

Customer details: Le Mark Self Adhesives Ltd  
Unit 1 Houghton Hill Industries  
Sawtry Way  
Houghton  
Cambridgeshire  
PE28 2DH

SATRA reference: FLO0240882/1549/5

Your reference: 000823

Date of report: 16 December 2015

Samples received: 4 December 2015

For the attention of: Keelan Cochrane

Date(s) work carried out: 4 December 2015 – 10 December 2015

## TECHNICAL REPORT

Subject: Testing of one sample described by the customer as 'Two Tone' to BS EN ISO 11925-2:2010

### Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

Tests marked  $\neq$  fall outside the UKAS Accreditation Schedule for SATRA. All interpretations of results of such tests and the comments based upon them are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

**A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.**

Please note uncertainty of measurement has not been applied to the results in this report. SATRA uncertainty of measurement values are available on request.

Report signed by: Philip Weal  
Position: Senior Technician  
Department: Furniture and Floor Coverings

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TECHNOLOGY

## 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 11925-2:2010 Reaction to Fire tests – Ignitability Of Building Products Subjected to Direct Impingement of Flame- Part 2: Single Flame Source Test.

### Scope of test

The test was performed in accordance with the procedure specified in BS EN ISO 11925-2:2010 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 standard.

BS EN ISO 11925-2:2010 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.

### Instruction to test

The test was conducted on the 10 December 2015 at the request of Le Mark Self Adhesives Ltd, the sponsor of the test.

### Provision of test specimen

The specimens were supplied by Le Mark Self Adhesives Ltd, the sponsor of the test. SATRA Technology Centre Ltd was not involved in any selection or sampling procedure.

### Conditioning of specimens

The specimens were received on the 4 December 2015.

Prior to testing the specimens were conditioned either until constant mass was achieved or conditioned for a fixed period of time as defined in BS EN 13238:2010 - Conditioning Procedures and General Rules for selection of substrates.

### Substrate

Fibre cement board supplied by Clarkes of Walsham Ltd.

### Flame application time

The flame was applied for 15 seconds.

## Description of Test Specimens

The description of the specimen 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 of flooring system |   | DANCE FLOORING                                  |                                     |     |
| Product reference of flooring system   |   | H.S. CODE 39181090                              |                                     |     |
| Colour reference                       |   | BLACK / WHITE                                   |                                     |     |
| Name of Manufacturer                   |   | RMG POLYVINYL INDIA LIMITED                     |                                     |     |
| Overall weight per unit area           |   | 1600 GSM  |                                     |     |
| Overall Thickness                      |   | 1.20 MM   |                                     |     |
| Floor covering                         | Configuration   | N/A   |                                     |     |
|  |   | Product Reference                               | N/A                                 |     |
|  |   | Generic Type                                    | N/A                                 |     |
|  |   | Layer 1<br>(Silicon /<br>Quartz<br>Particulate) | Name of Manufacturer                | N/A |
|  |   |   | Application Rate                    | N/A |
|  |   | Application method                              | N/A                                 |     |
|  |   | Specific gravity                                | N/A                                 |     |
|  |   | Colour reference                                | N/A                                 |     |
|  | Flame Retardant Details                                     | N/A   |                                     |     |
|  | Layer 2<br>(Wear Layer)                                     | Product Reference                               | DANCE FLOORING                      |     |
|  |   | Generic Type                                    | PVC CUSHION FLOORING WITH GLASS     |     |
|  |   | Name of Manufacturer                            | RMG POLYVINYL INDIA LIMITED         |     |
|  |   | % Composition                                   | 30%                                 |     |
|  |   | Weight per unit area                            | 325 GSM                             |     |
|  |   | Thickness                                       | 0.25 MM                             |     |
|  |   | Trade name of flame retardant                   | (NO SPECIAL ADDITIVES ADDED)        |     |
|  | Generic form of flame retardant                             |   |                                     |     |
|  | Amount of flame retardant                                   |   |                                     |     |
|  | Layer 3<br>(Printed<br>film)                                | Product Reference                               | N/A                                 |     |
|  |   | Generic Type                                    | N/A                                 |     |
|  |   | Name of Manufacturer                            | N/A                                 |     |
|  |   | % Composition                                   | N/A                                 |     |
|  |   | Weight per unit area                            | N/A                                 |     |
|  |   | Thickness                                       | N/A                                 |     |
|  |   | Flame Retardant details                         | N/A                                 |     |
|  |   | Generic form of flame retardant                 | N/A                                 |     |
|  | Amount of flame retardant                                   | N/A   |                                     |     |
|  | Glass fibre<br>sheet<br>incorporated<br>in backing<br>layer | Product Reference                               | DANCE FLOORING                      |     |
|  |   | Generic Type                                    | GLASS FIBER TISSUE IMPREGNATED WITH |     |
|  |   | Name of Manufacturer                            | GFT IMPORTED BY RMG POLYVINYL INDIA |     |
|  |   | Thickness                                       | 0.30 MM                             |     |
|  |   | Weight per unit area                            | 325 GRAM PER SQ. MTR.               |     |
|  |   | Flame Retardant details                         | (NO SPECIAL ADDITIVES ADDED)        |     |
| Generic form of flame retardant        |   |   |                                     |     |
| Amount of flame retardant              |   |   |                                     |     |

|  |  |   |                                  |
|--|--|---|----------------------------------|
| Floorcovering                                  | Backing Material<br>(Calendared Layer) | Product Reference                                 | DANCE FLOORING                   |
|  |  | Generic Type                                      | BACKING LAYER BY COATING PROCESS |
|  |  | Name of Manufacturer                              | RMG POLYVINYL INDIA LIMITED      |
|  |  | Thickness   | 0.60                             |
|  |  | Weight per unit area                              | 900 GSM                          |
|  |  | Flame Retardant details                           | (NO SPECIAL ADDITIVES ADDED)     |
|  |  | Generic form of flame retardant                   |                                  |
|  |  | Amount of flame retardant                         |                                  |
| Adhesive                                       |  | Product Reference                                 | NO ADHESIVE USED                 |
|  |  | Generic Type                                      |                                  |
|  |  | Name of Manufacturer                              |                                  |
|  |  | Density (20°C)                                    |                                  |
|  |  | Colour  |                                  |
| Substrate                                      |  | Product reference                                 | 'Cembrit HD'                     |
|  |  | Generic type                                      | Fibre cement board               |
|  |  | Name of supplier                                  | Clarkes of Walsham Ltd           |
|  |  | Thickness   | 8 ± 2mm                          |
|  |  | Density   | 1800 ± 200 kg/m <sup>3</sup>     |
| Brief Description of the manufacturing process |  | FLOORING IS PRODUCED ON STORK SPREAD COATING LINE |                                  |

## Test Results

### Number of specimens tested

Six specimens were tested which were subjected to surface exposure to flame with the detailed face exposed. Three specimens were tested in direction of manufacture with three specimens tested in a direction perpendicular to that of manufacture.

### Applicability of test result

The test results relate only to the behaviour of the test specimen of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential smoke 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 specimen's which were tested.

The test results for the individual specimen, together with observations made during the test and comments on any difficulties encountered during the test are given in Table 1.

### Validity

The specification and interpretation of fire test, EXAP and classification methods is the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of fire reports, EXAP report and classification reports over 5 years old should be considered by the user. The notified body 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 report.

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**Table 1**

**Test flame application position – Surface of sample referenced as 'Two Tone' – Direction of manufacture**

| Specimen No. | Ignition YES/NO | Time from start of test for flame to reach 150mm (seconds) | Extent of flame spread (mm) | Flaming debris | Glowing | Extent of Damaged Area (mm) |       |
|--------------|-----------------|--|-----------------------------|----------------|---------|-----------------------------|-------|
|              |                 |  |                             |                |         | Height                      | Width |
| 1            | Yes             | N/A  | 81                          | No             | No      | 205                         | 21    |
| 2            | Yes             | N/A  | 72                          | No             | No      | 206                         | 20    |
| 3            | Yes             | N/A  | 90                          | No             | No      | 205                         | 13    |

**Test flame application position – Surface of sample referenced as as 'Two Tone' – Perpendicular to direction of manufacture**

| Specimen No. | Ignition YES/NO | Time from start of test for flame to reach 150mm (seconds) | Extent of flame spread (mm) | Flaming debris | Glowing | Extent of Damaged Area (mm) |       |
|--------------|-----------------|--|-----------------------------|----------------|---------|-----------------------------|-------|
|              |                 |  |                             |                |         | Height                      | Width |
| 1            | Yes             | N/A  | 63                          | No             | No      | 200                         | 12    |
| 2            | Yes             | N/A  | 52                          | No             | No      | 200                         | 17    |
| 3            | Yes             | N/A  | 55                          | No             | No      | 201                         | 18    |

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The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

Issue Date: 1st October 2009