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**Title**

EN 45545-2:2020 Classification  
Summary report for R10:

Product Reference "Silent Panel  
ACM/MLV"

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**Report No.:**

552860

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**Issue Date:**

1<sup>st</sup> October 2025

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**Version Number:**

1

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**Valid Until:**

7<sup>th</sup> July 2030

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**Prepared for:**

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## 1 Introduction

This report has been commissioned by Marimex Insulation and International Trading Ltd., and relates to the fire performance of “Silent Panel ACM/MLV”, which Marimex Insulation and International Trading Ltd., states is used as a floor composite according to EN 45545-2:2020.

This report has been written using appropriate test evidence generated at UKAS accredited laboratories, to the relevant test standard. The supporting test evidence has been deemed appropriate to support the stated product and is summarised in section 3. It is the responsibility of users to check that the cited versions of such supporting documentation remain valid at the time of use.

Specimens of a product have been tested in accordance with the test methods

- “T04” (EN ISO 9239-1:2010 Part 1. Determination of the Burning Behaviour Using a Radiant Heat Source)
- “T10.03” (ISO 5659-2:2017 Plastics – Smoke Generation. Part 2 Determination of Optical Density by a Single Chamber Method)
- “T11.02” (Gas Analysis in the Smoke Box EN ISO 5659-2, using FTIR Technique) as specified in EN 17084:2018 Railway applications – Fire protection on railway vehicles – Toxicity test of materials and components”. Method 1: Smoke chamber

The results of the tests are fully reported in the Warringtonfire test reports 552709 & 552710.

A full detailing of the relevant test reports can be found in Annex A.

## 2 Description of System

The description of the specimens given below has been prepared from information provided by the sponsor of the test. This information has not been independently verified by Warringtonfire. All values quoted are nominal, unless tolerances are given.

|                              |                                                       |                                                                                                                                               |
|------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Generic description          |                                                       | Plywood with rubber cork insulation core                                                                                                      |
| Product reference            |                                                       | “Silent Panel ACM / MLV”                                                                                                                      |
| Name of manufacturer         |                                                       | Marimex Insulation Ltd                                                                                                                        |
| Overall thickness            |                                                       | 16mm (stated by sponsor)<br>16.17mm (determined by <a href="#">Warringtonfire</a> )                                                           |
| Overall weight per unit area |                                                       | 9.57kg/m <sup>2</sup> (stated by sponsor)<br>10.08kg/m <sup>2</sup> (determined by <a href="#">Warringtonfire</a> )                           |
| Product configuration        |                                                       | <ul style="list-style-type: none"> <li>• Plywood</li> <li>• Adhesive</li> <li>• Rubber cork</li> <li>• Adhesive</li> <li>• Plywood</li> </ul> |
| Plywood                      | Generic type                                          | Hardwood plywood                                                                                                                              |
|                              | Product reference                                     | “Hardwood plywood , veneer core”                                                                                                              |
|                              | Timber species                                        | Okoume                                                                                                                                        |
|                              | Thickness                                             | 6mm                                                                                                                                           |
|                              | Density                                               | 479kg/m <sup>3</sup>                                                                                                                          |
|                              | No. of Ply's                                          | 3 (observed by <a href="#">Warringtonfire</a> )                                                                                               |
|                              | Trade name of adhesive used to bond the wood together | “PF 201”                                                                                                                                      |

Continued on next page

|                                            |                                                         |                                      |
|--------------------------------------------|---------------------------------------------------------|--------------------------------------|
| Plywood<br>(continued)                     | Generic type of adhesive used to bond the wood together | Phenolic formaldehyde resin adhesive |
|                                            | Name of manufacturer / supplier                         | African Elephant Wood Zerp.          |
|                                            | Flame retardant details                                 | <b>See Note 1 below</b>              |
| Adhesive                                   | Generic type                                            | Two component water based adhesive   |
|                                            | Product reference                                       | <b>See Note 2 below</b>              |
|                                            | Name of manufacturer                                    | <b>See Note 2 below</b>              |
|                                            | Application thickness                                   | <b>See Note 2 below</b>              |
|                                            | Specific gravity                                        | <b>See Note 2 below</b>              |
|                                            | Colour                                                  | <b>See Note 2 below</b>              |
|                                            | Application method                                      | <b>See Note 2 below</b>              |
|                                            | Flame retardant details                                 | <b>See Note 1 below</b>              |
| Rubber cork<br>insulation                  | Generic type                                            | Rubber cork                          |
|                                            | Product reference                                       | "ACM"                                |
|                                            | Name of manufacturer                                    | <b>See Note 2 below</b>              |
|                                            | Thickness of each layer                                 | 4mm                                  |
|                                            | Number of layers                                        | One                                  |
|                                            | Weight per unit area                                    | 2.6kg/m <sup>2</sup>                 |
|                                            | Colour                                                  | Brown                                |
|                                            | Flame retardant details                                 | <b>See Note 1 below</b>              |
| Brief description of manufacturing process |                                                         | <b>See Note 3 below</b>              |

**Note 1: The sponsor was unable to provide this information.**

**Note 2: 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 3: The sponsor was unwilling to provide this information.**

### 3 Test Results

The following results were obtained for the specimens, which were tested.

| Test Method Reference | Test Method            | Test Result                                                |
|-----------------------|------------------------|------------------------------------------------------------|
| "T04"                 | EN ISO 9239-1:2010     | CHF = 7.4 kW/m <sup>2</sup>                                |
| "T10.03"              | ISO 5659-2:2017        | D <sub>s</sub> max. = 18                                   |
| "T11.02"              | EN 17084:2018 Method 1 | CIT <sub>4mins</sub> = 0.12<br>CIT <sub>8mins</sub> = 0.20 |

The test results relate only to the behaviour of the test specimens of the product under the conditions of the test, they are not intended to be the sole criterion for assessing the potential 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 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 with the specimens which were tested.

## 4 Conclusion

| Classification achieved by "Silent Panel ACM/MLV" |     |             |
|---------------------------------------------------|-----|-------------|
| EN 45545-2:2020                                   | R10 | HL1 and HL2 |

This evaluation is conducted based on the test reports in relation to the testing completed on the product described in Section 2.

This report should be read in conjunction with and not accepted as a substitute for the test reports used to claim that the necessary performance has been achieved. Those test reports may include additional information which may be relevant to the evaluation of the potential fire hazard of the product.

All tests must have been conducted within the last 5 years, or the test reports must have been reviewed within the last five years where the system is used on:

- Rolling stock used in European Union covered by the Technical Specification for Interoperability (LOC&PAS TSI (Commission Regulation (EU) No. 2023/1694))

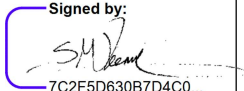
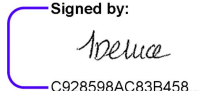
This report may only be reproduced in full. Extracts or abridgements shall not be published without permission of Warringtonfire.

This report is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available to Warringtonfire, the report will be unconditionally withdrawn, and the applicant will be notified in writing.

The sponsor is not aware of any information that could affect the conclusions of this report. If the sponsor subsequently becomes aware of any such information, they agree to ask the reporting authority to withdraw the report.

## 5 Validity

The report is initially valid until 7<sup>th</sup> July 2030 after which time it must be re-appraised.

| Position:  | Prepared by                                                                                                                | Authorised by                                                                                                               |
|------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Signature: |  <p>Signed by:<br/>7C2F5D630B7D4C0...</p> |  <p>Signed by:<br/>C928598AC83B458...</p> |
| Name:      | <b>Stacey Deeming</b>                                                                                                      | <b>Tracy Deluce</b>                                                                                                         |
| Title:     | Principal Product Assessor                                                                                                 | Product Assessor                                                                                                            |

\* For and on behalf of Warringtonfire

## 6 Appendix A: Test Evidence

### 6.1 Primary Test Evidence

#### 6.1.1 Test Report 552709

|                                     |                                                             |
|-------------------------------------|-------------------------------------------------------------|
| <b>Date of Test:</b>                | 8 <sup>th</sup> & 9 <sup>th</sup> July 2025                 |
| <b>Identification of Test Body:</b> | Warringtonfire Testing and Certification Ltd. UKAS No. 0249 |
| <b>Sponsor:</b>                     | Marimex Insulation and International Trading Ltd            |
| <b>Tested Product:</b>              | "Silent Panel ACM/MLV"                                      |
| <b>Test Standard:</b>               | EN ISO 9239-1:2010                                          |
| <b>Performance:</b>                 | CHF = 7.4 kW/m <sup>2</sup>                                 |

#### 6.1.2 Test Report 552710

|                                     |                                                                                        |
|-------------------------------------|----------------------------------------------------------------------------------------|
| <b>Date of Test:</b>                | 19 <sup>th</sup> August 2025                                                           |
| <b>Identification of Test Body:</b> | Warringtonfire Testing and Certification Ltd. UKAS No. 0249                            |
| <b>Sponsor:</b>                     | Marimex Insulation and International Trading Ltd                                       |
| <b>Tested Product:</b>              | "Silent Panel ACM/MLV"                                                                 |
| <b>Test Standard:</b>               | ISO 5659-2:2017<br>EN 17084:2018 Method 1                                              |
| <b>Performance:</b>                 | D <sub>s</sub> max. = 18<br>CIT <sub>4mins</sub> = 0.12<br>CIT <sub>8mins</sub> = 0.20 |

## 7 Revision History

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