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# APPROVAL REPORT

**Project No:** 0003053716  
**Class:** 4470  
**Product Name:** AcryShield  
**Name of Listing Company:** National Coatings Corp  
**Address of Listing Company:** 1201 Calle Suerte  
Camarillo CA 93012  
United States  
**Customer ID:** 1000000240-1  
**Customer website:**

**Prepared by**

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**Reviewed by**

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AVP, Manager of Materials

**3/5/2015**

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**Date of Approval**

**1 INTRODUCTION**

1.1 National Coatings Corp requested Approval of their AcryShield to determine if it meets the Approval requirements of the standards listed in Section 1.3 when applied directly to structural concrete decks.

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

**1.3 Standards**

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	6/2012
American National Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures	4474	3/2004 (R2010)

**1.4 Listing**

The assemblies will be listed in RoofNav, an on-line resource of FM Approvals. Formulations, drawings and specifications are on file at FM Approvals.

**2 DESCRIPTION**

All products are as described in RoofNav.

**3 EXAMINATIONS AND TESTS**

3.1 All components 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 Standard 4470 Requirement	Original Project ID
Combustibility From Above the Roof Deck	Waived, see project ID# 3036076
Combustibility From Below the Roof Deck	Waived *
Wind Uplift Resistance	Included
Water Leakage Resistance	Waived, see project ID #3036076
Hail Damage Resistance	Included
Foot Traffic Resistance	Waived, see project ID #1B3A0.AM

Corrosion Resistance	Waived **
Heat Damage Resistance	Waived ***
* Approval is for noncombustible deck only	
** No fasteners are included in the program	
*** No insulations are included in the program	

**3.3 2x2 Simulated Wind Uplift Pull Test**

**3.3.1** One test sample was prepared and tested. The components and sequence of installation were as follows:

Sample #1:

Top Coat: AcryShield applied at 1.5 gal/sq (0.61L/m<sup>2</sup>)\* to a wet mil thickness of 0.024 in (0.61 mm)

Base Coat: AcryShield Basecoat applied at 1.5 gal/sq (0.61 L/m<sup>2</sup>)\* to a wet mil thickness of 0.024 in (0.61 mm)

Deck: Structural Concrete deck

\*Application rate for Approval will be based on previous leakage testing results.

Test Results Sample #1: The sample met the 990 psf (47.4 kPa) minimum FM Approvals requirement for Class 1-990 windstorm classification. No failure was observed, Approvals tested with this method are limited to a Class 1-990.

**3.4 Hail Damage Resistance Test:**

Sample #1:

Top Coat: AcryShield applied at 1.5 gal/sq (0.61L/m<sup>2</sup>)\* to a wet mil thickness of 0.024 in (0.61 mm)

Base Coat: AcryShield Basecoat applied at 1.5 gal/sq (0.61 L/m<sup>2</sup>)\* to a wet mil thickness of 0.024 in (0.61 mm)

Deck: Structural Concrete deck

\*Application rate for Approval will be based on previous leakage testing results.

Pre UV Hail Results Sample No. 1: Pass SH

A second sample of the same construction was exposed to 1000 hours of UV Conditioning

Post UV Hail Results Sample No. 1: Pass SH

**4 MARKING**

**4.1** The manufacturer shall mark each product and/or packaging with the manufacturer's name and product trade name. In addition, product and/or packaging must be marked with the Approval Mark of FM Approvals.

**4.2** 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.

**4.3** 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**

- 5.1 The securement of the roof system must be enhanced at the building corners and perimeter as outlined in FM Global Property Loss Prevention Data Sheet 1-29.
- 5.2 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)**

1201 Calle Suerte  
Camarillo CA 93012  
United States

**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**

No new documents have been created as all products are currently Approved.

**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**

<b>Construction#1</b>	
Top Coat:	AcryShield, AcryShield A400FR, AcryShield A405, AcryShield A500, AcryShield A520, AcryShield A530, AcryShield A540, AcryShield A550, AcryShield A550, AcryShield A600 applied at 2-3 gal/sq (0.8-1.2 L/m <sup>2</sup> ), brush, spray or roller applied
Ply	<i>Optional</i> Polyester fabric, loose laid
Base Coat	AcryShield, AcryShield A502, AcryShield A503. AcryShield A602 or AcryShield Basecoat applied at 2-3 gal/sq (0.8-1.2 L/m <sup>2</sup> ),, brush, spray or roller applied
Deck	Structural Concrete deck
Wind / Hail:	1-990 / Class 1-SH
ASTM E 108:	A @ 1.5

**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:** 0003053716

**ORIGINAL TEST DATA** See PDR Table 1