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DIVISION: 07 – THERMAL AND MOISTURE PROTECTION

Section: 07 25 00 – Water-resistive barriers

Section: 07 27 00 - Air barriers

REPORT HOLDER:

Omega Products International

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REPORT SUBJECT:

AkroGuard Water-resistive Coating

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2021 and 2018 *International Building Code*® (IBC)
- 2021 and 2018 *International Residential Code*® (IRC)

NOTE: This report references the most recent Code editions cited. Section numbers in earlier editions may differ.

1.2 The AkroGuard Water-resistive Coating system has been evaluated for the following properties (see Table 1):

- Physical properties
- Air permeability
- Vapor permeability
- Surface burning characteristics

1.3 The AkroGuard Water-resistive Coating system has been evaluated for the following uses (see Table 1):

- As an alternative to the water-resistive barrier specified in IBC Section 1403.2 and IRC Section R703.2
- With EIFS with drainage in accordance with IBC Section 1407.4.1
- As an air barrier material in accordance with IRC Section N1102.4 and IECC sections C402.5 and R402.4
- Use in Types I, II, III, IV and V construction and construction permitted under the IRC
- Use as interior wall and finish material in accordance with IBC section 803 and IRC Section R302.9.

2.0 STATEMENT OF COMPLIANCE

The AkroGuard Water-resistive Coating System complies with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

3.0 DESCRIPTION

3.1 AkroGuard Water-resistive Coating System: The system is a liquid-applied water-resistive coating consisting of AkroGuard coating, AkroFill coating and AkroFlex Mesh. The coatings are supplied in 5-gallon pails and have a shelf life of 2 years when stored unopened and out of direct sunlight at temperatures between 40° F and 90°F. AkroFlex Mesh is an open-weave glass fiber mesh that weighs approximately 4.5 ounces per square yard.

3.2 Substrates: Substrates must be one of the following:

- Gypsum sheathing complying with ASTM C1396 or ASTM C1177
- Exterior or Exposure 1 wood structural panels complying with DOC PS-1 or PS-2
- Exterior Cement board, complying with ASTM C1325
- Concrete, concrete-masonry or exterior plaster complying with the code

4.0 PERFORMANCE CHARACTERISTICS

4.1 Physical Properties: When installed in accordance with this report, the system complies with ASTM E2570 and ICC-ES AC212.

4.2 Air Leakage: The AkroGuard coating has an air leakage rate of less than 0.02 L/s.m² at 75 Pa. when installed with a minimum wet film thickness of 15 mils (dry film thickness of 9 mils) based on testing in accordance with ASTM E2178.

4.3 Vapor Permeability: The AkroGuard coating has a moisture vapor permeance of 7.64 perms when installed at



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a minimum dry film thickness of 12 mils, based on testing in accordance with ASTM E96, water method.

4.4 Surface Burning Characteristics: The AkroGuard coating has a flame spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E84.

5.0 INSTALLATION

5.1 General:

The AkroGuard coating system must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

Flashing shall be provided in accordance with IBC Section 1404.4 or IRC Section R903.9.1 or IRC R903.9.2.

5.2 Application:

Application must be as follows:

- Flashing shall be provided in accordance with the requirements of IBC Section 1404.4 and IRC Section R703.2.
- AkroFill coating is applied with a trowel over sheathing joints and at inside and outside corners. Total thickness is approximately 1/16 in.
- AkroFill coating may be used to fill holes or surface imperfections less than 1/16 in.
- AkroFlex Mesh is embedded in the wet AkroFill coating and troweled smooth, ensuring no mesh is visible.
- Use 4.5 oz., 5in.-wide, AkroFlex Mesh over sheathing joints and 4.5-oz., 9.5-in.-wide, AkroFlex Mesh over rough openings.
- Mesh must be lapped a minimum of 2-1/2 in. at intersections.
- AkroFill must be allowed to dry prior to application of AkroGuard coating.
- AkroGuard is applied with a roller or is sprayed to form a continuous barrier across the substrate, approximately 10 to 20 wet mils. The application must be free of void, pins or discontinuities.
- OSB requires two separate coats, approximately 10 wet mils, per coat. The first coat must dry before application of the second.

5.3 Use in Types I-IV Construction:

When used in Types I, II, III or IV construction (IBC), use is limited to buildings a maximum of 40 feet above grade plane except where the installation complies with Exception 1 of IBC Section 1402.5 or were used as part of approved assemblies as described for the AkroFlex EIF Systems in CCRR-0466 or the Diamond Wall system in CCR-0467.

5.4 Use in Fire-resistance-rated Construction:

Use in fire-resistance-rated construction is outside the scope of this report.

5.5 Special Inspections:

For use with EIFS, special inspections are required by IBC Section 1705.17.1. For other wall coverings, special inspections in accordance with IBC Section 1705.1.1 are required for application of the water-resistive coating except when the installation is done by an installer or contractor trained by Omega Products International, and a certificate of installation is presented to the code official at the completion of the project.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 Installation must be by contractors acceptable to Omega Products International.

6.3 Special inspection shall be provided in accordance with Section 5.5 of this report.

6.4 The Omega Products components are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Reports of tests in accordance with ASTM E2570, ASTM E2178, ASTM E96.





7.2 Data in accordance with ICC-ES AC212, approved February 2015 (editorially revised July 2020).

7.3 Intertek Listing Report "Omega Products AkroGuard Water-resistive Coating", on the [Intertek Directory of Building Products](#).

8.0 IDENTIFICATION

The AkroGuard components are identified with the manufacturer’s name (Omega Products International), the product name, the lot or batch number, storage instructions, expiration date, the Intertek Mark as shown below, the Intertek Control Number and the Code Compliance Research Report number (CCRR-0465).



9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.

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TABLE 1 - PROPERTIES EVALUATED

PROPERTY	2021 IBC SECTION ¹	2021 IRC SECTION ¹	2021 IECC Section ¹
Physical properties	104.11, 1403.2	104.11, R703.9	NA
Air permeability	1301	N102.4	C402.5, R402.4
Vapor permeance	202	R202	NA
Surface burning characteristics	803	302.9	NA
Use in Types I, II, III and IV construction	2603.5	NA	NA

¹Section numbers in earlier editions of the code may differ.

