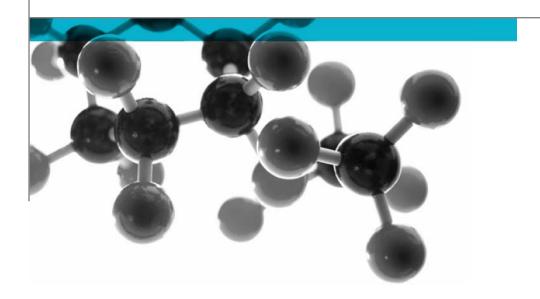
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Class 0 Summary Report



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: Graphenstone

Document Reference: 392941 & 392944

Date: 18th December 2017

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 / application rate	Weight per unit area or density	
Coated gypsum plasterboard	"GrafClean Premium"	13.84mm *	12.37kg/m ² *	
Individual components used to manufacture composite:				
Coating	"GrafClean Premium"	2 x 5m ² /l	$1.65 \pm 0.05 \text{ g/cm}^3$	
Plasterboard	No product reference assigned	11mm	700kg/m ³	
*Determined by Exova Warringtonfire				
Please see page 5 of this test report for the full description of the product tested				

Test Sponsor Graphenstone, c/Herreros 8, 41520 Viso Del Aclor, Sevilla, Spain

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 13th December 2017

Signatories

Responsible Officer
C. Meachin *
Technical Officer

Authorised B. Dean *

Technical Leader

* For and on behalf of Exova Warringtonfire.

C. Men.

Report Issued: 18th December 2017

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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. 392941 and 392944.

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. 392941 and 392944. 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 the coated face was exposed to the heating conditions of the tests.

Results of test

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

BS	47	6:	P	art	6:
198	9+	A 1	ŧ	20	09

Fire propagation index, I = 1.7

subindex, $i_1 = 0.4$

subindex, i_2 = 0.9

subindex, $i_3 = 0.4$

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. This information has not been independently verified by **Exova Warringtonfire**. All values quoted are nominal, unless tolerances are given.

General description		Coated gypsum plasterboard	
Product reference		"GrafClean Premium"	
Name of manufacturer		Industria Española para el Desarrollo e	
		Investigación, S.A., IEDISA	
Thickness		13.84mm (determined by Exova Warringtonfire)	
Weight per unit area		12.37kg/m ² (determined by Exova Warringtonfire)	
	Generic type	Interior and exterior paint with graphene	
	Product reference	"GrafClean Premium"	
	Name of manufacturer	Industria Española para el Desarrollo e	
		Investigación, S.A., IEDISA	
	Colour reference	"White"	
Coating	Number of coats	Two	
Coating	Application rate per coat	$5 \text{m}^2/\text{l}$	
	Density	$1.65 \pm 0.05 \text{ g/cm}^3$	
	Application method	Roller	
	Curing process per coat	2-4 hours between coats and 24 hours for full drying	
		at 25°C and 60% relative humidity	
	Flame retardant details	See Note 1 below	
Plasterboard	Generic type	Gypsum plasterboard	
	Product reference	No product reference assigned	
	Name of manufacturer	See Note 2 below	
	Thickness	11mm	
	Density	700kg/m ³	
	Flame retardant details	See Note 1 below	
Brief description of manufacturing process		See Note 2 below	

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

Note 2: The sponsor was unwilling 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. **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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