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# ICC-ES Evaluation Report

## ESR-3198

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Reissued 04/2019

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**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**

**SECTION: 07 21 00—THERMAL INSULATION**

**REPORT HOLDER:**

**DEMILEC (USA) INC.**

**EVALUATION SUBJECT:**

**HEATLOK® ECO SERIES SPRAY-APPLIED POLYURETHANE INSULATION**



*“2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence”*



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Reissued April 2019

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**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**

**Section: 07 21 00—Thermal Insulation**

**REPORT HOLDER:**

DEMILEC (USA) INC.

**EVALUATION SUBJECT:**

HEATLOK® ECO SERIES SPRAY-APPLIED POLYURETHANE INSULATION

**1.0 EVALUATION SCOPE**

**1.1 Compliance with the following codes:**

- 2018, 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
- 2018, 2015, 2012 and 2009 *International Energy Conservation Code*® (IECC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)<sup>†</sup>

<sup>†</sup>The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

**Properties evaluated:**

- Surface-burning characteristics
- Physical properties
- Thermal resistance (*R*-values)
- Attic and crawl space installation
- Air permeability
- Water vapor transmission
- Exterior walls of Types I–IV construction

**1.2 Evaluation to the following green standard:**

2008 ICC 700 *National Green Building Standard*™ (ICC 700-2008)

**Attributes verified:**

See Section 3.1

**2.0 USES**

Heatlok® Eco Series are used as a nonstructural thermal insulating material in Type V construction under the IBC and dwellings under the IRC. The insulation may be used

in buildings of Type I, II, III or IV construction when installed in accordance with Section 4.5. The insulation is for use in wall cavities, floor assemblies, ceiling assemblies, or attics and crawl spaces when installed in accordance with Section 4.4. Under the IRC, the insulation may be used as air-impermeable insulation when installed in accordance with Section 3.4, and as a vapor retarder when installed in accordance with Section 3.5.

**3.0 DESCRIPTION**

**3.1 HEATLOK® ECO Series Insulation:**

Heatlok® Eco Series is a two-component, closed-cell, spray-applied foam plastic insulation with a nominal density of 2.0 pcf (32 kg/m<sup>3</sup>). The polyurethane foam is produced by combining a polymeric isocyanate (A-side component) with a polymeric resin (Heatlok® Eco B-side component). The products have a shelf life of six months when stored in factory-sealed containers at temperatures between 55°F and 80°F (13°C and 27°C).

The attributes of the insulation have been verified as conforming to the provisions of ICC 700-2008 Section 703.2.1.1.1(c) as an air impermeable insulation. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

**3.2 Surface Burning Characteristics:**

Heatlok® Eco Series insulation, at a maximum thickness of 4 inches (102 mm) and a nominal density of 2.0 pounds per cubic foot (32.0 kg/m<sup>3</sup>), 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 (UL 723).

There are no thickness limitations on the Heatlok® Eco Series insulation when installed behind a code-prescribed thermal barrier.

**3.3 Thermal Resistance:**

Heatlok® Eco Series insulation have thermal resistances, *R*-values, at a mean temperature of 75°F (24°C) as shown in Table 1.

**3.4 Air Permeability:**

Heatlok® Eco Series insulation, at a minimum 1-inch (25.4 mm) thickness, is considered air-impermeable insulation in accordance with 2018 IBC Section 1202.3 [2015 Section 1203.3] and 2018, 2015 and 2012 IRC

Section R806.5 (2009 IRC Section R806.4), based on testing in accordance with ASTM E283.

### 3.5 Vapor Permeability:

Heatlok® Eco Series insulation has a vapor permeance of less than 1 perm ( $5.7 \times 10^{-11}$  kg/Pa-s-m<sup>2</sup>) at a minimum thickness of 1 inches (25.4 mm) and may be used where a Class II vapor retarder is required by the applicable code.

### 3.6 Fire Protective Coatings:

**3.6.1 DC 315 Coating:** DC 315 Coating, manufactured by International Fireproof Technology, Inc. / Paint to Protect Inc. ([ESR-3702](#)), is a water-based, intumescent coating supplied in 5-gallon (19 L) pails and 55 gallon (208 L) drums. The coating material has a shelf life of 12 months when stored in factory-sealed containers at temperatures between 50°F (10°C) and 80°F (27°C).

**3.6.2 Flame Seal® TB:** Flame Seal® TB is a two-component liquid-applied, water-based polymer intumescent coating, consisting of the Flame Seal TB resin and Flame Seal T50 crosslinking catalyst, manufactured by Flame Seal Products, Inc. ([ESR-4002](#)). The two components are mixed prior to application. The coating is supplied in 5-gallon (19 L) pails (4 gallons (15.1 L) of TB and 1 gallon (3.8 L) of T50) and 50-gallon (189.2 L) drums (40 gallons (151.4 L) of TB and 10 gallon (37.8 L) of T50) and has a shelf life of twelve months when stored in factory-sealed containers at temperatures between 40°F (4°C) and 90°F (32°C).

**3.6.3 Blazelok™ TBX Coating:** Blazelok™ TBX is a one-component water-based intumescent coating manufactured by TPR<sup>2</sup> Corporation ([ESR-3997](#)). The coating is supplied in 5-gallon (19 L) pails and 55-gallon (208 L) drums and has a shelf life of one year when stored in factory-sealed containers at temperatures of 45°F (7.2°C) and 95°F (35°C).

## 4.0 DESIGN AND INSTALLATION

### 4.1 General:

The manufacturer's published installation instructions and this report must be strictly adhered to and a copy of these instructions and this evaluation report must be available on the jobsite at all times during installation.

### 4.2 Application:

Heatlok® Eco Series must be installed in accordance with the manufacturer's published installation instructions and this report. The insulation must not be used in areas having a maximum service temperature greater than 180°F (82°C), must not be used in electrical outlet or junction boxes or in direct continuous contact with water. Surfaces to which the spray-applied foam insulation is to be applied to must be protected from the weather during application. Where Heatlok® Eco Series is used as an air-impermeable barrier, such as in unventilated attic spaces regulated by 2018 IBC Section 1202.3 [2015 IBC Section 1203.3] or 2018, 2015 and 2012 IRC Section R806.5 (2009 IRC Section R806), the insulation must be installed at a minimum thickness of 1 inch (25.4 mm). The insulation is applied to the intended thickness, with each pass being a maximum of 3.25 inches (82.6 mm). Where multiple passes are required, the cure time between passes is 15 minutes. Heatlok® Eco Series must be installed by factory-authorized applicators.

### 4.3 Thermal Barrier:

**4.3.1 Application with a Prescriptive Thermal Barrier:** Heatlok® Eco Series spray foam insulation must be separated from the interior of the building by an approved

thermal barrier of 1/2-inch-thick (12.7 mm) gypsum board or an equivalent thermal barrier complying with, and installed in accordance with, IBC Section 2603.4 or IRC Section R316.4, as applicable, except where the installation complies with the requirements set forth in Section 4.3.2. When installation is within an attic or crawl space as described in Section 4.4, a thermal barrier is not required between the foam plastic and the attic or crawl space, but is required between the insulation and the interior of the building. There is no thickness limit when installed behind a code-prescribed thermal barrier except as noted in Section 4.4.2.2.

**4.3.2 Application without a Prescriptive Thermal Barrier:** The Heatlok® Eco Series insulations may be installed without the prescriptive thermal barrier described in Section 4.3.1 when installation is in accordance with the following requirements:

**4.3.2.1** The insulation must be covered on all surfaces with a fire protective coating at the minimum thickness set forth in Table 2.

**4.3.2.2** The maximum installed thickness of the insulation must not exceed the thicknesses set forth in Table 2.

**4.3.2.3** The coating must be applied over the insulation in accordance with the coating manufacturer's instructions and this report.

### 4.4 Ignition Barrier—Attics and Crawl Spaces:

**4.4.1 Application with a Prescriptive Ignition Barrier:** When Heatlok® Eco Series insulation is installed within attics or crawl spaces where entry is made only for service of utilities, an ignition barrier must be installed in accordance with IBC Section 2603.4.1.6 or IRC Sections R316.5.3 and R316.5.4, as applicable, except where the installation complies with the requirements set forth in Section 4.4.2. The ignition barrier must be consistent with the requirements for the type of construction required by the applicable code, and must be installed in a manner so the foam plastic insulation is not exposed. Heatlok® Eco Series insulation may be installed in unvented attics in accordance with 2018 IBC Section 1202.3 [2015 IBC Section 1203.3] or 2018, 2015 and 2012 IRC Section R806.5 (2009 IRC Section R806.4).

**4.4.2 Application without a Prescriptive Ignition Barrier:** Where Heatlok® Eco Series spray foam is installed in an attic or crawl space without a prescriptive ignition barrier, in accordance with Sections 4.4.2.1 and 4.4.2.2, the following conditions apply:

1. Entry to the attic or crawl space is only for the service of utilities and no storage is permitted.
2. There are no interconnected attic, crawl space or basement areas.
3. Air in the attic or crawl space is not circulated to other parts of the building.
4. Combustion air is provided in accordance with the IMC (*International Mechanical Code*®) Section 701.
5. Attic ventilation is provided when required by 2018 IBC Section 1202.2 [2015 or 2012 IBC Section 1203.2] or IRC Section R806, except when air-impermeable insulation is permitted in unvented attics in accordance with 2018 IBC Section 1202.3 [2015 IBC Section 1203.3] or 2018, 2015 and 2012 IRC Section R806.5 (2009 IRC Section R806.4).
6. Under-floor (crawl space) ventilation is provided when required by 2018 IBC Section 1202.4 [2015 IBC

Section 1203.4 or 2012 IBC Section 1203.3] or IRC Section R408.1, as applicable.

**4.4.2.1** In attics and crawl spaces, Heatlok® Eco insulation may be spray-applied to the underside of the roof sheathing and/or rafters, and to the vertical walls and the underside of floors as described in this section. The thickness of the foam plastic applied to the underside of the roof sheathing must not exceed 1 1/2 inches (292 mm) for the Heatlok® Eco Series. The thickness of the spray foam insulation applied to vertical wall surfaces must not exceed 1 1/2 inches (292 mm) for the Heatlok® Eco Series. The insulation does not require the application of either an ignition barrier or a fire-protective coating.

**Optional:** It is permitted to cover all surfaces of the foam plastic with the coating, as described below and in Section 3.6. The coating must be applied over the Heatlok® Eco Series insulation in accordance with the coating manufacturer's instructions and this report. Surfaces to be coated must be dry, clean, and free of dirt, loose debris and other substances that could interfere with adhesion of the coating. The coating is applied in one coat with low-pressure airless spray equipment, and must be applied to a minimum wet film thickness as indicated in Table 3.

Heatlok® Eco Series insulation may be installed in unvented attics or crawl spaces as described in this section in accordance with 2018 IBC Section 1202.3 [2015 IBC Section 1203.3] or 2018, 2015 and 2012 IRC Section R806.5 (2009 IRC Section R806.4).

**4.4.2.2 Use on Attic Floors:** Heatlok® Eco Series insulation may be installed exposed at a maximum thickness of 1 1/2 inches (292 mm) between and over the joists in attic floors. The insulation must be separated from the interior of the building by an approved thermal barrier. The ignition barrier in accordance with the IBC Section 2603.4 and IRC Section R316.5.3 may be omitted and the insulation left exposed.

#### 4.5 Exterior Walls in Type I, II, III and IV Construction:

**4.5.1 General:** When used on exterior walls of Types I, II, III or IV construction, the assembly must comply with IBC Section 2603.5 and this section. The potential heat of Heatlok® Eco Series insulation is 1880 Btu/ft<sup>2</sup> per inch of thickness, when tested in accordance with NFPA 259.

**4.5.2** Wall assemblies using Heatlok® Eco Series insulation must be as described in Table 4 or Table 5.

### 5.0 CONDITIONS OF USE

The Heatlok® Eco Series spray foam insulation described in this report complies with, or is a suitable alternative to what is specified in those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** The product must be installed in accordance with the manufacturer's published installation instructions, this evaluation report and the applicable code. The instructions within this report govern if there are any conflicts between the manufacturer's published installation instructions and this report.
- 5.2** The insulation must be separated from the interior of the building by an approved thermal barrier in accordance with IBC Section 2603.4 or IRC Section R316.4, unless otherwise allowed by the applicable code or when installation is as described in Section 4.3.2 or in attics and crawl spaces as described in Section 4.4.
- 5.3** The insulation must not exceed the thickness noted in Sections 3.2, 4.3, 4.4 and 4.5 of this report.
- 5.4** The insulation must be protected from the weather during application.

- 5.5** The insulation must be applied by installers authorized by Demilec (USA) Inc.
- 5.6** Use of the insulation in areas where the probability of termite infestation is "very heavy" must be in accordance with IRC Section R318.4 or 2015 and 2009 IBC Section 2603.8 (2012 IBC Section 2603.9), as applicable.
- 5.7** When use is on buildings of Type I, II, III or IV, the construction must be as described in Tables 4 or 5.
- 5.8** Heatlok® Eco Series at 1-inch thickness (25.4 mm) or greater are Class II vapor retarders as defined in IRC Section R202.
- 5.9** Jobsite certification and labeling of the insulation must comply with 2018 or 2015 IRC Section N1101.10.1 and N1101.10.1.1 (2012 IRC Section N1101.12.1 and N1101.12.1.1 or 2009 IRC Sections N1101.4 and N1101.4.1) and 2018, 2015 and 2012 IECC Sections C303.1.1, C303.1.1.1, R303.1.1 and R303.1.1.1 (2009 IECC Sections 303.1.1 and 303.1.2), as applicable.
- 5.10** The A and B components of the insulation are produced under a quality control program with inspections by ICC-ES.

### 6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with the ICC-ES Acceptance Criteria for Spray-applied Foam Plastic Insulation, (AC377), dated April 2016 (editorially revised April 2018), including reports of tests in accordance with Appendix X of AC377.
- 6.2** Report of air permeance tests in accordance with ASTM E283.
- 6.3** Report of vapor permeance tests in accordance with ASTM E96.
- 6.4** Report of fire tests in accordance with NFPA 285, and related engineering analysis.
- 6.5** Reports of room corner fire tests in accordance with NFPA 286.
- 6.6** Report of potential heat tests in accordance with NFPA 259.

### 7.0 IDENTIFICATION

- 7.1** Containers of Heatlok® Eco Series components are identified with a label bearing the Demilec (USA) Inc., name and address; the product trade name (Heatlok® Eco); the lot number; the flame spread and smoke developed indices; mixing instructions; density; the shelf life and the expiration date; the evaluation report number (ESR-3198).

International Fireproof Technology, Inc. / Paint to Protect Inc., DC 315 coating is labeled with the manufacturer's name and address; the product name; the date of manufacture, the shelf life or expiration date; the manufacturer's instructions for application and evaluation report number ([ESR-3702](#)).

TPR2 Corporation Blazelok™ TBX coating is labeled with the manufacturer's name and address; the product name; the date of manufacture, the shelf life or expiration date; the manufacturer's instructions for application and evaluation report number ([ESR-3997](#)).

Flame Seal Products, Inc., Flame Seal TB coating is labeled with the manufacturer's name and address; the product name; the date of manufacture, the shelf life or expiration date; the manufacturer's instructions for application and evaluation report number ([ESR-4002](#)).

Fire protective coating described in Section 3.6.2 are identified with the manufacturer’s name and address, the product trade name and use instructions.

7.2 The report holder’s contact information is the following:

**DEMILEC (USA) INC.**  
**3315 EAST DIVISION STREET**  
**ARLINGTON, TEXAS 76011**  
**(817) 640-4900**  
[www.demilecusa.com](http://www.demilecusa.com)

**TABLE 1—THERMAL RESISTANCE (R-VALUES)**

HEATLOK <sup>®</sup> ECO SERIES	
1.0	6.5
3.1	21
3.5	23
4.0	27
5.5	37
6.0	40
7.5	50
8.5	56
9.5	63
10.0	66
11.25	75
11.5	76

For **SI**: 1 inch = 25.4 mm; 1°F.ft<sup>2</sup>.h/Btu = 0.176110°K.m<sup>2</sup>.h/W.

<sup>1</sup>R-values are calculated based on tested K-values at 1- and 4-inch thicknesses.

<sup>2</sup>R-values greater than 10 are rounded to the nearest whole number.

**TABLE 2—USE OF INSULATION WITHOUT A PRESCRIPTIVE THERMAL BARRIER<sup>1</sup>**

INSULATION TYPE	Maximum Thickness (in) Wall and Vertical Surfaces	Maximum Thickness (in) Ceiling and Overhead Surfaces	Fire Protective Coating (Applied to all Foam Surfaces) <sup>2</sup>		Test Submitted
			Type and Minimum Thickness	Minimum Application Rate	
Heatlok <sup>®</sup> Eco Series	11 <sup>1</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>4</sub>	Flame Seal TB 24 mils WFT	1.5 gal/100 ft <sup>2</sup>	UL 1715
	5 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	DC315 22 mils WFT	1.4 gal/100 ft <sup>2</sup>	NFPA 286
	5 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	Blazelok TBX 17 mils WFT	1.1 gal/100 ft <sup>2</sup>	NFPA 286

For **SI**: 1 inch = 25.4 mm; 1 gallon = 3.38L; 1 ft<sup>2</sup> = 0.093m<sup>2</sup>

<sup>1</sup>See Section 4.3.2.

<sup>2</sup>See Sections 3.6.1, 3.6.3 and 3.6.4.

**TABLE 3—OPTIONAL USE OF INSULATION WITHOUT A PRESCRIPTIVE IGNITION BARRIER<sup>1</sup>**

INSULATION TYPE	Fire Protective Coating (Applied to all Foam Surfaces) <sup>2</sup>	
	Type and Minimum Thickness	Minimum Application Rate
Heatlok <sup>®</sup> Eco Series	DC 315 4 mils WFT	0.25 gal/100 ft <sup>2</sup>

For **SI**: 1 inch = 25.4 mm.

<sup>1</sup>See Section 4.4.2.

<sup>2</sup>See Sections 3.6.1, 3.6.2 and 3.6.3.

**TABLE 4—USE OF HEATLOK® ECO SERIES IN EXTERIOR WALL CAVITIES**

WALL COMPONENT	MATERIALS
Base wall system— Use either 1, 2 or 3	1 – Concrete wall 2 – Concrete Masonry wall 3 – 1 layer of 5/8-inch-thick Type X gypsum wallboard installed on the interior side of minimum 3 5/8-inch-deep minimum 20-gauge-thick steel studs spaced a maximum of 24 inches on center. Lateral bracing installed minimum every 4 ft. vertically or as required. Wall stud cavities shall be filled at each floor line with minimum 4 lb/ft <sup>3</sup> mineral wool friction fit between steel wall studs.
Perimeter Fire Barrier System	Perimeter fire barrier system complying with Section 715.4 of the 2015 IBC shall be installed, as applicable, to fill the void between the edge of the concrete floor slab and the interior surface of the exterior wall assembly.
Interior Insulation – Use either 1, 2, 3, 4 or 5 or combinations of 3 with 4 or 3 with 5	1 – None 2 – Maximum 4-inch thickness of Heatlok® Eco applied to interior surface of Base Wall System 1 and 2 (See Note 1) 3 – Full wall stud cavity depth or less of Heatlok® Eco applied using exterior gypsum sheathing of Base Wall System 3 as the substrate and covering the width of the cavity and the inside of the steel wall stud framing flange. 4 – Fiberglass batt insulation (faced or unfaced) 5 – Mineral wool insulation (faced or unfaced)
Exterior sheathing	5/8-inch-thick Type X exterior type gypsum sheathing (for Base Wall System 3 above)
Exterior Wall Covering – Use either 1, 2, or 3 (See Note 3)	1 – Any non-combustible exterior wall covering material using any standard installation technique 2 – Any non-combustible exterior wall covering system with a combustible WRB that has successfully been tested in accordance with NFPA 285 3 – Metal Composite Material (MCM) Mitsubishi Plastic Composites America, Inc. Alpolic/fr wall panels (see ICC-ES <a href="#">ESR-2653</a> ) or Alcoa Architectural Products Reynobond FR 6-mm panels (see ICC-ES <a href="#">ESR-3435</a> ) where there is no exterior insulation in the cavity behind the panels
Flashing of window, door and other exterior wall penetrations.	As an option, flash around window, door and other exterior penetrations with limited amounts of maximum 12-inch-wide flashing tape (acrylic, asphalt or butyl-based) or liquid-applied membrane material with or without fiber mesh reinforcement.

Note 1: Fireblocking per Section 718 of the 2015 IBC and thermal barrier material requirements must be met for Base Wall Systems 1 and 2, as required by specific wall construction details when combustible concealed space is created on interior side of exterior wall assembly.

Note 2: Building code section references may change in different editions of the IBC.

Note 3: Exterior wall coverings shall be installed in accordance with manufacturer's installation requirements and must comply with the applicable provisions of IBC Chapter 14 and IRC Chapter 7.

**TABLE 5—USE OF HEATLOK® ECO SERIES ON EXTERIOR WALLS**

WALL COMPONENT	MATERIALS
Base Wall System – Use either 1, 2 or 3	1 – Concrete wall 2 – Concrete Masonry wall 3 – 1 layer of 5/8-inch-thick Type X gypsum wallboard installed on the interior side of minimum 3 5/8-inch-deep minimum 20-gauge-thick steel studs spaced a maximum of 24 inches on center. Lateral bracing installed minimum every 4 ft. vertically or as required. Wall stud cavities shall be filled at each floor line with minimum 4 lbs/ft <sup>3</sup> mineral wool friction fit between steel wall studs.
Perimeter Fire Barrier System	Perimeter fire barrier system complying with Section 715.4 of the 2015 IBC shall be installed, as applicable, to fill the void between the edge of the concrete floor slab and the interior surface of the exterior wall assembly.
Interior Insulation – Use either 1, 2, 3, 4, or 5; or combination of 2 and 4 or combination of 2 and 5.	1 – None 2 – Maximum 4-inch-thickness of Heatlok® Eco applied to interior surface of Base Wall System 1 and 2 (See Note 1) 3 – Full wall stud cavity depth or less of Heatlok® Eco applied using exterior gypsum sheathing of Base Wall System 3 as the substrate and covering the width of the cavity and the inside of the steel wall stud framing flange. 4 – Fiberglass batt insulation (faced or unfaced) 5 – Mineral wool insulation (faced or unfaced)
Exterior sheathing – Use either 1 or 2.	1 – None (for Base Wall Systems 1 or 2 above) 2 – 5/8-inch-thick Type X exterior-type gypsum sheathing (for Base Wall System 3 above)
Exterior Insulation	Maximum 4-inch-thickness of Heatlok® Eco applied to exterior surface of Base Wall Systems 1 or 2 or over exterior sheathing of Base Wall System 3
Exterior Wall Covering – Use either 1, 2, 3, 4, or 5 (See Note 3)	1 – Brick – Standard type brick veneer anchors, installed a maximum 24-inches on center, vertically on each stud with maximum 1-inch air gap between exterior insulation and brick. Brick to be standard nominal 4-inch-thick clay brick installed in a running bond pattern using Type S mortar. 2 – Stucco – Minimum 3/4-inch-thick, exterior cement plaster and lath. A secondary water-resistive barrier can be installed between the exterior insulation and the lath. The secondary water-resistive barrier shall not be full-coverage asphalt or butyl-based self-adhered membranes. 3 – Minimum 2-inch-thick natural stone (granite, limestone, marble, sandstone). Any standard non-open jointed installation technique can be used. 4 – Minimum 1 1/2 inch thick concrete masonry unit (CMU), pre-cast concrete, or artificial cast stone. Any standard non-open jointed installation technique can be used. 5 – Minimum 1 1/4 inch thick Terra Cotta non-open jointed. Any standard non-open jointed installation technique can be used.
Flashing of window, door and other exterior wall penetrations.	As an option, flash around window, door and other exterior penetrations with limited amounts of maximum 12-inch-wide flashing tape (acrylic, asphalt or butyl-based) or liquid-applied membrane material with or without fiber mesh reinforcement.

Note 1: Fireblocking per Section 718 of the 2015 IBC and thermal barrier material requirements must be met for Base Wall Systems 1 and 2, as required by specific wall construction details when combustible concealed space is created on interior side of exterior wall assembly.

Note 2: Building code section references may change in different editions of the IBC.

Note 3: Exterior wall coverings shall be installed in accordance with manufacturer's installation requirements and must comply with the applicable provisions of IBC Chapter 14 and IRC Chapter 7.

## ICC-ES Evaluation Report

## ESR-3198 FBC Supplement

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### REPORT HOLDER:

DEMILEC (USA) INC.

### EVALUATION SUBJECT:

HEATLOK® ECO SERIES SPRAY-APPLIED POLYURETHANE INSULATION

### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Heatlok® Eco Series insulation, recognized in ICC-ES master evaluation report ESR-3198, has also been evaluated for compliance with the codes noted below.

#### Applicable code editions:

- 2017 *Florida Building Code—Building*
- 2017 *Florida Building Code—Residential*

### 2.0 CONCLUSIONS

The Heatlok® Eco Series insulation, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3198, complies with the *Florida Building Code—Building* and *Florida Building Code—Residential*, provided the installation is in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the master report under the following condition:

Installation must meet the requirements of Sections 1403.8 and 2603.8 of the *Florida Building Code—Building* and Sections R318.7 and R318.8 of the *Florida Building Code—Residential*, as applicable.

Use of the Heatlok® Eco Series insulation for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and *Florida Building Code—Residential* has not been evaluated, and is outside the scope of this supplemental report.

For products falling under Florida Rule 9N-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the master report, reissued April 2019.