brief description of manufacturing process	Manufactured in a continuous process. A liquid mixture of polyol and isocyanate is introduced, (in between two running aluminium foils) which foams up, solidifies and adheres to these two foils. These foils are maintained 30 mm apart from each other, to achieve desired thickness of the composite panel, of 30 mm.
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Note 1: The sponsor was unable to provide this information.

Note 2: The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

The description of the specimens as given above is not as detailed as would usually be the case for descriptions included in **Exova Warringtonfire** test reports and the description may not fully comply with the requirements of the test standard. In all other respects however the tests were conducted fully in accordance with the requirements of the test standard and the test results are valid.

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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