

WF Report Numbers

**182136 (Issue 2) & 182137
(Issue 2)**

Date:

13th May 2009

Test Sponsor:

Eurobond Industries Pvt. Ltd.

**SUMMARY OF WF REPORT No's. 182136 (Issue 2)
& 182137 (Issue 2)**

**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**

Sponsored By

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Test Details

Terms Of Reference

To assess the results of tests to BS 476:Part 6:1989 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 'Method of test for fire propagation of products' and BS 476: Part 7: 1997 'Surface spread of flame test for materials'. The results of the tests are fully reported in the **Bodycote warringtonfire** test reports No's. 182136 (Issue 2) and 182137 (Issue 2).

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 **Bodycote warringtonfire** test reports No's. 182136 (Issue 2) and 182137 (Issue 2). 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. 182136 (Issue 2) and test report No. 182137 (Issue 2).

Face subjected to tests

The specimens were mounted in the test positions such that the face coated with the PVDF coating 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	=	2.5
subindex, i_1	=	1.8
subindex, i_2	=	0.6
subindex, i_3	=	0.1

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. The specimens were supplied by the sponsor of the test. **Bodycote warringtonfire** was not involved in any selection or sampling procedure.

General description		A composite panel comprising coated aluminium facings adhered to an LDPE core
Product reference of composite		"EUROBOND-FR"
Name of manufacturer of composite		Eurobond Industries Pvt. Ltd.
Thickness of composite		4mm (stated by sponsor) 4.13mm (determined by Bodycote warringtonfire)
Weight per unit area of composite		6.5 kg/m ² (stated by sponsor) 6.76kg/m ² (determined by Bodycote warringtonfire)
Coating (test face)	Product reference	"Kynar 500"
	Generic type	PVDF (Polyvinylidene Difluoride)
	Name of manufacturer	Becker Industrial Coating
	Colour	"Bright Silver"
	Application rate	See Note 1 below
	Application thickness	Between 28 and 32 microns
	Application method	Hot roller coating
	Specific gravity	See Note 2 below
Facing	Flame retardant details	See Note 2 below
	Product reference	"Front Aluminium Foil"
	Generic type	Aluminium alloy 1100-H18
	Name of manufacturer	Lite Source Hong Kong Ltd.
	Weight per unit area	1.36kg/m ²
	Thickness	0.50mm
Adhesive	Flame retardant details	The aluminium is inherently flame retardant
	Product reference	"DUPONT"
	Generic type	Polymer based film The sponsor was unable to provide further information relating to the generic type of the component
	Name of manufacturer	DuPont
	Application thickness	0.07mm
	Application method	Bonding between core and aluminium is through heating
Core	Flame retardant details	See Note 2 below
	Product reference	"Lite Source Hong Kong Ltd."
	Generic type	Flame retardant grade LDPE (Low Density Polyethylene)
	Colour	"White"
	Name of manufacturer	Lite Source Hong Kong Ltd.
	Weight per unit area	3.79kg/m ²
	Thickness	3mm
	Flame retardant details	See Note 2 below

Continued on next page

Adhesive	Product reference	"DUPONT"
	Generic type	Polymer based film The sponsor was unable to provide further information relating to the generic type of the component
	Name of manufacturer	DuPont
	Application thickness	0.07mm
	Application method	Bonding between core and aluminium is through heating
	Trade name of flame retardant	See Note 2 below
Backing	Product reference	"Back Aluminium Foil"
	Generic type	Aluminium alloy 1100-H18
	Name of manufacturer	Lite Source Hong Kong Ltd.
	Weight per unit area	1.36kg/m ²
	Thickness	0.50mm
	Flame retardant details	The aluminium is inherently flame retardant
Coating (reverse face)	Product reference	"Back Coating"
	Generic type	Anti corrosive coating / service coating The sponsor was unable to provide further information relating to the generic type of the component
	Name of manufacturer	Becker Industrial Coating
	Colour	"Grey / White"
	Application rate	See Note 1 below
	Application thickness	Between 6 and 10 microns
	Application method	Hot roller coating
	Specific gravity	See Note 1 below
	Flame retardant details	See Note 2 below
Brief description of manufacturing process		The FR LDPE granules are blended together and then auto loaded into another chamber. The moisture is removed from the blended mixture before it is extruded. After extruding the dried mixture, is it then formed into a sheet of the desired thickness with the help of calendaring. The coated aluminium is then adhered to the LDPE sheet with the help of the adhesive film. In the cooling stage the composite sheets are cooled and levelled and a protective film is applied. The aluminium composite panel is then marked as per operations for traceability. This includes marking the manufacturing date, batch number etc. The aluminium composite panel is then taken off after trimming and cutting into desired sizes.

Note 1. The sponsor of the test was unwilling to provide this information.

Note 2. The sponsor of the test was unable to provide this information.

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. **Bodycote 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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Signatories



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* For and on behalf of **Bodycote warringtonfire**.

Report Issued: 13th May 2009

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