1844 US Hwy 41 SET: 800.241.2262Calhoun, GA 30701manningtoncommercial.com

Mannington.

September 9, 2022

To Whom It May Concern:

RE: Assurance II - Assurance III

This letter is to certify that the attached test report #335083 (12-16-13) would be applicable to Assurance II or Assurance III.

Both products are the same construction and only the color line was updated.

If you should have any other questions, please contact our Technical Services Department at 800-241-2262 Ext. 3.

Sincerely, MANNINGTON COMMERCIAL

Kelly Parker

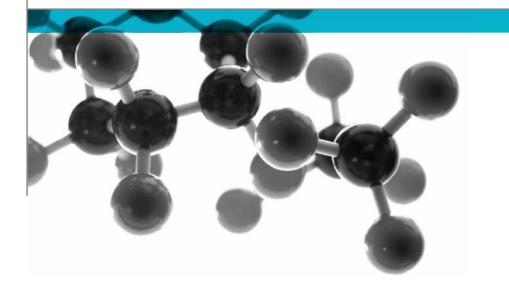
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BS EN ISO 9239-1: 2010



Fire Tests For Determination Of The Burning **Behaviour of Floorings** Part 1: Determination Of The Burning Behaviour **Using A Radiant Heat Source**

A Report To: Mannington Mills

Document Reference: Additional test report No. 335083

Date: 16th December 2013

Issue No.: 1

Page 1





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

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Executive Summary

Objective

To determine the performance of the following product when tested in accordance with BS EN ISO 9239-1: 2010

Generic Description	Product reference	Thickness	Weight per unit area or density
A homogenous slip resistant	"Biospec SR / Assurance II"	2mm	3.2kg/m ²
plasticised PVC flooring	(flooring only)	(flooring only)	(flooring only)
Individual components used to I	manufacture composite:		
Floor covering	"Biospec SR / Assurance II"	2mm	3.2kg/m ²
Substrate	"Particle Board"	18mm	600kg/m ³
Please see page 6 of this test report for the full description of the product tested			

Test Sponsor Mannington Mills, 75 Mannington Mills Road, Salem, New Jersey 08079, USA

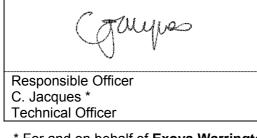
Test Results:	Average critical radiant flux	=	9.0kW/m ²
	Average smoke development	=	165.92% min

Date of Test 28th August 2013

This test report is additional to that issued as 332499 dated the 10th September 2013 and has been issued at the request of the sponsor. The original test report remains valid and is not replaced by this additional test report. The product referred to in the original report and this additional test report has not been re-tested since the original test and neither has a technical review of the original test report resulting in any technical changes been carried out.

The original product reference has been removed and the reference "Biospec SR / Assurance II" has been inserted. The original sponsor's name has been removed and "Mannington Mills" has been inserted. The sponsor of the test has stated that the material described in this additional report is identical to the material which was tested. Both the original and the alternative trade names of the product and the original and alternative names and addresses of the sponsor have been documented and the documentation is maintained in the confidential file covering this investigation.

Signatories



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

Report Issued: 16th December 2013

54 kem
Authorised
S. Deeming *
Operations Manager

This version of the report has been produced from a .pdf format electronic file that has been provided by **Exova Warringtonfire** to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of **Exova Warringtonfire**.

Document No.: Author: Client: Additional test report No. 335083 C. Jacques Mannington Mills

083 Page No.: Issue Date: Issue No.:







CONTENTS	PAGE NO.
EXECUTIVE SUMMARY	2
SIGNATORIES	2
TEST DETAILS	4
DESCRIPTION OF TEST SPECIMENS	6
TEST RESULTS	7
Table 1	8
REVISION HISTORY	9

Document No.: Author:

Client:

Additional test report No. 335083

C. Ma

C. Jacques Mannington Mills Page No.: Issue Date: Issue No.:







Test Details	
Purpose of test	To determine the performance of specimens of a product when they are subjected to the conditions of the test procedure defined in the document BS EN ISO 9239-1:2010 - Reaction To Fire Tests For Floorings – Part 1: Determination Of The Burning Behaviour Using A Radiant Heat Source.
	The test was performed in accordance with the procedure defined in BS EN ISO 9239-1:2010 and this report should be read in conjunction with that Standard.
Scope of test	BS EN ISO 9239-1:2010 describes a European test procedure for assessing the burning behaviour, spread of flame and smoke development of horizontally mounted floorcovering systems exposed to a radiant heat gradient in a test chamber, when ignited with a pilot flame.
	The measurements provide a basis for estimating one aspect of fire exposure behaviour of floor covering systems. The imposed radiant flux simulates the thermal radiation levels likely to impinge on the floors of a building whose upper surfaces are heated by flames or hot gases or both, from a fire in an adjacent room or compartment.
	This method is applicable to all types of floorcoverings such as textile carpet, cork, wood, rubber and plastic coverings as well as coatings. Results obtained by this method reflect the performance of the total floor covering system as tested. Modifications of the backing, bonding to a substrate, underlay, or other changes to the system may affect the test results.
	The test is intended for regulatory purposes, specification acceptance, design purposes, classification, or development and research.
Fire test study group/EGOLF	Certain aspects of some fire test specifications are open to different interpretations. The Fire Test Study Group and EGOLF have identified a number of such areas and has agreed Resolutions which define common agreement of interpretations between fire test laboratories which are members of the Groups. Where such Resolutions are applicable to this test they have been followed.
Instruction to test	The test was conducted on the 28 th August 2013 at the request of the original sponsor of the test.
Provision of test specimens	The specimens were supplied by the original sponsor of the test. Exova Warringtonfire was not involved in any selection or sampling procedure.
Conditioning of specimens	The specimens were received on the 20 th August 2013
Speemens	Prior to test the specimens were conditioned to constant mass at a temperature of $23 \pm 2^{\circ}$ C and a relative humidity of $50 \pm 5\%$.







Number of specimens tested The specimens had no directional quality so only three specimens were tested

- **Exposed face** The decorative face of the specimens was exposed to the radiant heat of the test when the specimens were mounted in the test position.
- Substrate The specimens were tested loose laid over an nominally 18mm thick particleboard substrate

Document No.: Author:

Client:

Additional test report No. 335083

C. Jacques Mannington Mills 335083 Page No.: Issue Date: Issue No.:





Description of Test Specimens

The description of the specimens given below has been prepared from information provided by the original sponsor of the test. All values quoted are nominal, unless tolerances are given.

General desc	iption	A homogenous slip resistant plasticised PVC flooring
	Product reference	"Biospec SR / Assurance II",
	Generic type	Vinyl tile
	Name of supplier	Mannington Mills
Floor	Weight per unit area	3.2kg/m ² (stated by sponsor)
covering		3.21kg/m ² (determined by Exova Warringtonfire)
(Test face)	Thickness	2.00mm (stated by sponsor)
		1.99mm (determined by Exova Warringtonfire)
	Colour	Any colour / pattern
	Flame retardant details	See Note 1 Below
	Trade name	"Particle Board"
	Generic type	Particle Board
Substrate	Name of supplier	SA Joinery
	Thickness	18mm
	Density	600kg/m ³
	on of manufacturing process of	The sponsor of the test was unwilling to provide this
the floor cove	ring	information

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

Document No.: Author:

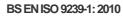
Client:

Additional test report No. 335083

C N

C. Jacques Mannington Mills Page No.: Issue Date: Issue No.:







Test Results

The test results relate to the behaviour of the test specimens of a product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results. Care should be taken to ensure that any product which is supplied or used is fully represented by the specimens which were tested.

The distance between the flame front and the zero point at 10 minute intervals together with the observations recorded during the tests in respect of each specimen tested, are given in Table 1.

Average maximum flame front distance	=	22cm
Average critical radiant flux	=	9.0kW/m ²
Average smoke development	=	165.92% min
Average maximum light attenuation	=	52.40%

Validity

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 that they are consistent with current practices, and if required may endorse the test report.

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Document No.:	Additional test report No. 335083	Page No.:	7 of 9	6
Author:	C. Jacques	Issue Date:	16 th December 2013	
Client:	Mannington Mills	Issue No.:	1	





Table 1

SPECIMEN NO.	1	2	3	
Orientation (Production direction (↑) or	Not applicable	Not applicable	Not applicable	
90° to production direction (\rightarrow))				
DISTANCE (cm)	TIME TO TRAVEL TO INDICATED DISTANCE			
		(minutes : seconds		
5	2:12	2:12	2:13	
10	2:32	2:34	2:30	
15	3:08	2:58	2:56	
20	3:50	3:47	4:07	
25				
30				
35				
40				
45				
50				
55				
60				
65				
70				
75				
80				
85				
90				
95				
100				
Maximum flame front distance (cm)	21	22	23	
Critical radiant flux (kW/m ²)	9.2	9.0	8.8	
Smoke Development (%.min)	149.31	165.15	183.28	
Maximum light attenuation (%)	49.49	56.27	51.44	
Specimen Number	1	2	3	
Flame front distance at 10 min (cm)	8	12	21	
Flame front distance at 20 min (cm)	-	-	-	

	1	4	5
Flame front distance at 10 min (cm)	8	12	21
Flame front distance at 20 min (cm)	-	-	-
Flame front distance at 30 min (cm)	-	-	-
Radiant flux at 10 minutes, Rf ₁₀ (kW/m ²)	≥11.0	10.8	9.2
Radiant flux at 20 minutes, Rf ₂₀ (kW/m ²)	-	-	-
Radiant flux at 30 minutes, Rf ₃₀ (kW/m ²)	-	-	-

Observations of the burning characteristics of the specimens during the testing exposure

None

Author:

Client:

Document No.: Additional test report No. 335083 C. Jacques Mannington Mills

Page No.: Issue Date: Issue No.:







Revision History

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

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Additional test report No. 335083

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C. Jacques Mannington Mills Page No.: Issue Date: Issue No.:

