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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: Kreysler & Associates

Document Reference: 354400 & 355663

Date: 24th August 2015

Issue No.: 1

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Registered Office: Exova (UK) Ltd, Lochend Industrial Estate, Newbridge, Midlothian EH28 8PL United Kingdom. Reg No.SC 70429 This report in issued in accordance with our terms and conditions, a copy of which is available on request.





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 |
|--------------------------------------------------------------------------------------|-------------------------------------|---------------|-------------------|--------------|---------------------------------|
| Flame fiberglass (GRP) pan | retardant g reinforced pla el | rade astic | "Fireshield 285" | 4.48mm * | 8.2kg/m ² * |
| Individual components used to manufacture composite: | | | | | |
| | Gel-coat | | Confidential | Confidential | Confidential |
| woulded | Resin | | Confidential | Confidential | Confidential |
| Sheet | Fibre reinforcement | | Confidential | Confidential | Confidential |
| *Determined by Exova Warringtonfire | | | | | |
| Please see page 5 of this test report for the full description of the product tested | | | | | |

Test Sponsor Kreysler & Associates, 501 Green Island road, American Canyon, CA 94503, United States

We consider the results of the tests to BS 476:Part 6:1989+A1: 2009 and BS **Opinion:** 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.

15th & 22nd July & 19th August 2015 **Date of Test**

Signatories

Responsible Officer T Mort * Senior Technical Officer

| - SM Dend | |
|--------------------------------------------------|--|
| Authorised S. Deeming * Business Unit Head | |

* For and on behalf of Exova Warringtonfire.

Report Issued: 24th August 2015

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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. 354400 and 355663. | | | |
| | | 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. 354400 and 355663. 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 described in test report No. 354400 and test report No. 355663. | | | |
| 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 r | esults were obtained for the sp | ecimens | s, which were tested. |
| BS 476: Part | ırt 6:)9 | | Fire propagation index, I | = | 9.9 |
| 1989+A1: 2009 | | | subindex, i ₁ | = | 0.2 |
| | | | subindex, i ₂ | = | 7.7 |
| | | | subindex, i_3 | = | 2.0 |
| BS 476: Part 1997 | 7: | | Class 1 surface spread of flam | ie | |

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. All values quoted are nominal, unless tolerances are given.

| Ge | eneral descriptior | 1 | Flame retardant grade fiberglass reinforced | | | |
|-----|--------------------|------------------------------------|---------------------------------------------|----------------------|--|--|
| | | | plastic (GRP) panel | | | |
| Pre | oduct reference | | "Fireshield 285" | | | |
| Na | me of manufactu | urer | Kreysler ar | nd Associates | | |
| Co | lour | | "White" | | | |
| Th | ickness | | 4.48mm | (determined by Exova | | |
| | | | Warringto | nfire) | | |
| We | eight per unit are | а | 8.2kg/m ² | (determined by Exova | | |
| | | | Warringtonfire) | | | |
| | | Generic type | Polyester | | | |
| | | Product reference | | See Note 1 Below | | |
| | | Name of manufacturer | | See Note 1 Below | | |
| | Gol-coat | Colour | "White" | | | |
| | Ger-coat | Application thickness | | See Note 1 Below | | |
| | | Density | | See Note 1 Below | | |
| | | Application method | Sprayed | | | |
| | | Flame retardant details | | See Note 2 Below | | |
| | | Generic type | Polyester | | | |
| it. | | Product reference | | See Note 1 Below | | |
| Jee | | Name of manufacturer | | See Note 1 Below | | |
| С | Resin | Density | | See Note 1 Below | | |
| ed | | Trade name of flame retardant | | See Note 1 Below | | |
| plu | | Generic type of flame retardant | | See Note 1 Below | | |
| 40 | | Amount of flame retardant | | See Note 1 Below | | |
| ~ | | Generic type | E – glass | | | |
| | | Product reference | | See Note 1 Below | | |
| | Fibro | Number of layers | | See Note 1 Below | | |
| | reinforcement | Weight per unit area of each layer | | See Note 1 Below | | |
| | | Configuration of glass | Woven rov | ing | | |
| | | reinforcement | | | | |
| | | Name of manufacturer | | See Note 1 Below | | |
| | Resin to glass | ratio (by weight) | | See Note 1 Below | | |
| | Percentage gla | ss reinforcement (by weight) | | See Note 1 Below | | |
| | Curing process | (duration and temperature) | | See Note 1 Below | | |
| Bri | ef description of | manufacturing process | | See Note 1 Below | | |

Note 1: 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.

Note 2: The sponsor was unable 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

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

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

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