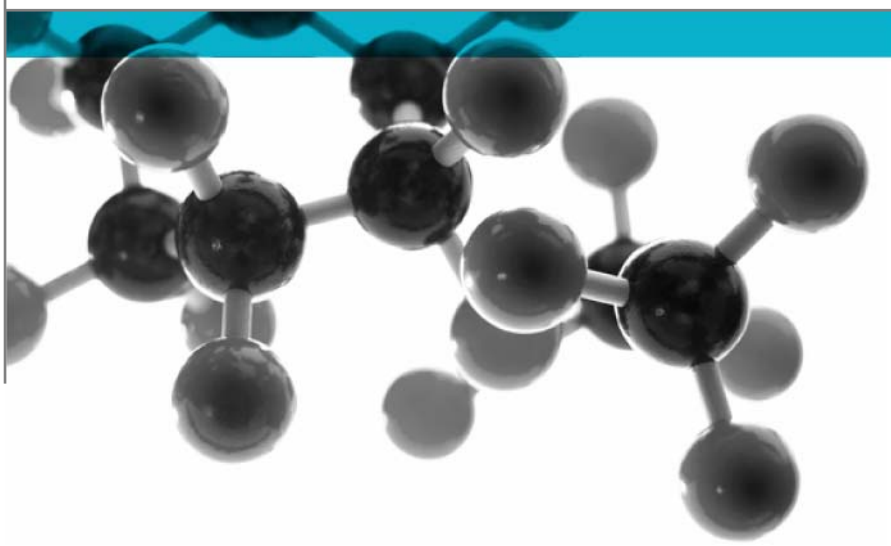
Exova Warringtonfire
Holmesfield Road
Warrington
WA1 2DS
United Kingdom

T : +44 (0 1925 655116
F : +44 (0) 1925 655419
E : warrington@exova.com
W: www.exova.com

BS EN ISO 11925-2: 2002



Ignitability Of Building Products Subjected To Direct Impingement Of Flame

Part 2: Single Flame Source Test

Date: 4th February 2010

Issue No.: 1

A Report To: R-Tek Manufacturing Ltd.
Unit 1
Hamiltownsbawn Industrial Estate
Armagh
Co. Armagh
BT60 1HW

Document Reference: WF 189857

Testing
Advising
Assuring

UKAS TESTING
0249

Executive Summary

Objective To determine the performance of the following material when tested in accordance with BS EN ISO 11925-2:2002.

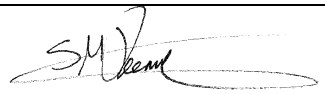
Generic Description	Product reference	Thickness	Weight per unit area or density
Interlocking PVC floor tile tested loose laid over a fibre cement based substrate	Not applicable	Not stated	Not stated
Individual components used to manufacture composite:			
PVC floor tile for industrial use	"R-Tile Interlocking PVC Floor Tile"	5mm	10kg/m^2 SG: 1.45
Fibre cement board substrate	"NT D4 604"	6mm	1800kg/m^3
Please see page 5 of this test report for the full description of the product tested			

Test Sponsor R-Tek Manufacturing Ltd., Unit 1, Hamiltownsbawn Industrial Estate, Armagh, Co. Armagh, BT60 1HW

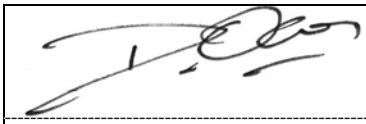
Test Results: **On each set of six specimens which were tested, the flame tip did not reach a distance of 150mm before the end of the test.**

Date of Test 29th January 2010

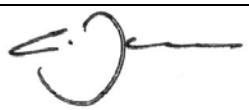
Signatories



Responsible Officer
S. Deeming *
Senior Technical Officer



Approved
D. J. Owen *
Senior Technical Officer



Authorised
C. Dean *
Operations Manager

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

Report Issued: 4th February 2010

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Test Details

Purpose of test

To determine the performance of specimens of a product when they are subjected to the conditions of the test specified in BS EN ISO 11925-2:2002 "Reaction to Fire tests - Ignitability Of Building Products Subjected to Direct Impingement of Flame – Part 2: Single Flame Source Test".

The test was performed in accordance with the procedure specified in BS EN ISO 11925-2:2002 Reaction to Fire Tests - Ignitability of Building Products subjected to direct impingement of flame – Part 2: Single Flame Source Test, and this report should be read in conjunction with that BS EN ISO Standard.

Scope of test

BS EN ISO 11925-2 specifies a method of test for determining the ignitability of building products by direct small flame impingement under zero impressed irradiance using specimens tested in a vertical orientation.

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 29th January 2010 at the request of R-Tek Manufacturing Ltd., the sponsor of the test.

Provision of test specimens

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

Conditioning of specimens

The specimens were received on the 8th January 2010.

Prior to test the specimens were stored for 21 days in a standard atmosphere as defined in BS EN 13238:2001 Conditioning Procedures and General Rules for selection of substrates until constant mass was achieved.

Intended application

Floorcovering

Substrate

The specimens were tested loose laid over a nominally 6mm thick fibre cement based substrate.

Flame application time

The flame was applied for 15 seconds.

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		Interlocking PVC floor tile which was tested loose laid over a nominally 6mm thick fibre cement based substrate
Floor Covering	Product reference	"R-Tile Interlocking PVC Floor Tile"
	Generic type	PVC floor tile for industrial use
	Name of manufacturer	R-Tek Manufacturing Ltd.
	Weight per unit area	10kg/m^2 (stated by sponsor) 7.06kg/m^2 (determined by **Exova Warringtonfire**)
	Density	1.45 (specific gravity – stated by sponsor) 1.29g/cm^3 (determined by **Exova Warringtonfire**)
	Thickness	5mm (stated by sponsor) 5.48mm (determined by **Exova Warringtonfire**)
	Colour	"Blue" (observed by **Exova Warringtonfire**)
	Flame retardant details	The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product / component
Substrate	Trade name	"NT D4 604"
	Generic type	Fibre cement board
	Supplier	Scheerders van de Kerkhove (SVK)
	Thickness	6mm
	Density	1800kg/m³
Brief description of manufacturing process of the floor covering		Injection moulded

Test Results

Number of specimens tested

Six specimens were tested, each of which were subjected to surface exposure to flame with the decorative face exposed.

Six specimens were tested, each of which were subjected to edge exposure to flame with the decorative face exposed.

Applicability of test results

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the 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 test results for the individual specimens, together with observations made during the test and comments on any difficulties encountered during the test are given in Tables 1 and 2.

On each set of six specimens which were tested, the flame tip did not reach a distance of 150mm before the end of the test.

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.

Table 1

Test Flame Application Position - Surface Of Decorative Face

Specimen No.	Ignition Yes/No	Time from start of test for flame tip to reach 150mm (seconds)	Extent of Flame Spread (mm)	Flaming Debris	Glowing	Extent of Damaged Area (mm)	
						Height	Width
1	Yes	Did not reach	50	None	None	33	19
2	Yes	Did not reach	40	None	None	31	20
3	Yes	Did not reach	60	None	None	30	20
4	Yes	Did not reach	40	None	None	31	23
5	Yes	Did not reach	30	None	None	31	21
6	Yes	Did not reach	60	None	None	35	20

Table 2

Test Flame Application Position - Edge Of Decorative Face

Specimen No.	Ignition Yes/No	Time from start of test for flame tip to reach 150mm (seconds)	Extent of Flame Spread (mm)	Flaming Debris	Glowing	Extent of Damaged Area (mm)	
						Height	Width
1	Yes	Did not reach	30	None	None	22	20
2	Yes	Did not reach	40	None	None	25	23
3	Yes	Did not reach	30	None	None	24	23
4	Yes	Did not reach	60	None	None	22	21
5	Yes	Did not reach	40	None	None	20	30
6	Yes	Did not reach	50	None	None	24	31

Revision History

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

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