

Assessment Report

WARRES No. 114055

Sponsored By

Spanolux SA
Zoning Ind. Burtonville
6690 Vielsalm
Belgium



(JS2686w) The Professionals in Fire Safety

Assessment Report

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1 Introduction

- 1.1 The sponsor produces and markets the "Firax" range of flame retardant grade medium density fibreboard products and approached Warrington Fire Research Centre for assistance in conducting a cost effective evaluation of the performance of all the products within the range to determine whether they would, achieve a Class 1 classification when they are tested in accordance with BS476: Part 7: 1997.

2 Range of Products

- 2.1 The products which were considered during the exercise are all based on "Firax", a flame retardant grade medium density fibreboard having a density of 780kg/m³ and comprising wood fibres, amino-plastglue type urea-melamine-formaldehyde resin and inorganic salt based flame retardants.

3 Appraisal of Product Ranges and Selection of Products for Test

- 3.1 The sponsor stated at the time of preparing this report that the "Firax" range of flame retardant grade medium density fibreboard products is available in four standard thicknesses (10mm, 12mm, 15mm and 18mm), although it should be noted that the product could be supplied in any thickness between 10mm and 18mm at the request of a customer.
- 3.2 It was not practicable for the purposes of this evaluation, to complete formal tests on each available thickness.
- 3.3 Each thickness of flame retardant grade medium density fibreboard is manufactured utilising the same formulation.
- 3.4 On the basis that all products within the range are consistent in terms of composition, two specimens of each standard thickness was tested to BS 476: Part 7: 1997. Warrington Fire Research Centre were not involved in any selection or sampling procedures.
- 3.5 The number of specimens tested (8) in relation to the number of products currently available is relatively small, therefore, taking into account the nature of production and the sponsor's need for regular testing to ensure continued compliance with the requirements of paragraph 1 of this report, it was agreed that audit testing on specimens selected at random by a representative of Warrington Fire Research Centre will be carried out on a twelve monthly basis commencing May 2001. The results of the audit tests will be reported in the form of a supplement to this report and will conclude (subject to acceptable results) that the results of this report continue to be valid.

4 Test Specimens

- 4.1 In all cases the flame retardant grade medium density fibreboard was tested backed by a 12.5mm thick calcium silicate based board.

The following thicknesses of flame retardant grade medium density fibreboard were supplied for testing:

10mm
12mm
15mm
18mm

5 Results of Tests

- 5.1 A list of the products which were subjected to the test is given in appendix 1. The flame spread at 1.5 minutes and the final spread of flame for each specimen when it was tested in accordance with the procedure specified in BS476: Part 7: 1997 are also given.
- 5.2 The results of the tests comfortably meet the performance criteria specified in Section 1 of this report (i.e. a maximum final spread of flame figure of 60mm).

6 Opinion

- 6.1 On the basis of the information which has been generated during the test programme which is described in this report, it is our opinion that all flame retardant grade medium density fibreboard products manufactured to the specifications described in this report will achieve a Class 1 designation when tested in accordance with BS476: Part 7: 1997.

7 Validity of Opinion

- 7.1 The above opinion relates only to specimens of the product in the form described in this report and is based on information and experience available at the time of preparation of the report. Small differences in the composition of the flame retardant grade medium density fibreboard products, may significantly affect the performance during the test and will therefore invalidate the test results. It is the responsibility of the supplier of the product to ensure that the product specification which is supplied is identical to the specification described in this report.
- 7.2 After May 2001, this opinion is no longer valid unless confirmed by a Supplement to the Report describing the audit testing scheduled to be carried out during the month.
- 7.3 The specification and interpretation of fire test methods are the subject of ongoing development and refinement, changes in associated legislation may also occur. For these reasons it is recommended that the relevance of test reports over five years old should be considered by the user. The laboratory that issued the report will be able to offer, on behalf of the legal owner, a review of the procedures adopted for a particular test to ensure they are consistent with current practices, and, if required, may endorse the test report.

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Responsible Officer



I. MOORE.

P.P. J COAKLEY
Technical Officer
Reaction to Fire Testing

Approved



C DEAN
Senior Technical Officer, Reaction to Fire Testing
For and on behalf of
WARRINGTON FIRE RESEARCH CENTRE

Date Of Issue : 25 May 2000

(JS2686w)

Appendix 1

Product Description	BS 476: PART 7: 1997	
	Flame Spread at 1½ mins (mm)	Final Flame Spread (mm)
10mm thick "Firax"	60	60
	60	60
12mm thick "Firax"	60	60
	60	60
15mm thick "Firax"	60	60
	60	60
18mm thick "Firax"	60	60
	60	60



Supplement No.2 (Issue 2) to WARRES No. 114055

1 Introduction

The report WARRES No.114055 concluded that in our opinion, all of the flame retardant grade medium density fibreboard products having a thickness of between 10mm and 18mm within the "Firax" range will achieve a Class 1 designation if they were tested in accordance with BS 476: Part 7: 1997.

At the date of issue of the original assessment report, the "Firax" range of flame retardant grade, medium density fibreboard products was only available at a thickness range of from 10mm to 18mm. However, during the audit visit that was conducted at the sponsor's manufacturing plant in Vielsalm, Belgium on the 5th October 2001, the purpose of which was to extend the validity of the assessment report until October 2002, it was determined that the "Firax" range of flame retardant grade, medium density fibreboard products was now available at a thickness range of from 6mm to 25mm. During this audit visit, the sponsor requested that the conclusions contained within our report WARRES No.114055 be extended to include all product thicknesses available at that time.

To extend the conclusions contained within our report WARRES No.114055, a single indicative BS 476: Part 7: 1997 test was performed on each of the following thicknesses of medium density fibreboard products from the "Firax" range:

1. 6mm
2. 9mm
3. 12mm
4. 15mm
5. 18mm
6. 25mm

In the case of each specimen, the maximum flame travel did not exceed 50mm. Therefore, the main opinion contained within the assessment report was extended to cover all products within the thickness range from 6mm to 25mm. The results of these tests are fully reported in Supplement No.1 to WARRES No.114055.

Supplement No.1 to WARRES No.114055 confirmed that it was our opinion that the conclusions contained within our report WARRES No.114055 continued to be valid for a further period of twelve months (up to October 2002) and could be extended to include all products having a thickness between 6mm and 25mm.

2 Validity Of Report

Following a period of one year after the assessment report was issued, it was agreed that testing on specimens comprising products selected at random from the "Firax" range by representatives of Warrington Fire Research Centre, would be carried out to maintain the validity of the report. The specimens were selected by a representative of Warrington Fire Research Centre during the audit visit referred to above (October 2001) and the test results obtained on the selected specimens were reported in Supplement No.1 to WARRES No.114055.

Subsequent to the first validation of the assessment report, it was agreed that testing on specimens comprising products selected at random from the "Firax" range by the sponsor under the guidance of Warrington Fire Research Centre, will be carried out on a twelve monthly basis commencing in October 2002 to maintain the validity of the report.

3 Selection Of Products For October 2002 Tests

The following thicknesses of flame retardant grade, medium density fibreboard products were selected for testing by the sponsor under the guidance of Warrington Fire Research Centre on the 25th September 2002.

1. 6mm
2. 15mm
3. 25mm

Two specimens of each selected product were tested to BS 476: Part 7: 1997, resulting in a total of six specimens being tested.

4 Results Of Tests

The flame spread at 1½ minutes and the final spread of flame for each specimen when it was tested in accordance with the procedures specified in BS 476: Part 7: 1997, were as follows:

PRODUCT THICKNESS	BS476:PART 7:1997		SUPPLEMENTARY OBSERVATIONS
	Flame spread at 1½ minutes (mm)	Final Flame Spread (mm)	
6mm	75	75	None
	70	70	
15mm	75	75	In the case of each specimen, flash flaming across the full width of the specimen occurred during the first 1minute 7seconds of the test, extending up to a maximum distance of 90mm.
	75	75	
25mm	75	75	None
	75	75	

The results of the tests meet the performance criteria specified in Section 1 of WARRES No.114055.

5 Opinion

On the basis of the information, which has been generated during the test programme which is described in this supplement, it is our opinion that the conclusions contained within our report WARRES No.114055 and Supplement No.1 to WARRES No.114055 continue to be valid for a further period of twelve months.

The above opinion includes all products within the "Firax" range of flame retardant grade medium density fibre boards having a thickness of between 6mm and 25mm.

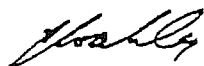
6 Validity Of Opinion

The above opinion relates only to the specimens of the product in the form described in this supplement and our report WARRES No.114055, and is based on information and experience available at the time of preparation of the supplement and the report. Small differences in the composition of the medium density fibreboard may significantly affect the performance during the test and will therefore invalidate the test results. It is the responsibility of the supplier of the product to ensure that the product, which is supplied, is identical to the specimens described in this Supplement and the report.

After October 2003, this opinion is no longer valid unless confirmed by a Supplement to the report describing satisfactory results of the testing scheduled to be carried out during that month.

This Supplement is only valid if read in conjunction with the Assessment Report WARRES No.114055.

Supplement Prepared By:



J. COAKLEY
Technical Officer
Reaction to Fire Testing

Approved



C DEAN
Laboratory Supervisor
for and on behalf of
WARRINGTON FIRE RESEARCH CENTRE

Date Of Issue: 25 February 2002



Supplement No.4 to WARRES No. 114055

1 Introduction

The report WARRES No.114055 concluded that in our opinion, all of the flame retardant grade medium density fibreboard products having a thickness of between 10mm and 18mm within the "Firax" range will achieve a Class 1 designation if they were tested in accordance with BS 476: Part 7: 1997.

At the date of issue of the original assessment report, the "Firax" range of flame retardant grade, medium density fibreboard products was only available at a thickness range of from 10mm to 18mm. However, during the audit visit that was conducted at the sponsor's manufacturing plant in Vielsalm, Belgium on the 5th October 2001, the purpose of which was to extend the validity of the assessment report until October 2002, it was determined that the "Firax" range of flame retardant grade, medium density fibreboard products was now available at a thickness range of from 6mm to 25mm. During this audit visit, the sponsor requested that the conclusions contained within our report WARRES No.114055 be extended to include all product thicknesses available at that time.

To extend the conclusions contained within our report WARRES No.114055, a single indicative BS 476: Part 7: 1997 test was performed on each of the following thicknesses of medium density fibreboard products from the "Firax" range:

1. 6mm
2. 9mm
3. 12mm
4. 15mm
5. 18mm
6. 25mm

In the case of each specimen, the maximum flame travel did not exceed 50mm. Therefore, the main opinion contained within the assessment report was extended to cover all products within the thickness range from 6mm to 25mm. The results of these tests are fully reported in Supplement No.1 to WARRES No.114055.

Supplement No.1 to WARRES No.114055 confirmed that it was our opinion that the conclusions contained within our report WARRES No.114055 continued to be valid for a further period of twelve months (up to October 2002) and could be extended to include all products having a thickness between 6mm and 25mm.

Supplement No.2 to WARRES No.114055 confirmed that it was our opinion that the conclusions contained within our report WARRES No.114055 continued to be valid for a further period of twelve months (up to October 2003) and could be extended to include all products having a thickness between 6mm and 25mm.

Supplement No.3 to WARRES No.114055 confirmed that it was our opinion that the conclusions contained within our report WARRES No.114055 continued to be valid for a further period of twelve months (up to October 2004) and could be extended to include all products having a thickness between 6mm and 25mm.

2 Validity Of Report

Following a period of one year after the assessment report was issued, it was agreed that testing on specimens comprising products selected at random from the "Firax" range by representatives of Warrington Fire Research Centre, would be carried out to maintain the validity of the report. The specimens were selected by a representative of Warrington Fire Research Centre during the audit visit referred to above (October 2001) and the test results obtained on the selected specimens were reported in Supplement No.1 to WARRES No.114055.

Subsequent to the first validation of the assessment report, it was agreed that testing on specimens comprising products selected at random from the "Firax" range by the sponsor under the guidance of Warrington Fire Research Centre, will be carried out on a twelve monthly basis commencing in October 2002 to maintain the validity of the report.

3 Selection Of Products For October 2004 Tests

During discussions about the selection of samples for this revalidation programme, it was determined that the "Firax" range of flame retardant grade, medium density fibreboard products is now available at a thickness range of from 6mm to 30mm. A representative of the sponsor confirmed that the "Firax" range is currently being manufactured in standard thicknesses of 6mm, 9mm, 10mm, 12mm, 15mm, 18mm, 25mm and 30mm, however, thicknesses of 19mm and 22mm are now being produced at the specific request of some of the sponsor's clients.

The following thicknesses of flame retardant grade, medium density fibreboard products were selected for testing by the sponsor under the guidance of Warrington Fire Research Centre:

1. 6mm
2. 12mm
3. 19mm
4. 22mm
5. 30mm

One specimen of the 6mm, 12mm, 19mm and 22mm products and two specimens of the 30mm thick product were tested to BS 476: Part 7: 1997, resulting in a total of six specimens being tested.

4 Results Of Tests

The flame spread at 1½ minutes and the final spread of flame for each specimen when it was tested in accordance with the procedures specified in BS 476: Part 7: 1997, were as follows:

PRODUCT THICKNESS	BS 476: PART 7: 1997		SUPPLEMENTARY OBSERVATIONS
	Flame spread at 1½ minutes (mm)	Final Flame Spread (mm)	
6mm	60	60	NONE
12mm	60	60	NONE
19mm	60	60	NONE
22mm	60	60	NONE
30mm	60	60	NONE
30mm	60	60	NONE

The results of the tests meet the performance criteria specified in Section 1 of WARRES No. 114055.

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5 Opinion

On the basis of the information, which has been generated during the test programme which is described in this supplement, it is our opinion that the conclusions contained within our report WARRES No.114055 and Supplement No.'s 1, 2 and 3 to WARRES No.114055 continue to be valid for a further period of twelve months and can be extended to include products having a maximum thickness of 30mm.

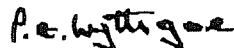
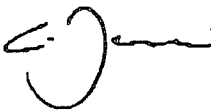
The above opinion includes all products within the "Firax" range of flame retardant grade medium density fibre boards having a thickness of between 6mm and 30mm.

6 Validity Of Opinion

The above opinion relates only to the specimens of the product in the form described in this supplement and our report WARRES No.114055, and is based on information and experience available at the time of preparation of the supplement and the report. Small differences in the composition of the medium density fibreboard may significantly affect the performance during the test and will therefore invalidate the test results. It is the responsibility of the supplier of the product to ensure that the product, which is supplied, is identical to the specimens described in this Supplement and the report.

After October 2005, this opinion is no longer valid unless confirmed by a Supplement to the report describing satisfactory results of the testing scheduled to be carried out during that month.

This Supplement is only valid if read in conjunction with the Assessment Report WARRES No.114055.

Supplement Prepared By:**Approved**

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Date Of Issue: 16th October 2004

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