

Code Compliance Research Report CCRR-0505

Issue Date: 09-11-2023 Revision Date: 09-25-2024 Renewal Date: 09-30-2025

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION Section: 07 25 00 – Water-Resistive Barriers Section: 07 27 00 – Air Barriers Section: 07 65 00 – Flexible Flashing

REPORT HOLDER:

Siplast 111 Hwy 67 S Arkadelphia, AR 71923 www.siplast.com

REPORT SUBJECT: Sinlast WALL control Modified Silico

Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB – Liquid-applied Water-resistive Barrier

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 International Building Code® (IBC)
- 2024, 2021, 2018 International Residential Code® (IRC)
- 2024, 2021, 2018 International Energy Conservation Code® (IECC)

NOTE: This report references the latest version of the codes cited. Section numbers in earlier versions of the codes may differ.

1.2 Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB has been evaluated for the following properties (see Table 1):

- Physical Properties
- Water Resistance
- Surface Burning Characteristics
- Air Barrier Material

1.3 Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB has been evaluated for use as an alternative to the water-resistive barriers specified in IBC Sections 1403.2 and 2510.6, and IRC Sections R703.2 and R703.7.3. See Table 1 for properties evaluated.

2.0 STATEMENT OF COMPLIANCE

Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB 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.

2.1 2024 IBC and IRC Evaluation Reports

The Intertek CCRR is an Evaluation Report for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB is a fluid-applied water-resistive coating based on a proprietary formulation. The liquid-applied coating is intended to be spray or roller applied in a single coat to achieve a nominal thickness between 23 and 25 mils. The coating has a shelf life of 12 months from the date of manufacture, when stored in a clean, dry environment at temperatures between 40°F and 90°F.

4.0 PERFORMANCE CHARACTERISTICS

4.1 The coating material has a flame spread index of 25 or less and smoke-developed index of 450 or less when tested at a maximum thickness of 25 mil in accordance with ASTM E84.

4.2 The coating material has an air leakage rate not exceeding $0.02 \text{ L/s} \cdot \text{m}^2$ at 75 Pa when tested in accordance with ASTM E2178. The coating complies as an air barrier material under IECC Sections C402.6.2.3.1 and R402.5.

4.3 The coating material has a water vapor permeance of 8.8 perms at a 22-mil thickness when tested in accordance



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with ASTM E96, desiccant method and 15.2 perms when tested in accordance with ASTM E96, water method.

4.4 When installed in accordance with this report, the coating system complies with ASTM E2570.

5.0 INSTALLATION

5.1 Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB 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.

Seams, joints and fastener heads in the substrate must be sealed with a 1/4-inch bead of Siplast WALLcontrol Modified Silicone (STPE) VP Liquid Flashing, flattened to achieve a 2-inch width. The coating is then spray or roller applied in a single coat to a nominal 23 to 25-mil wet film thickness. The coating should lap at least 2 inches onto flashings.

Apply the coating to clean substrates, free of any substance that may affect the adhesion, such as frost, oil, grease, mold and efflorescence. Remove all dust, dirt and loose mortar from the substrate. CMU substrates should be free of holes and excess mortar. Fill all head and bed joints with mortar. Mortar joints should be struck flush. Joints in sheathing must be nominally 1/8 inch, but the coating may be used to bridge localized gaps up to 1/4 inch.

Apply the coating when air and surface temperatures are above 20°F and rising. When applied over wood-based substrates, the moisture content of the substrate must be below 20%.

The coating is recognized in this report for use with the following substrates: exterior gypsum sheathing complying with ASTM C1177, plywood, oriented strand board (OSB), concrete and concrete masonry units (CMU).

When applied over wood-based sheathing with cement plaster (stucco) under IBC Section 2510.6 and IRC Section R703.7.3, the coating system may be used as one layer of the water-resistive barrier system for both dry climates (2510.6.1, R703.7.3.1) and moist or marine climates

(2510.6.2, R703.7.3.2). The coating must be separated from the stucco with an intervening, substantially non-water-absorbing layer or drainage space.

5.2 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 Siplast, and a certificate of installation is presented to the code official at the completion of the project.

5.3 Types of Construction:

Use of the coating system is recognized for use in Type V construction. For use in Types I, II, III and IV construction, testing or an engineering evaluation must be provided, demonstrating, to the satisfaction of the code official, that the coating system complies with NFPA 285, as required in IBC Section 1402.6.

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

6.3 Special inspection shall be provided in accordance with Section 5.2 of this report.

6.4 For use in Types I, II, III and IV construction, see Section 5.3 of this report.

6.5 Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.



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7.0 SUPPORTING EVIDENCE

7.1 Manufacturer installation instructions

7.2 Reports of testing in accordance with the performance requirements of ICC-ES AC212, Acceptance Criteria for Water-Resistive Coating Used as Water-Resistive Barriers over Exterior Sheathing, approved February 2015.

7.3 Reports of testing in accordance with ASTM E84, ASTM E96, ASTM E2570, and ASTM E2178.

8.0 IDENTIFICATION

Containers of Siplast WALLcontrol Modified Silicone (STPE) VP Liquid AWB are identified with the manufacturer's name (Siplast) and address, 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-0505).



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

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TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION ¹	2024 IRC SECTION ¹	2024 IECC Section ¹
Physical properties	104.2.3, 1403.2	R104.2.2.4, R703.2	NA
Air permeability	1301	N1102.4	C402.6.2.3.1, R402.5
Vapor permeance	202	R202	NA
Surface burning characteristics	803	R302.9	NA
Use in Types I, II, III and IV construction	1402.6	NA	NA

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



