

# UL Evaluation Report



## UL ER7260-01

Issued: March 31, 2015

Revised: December 10, 2019

Visit UL,LLC's [Product iQ™ database](#) for status of Report.

UL Category Code: ULEX

CSI MasterFormat®

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

**Sub-level 2: 07 20 00 - Thermal Protection**

**Sub-level 3: 07 21 00 - Thermal Insulation**

**Sub-level 4: 07 21 13 - Board Insulation**

**Sub-level 3: 07 22 00 - Roof and Deck Insulation**

**Sub-level 4: 07 22 16 - Roof Board Insulation**

**Sub-level 3: 07 25 00 - Weather Barriers**

**Sub-level 3: 07 27 00 - Air Barriers**

**DIVISION: 31 00 00 - Earthworks**

**Sub-level 3: 31 23 00 - Excavation and Fill**

**Sub-level 4: 31 23 23 - Fill**

**COMPANY:**

**CELLOFOAM NORTH AMERICA INC**

**1917 ROCKDALE INDUSTRIAL BLVD**

**CONYERS, GA 30012 USA**

[www.cellofoam.com](http://www.cellofoam.com)

## 1. SUBJECT:

**CELLOFOAM EPS INSULATION BOARDS**

**CELLOFOAM POLYSHIELD**

**CELLOFOAM FR COMPOSITE**

**CELLOFOAM EPS GEOFOAM BLOCKS**

## 2. SCOPE OF EVALUATION

- 2015, 2012 *International Building Code*® (IBC)
- 2015, 2012 *International Residential Code*® (IRC)
- 2015, 2012 *International Energy Code*® (IECC)
- ICC-ES Acceptance Criteria for Foam Plastic Insulation (AC12), dated June 2012
- ICC-ES Acceptance Criteria for Foam Plastic Sheathing Panels used as Water Resistive Barriers (AC71), dated February 2003 with revisions through November 2013
- ICC-ES Acceptance Criteria for Termite Resistant Foam Plastic (AC239), dated October 2008
- ICC-ES Acceptance Criteria for Rigid Cellular Polystyrene (RCPS) Geofoam used in Interior Floor Applications (AC452), dated February 2018
- ICC-ES Acceptance Criteria for Quality Documentation (AC10), dated June 2014

**The products were evaluated for the following properties, where indicated in [Table 1](#) and elsewhere in this report.**

- Surface Burning Characteristics (ANSI/UL723, ASTM E84)
- Physical Properties (ASTM C578)
- Physical Properties (ASTM E2430)
- Physical Properties (ASTM D6817)
- Roof Deck Construction Material With Resistance to Internal Fire Exposure (ANSI/UL1256)
- Roofing Systems for Exterior Fire Exposure (ANSI/UL790, ASTM E108)
- Tests For Uplift Resistance of Roof Deck Assemblies (ANSI/UL 580)
- For Use Without a Thermal Barrier – Special Approval (NFPA 286)
- Water-resistive Barrier (AC71)
- Air Barrier (ASTM E2178)
- Flammability Testing for Use in Attics and Crawl Spaces (ICC-ES AC12, App. A and B)
- Termite-Resistance, (ICC-ES AC 239)
- For Use on Exterior Commercial Walls (NFPA 285)
- Foam Plastic – Special Approval (ANSI/UL1715)

**Table 1 – Properties Evaluated**

Properties Evaluated	Cellofoam EPS (non-laminated EPS)	Cellofoam PolyShield (Laminated EPS)	Cellofoam FR Composite	Cellofoam Geofoam EPS
Surface Burning Characteristics	X	X	X (Foam Core)	X
Physical Properties (ASTM C578)	X	X	X (Foam Core)	X
Physical Properties (ASTM E2430)	X			
Physical Properties (ASTM D6817)				X
Roofing Systems for Exterior Fire Exposure	X	X	X	
Roof Deck Construction Materials for Interior Fire Exposure	X	X		
Uplift Tests For Roof Covering Systems	X	X		
Flammability Testing for Use in Attics and Crawl Spaces	X	X		
Water-Resistive Barrier		X		
Air Barrier	X	X		
Termite Resistance <sup>1</sup>	X	X (Foam Core)	X (Foam Core)	X
Foam Plastic - Special Approval (UL-1715)				X <sup>2</sup>
For Use Without a Thermal Barrier – Special Approval (NFPA 286)	X <sup>3</sup>	X <sup>3</sup>		X <sup>2</sup>
Exterior Walls (NFPA 285)	X	X		

<sup>1</sup>Products containing the termite resistant additive, Preventol®, are identified as such on the product markings.

<sup>2</sup>Limited to use as lightweight structural fill in floor cavities when covered on all sides by a minimum of 1 inch thick masonry or concrete.

<sup>3</sup>Complies with the acceptance criteria for NFPA 286 as referenced in IBC 803.1.1.1 and IRC 316.6

### 3. REFERENCED DOCUMENTS

- ICC-ES:
  - ICC-ES Acceptance Criteria for Foam Plastic Insulation (AC12), dated June 2012
  - ICC-ES Acceptance Criteria for Quality Documentation (AC10), dated December 2014
  - ICC-ES Acceptance Criteria for Foam Plastic Sheathing Panels used Water- Resistive Barriers (AC71), dated February 2003 with revisions through November 2013
  - ICC-ES Acceptance Criteria for Termite-Resistant Foam Plastics (AC239), dated January 2018
  - ICC-ES Acceptance Criteria for Rigid Cellular Polystyrene (RCPS) Geofoam used in Interior Floor Applications (AC452), dated February 2018
- ANSI/UL:
  - ANSI/UL723 (ASTM E84), Test for Surface Burning Characteristics of Building Materials, Tenth Edition including revisions through December 21, 2017
  - ANSI/UL790 (ASTM E108), Standard Test Methods for Fire Tests of Roof Coverings, Eighth Edition including revisions through October 19, 2018
  - ANSI/UL1256, Standard for Fire Test of Roof Deck Constructions, Fourth Edition including revisions through August 10, 2018
  - ANSI/UL580, Tests For Uplift Resistance of Roof Deck Assemblies Fifth Edition including revisions through March 29, 2019
  - ANSI/UL1715, Fire Test of Interior Finish Material Third Edition including revisions through April 27, 2017
- ASTM:
  - ASTM C578-12b, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation
  - ASTM D6817/D6817M-17, Standard Specification for Rigid Cellular Polystyrene Geofoam
  - ASTM D7180/D7180M-05, Standard Guide for Use of Expanded Polystyrene (EPS) Geofoam in Geotechnical Projects
  - ASTM D7557/D7557-09, Standard Practice for Sampling of Expanded Polystyrene Geofoam Specimens
  - ASTM E2430/E2430M-13, Standard Specification for Expanded Polystyrene (EPS) Thermal Insulation Boards for Use in Exterior Insulation Finish Systems (EIFS)
  - ASTM E2178-13, Standard Test Method for Air Permeance of Building Materials
- NFPA:
  - NFPA 285-12, Standard Fire Test for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Assemblies Containing Combustible Components
  - NFPA 286-15, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth

### 4. USES

#### 4.1 General

The products described in this report are used as nonstructural insulation on the interior or exterior of above grade walls, on the interior or exterior of below grade walls, below concrete slabs, around concrete slab edges, or as roof insulation. Installation shall be in accordance with Section 6 of this report.

Cellofoam EPS and Cellofoam PolyShield may be used on walls in attics and crawl spaces when installation is in accordance with Section 6.4.

The insulation may be used as a vapor retarder when installation is in accordance with Section 6.2.

Cellofoam EPS, Cellofoam PolyShield, and Cellofoam FR Composite may be used in commercial and residential roofing systems classified for use in Class A, B, and C assemblies, when installed in accordance with Section 6.3. Refer to UL Certification Information for File R7260, Roofing Systems ([TGFU](#)) for applicable coverage and details of the roof assembly.

When used on the exterior of above grade walls, where indicated in [Table 1](#), the insulation shall be installed in accordance with Section 6.6.

Cellofoam PolyShield is approved for use on interior walls of residential basements without a prescriptive thermal barrier based on fire testing in accordance with IBC [Section 2603.10](#) and IRC [Section R316.6](#), as described in Section 6.5.

Cellofoam PolyShield may be used as an alternative to the water-resistive barriers specified in the codes when installed in accordance with Section 6.7.

Cellofoam EPS may be used as a component in Exterior Insulation and Finish Systems (EIFS).

#### 4.2 Cellofoam Geofoam EPS Blocks

Cellofoam Geofoam EPS Blocks may be used as lightweight structural fill in floor cavities. Installation shall be in accordance with Section 6.8 of this report.

### 5. PRODUCT DESCRIPTION

#### 5.1 General

The products covered under this report are molded, closed-cell expanded polystyrene having a flame spread index not exceeding 25 and a smoke developed index not exceeding 450 for thicknesses up to 5 inches, when tested in accordance with UL723 (ASTM E84) as required by IBC Section 2603.3 or IRC Section 316.3, as applicable.

Products containing the additive Preventol® and identified as such on the product markings, have been treated for termite resistance in accordance with IBC [Section 2603.9 exception 2](#), or IRC [Section R318.4 exception 2](#), as applicable.

#### 5.2 Cellofoam EPS Insulation Boards

All Cellofoam EPS board cores have been found to comply with ASTM C578. The boards are manufactured at minimum densities of 0.90, 1.15, 1.35, 1.80, 2.40 and 3.00 lbs/ft<sup>3</sup> and have ASTM C578 designations of Type I, Type VIII, Type II, Type IX, XIV, and XV, respectively. See excerpt from ASTM C578, Table 2 below for minimum Thermal Resistance values for each Type:

**Table 2 – Thermal Resistance Values**

ASTM TYPE	DENSITY, minimum, lb/ft <sup>3</sup>	THERMAL RESISTANCE <sup>1</sup> , minimum, ° F-ft <sup>2</sup> -h/Btu
Type I	0.90	3.6
Type VIII	1.15	3.8
Type II	1.35	4.0
Type IX	1.80	4.2
Type XIV	2.40	4.2
Type XV	3.00	4.3

<sup>1</sup>Thermal resistance (R) values are based on tested values at 1 inch thickness and 75°F mean temperature and must be multiplied by the installed thickness for thicknesses greater than 1 inch.

Cellofoam EPS Insulation Boards intended for use in EIFS systems have been found to comply with ASTM C578 and ASTM E2430. The boards are manufactured at a minimum density of 0.90 lbs/ft<sup>3</sup> and have the ASTM C578 designation of Type I.

### 5.3 Cellofoam Poly Shield Insulation Boards

Cellofoam Poly Shield Insulation Boards consist of Cellofoam EPS laminated with a polymeric film facing and a metalized polymeric film facing. The EPS board cores are manufactured at minimum densities of 0.90, 1.15, 1.35, 1.80, 2.40 and 3.00 lbs/ft<sup>3</sup> and have ASTM C578 designations of Type I, Type VIII, Type II, Type IX, Type XIV, and Type XV, respectively. Cellofoam Poly Shield is manufactured in solid boards and fan-fold configurations.

### 5.4 Cellofoam FR Composite Insulation Boards

Cellofoam FR Composite Insulation Boards consist of Cellofoam EPS laminated with a fiberglass mat facing. The boards are used in commercial and residential roofing systems classified for use in Class A, B, and C assemblies. The EPS board cores are manufactured at minimum densities of 0.90, 1.15, 1.35, 1.80, 2.40 and 3.00 lbs/ft<sup>3</sup> and have ASTM C578 designations of Type I, Type VIII, Type II, Type IX, Type XIV, and Type XV, respectively.

### 5.5 Cellofoam Geofoam EPS Blocks

Cellofoam Geofoam Blocks have been found to comply with ASTM D6817. The blocks are manufactured at minimum densities of 0.90, 1.15, 1.35, 1.80, 2.40 and 2.85 lbs/ft<sup>3</sup> and have ASTM D6817 designations of EPS15, EPS19, EPS22, EPS29, EPS 39, and EPS 46, respectively. See excerpt from ASTM D6817, Table 3 below.

**Table 3 – ASTM D6817 Physical Property Requirements for RCPS Geofoam**

ASTM TYPE	DENSITY, minimum, lb/ft <sup>3</sup>	COMPRESSIVE RESISTANCE, minimum, psi at 1 % Strain
Type EPS15	0.90	3.6
Type EPS19	1.15	5.8
Type EPS22	1.35	7.3
Type EPS29	1.80	10.9
Type EPS39	2.40	15.0
Type EPS46	2.85	18.6

## 6. INSTALLATION

### 6.1 General

The products described in this report are installed in accordance with the manufacturer's published installation instructions and this evaluation report. The manufacturer's published installation instructions and this report must be strictly adhered to, and a copy of the instructions shall be available on the jobsite during installation.

These products must be attached to the structure in a manner that will hold the insulation securely in place. The insulation boards must not be used structurally to resist transverse, axial or shear loads.

The interior of the building must be separated from the insulation with a thermal barrier as required by IBC Section 2603.4 or IRC Section 316.4, as applicable, except as described in Sections 6.3, 6.4 and 6.5.

A water-resistive barrier in compliance with IBC [Section 1404.2](#) or IRC [Section R703.2](#) is required and, when applied over wood-based sheathing, must comply with IBC Section 2510.6 or IRC Section R703.6.3.

## 6.2 For Use as Vapor Retarders

The products described in this report may be used as vapor retarders based on perm values described in Table 4, when required in accordance with the applicable sections of the IBC, IRC and IECC. Vapor retarders are classified as follows:

Class I: 0.1 perm or less      Class II: 0.1 <perm ≤ 1.0 perm      Class III: 1.0 <perm ≤ 10 perms

**Table 4 – Water Vapor Permeance of Cellofoam Insulation Boards**

ASTM TYPE	DENSITY, minimum lb/ft <sup>3</sup>	MAXIMUM PERMEANCE <sup>1</sup>
Type I	0.90	5.0
Type VIII	1.15	3.5
Type II	1.35	3.5
Type IX	1.80	2.5
Type XIV	2.40	2.5
Type XV	3.00	2.5

<sup>1</sup>Water vapor permeance values are based on 1 inch thickness when tested in accordance with ASTM C578 and ASTM E96. Actual water vapor permeance values may be calculated based on insulation thickness, by dividing the perm value shown by the installed thickness in inches.

## 6.3 For Use as Roof Insulation

Where indicated in [Table 1](#), these products are used as a roofing insulation as follows:

- As part of a UL Classified Class A, B, or C roof-covering assembly in accordance with UL 790
- As part of a UL Classified Roof Deck Construction in accordance with UL 1256
- As part of a UL Classified Roof Deck Construction for uplift resistance in accordance with UL 580

## 6.4 For Use in Attics and Crawl Spaces

Cellofoam EPS and Cellofoam Poly Shield Insulation Boards may be used on walls of attics and crawl spaces, without the coverings listed in IBC [Section 2603.4.1.6](#) or IRC [Section R316.5.3](#) and IRC [Section R316.5.4](#), as follows:

1. Entry to the attic or crawl space is limited to service of utilities, and no storage is permitted. Utilities include, but are not limited to, mechanical equipment, electrical wiring, fans, plumbing, gas or electric hot water heaters, and gas or electric furnaces.
2. Attic ventilation is provided when required by [Section 1203.2](#) of the IBC or IRC [Section R806](#), as applicable.
3. There are no interconnected crawl space areas
4. Air in the attic or crawl space is not circulated to other parts of the building.
5. Under-floor (crawl space) ventilation is provided when required by IBC [Section 1203.3](#) or IRC [Section R408.1](#), as applicable.
6. Combustion air is provided in accordance with IMC [Section 701](#).

7. Cellofoam Insulation boards are limited to a maximum thickness of 4 inches (102 mm) for Type I; a maximum thickness of 3-¼ inches (82.6 mm) for Type VIII; a maximum thickness of 2-⅔ inches (67.8 mm) for Type II; a maximum thickness of 2 inches (51 mm) for Type IX; a maximum thickness of 1-⅔ inches for Type XIV, or a maximum thickness of 1-¼ for Type XV.

#### **6.5 For Use in Residential Basements:**

Cellofoam EPS may be installed on wall surfaces of residential basements with no thermal or ignition barrier applied to the foam plastics, based on testing in accordance with NFPA 286, and IBC [Section 2603.10](#) or IRC [Section R316.6](#), when all other requirements of the building code for that building are met. Insulation boards are limited to a maximum nominal density of 1 pcf (16 kg/m<sup>3</sup>) and maximum nominal thickness of 4 inches (102 mm); or maximum nominal density of 2 pcf (32 kg/m<sup>3</sup>) and maximum nominal thickness of 2 inches (51 mm); or maximum nominal density of 1.5 pcf (24 kg/m<sup>3</sup>) and maximum nominal thickness of 2-⅔ inches (68 mm); or a maximum nominal density of 1.25 pcf (20 kg/m<sup>3</sup>) and maximum nominal thickness of 3-¼ inches (82 mm); or a maximum nominal density of 2.50 pcf (36 Kg/m<sup>3</sup>) and a maximum nominal thickness of 1-⅔ inches (42 mm); or a maximum nominal density of 3.00 pcf (48 Kg/m<sup>3</sup>) and a maximum nominal thickness of 1-¼ inches (32 mm).

#### **6.6 For Use on the Exterior of Above Grade Walls**

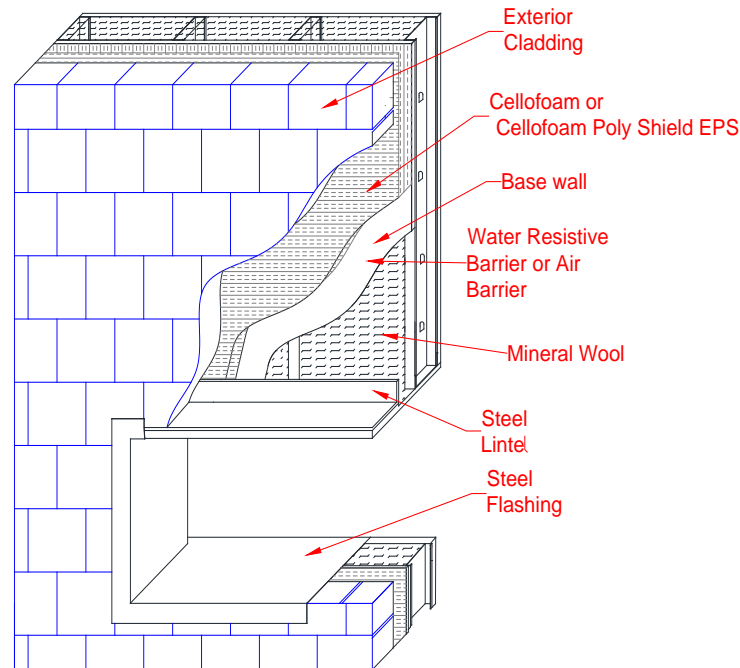
Cellofoam EPS and Cellofoam PolyShield Insulation Boards may be used on the exterior of above grade walls as follows:

- Exterior Walls of One- and Two-Family Dwellings in accordance with the 2015 IRC.
- Exterior walls of one story buildings of Types I, II, III, or IV construction in accordance with IBC Section 2603.4.1.4.
- Exterior walls of Type V construction in accordance with IBC Section 2603.2, Section 2603.3, and Section 2603.4.
- Exterior walls of buildings more than one story of Types I, II, III, or IV construction in accordance with IBC [Section 2603.5](#) when part of an exterior wall system in accordance with NFPA 285. See [Figure 1](#) and [Table 5](#), which outlines the list of allowable wall construction elements. Note that one element from each “Wall Component” must be selected, unless “None” is an available selection.



**Table 5 – NFPA 285 Compliant Assembly Options**

Wall Component	Options
Base Wall Use 1, 2, or 3	<ol style="list-style-type: none"> <li>1) Cast Concrete Walls</li> <li>2) CMU Cast Concrete Walls</li> <li>3) 25 GA (min) 3-5/8" (min) steel studs spaced 24" oc (max)               <ol style="list-style-type: none"> <li>a. Any 5/8" type X gypsum wallboard interior</li> <li>b. Any 1/2" Exterior gypsum sheathing</li> <li>c. Lateral bracing every 4 ft. vertically</li> </ol> </li> </ol>
Fire Stopping at Floor Lines	Any approved 4.0 pcf density mineral fiber based safing insulation in each stud cavity at floor line. Safing thickness must match stud cavity depth. Use mineral fiber insulation manufacturer instructions for installation
Cavity Insulation Use 1, 2, or 3	<ol style="list-style-type: none"> <li>1) None</li> <li>2) Any Class A, B, or C Fiberglass batt insulation (faced or unfaced)</li> <li>3) Any non-combustible insulation</li> </ol>
Exterior Sheathing	1/2" or thicker exterior grade gypsum sheathing
Water Resistive Barrier or Air Barrier over Base Wall Surface Use 1 or 2	<ol style="list-style-type: none"> <li>1) None</li> <li>2) Any of the following applied per individual manufacturer instruction:           <ul style="list-style-type: none"> <li>Tremco EXOAir 230</li> <li>BASF Enershield HP</li> <li>BASF Enershield I</li> <li>Grace Perm-A-Barrier VPS</li> <li>DuPont Fluid Applied WB</li> <li>DuPont Tyvek Commercialwrap (1 or 2 layers)</li> <li>CCW Barritech NP</li> <li>CCW Barritech VP</li> </ul> </li> </ol>
Cellofoam EPS Exterior Insulation Use 1, 2, 3, 4, 5, 6, or 7	<ol style="list-style-type: none"> <li>1) None</li> <li>2) ASTM C578, Type I, 10-3/4 in. maximum thickness</li> <li>3) ASTM C578, Type VIII, 8-1/4 in. maximum thickness</li> <li>4) ASTM C578, Type II, 7 in. maximum thickness</li> <li>5) ASTM C578, Type IX, 5-1/4 in. maximum thickness</li> <li>6) ASTM C578, Type XIV, 4 in. maximum thickness</li> <li>7) ASTM C578, Type XV, 3-1/4 in. maximum thickness</li> </ol>
WRB Over Exterior Insulation	None
Exterior Cladding Use either 1, 2, 3, 4, 5, 6, 7, or 8	<ol style="list-style-type: none"> <li>1) Brick – nominal 4" clay brick or veneer with maximum 2" air gap cavity behind the cladding. Brick with ties / anchors spaced 24" oc (max)</li> <li>2) Concrete – minimum 2" thick with a maximum 2" air gap cavity behind the cladding</li> <li>3) Concrete Masonry Units – minimum 4" thick with maximum 2" air gap cavity behind the cladding</li> <li>4) Limestone – minimum 2" thick with non-open joints installation technique such as shiplap</li> <li>5) Natural Stone Veneer – minimum 2" thick with non-open joints installation technique such as shiplap</li> <li>6) Precast Artificial Stone – minimum 1-1/2" thick complying with ICC-ES AC51 with non-open joint installation technique</li> <li>7) Terra Cotta Cladding – minimum 1-1/4" thick (solid) with non-open joint installation technique such as shiplap</li> <li>8) Stucco – minimum 3/4" thick exterior cement plaster and lath</li> </ol>
Window Header	Flashing composed of 25 GA (min) sheet metal (steel) with 1" thick, 4 pcf mineral wool over the interior of the sheet metal



**Figure 1 – NFPA 285 Commercial Wall Assembly**

### **6.7 Cellofoam PolyShield Used as a Water-Resistive Barrier**

Cellofoam PolyShield combined with Cellofoam PermaSeal Tape may be used as an alternative to the water resistant barrier required by IBC [Section 1404.2](#) and IRC [Section R703.2](#) when installed with this Section.

The Cellofoam PolyShield boards must be installed directly to framing spaced a maximum of 24 inches on center, except where further limited by the requirements for a wall covering. When the Cellofoam PolyShield boards with square or tongue-and-groove joints along the long edge are installed vertically, the joints must occur over framing. The Cellofoam PolyShield with tongue-and-groove joints on the long edges when oriented horizontally must be installed with the tongue edges facing upward.

Fasteners (corrosion-resistant) used to attach the boards to framing must be either 6d ring shank nails with a <sup>15</sup>/<sub>16</sub>-inch-diameter plastic washer, or equivalent, spaced at 12 inches OC or No. 16 gage staples having a 1 inch wide crown spaced at 6 inches OC. Joints between boards, corners created with the board and fastener locations must be taped with Cellofoam PermaSeal Tape centered over the joint, corner and fastener. A minimum 0.019 inch corrosion-resistance weep screed with a vertical attachment flange measuring a minimum of 3-½ inches must be provided at the bottom of the wall. The installation of the weep screed must be in accordance with IBC [Section 2512.1.1](#) or IRC [Section R703.6.2.1](#) as applicable.

Flashing of flanged window penetrations must be installed in accordance with IBC [Section 1405.4](#). The flashing tape must completely cover the framing sill and extend a minimum of 8 inches up the sides of the opening and 6 inches onto the face of the Cellofoam PolyShield at the front of the window opening.

Flashing of small penetrations (e.g. pipes) must be with a silicone sealant complying with ASTM C920. Flashing of other penetrating items must be in accordance with the wall covering manufacture's published installation instructions.

## **6.8 Cellofoam Geofoam EPS Blocks**

Cellofoam Geofoam EPS Blocks are placed loosely on a level surface or existing structural slab. The blocks may be installed in a single layer or in multiple layers.

Structural loads on the Cellofoam Geofoam EPS Blocks shall not exceed the compressive resistance at 1% strain in accordance with ASTM D6817. Additional design considerations are included in ASTM D7180 Standard Guide for Use of Expanded Polystyrene (EPS) Geofoam and ASTM D7557 Standard Practice for Sampling of Expanded Polystyrene Geofoam Specimens.

When Cellofoam Geofoam EPS Blocks are less than 4 inches in thickness, the interior of the building must be separated from the geofoam blocks with a thermal barrier as required by IBC [Section 2603.4](#) or IRC [Section R316.4](#), as applicable.

When Cellofoam Geofoam EPS blocks used in interior applications are greater than 4 inches in thickness, a minimum 1 inch concrete or masonry material must cover the geofoam blocks on all faces.

## **7. CONDITIONS OF USE**

### **7.1 General**

The products described in this report comply with, or are suitable alternatives to what is specified in the codes listed in Section 2 of this report, subject to the following conditions: the products must be produced, identified, and installed in accordance with the manufacturer's published installation instructions. If there is a conflict between this report and the manufacturer's instructions, this report governs.

In areas where the probability of termite infestation is defined as "very heavy", the products described in this report that have not been treated for termite resistance, as described in 5.1 must be installed in accordance with IBC [Section 2603.9](#) or IRC [Section R318.4](#), as applicable.

The products described in this report must be separated from the building interior with a thermal barrier, such as ½ in. gypsum board, as required by IBC [Section 2603.4](#) or IRC [Section 316.4](#), as applicable. Exceptions are noted in Sections 6.4 and 6.5.

## 7.2 Cellofoam Insulation Products

For a listing of applicable UL Certifications for Cellofoam Insulation Boards, see the [Product iQ™ database](#) for the following categories:

- See Product iQ™ database for Foamed Plastic, UL Classified for Surface Burning Characteristics in accordance with ANSI/UL723 ([BRYX](#)).
- See Product iQ™ database for Polystyrene Thermal Insulation, Rigid Cellular, UL Classified in accordance with ASTM C578 ([QORW](#)).
- See Product iQ™ database for Polystyrene Thermal Insulation, Rigid Cellular, UL Classified in accordance with ANSI/UL263 ([CCVW](#)).
- See Product iQ™ database for Class A, B, or C roof-covering assemblies UL Classified in accordance with ANSI/UL 790 ([TGFU](#)).
- See Product iQ™ database for Foamed Plastic, UL Classified for Interior Building Construction in accordance with UL 1715 ([OERU](#)).
- See Product iQ™ database for Roof Deck Constructions for assemblies UL Classified in accordance with UL 1256 and UL 580 ([TJBX](#)).
- See Product iQ™ database for Exterior Wall System Components UL Classified in accordance with ANSI/NFPA 285 (FWFO): [EWS0039](#)

## 7.3 Cellofoam Geofoam EPS Blocks

Cellofoam Geofoam EPS Blocks less than 4 inches in thickness must be separated from the building interior with a thermal barrier such as ½-inch thick gypsum board, as required by IBC [Section 2603.4](#) or IRC [Section 316.4](#), as applicable. Cellofoam Geofoam EPS Blocks greater than 4 inches in thickness must be separated from the building interior with a minimum 1 inch thick concrete or masonry on all faces as required by IBC [Section 2603.4.1.1](#).

Design loads to be resisted by the Cellofoam Geofoam EPS Blocks must be determined in accordance with the IBC or IRC, as applicable, and must not exceed the allowable loads noted in this report.

All construction documents specifying the Cellofoam Geofoam EPS Blocks must comply with the design limitations of this report. Design calculations and details for the specific applications must be furnished to the code official to verify compliance with this report and applicable codes. The documents must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

For a listing of applicable UL Certifications for Cellofoam Geofoam EPS Blocks, see the [Product iQ™ database](#) for the following categories:

- See Product iQ™ database for Foamed Plastic, UL Classified for Surface Burning Characteristics in accordance with UL723 ([BRYX](#)).
- See Product iQ™ database for Polystyrene Thermal Insulation, Rigid Cellular, UL Classified in accordance with ASTM C578 ([QORW](#)).
- See Product iQ™ database for Foamed Plastic, UL Classified for Interior Building Construction in accordance with ASTM D6817 ([OERU](#)).

## 7.4 Manufacturing Locations:

The products are manufactured at the following locations described in Table 6 under the UL LLC Listing or Classification and Follow-Up Service Program, which includes audits in accordance with ICC-ES Acceptance Criteria for Quality Documentation, AC 10.

**Table 6 – Cellofoam Manufacturing Locations**

LOCATION	PLANT ID NO.
1917 Rockdale Industrial Blvd. Conyers, GA 30012	014X
11237 Astronaut Blvd. Orlando, FL 32837	013X
150 Crossroads Drive Whiteland, IN 46184	011X
1330 West Redwood Ave. Sallisaw, OK 74955	012X
326 McGhee Road Winchester, VA 22603	U-14
1090 Airport Pky Gainesville, GA 30503	015X

## 8. SUPPORTING EVIDENCE

### 8.1 Cellofoam Insulation Products

- 8.1.1 Data in accordance with ICC-ES Acceptance Criteria for Foam Plastic Insulation (AC12), dated June 2012.
- 8.1.2 Data in accordance with ICC-ES Acceptance Criteria for Termite Resistant Foam Plastics (AC239), dated October 2008.
- 8.1.3 UL Classification reports in accordance with UL 723, ANSI/UL 263, ASTM C578, UL 790, UL 1256, UL 580, and NFPA 285. See UL Product Certification Categories (BRYX), (CCVW), (QORW), (TGFU), (TJBX), and (FWFO).  
  
See links to UL [Product iQ™ database](#) in Section 7.2.
- 8.1.4 Reports and analysis of wall fire tests in accordance with NFPA 285.
- 8.1.5 Documentation of quality system elements described in AC10, dated December 2014.
- 8.1.6 Data in accordance with ICC-ES Acceptance Criteria for Foam Plastic Sheathing Panels used as Water Resistive Barriers (AC71), dated February 2003 with revisions through November 2013.
- 8.1.7 Data in accordance with ASTM E2178 Standard Test Method for Air Permeance of Building Materials.
- 8.1.8 Reports of room corner fire tests in accordance with NFPA 286 and AC12 Appendix A and B

## 8.2 Cellofoam Geofoam Blocks

**8.2.1** UL Classification reports in accordance with ANSI/UL 723, ASTM D6817, and UL 1715. See UL Product Certification Categories BRYX, QORW, and OERU, respectively.

See links to UL [Product iQ™ database](#) for BRYX, QORW, and OERU in section 7.3.

**8.2.2** Data in accordance with ICC-ES Acceptance Criteria for Termite Resistant Foam Plastics (AC239), dated October 2008.

**8.2.3** Documentation of quality system elements described in AC10, dated January 2018.

## 9. IDENTIFICATION

The products described in this evaluation report are identified by a marking bearing the report holder's name (Cellofoam North America Inc.), the plant identification, the product name, the ASTM type designation, the UL Certification Mark, and the evaluation report number UL ER7260-01. The validity of the evaluation report is contingent upon this identification appearing on the product or UL Classification Mark certificate.

## 10. USE OF UL EVALUATION REPORT

**10.1** The approval of building products, materials or systems is under the responsibility of the applicable authorities having jurisdiction.

**10.2** UL Evaluation Reports shall not be used in any manner that implies an endorsement of the product, material or system by UL.

**10.3** The status of this report, as well as a complete directory of UL Evaluation Reports may be found at UL.com via the [Product iQ™ database](#).

© 2019 UL LLC

*This UL Evaluation Report is not an endorsement or recommendation for use of the subject and/or product described herein. This report is not the UL Listing or UL Classification Report that covers the subject product. The subject product's UL Listing or UL Classification is covered under a separate UL Report. UL disclaims all representations and warranties whether express or implied, with respect to this report and the subject or product described herein. Contents of this report may be based on data that has been generated by laboratories other than UL that are accredited as complying with ISO/IEC Standard 17025 by the International Accreditation Service (IAS) or by any other accreditation body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA). The scope of the laboratory's accreditation shall include the specific type of testing covered in the test report. As the accuracy of any non-UL data is the responsibility of the accredited laboratory, UL does not accept responsibility for the accuracy of this data.*

