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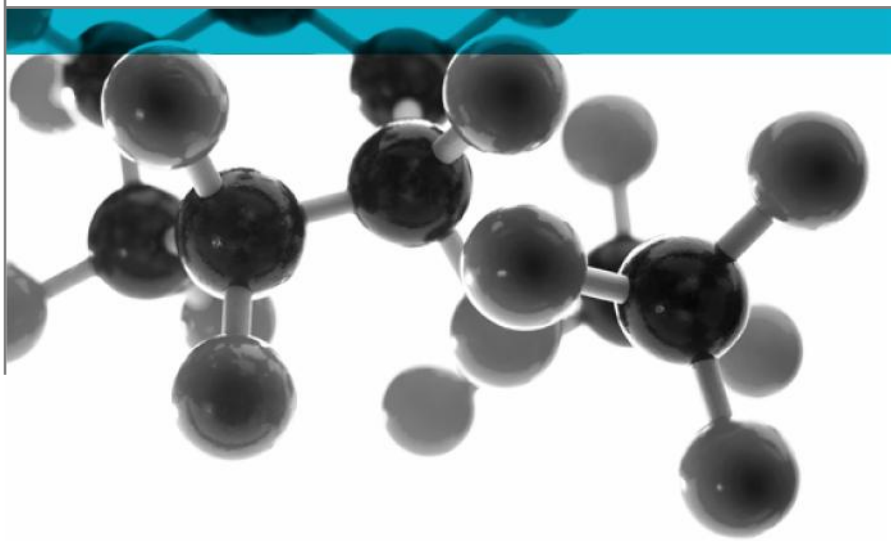
Class 0 Summary Report



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: International Alluminium Company s.r.l.

Document Reference: 338763 & 338764

Date: 22nd May 2014

Issue No.: 1

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 / density specific gravity
A coating system applied to an aluminium substrate	"D-MAX® HIGH PERFORMANCE SOLID ALUMINUM"	3.0 mm	2.71 g/cm^3
Individual components used to manufacture composite:			
Final coating product (test face)	"WHITE RAL 9016 VL 403"	20±2 microns	Unwilling to provide
First coating product	"WHITE VL75"	5±2 microns	Unwilling to provide
Substrate	"5754 ALLOY"	3 mm	2.71 g/cm^3
Coating product (reverse face)	"GREY RAL 7035 VL232"	5±2 microns	Unwilling to provide
Please see page 5 of this test report for the full description of the product tested			

Test Sponsor

International Alluminium Company s.r.l., Via Pergolesi, 6 – 20124 Milano mi, Italy.

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

26th & 27th March 2014

Signatories

Responsible Officer C. Meachin * Technical Officer	Authorised S. Deeming * Operations Manager

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

Report Issued: 22nd May 2014

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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. 338763 and 338764.

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. 338763 and 338764. 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 PVDF 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 476: Part 6: 1989

Fire propagation index, I	=	0.3
subindex, i_1	=	0.3
subindex, i_2	=	0.0
subindex, i_3	=	0.0

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		A coating system applied to an aluminium substrate
Product reference of composite		"D-MAX® HIGH PERFORMANCE SOLID ALUMINUM"
Name of manufacturer of composite		INTERNATIONAL ALLUMINIUM COMPANY SRL
Thickness of composite		3.0 mm (stated by sponsor) 3.0 mm (determined by **Exova Warringtonfire**)
Density of composite		2.71 g/cm^3 (stated by sponsor) 2.62 g/cm^3 (determined by **Exova Warringtonfire**)
Final coating product (Test face)	Generic type	Polyvinylidene difluoride (PVDF) liquid paint
	Product reference	"WHITE RAL 9016 VL 403"
	Name of manufacturer	**See Note 1 below**
	Colour reference	**See Note 1 below** "White" (observed by **Exova Warringtonfire**)
	Number of coats	1
	Application thickness per coat	20±2 microns
	Density / specific gravity	**See Note 1 below**
	Application method	Coil coating
	Flame retardant details	**See Note 2 below**
	Curing process per coat	Infra-red system
First coating product	Generic type	Polyester liquid paint
	Product reference	"WHITE VL75"
	Name of manufacturer	**See Note 1 below**
	Colour reference	**See Note 1 below**
	Number of coats	1
	Application thickness per coat	5±2 microns
	Density / specific gravity	**See Note 1 below**
	Application method	Coil coating
	Flame retardant details	**See Note 2 below**
	Curing process per coat	Infra-red system
Substrate	Generic type	Aluminium alloy
	Product reference	"5754 ALLOY"
	Detailed description / composition details	EN AW 5754 / EN AW-Al Mg3
	Name of manufacturer	**See Note 1 below**
	Thickness	3 mm
	Density	2.71 g/cm^3
	Flame retardant details	This component is inherently flame retardant

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Coating product (Reverse face)	Generic type	Epoxide liquid paint
	Product reference	"GREY RAL 7035 VL232"
	Name of manufacturer	**See Note 1 below**
	Colour reference	**See Note 1 below**
	Number of coats	1
	Application thickness per coat	5±2 microns
	Density / specific gravity	**See Note 1 below**
	Application method	Coil coating
	Flame retardant details	**See Note 2 below**
	Curing process per coat	Infra-red system
Brief description of manufacturing process		Unwinding coil Jointing with preceding coil Chemical pre-treatment Painting (primer on face a & back on face b) Paint polymerization Painting (finish on face a) Paint polymerization Cooling Application of protective film Rewinding coil

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.

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.

Revision History

Issue No :	Re-issue Date:
Revised By:	Approved By:
Reason for Revision:	

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