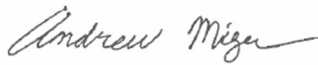


# APPROVAL REPORT

**Project No:** PR472014  
**Class:** 4470  
**Product Name:** AllShield BarrierSheet  
**Name of Listing Company:** AllShield Coatings BV  
**Address of Listing Company:** Hoogenveeneweg 29  
Nieuwerkerk aan den IJssel 2913 LV  
Netherlands  
**Customer ID:** 279759-1  
**Customer website:** <http://www.allshieldcoatings.com>

**Prepared by**



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Andrew Miga  
Engineer

**Reviewed by**



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Joanna Blaney  
AVP, Technical Team Manager, Materials



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Phillip J. Smith  
VP, Manager of Materials

**11 December 2025**

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**Date of Approval**

## 1 INTRODUCTION

1.1 AllShield Coatings BV requested Approval of their AllShield BarrierSheet to determine if it meets the Approval requirements of the standard(s) listed in Section 1.3.

1.2 This report may be freely reproduced only in its entirety and without modification.

### 1.3 Standard(s)

Title	Number	Issue Date
Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction	4470	04/2022
Examination Standard for Roof-Mounted Rigid Photovoltaic Modules	4478	03/2025

### 1.4 Listing

The products and assemblies will be listed in RoofNav, an on-line resource of FM Approvals.

## 2 DESCRIPTION

The AllShield BarrierSheet is described as follows:

2.1 AllShield BarrierSheet is a 2.5 mm (0.098 mm) thick coverboard that is a formulated cementitious board. Board size is 1000x2000 mm (39.4x 78.7 in).

2.2 All other products are as described in RoofNav. Formulations, drawings and specifications are on file at FM Approvals

## 3 EXAMINATIONS AND TESTS

3.1 All components, except those in Section(s) 2.1, were produced under the FM Approvals Surveillance Audit program as indicated by FM Approvals labels. All samples were considered to be representative of standard production and were examined and tested as indicated below. Components incorporated into test samples were selected by FM Approvals personnel. Test samples were prepared by, or under the supervision of, FM Approvals personnel. All data is on file at FM Approvals along with other documents and correspondence applicable to this program.

3.2 Several performance requirements and tests required by the Standard have been waived due to previous successful testing. See Table 1 below for details.

Table 1

FM Approvals Examination Standard 4470, Dated April 2022	
Performance Requirement	Original Project ID(s)
<b>Combustibility from Above the Roof Deck</b>	<b>Included.</b> (data from 3047304 released by project sponsor asl used for Approval)
Combustibility from Below the Roof Deck	Waived – see OJ2A2.AM data released by project sponsor
Wind Uplift Resistance	Waived <sup>1</sup>
Hail Damage Resistance	Waived – see 3047304 data released by project sponsor
Water Leakage Resistance	Waived <sup>2</sup>
Foot Traffic Resistance	Waived <sup>4</sup>
Corrosion Resistance	Waived <sup>3</sup>
Susceptibility to Heat Damage	Waived <sup>4</sup>
NCC (Noncombustible Core) Rated Roof Insulation	Optional. Not Included.
Dynamic Puncture Resistance Rating of Roof Covers	Optional. Not Included.
Solar Reflectance of Roof Surfaces	Optional. Not Included.
<b>Identification Tests - Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis, ASTM E1252</b>	<b>Included.</b>
Identification Test – FM Approvals Thermal Desorption Gas Chromatography Mass Spectrometry (TD/GC/MS)	Test is not required; performed at the sole discretion of FM Approvals.
<sup>1</sup> The AllShield BarrierSheet is judged not to affect this performance characteristic as used in the constructions evaluated in this program. All roof cover and fasteners are currently Approved and listed on RoofNAV; no new roof covers or fasteners are included.	
<sup>2</sup> This test is conducted only on roofing cover. The constructions evaluated in this program are judged not to affect this performance criteria. All roof covers are Approved for the OEM, no new roofing covers included.	
<sup>3</sup> This test is only conducted on roof fasteners. The constructions evaluated in this program are judged not to affect this performance characteristic. All roof membrane fasteners are Approved for the OEM, no new roofing fasteners included.	
<sup>4</sup> The AllShield BarrierSheet as an insulation will not be Approved direct to steel deck.	

FM Approvals Examination Standard 4478, Dated March 2025	
Performance Requirement	Original Project ID(s)
Combustibility From Above the Roof Deck	Waived – based on results of 4470 Combustibility from Above the Roof Deck testing and data release <sup>1</sup>
Wind Uplift Resistance for Rigid Photovoltaic Module	Waived – see PR468363 data released by project sponsor
Hail Damage Resistance Test	Waived – see 3060628 data released by project sponsor
Electrical Performance	Waived – see PR459210 data released by project sponsor

Electrical Safety	Waived – see PR459210 data released by project sponsor
Gravity Load Resistance Test (optional)	Waived – see 3060628 data released by project sponsor
<sup>1</sup> External fire results less critical than results of the Combustibility from Above the Roof Deck included in the 4470 testing scope in 3047304, this testing showed the combination of AllShield Barrier Board and Sika TPO cover are determined to be less critical when compared to currently Approved systems.	

**3.3** ASTM E108 Spread of Flame Testing

Sample 1 & 2

Roofing Cover:	Sarnafil TS 77-15 (Sika Services AG, BU Contractors)
Roof Cover Securement:	Mechanically fastened using FM Approved fasteners
Coverboard:	2.5 mm (0.098 mm) AllShield BarrierSheet
Insulation:	50 mm (2 in) Therma TR26 SP (Kingspan Insulation S.A.U.)
Deck:	Plywood

Results:

Sample No.	Slope	Class Tested	Max Flame Spread	Class Passed
1	0.5 in 12	A	26 in (699 mm)	A
2	0.5 in 12	A	28 in (1168 mm)	A*

\*Confirming samples

**3.4** ASTM E1252, Infrared Spectra sample

One sample of the AllShield BarrierSheet was tested and will be kept on file at FM Approvals.

**4** **MARKING**

**4.1** Marking on the product or, if not possible due to size, on its packaging or label accompanying the product, shall include the following information:

- name and address of the manufacturer or marking traceable to the manufacturer;
- date of manufacture or code traceable to date of manufacture or lot identification;
- model number, model type and/or product trade name as appropriate.

When hazard warnings are needed, the markings shall be universally recognizable

**4.2** The product trade name, model number or model type identification shall correspond with RoofNav, the manufacturer's catalog designation and shall uniquely identify the product as FM Approved. The manufacturer shall not place this trade name or model number identification on any other product unless covered by a separate agreement with FM Approvals.

**4.3** The Approval Mark shall be displayed visibly and permanently on the product and/or packaging as appropriate. The manufacturer shall not use this Mark on any other product unless such product is covered by a separate FM Approvals Approval Report.

- 4.4** Markings denoting Approval by FM Approvals shall be applied by the manufacturer only within and on the premises of manufacturing locations that are under the FM Approvals Surveillance Audit program.
- 4.5** The manufacturer agrees that use of the FM Approvals name or Approval Mark is subject to the conditions and limitations of the Approval by FM Approvals. Such conditions and limitations must be included in all references to Approval by FM Approvals.

**5 REMARKS**

The roof cover must be installed using a roof perimeter flashing system Approved by FM Approvals. See RoofNav.

**6 SURVEILLANCE AUDIT**

The manufacturing facilities at the following location(s) shall be visited on a routine basis. The facility processes and quality control procedures in place have been determined to be satisfactory to manufacture products identical to that tested and Approved. An FM Approved Products/Specification-Tested Revision Request Form shall be submitted to FM Approvals for requesting to manufacture products at any additional or alternate manufacturing facilities which are not listed below.

**Audit Location(s)**

Hoogenveenweg 29  
Nieuwerkerk aan den IJssel 2913 LV  
Netherlands

**7 MANUFACTURER'S RESPONSIBILITIES**

- 7.1** The manufacturer shall notify FM Approvals of any planned change in the Approved products, prior to general sale or distribution, using the FM Approved Products/Specification-Tested Revision Request Form. No changes of any nature shall be made unless notice of the proposed change has been given and written authorization obtained from FM Approvals.
- 7.2** To ensure compliance with his procedures in the field, the manufacturer shall supply to the installer such necessary instruction or assistance required to produce the desired performance achieved in the tests.
- 7.3** In accordance with the Master Agreement, the manufacturer shall make full and immediate disclosure to FM Approvals of all information concerning any defect in, or potential hazard of, the product or service manufactured or provided by the Customer which is Approved by, or being examined by, FM Approvals. The manufacturer shall make all necessary arrangements for the investigation of complaints / anomalies applicable to this approval and shall keep records of all complaints / anomalies including actions taken.

**8 DOCUMENTATION**

The following document describes the AllShield BarrierSheet and is on file at FM Approvals.

Document Title	Issue Date
Surveillance Audit Manual	December 2025

**9 CONCLUSIONS**

**9.1** Test results from this and previous programs indicate that the submitted products as evaluated, meet the requirements FM Approvals Standard(s) listed in section 1.3 when installed as follows:

**9.2** RoofNav 568563-0-0

Roof Cover #1	
PV Panels	FM Approved Centroplan JA Solar PV panels
PV Securement	Sika SolaRoof mounting system – see RoofNav for more details
Singe Ply Cover	Sarnafil TS 77-15, TS 77-18 or TS 77-20
Cover securement	Mechanically Attached – see RoofNav for more details
Coverboard	2.5 mm (0.098 mm) thick AllShield BarrierSheet is added to the top insulation layer, loose laid.
Insulation	FM Approved insulation in the above assembly
Deck	Steel (new)
Roof Wind / Hail:	1-90 / Class 1-SH
Maximum roof slope:	0.5 in 12
PV Wind Uplift	105
PV Hail	Class 4

**9.3** Tests show that the tested roof constructions in and of themselves would not create a need for automatic sprinklers.

**9.4** Since a duly signed Master Agreement is on file for this customer, Approval is effective as of the date of this report.

**9.5** Continued Approval will depend upon satisfactory field experience and periodic Facilities and Procedures Audits.

**PROJECT DATA RECORD:** PR472014

**ORIGINAL TEST DATA** See Table 1