



PLASTIC COMPONENTS, INC.

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ULTRA-LATH® PLUS HDPE LATH FOR USE IN VERTICAL OR HORIZONTAL APPLICATIONS

CSI Division:

09 00 00 FINISHES

CSI Section:

09 22 36 Lath

1.0 SCOPE OF EVALUATION

1.1 Compliance to the following codes & regulations:

- 2018, 2015, and 2012 International Building Code®
- 2018, 2015, and 2012 International Residential Code®
- 2020 Florida Building Code, Building (FBC) – Including HVHZ – attached supplement
- 2020 Florida Building Code, Residential (FRC) – Including HVHZ – attached supplement

1.2 Evaluated in accordance with:

- IAPMO EC 014
- ICC-ES AC191

1.3 Properties assessed:

- Physical
- Structural
- Durability
- Vertical and Lateral Flame Propagation Characteristics

2.0 PRODUCT USE

Ultra-Lath® Plus HDPE Lath is an alternative to metal lath used with exterior Portland cement-based plaster (stucco) complying with Chapter 25 of the IBC or Chapter 7 of the IRC and cementitious exterior wall and soffit (vertical or horizontal) coatings recognized in current approved evaluation reports. In addition, exterior Portland cement-based plaster (stucco) reinforced with Ultra-Lath® Plus may be used to support precast stone veneer when specifically recognized in current valid evaluation reports. Ultra-Lath® Plus is limited to use in Type V-B construction under the IBC and to buildings constructed under the IRC and Type II-B when constructed as specified in Section 4.3 of this report.

3.0 PRODUCT DESCRIPTION

Ultra-Lath® Plus is a high-density polyethylene (HDPE), diamond patterned mesh with integral ¼-inch-thick (6.4 mm) fastening strips. The Ultra-Lath® Plus material weighs 3.2 oz. per sq. yd. (108 g/m²) and is available in 27-inch x 96-inch (686 mm x 2438 mm) sheets, 27-inch-wide (686 mm) by up to 100-foot-long (30 480 mm) rolls, and in 3-inch, 4-inch, 6-inch, and 8-inch-wide (76 mm, 102 mm, 152 mm, and 203 mm) strips.

4.0 DESIGN AND INSTALLATION

4.1 General: Installation of the plaster and lathing shall comply with IBC Sections 2510 and 2512, or IRC Section R703.7, except as specifically noted in this report. A code-specified solid substrate and weather-resistive barrier shall be in place before installing Ultra-Lath® Plus. Ultra-Lath® Plus shall be installed with the fastening strips placed against the substrate in any direction, to create a void that will allow proper embedment of the Ultra-Lath® Plus when the plaster or mortar scratch coat is applied. The Ultra-Lath® Plus shall be installed with a minimum 1-inch (25.4 mm) overlap at horizontal and vertical edges. The Ultra-Lath® Plus shall be applied flat and fastened securely against the substrate. Figure 1 of this report provides a standard material detail.

4.2 Fasteners: Ultra-Lath® Plus shall be fastened through the substrate to a structural wall or ceiling member at 6 inches (152 mm) on center vertically or horizontally, in accordance with the minimum requirements in Section 7.10 of ASTM C1063 (as referenced by Section 2510.3 of the IBC) or IRC Section R703.6.1, as applicable. The spacing of framing members shall conform to the requirements of Table 3 of ASTM C1063 following the tabulated provisions for the diamond mesh type and weight of metal plaster base. Fasteners shall be minimum No.16-gauge staples, with a minimum 7/16-inch-wide (11 mm) crowns and minimum 1-inch-long (25 mm) legs and shall engage not less than three strands of the lath. Fasteners shall be of sufficient length to penetrate wall or ceiling framing members a minimum of ¾-inch (19 mm). All fasteners shall be corrosion resistant. Installation of cement plaster shall be in accordance with Section 2512 of the IBC or Section R703.6.2 of the IRC, as applicable.

4.3 Vertical and Lateral Flame Propagation Characteristics: Ultra-Lath® Plus when installed in accordance with Table 1 of this report meets acceptance criteria of NFPA 285 when required by the Section 1402.5 of the IBC. Ultra-Lath® Plus is limited to Types II and III construction for exterior walls that are not required to be fire-resistance-rated as required in Chapters 6 and 7 of the IBC.

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.

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5.0 LIMITATIONS

The Ultra-Lath® Plus HDPE Lath described in this report complies with or is a suitable alternative to what is specified in the codes listed in Section 1.1 of this report, subject to the following conditions:

5.1 Ultra-Lath® Plus shall be installed with the fastening strip against the substrate.

5.2 Ultra-Lath® Plus is limited to Type V-B construction that is not required to be fire-resistance-rated under the IBC and to buildings constructed under the IRC, except as indicated in Section 4.3 of this report.

5.3 An engineered design of the wall construction shall be performed in accordance with IRC Sections R301.1.3 when the weight exceeds the applicable limits of IRC Section R301.2.2.2.1.

5.4 Use of Ultra-Lath® Plus to provide in-plane racking shear resistance and wall bracing is beyond the scope of this report.

5.5 Ultra-Lath® Plus shall be stored in a dry location.

5.6 Ultra-Lath® Plus is manufactured in Miami, Florida.

6.0 SUBSTANTIATING DATA

6.1 Data in accordance with the IAPMO Uniform ES Evaluation Criteria for High Density Polyethylene (HDP) Lath Used in Cementitious Exterior Wall Coatings or Exterior Cement Plaster (Stucco) (EC-014), revised January 2020.

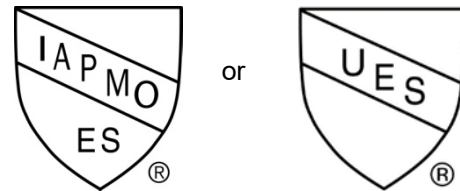
6.2 Data in accordance with ICC-ES Acceptance Criteria for Metal Plaster Bases (Lath), AC191, Approved March 2016, editorially revised August 2019, pertaining to Horizontal and Vertical applications.

6.3 Reports of Fire Propagation Characteristics testing in accordance with NFPA 285.

6.4 Test reports are from laboratories in compliance with ISO/IEC 17025.

7.0 IDENTIFICATION

The product is identified with a label identifying the IAPMO-UES report number (ER-284), the company name (Plastic Components, Inc.), and roll or sheet dimensions. Either Mark of Conformity may also be used as shown below:



IAPMO UES ER-284

8.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Ultra-Lath® Plus HDPE Lath to assess conformance to the codes shown in Section 1.0 of this report and serves as documentation of the product certification. Products are manufactured at locations noted in Section 5.6 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org

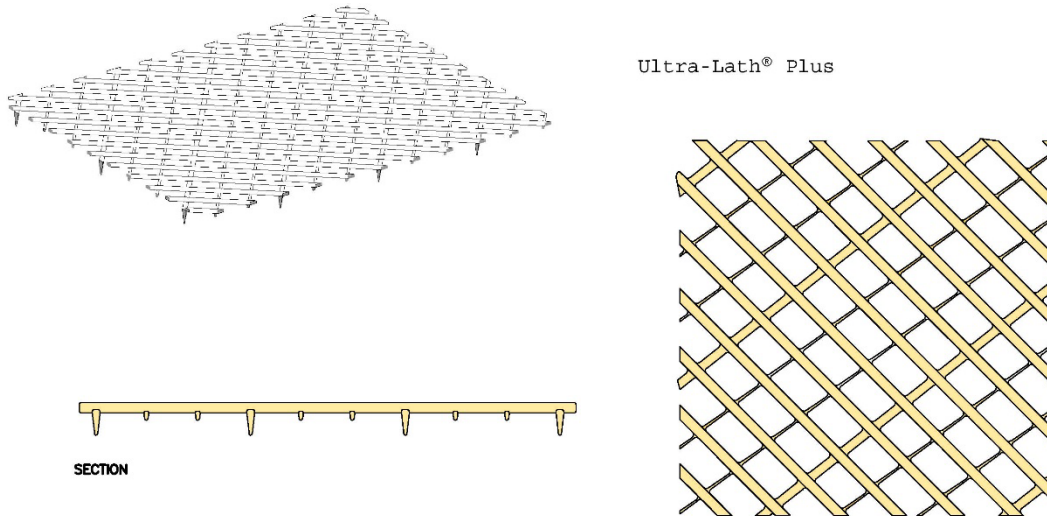


FIGURE 1 – Ultra-Lath® Plus

Table 1 – NFPA 285 Complying Exterior Wall Assembly with Ultra-Lath® Plus

Wall Component	Material Description
Base Wall System	1 layer of 5/8-inch-thick Type X gypsum wallboard installed on the interior side of 3 5/8-inch-deep, No. 18-gauge galvanized steel studs spaced at 16 inches on center.
Cavity Insulation	None
Exterior Sheathing	1/2-inch-thick National Gypsum Gold Bond® eXP® sheathing installed horizontally perpendicular to the studs.
Exterior Insulation	None
Exterior Wall Covering	Dupont™ Tyvek® CommercialWrap® applied over the exterior sheathing with a minimum 3-inch overlap for each row. Plastic Components Old Style Casing Bead pieces fastened to the assembly perimeter and around window opening perimeters. Plastic Components “V” control joint trim pieces fastened to the sheathing as required by the manufacturer’s installation instructions. Ultra-Lath® Plus lath installed over the water-resistive barrier and three coats of stucco a total thickness of 7/8 inch.
Window/Door Perimeters	Window opening framed with No. 18-gauge galvanized steel track centered on the vertical centerline of the opening. No.18-gauge galvanized steel flashing over the cladding fastened to the full opening perimeter.



FLORIDA SUPPLEMENT

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1.0 SCOPE OF EVALUATION

1.1 Compliance to the following codes & regulations:

- 2020 Florida Building Code, Building (FBC - Building) – Including HVHZ
- 2020 Florida Building Code, Residential (FBC - Residential) – Including HVHZ

2.0 LIMITATIONS

The Ultra-Lath[®] Plus HDPE Lath described in IAPMO UES ER-284 complies with or is a suitable alternative to what is specified in the codes listed in Section 1.1 of this SUPPLEMENT, subject to the following conditions:

2.1 The design and installation of the Ultra-Lath HDPE Lath shall be in accordance with the 2020 Florida Building Code -- Building and the 2020 Florida Building Code – Residential, as applicable, and as noted in ER-284.

2.2 Load combinations shall be in accordance with Sections 1605.2 or 1605.3 of the FBC, Building as applicable.

2.3 Design wind loads shall be in accordance with Section 1609 of the FBC, Building or Section R301.2.1.1 of the FBC, Residential, as applicable.

2.4 In order to provide for inspection for termite infestation, clearance between exterior wall coverings and final earth grade on the exterior of a building shall be in accordance with Section 1403.8 of the FBC, Building or Section R318.7 of the FBC, Residential, as applicable.

2.5 Use of the Ultra-Lath[®] HDPE Lath for compliance with the high-velocity hurricane zone provisions of the FBC, Building has been evaluated for use with the assembly shown in Section 3.1 of this evaluation report supplement. Design wind loads shall be in accordance with Section 1620 of the Florida Building Code – Building.

2.6 For products falling under Section (5)(d) of Florida Rule 61G20-3.008, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission (or the building official when the report holder does not possess an approval by the Commission), to provide oversight and determine that the products are being manufactured as described in this evaluation report to establish continual product performance.

2.7 This supplement expires concurrently with ER-284

3.0 PRODUCT USE

3.1 General: Ultra Lath HDPE Lath has been evaluated for use in the HVHZ when used as part of the wall assembly described in this section. The assembly has been tested to the requirements of TAS 201, TAS 202, and TAS 203 using the ASTM E330 test procedure. The assembly met the requirements for large missile impact traveling at 50 feet per second as well as static and cyclical, positive, and negative wind pressures of 90 psf. The assembly is allowable for use in heights up to 30 feet in Risk Categories I, II, and III.

3.1.1 Framing: The wall framing shall be a minimum 2-by lumber spaced at 16 inches (406 mm) on center, maximum The framing members shall be sized prescriptively or designed to withstand the maximum positive and negative design wind loads for the building at a maximum L/360 deflection. Studs shall be covered with gypsum wallboard, or otherwise braced on the inside to prevent buckling.

3.1.2 Sheathing: 5/8-inch (16 mm) exterior grade Exposure 1 plywood shall be installed over and fastened to the framing using 1¾-inch-long (44 mm) roofing nails or equivalent, spaced at maximum nominally 15 inches (381 mm) on center or in accordance with the code, whichever is the most restrictive.

3.1.3 Water-resistive Barrier: A code compliant installation of a Grade D water-resistive barrier shall be installed over the sheathing.

3.1.4 Lath Plastic Components: Ultra-Lath Plus plastic lath, as shown in ER-284, shall be installed over the water-resistive barrier. All joints in the lath shall be overlapped 3 inches.

3.1.5 Lath Fasteners: The fasteners used to fasten the lath to the substrate shall be 11-gauge, 1¾-inch-long (44 mm) galvanized roofing nails or equivalent, with 7/16-inch-diameter (11 mm) heads, minimum. The fasteners shall be spaced at 4 inches (102 mm) on center, maximum through the sheathing.



3.1.6 Stucco: Three-coat stucco cement meeting ASTM C91 and ASTM C1328 shall be mixed and applied to the assembly in accordance with ASTM C926. Sufficient moisture and time shall be provided to permit adequate hydration for the climate and job conditions, for the stucco to develop rigidity and resist cracking in accordance with the code, ASTM C926, and the requirements of the Jurisdictional Authority.

The first coat or base layer shall be a minimum ¼-inch-thick (6 mm) scratch coat.

The second coat or layer shall be a minimum ½-inch-thick (13 mm) brown coat.

The third coat or final layer shall be a minimum 1/16-inch-thick (1.6 mm) finish coat.

For additional information about this evaluation report please visit

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