

# **CERUS-1018**

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|-------------|-----------|--|--|--|
| REVISED:    | June 2024 |  |  |  |
| EXPIRATION: | June 2027 |  |  |  |

PRODUCT: Primus Water-Resistive Barrier

**REPORT HOLDER:** Gulnar Plastics PVT LTD

**CONTACT DETAILS:** 20 Podar Chambers, S.A. Brelvi Road Fort Mumbai 400001, India www.gulnarplastics.com

**CSI DIVISION:** 07 00 00 - Thermal and Moisture Protection

- CSI SECTION: 07 25 00 Water-Resistive Barriers / Weather Barriers
- APPLICABLE CODES: 2024, 2021, 2018, 2015 International Building Code (IBC) 2024, 2021, 2018, 2015 International Residential Code (IRC) 2022, 2019 California Green Building Standards Code (CALGreen), Title 24, Part 11 2020, 2015 ICC 700 National Green Building Standard ™ (ICC 700) 2013 Abu Dhabi International Building Code (ADIBC)\* \*Thee ADIBC is based on the 2009 IBC. Compliance with the noted IBC codes are considered compliance with the ADIBC requirements.

**EVALUATED:** Water-resistance





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### 1.0 APPROVED FOR FOLLOWING:

| APPROVED TYPES OF<br>CONSTRUCTION: | Type IAB, Type IIAB, Type IIIAB, Type IV, Type VAB  |
|------------------------------------|---|
| APPROVED USE:                      | Water-resistive barrier for use in combustible and Types I-IV construction (40 ft building height). |
| APPROVED INSTALLATIONS:            | Exterior walls.   |

### 2.0 DESCRIPTION:

#### 2.1 General:

Gulnar Plastics PVT Ltd. (Gulnar Plastics) Primus water-resistive barriers are woven, microporous, perforated polyolefin fabric that include a polyolefin coating on the exterior facings. The products are 0.004 inches (0.11 mm) thickness available in rolls of minimum and maximum sizes and coverage weights outlined in Table 1 below.

Gulnar Plastics Primus water-resistive barriers are an approved alternative to code prescribed materials specified in Chapter 14 of the 2024 / 2021 / 2018 / 2015 IBC and Chapter 7 of the 2024 / 2021 / 2018 / 2015 IRC. Primus water-resistive barriers are equivalent to 60-minute Grade D paper described in Chapter 25 of the 2024 / 2021 IBC and Chapter 7 of the 2024 / 2021 / 2018 / 2015 IRC. Gulnar Plastics Primus products are combustible water-resistive barriers approved for use in buildings up to 40 ft (12.2 m) building height above grade, except where evidence of compliance for the exterior wall assembly is provided based on compliant evaluation to NFPA 285.

Gulnar Plastics Primus water-resistive barriers comply with Section 5.407 of CALGreen for *Water-Resistance and Moisture Management* as an exterior wall water-resistive barrier. Gulnar Plastics Primus water-resistive barriers comply with Section 602.1 of ICC 700 *Moisture Management – Building Envelope* as a water-resistive barrier for use behind exterior veneer and siding.

| Table 1. GULNAR PLASTICS PRIMUS WATER-RESISTIVE BARRIER ROLL DIMENSION |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |

| PRODUCT | DIMENSIONS | LENGTH |      | WIDTH  |      | PRODUCT WEIGHT     |      |
|---------|------------|--------|------|--------|------|--------------------|------|
|         |            | feet   | m    | inches | cm   | oz/yd <sup>2</sup> | g/m² |
| Primus  | Minimum    | 30     | 9.1  | 36     | 91.4 | 1.92               | 54   |
|         | Maximum    | 195    | 59.4 | 120    | 305  |                    |      |

Alternate dimensions can be available on request.

#### 3.0 DESIGN:

Use of Gulnar Plastics Primus water-resistive barriers does not require design. Gulnar Plastics Primus water-resistive barriers outlined in this report are intended to be installed with code compliant exterior wall coverings complying with Section 1403 of the 2024 / 2021 / 2018 IBC, Section 1404 of the 2015 / 2012 IBC and Section R703 of the 2024 / 2021 / 2018 / 2015 / 2012 IRC.

Gulnar Primus water-resistive barriers are a combustible water-resistive barrier and are limited to buildings of 40 ft (12.2 m) above grade, except where testing in compliance with NFPA 285 of the exterior wall assembly is provided.



#### 4.0 INSTALLATIONS:

#### 4.1 General:

Primus water-resistive barrier must be installed after wall framing is completed and before windows and doors are installed. Starting from the bottom of wall and working upwards to ensure overlaps provide water shedding at interface joints, the roll must be placed a minimum of 6 inches (152 mm) from the starting corner. Primus water-resistive barrier is attached to the code complying sheathing with either:

1) Corrosion-resistant nails having minimum 1-inch-diameter (25 mm) plastic washer heads or cap heads spaced at a maximum of 16 inches (406 mm) on center, or

2) Corrosion-resistant staples with minimum 1-inch (25 mm) crowns, spaced a maximum of 12 inches (305 mm) on center.

The Primus is unrolled around the building and fastened with fasteners and spacing described above. The printed side of Primus water-resistive barrier is required installed facing the exterior. Overlaps at seams of minimum of 8 inches (203 mm) for vertical seams and 4 inches (102 mm) for horizontal seams is required except where greater overlap for applications used is specified.

Where Primus water-resistive barriers are installed under exterior cement plaster (stucco) and over wood-based sheathings in jurisdictions governed by the 2024 / 2021 IBC or 2024 / 2021 IRC, installation per Section 2510.6 or Section R703.7 2021 IRC are required as outlined below:

#### Dry (B) Climates one of the below installation methods is required:

- Primus water-resistive barrier shall be installed in 2 layers, with each layer installed independently such that each layer provides a separate continues plant and any flashing installed in accordance with Section 1404.4 of the 2024 / 2021 IBC or Section 703.4 of the 2024 / 2021 IRC intended to drain to the water-resistive barrier is directed between the layers.
- 2. Primus water-resistive barrier shall be installed as a single layer separated by the exterior cement plaster (stucco) by a layer of foam plastic insulating sheathing or other nonwatery absorbing layer, or a drainage space or means of drainage as required for Moist or Marine climates as outlined below, with flashing complying with Section 1404.4 of the 2024 / 2021 IBC or Section 703.4 of the 2024 / 2021 IRC draining the Primus water-resistive barrier directed to drain on exterior side of the Primus layers.

#### Moist (A) or Marine (C) Climates one of the below installation methods is required:

- In addition to Dry (B) climate items (1) and (2) above, a space or drainage material of minimum 3/16-inches (5 mm) is required installed on the exterior of the Primus water-resistive barrier.
- 2. In addition to Dry (B) climate item (2) above, drainage efficiency on the exterior side of Primus water-resistive barrier shall be a minimum 90% determined per ASTM E2273 or ASTM E2925 Annex A2.

Where Primus water-resistive barriers are installed under exterior cement plaster (stucco) and over wood-based sheathings in jurisdictions governed by Section R703.7 2024 / 2021 / 2018 / 2015 / 2012 IRC, Primus water-resistive barrier shall be installed in 2 layers, with each layer installed independently such that each layer provides a separate continues plant and any flashing installed in accordance with Section 1404.4 of the 2021 IBC or Section R703.4 of the 2021 IRC intended to drain to the water-resistive barrier is directed between the layers, with the following exceptions:

1. Primus water-resistive barrier is separated from the exterior plaster (stucco) by an intervening, substantially nonwater-absorbing layer or drainage space, or

Where Primus water-resistive barriers are installed under cementitious coatings or exterior insulation and finish systems, installation is to follow the exterior coverings approved installation instructions.

### **5.0 LIMITATIONS**

- Installation of Gulnar Primus water-resistive barriers are to comply with the applicable codes, this report and the manufacturer's installation instructions. Where differences are found between documents, the applicable code and this report must be followed.
- Gulnar Plastics Primus are limited to installations over solid sheathing complying with the applicable code.
- Gulnar Primus water-resistive barriers are intended for installation under exterior cladding complying with the applicable code.
- Gulnar Plastics Primus water-resistive barriers are not approved for use as an alternative to ASTM E2556 Type I or Type II products as specified by the 2018 / 2015 / 2012 IBC for use under exterior plaster (stucco).
- Gulnar Plastics Primus water-resistive barriers are classified as a combustible water-resistive barrier, approved for use in Types I, II, III and IV construction up to 40 ft (12.2 m) above grade building height.
- Gulnar Plastics Primus water-resistive barriers are manufactured in Silvassa, India with inspections by QAI Laboratories.

#### 6.0 SUPPORTING INFORMATION:

The following data has been evaluated for Gulnar Plastics Primus, Primus Ultra, and Primus Ultra+ synthetic roofing underlayment:

 Data demonstrating compliance with No. 15 felt complying with ASTM D226 Type 1 per Section 1403.2 of the 2024 / 2021 / 2018 IBC.



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### 7.0 MARKING:

Gulnar Plastics Primus water-resistive barrier include the the following information on the product label:

- Product Name.
- Manufacturer.
- Country of Manufacture.
- QAI CER<sub>US</sub>-1018
- QAI Certification Mark shown below:



# 8. ELIGIBILITY OF REPORT

QAI's Code Evaluation Report complies with Section 104.4.2.3.6.1 *Evaluation reports* of the 2024 IBC, and Section 104.11 *Research Reports* of the 2021 / 2018 / 2015 IBC. Supporting data has been evaluated by QAI for compliance of the noted materials and assemblies to the applicable code by QAI, and *approved* source as detailed below.

The attached report has been reviewed by a QAI Registered Professional Engineer approved by the specific state Board of Professional Engineers noted on the specific P.E. seal(s).

Per section 1703 of the IBC, QAI is an independent third-party testing, inspection and certification agency accredited by the International Accreditation Service, Inc. (IAS) for this specific scope (see IAS PCA-118). QAI can confirm that based on its IAS accreditation it meets IBC Section 1703.1 on Independence, Section 1703.1.2 on Equipment and Section 1703.1 on Personnel.

This Evaluation report has been designed to meet the performance requirements of IBC Section 1703.4 and contains the required information to show the product, material or assembly meets the applicable code requirements.

The product is labeled per section IBC 1703 and subject to follow-up inspection per IBC 1703.6 using QAI IAS accredited ISO/IEC 17020 inspection program (see IAS AA-723).

For more information regarding QAI Laboratories, please visit <u>www.qai.org</u>.



The above is an example of the QAI registered Listing mark. The Listing mark may only be used by the Report Holder per the QAI service agreement on products defined in this report. The 'us' indicator in the 4 o'clock position indicates the product complies with the properties evaluated with limitations outlined in this report for use in the US market. A 'c' indicator in the 8 o'clock position indicates the product has been evaluated for use in the Canadian market.





# 11. REFERENCED STANDARDS

NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

ASTM D226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.

ASTM E2273 Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies.

ASTM E2925 Standard Specification for Manufactured Polymeric Drainage and Ventilation materials Used to Provide a Rainscreen Function.

ASTM E2556 Standard Specification for Vapor Permeable Flexible Sheet Water-Resistive Barriers Intended for Mechanical Attachment.