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ACCUFOAM CC-HFO SPRAY FOAM INSULATION

CSI Section:

07 21 00 Thermal Insulation

1.0 RECOGNITION

Accufoam CC-HFO spray foam insulation has been evaluated for use as spray foam insulation complying with IBC Section 2603, IRC Section R316, IECC Sections C303, C402, R303 and R402. The surface burning, physical properties, uses in Types I through V construction, and thermal resistance of Accufoam CC-HFO spray foam insulation was evaluated to comply to the intent of the following codes and regulations:

- 2024, 2021, 2018, and 2015 International Building Code® (IBC)
- 2024, 2021, 2018, and 2015 International Residential Code® (IRC)
- 2024, 2021, 2018, and 2015 International Energy Conservation Code® (IECC)

2.0 LIMITATIONS

Use of Accufoam CC-HFO spray foam insulation recognized in this report is subject to the following limitations:

2.1 The insulation shall be installed in accordance with the manufacturer’s published installation instructions. The insulation shall also be installed in accordance with this evaluation report and the applicable code, and if there are any conflicts between the manufacturer’s published installation instructions and this report, the more restrictive governs.

2.2 Except as indicated in Section 3.3.3 of this report or by the applicable code, the insulations shall be separated from the interior of the building by a code approved thermal barrier.

2.3 During installation, the insulation and the surfaces to which it is applied shall be protected from exposure to weather.

2.4 The contractors that will be installing the insulation shall be approved by Creative Polymer Solutions, LLC or by the Spray Polyurethane Foam Alliance.

2.5 Use of the insulation in areas of “very heavy” termite infestation shall be in accordance with the IBC Section

2603.8 or 2024 IRC Section 305.4 or 2021, 2018, or 2015 IRC Section 318.4, as applicable.

2.6 Labeling and jobsite certification of the insulation and coatings shall comply with IBC Section 2603.2, IRC N1101.10 and N1101.10.1.1, and IECC Sections C303.1.1 and C303.1.2, as applicable.

2.7 Foam plastic used in plenums as interior finish or interior trim shall comply with Section 2603.7 of the IBC.

2.8 The insulations are produced in Birmingham, Alabama under a quality control program.

3.0 PRODUCT USE

3.1 General: When installed in accordance with Section 3.3 of this report, Accufoam CC-HFO spray foam insulation can be used in wall cavities, floor assemblies or ceiling assemblies, and in attic and crawl spaces as nonstructural thermal insulation material. The spray-applied foam plastic insulation is used in Type V-B construction under the IBC and in dwellings under the IRC.

Accufoam CC-HFO spray foam insulation may be used in Construction Types I, II, III, or IV when installed in accordance with Section 3.4 of this report.

3.2 Design: Accufoam CC-HFO spray foam insulation shall comply with requirements in IECC Sections C402 and R402.

3.2.1 Thermal Resistance (R-Values): Accufoam CC-HFO spray foam insulation has a thermal resistance (R-Value) at a mean temperature of 75°F (24°C) as shown in Table 1 of this report.

Thickness (inch)	Accufoam CC-HFO R-Value (°F·ft²·h/Btu)
1	7.5
2	14
2.5	17
3	21
3.5	24
4	27
5	34
6	41
7	48
7.25	49
8	54
9	61
10	68
11	75
12	81

For SI: 1 inch = 25.4 mm, 1°F·ft²·h/Btu = 0.176 110 K·m²/W.

¹ R-Values are calculated based on tested K values at 1-inch and 3.5-inch thicknesses.

² R-Values greater than 10 are rounded to the nearest whole number.

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 Section 104.2.3 of the 2024 IBC and Section 104.11 of previous editions. This document shall only be reproduced in its entirety.





3.2.2 Surface Burning Characteristics: At a maximum thickness of 3¹/₂ inches (89 mm) and a nominal density of 2.1 pcf (16 kg/m³), the Accufoam CC-HFO Spray Foam Insulation 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. Greater thicknesses, depending on end use, are recognized when installed in accordance with this report.

3.2.3 Water Vapor Transmission: When tested to the requirements of ASTM E96, desiccant method (Procedure A), Accufoam CC-HFO has a permeance of less than 1.0 perm (57.4 x 10⁹ g/Pa·s·m) at a minimum thickness of 1.4 inches (35.6 mm) and qualifies as a Class II vapor retarder in accordance with IBC Section 202 and IRC Section R202.

3.3 Installation:

3.3.1 Installation General: The manufacturer's published installation instructions for Accufoam CC-HFO spray foam insulation and this report shall be available and strictly adhered to at all times on the jobsite during installation.

The spray foam insulation shall be spray-applied on the jobsite using a volumetric positive displacement pump in accordance with the manufacturer's published installation instructions. Accufoam CC-HFO shall be sprayed in multiple passes having a maximum thickness of 3.5 inches (89 mm) per pass, at the required conditions between passes, up to the maximum insulation thickness specified in this report.

The maximum in-service temperature for all areas shall not exceed 180°F (82°C). The spray-applied foam plastic insulation shall not be used in electrical outlets or junction boxes or in continuous contact with rain or water. The spray-applied foam plastic insulations shall be sprayed onto a substrate that is protected and clean from any debris or weather-related conditions during application.

After the application of the spray foam, a minimum of a 1-hour ventilation period at 10 air changes per hour is required before re-entry of the space for unprotected workers. An additional 1-hour ventilation period is required for re-occupancy by the general population.

3.3.2 Thermal Barrier

3.3.2.1 Installation with a Prescriptive Thermal Barrier: Accufoam CC-HFO spray foam insulation shall be separated from the interior by an approved thermal barrier of minimum ½-inch-thick (12.7 mm) gypsum wallboard or an equivalent thermal barrier. The barrier shall comply with and be installed in accordance with IBC Section 2603.4 or IRC Section R316.4, as applicable.

3.3.2.2 Alternative Thermal Barrier Assemblies: Accufoam CC-HFO spray-applied polyurethane foam plastic insulation may be installed without a prescriptive thermal

barrier as defined in Section 3.3.2.1 of this report when installed with a fire-protective coating as described in Table 2 of this report based on testing in accordance with NFPA 286.

3.3.3 Installation for Attics and Crawl Spaces: When used in an attic or crawl space where entry is made only for service of utilities, Accufoam CC-HFO spray foam insulation shall be installed in accordance with this section. The insulation shall be separated from the interior of the building by an approved thermal barrier as described in Section 3.3.2 of this report, as applicable.

3.3.4 Installation with a Prescriptive Ignition Barrier: Where entry is made only for the service of utilities, Accufoam CC-HFO spray foam insulation may be installed within attics or crawl spaces with an ignition barrier in accordance with IBC Section 2603.4.1.6, or IRC Sections R316.5.3 and R316.5.4, as applicable. The ignition barrier shall be installed in a manner such that the foam plastic insulation is not exposed and is consistent with the requirements of the type of construction required by the applicable code.

3.3.4.1 Installation in Attics and Crawl Spaces without an Ignition Barrier: Accufoam CC-HFO spray-applied polyurethane foam plastic insulation may be installed in attics and crawl spaces without a prescriptive ignition barrier or fire-protective coating provided:

- a. Entry is only to service utilities in the attic or crawl space and no storage is permitted.
- b. Attic or crawl space areas cannot be interconnected.
- c. Air from the attic or crawl space cannot be circulated to other parts of the building.
- d. Attic ventilation is provided as required by 2024, 2021, and 2018 IBC Section 1202.2, and 2015 IBC Section 1203.2 or IRC Section R806 except where air-impermeable insulation is permitted in unvented attics and shall comply with the following code sections as applicable:

For Unvented Attics:

- 2024, 2021, and 2018 IBC Section 1202.3
- 2015 IBC Section 1203.3
- IRC Section R806.5

Unvented crawl spaces shall meet the requirements of Section 3.3.5 of this report.

Ventilated crawl spaces shall be provided with ventilation as required by the following code sections as applicable:

- 2024, 2021 and 2018 IBC Section 1202.4
- 2015 IBC Section 1203.4
- IRC Section R408.1

- e. Accufoam CC-HFO spray-applied polyurethane foam plastic insulation may be applied at a nominal density of 2.2 pcf to the underside of roof sheathing or roof



rafters and vertical surfaces of attics and in crawl spaces without a prescriptive ignition barrier or fire-protective coating. When applied to the underside of the top of the space, the thickness of the Accufoam CC-HFO spray-applied polyurethane foam plastic insulation shall not exceed 10 inches (254 mm), and when applied to vertical surfaces or floor, the maximum thickness shall not exceed 8 inches (203 mm).

- f. In accordance with IMC (International Mechanical Code®) Section 701, combustion air is provided.

3.3.5 Unvented Attics: Accufoam CC-HFO spray foam insulation may be installed in unvented attic assemblies and unvented enclosed rafter assemblies in accordance with Section 1202.3 of the 2024, 2021 or 2018 IBC, Section 1203.3 of the 2015 IBC, or Section R806.5 of the IRC, as applicable.

3.4 Use in Exterior Walls of Types I, II, III, and IV Construction (IBC)

3.4.1 General: When Accufoam CC-HFO spray foam plastic insulation is used in exterior walls of Types I, II, III, or IV construction of any height, the insulation shall comply with IBC Section 2603.5 and Section 3.4. Walls required to be fire-resistance-rated construction are beyond the scope of this report and shall comply with IBC Section 2603.5.1.

3.4.2 Complying Exterior Wall Assemblies: Wall assemblies that comply with Section 2603.5 of the IBC and this report that may be used in exterior walls of buildings of Type I, II, III, or IV construction of any height are described in Tables 3 and 4.

4.0 PRODUCT DESCRIPTION

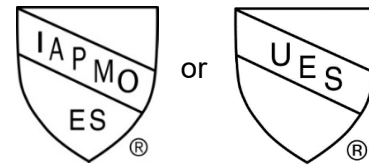
Accufoam CC-HFO spray foam insulation is a spray-applied, polyurethane closed cell foam plastic and complies as a medium-density insulation in accordance with Section 3.1.1 and Table 1 of AC377. The insulation is a two-component spray foam plastic with a nominal in-place density of 2.1 pcf (67 kg/m³).

The spray-applied insulation is mixed in the field by combining a polymeric isocyanate (A component) and a resin blend (B component). The liquid components shall be stored in 55-gallon (208 L) drums at temperatures between 60°F and 90°F (16°C and 32°C). When Component A and Component B are stored in factory-sealed containers at the recommended temperatures, the maximum shelf life is six months.

5.0 IDENTIFICATION

Accufoam CC-HFO spray foam insulation's containers are identified by the manufacturer's name (Creative Polymer Solutions, LLC) address and telephone number, product name, use instructions, density, flame-spread and smoke-development indices, date of manufacture, and evaluation report number (ER-833).

The identification may also include either of the IAPMO Uniform Evaluation Service Marks of Conformity as shown below:



IAPMO UES ER-833

6.0 SUBSTANTIATING DATA

6.1 Manufacturer's descriptive literature and installation instructions.

6.2 Data in accordance with the Acceptance Criteria for Spray-applied Foam Plastic Insulation, ICC-ES AC377, dated June 2023.

6.3 Data in accordance with 2019 ICC 1100 Standard for Spray-applied Polyurethane Foam Plastic Insulation.

6.4 Report of Flammability Testing in accordance with NFPA 286.

6.5 Reports of fire propagation characteristics in accordance with NFPA 285.

6.6 Third party engineering analysis for extension of NFPA 285 results.

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

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Accufoam CC-HFO spray foam insulations to assess its conformance to the codes shown in Section 1.0 of this report and documents the product's certification. Products are manufactured at the location noted in Section 2.8 of this report under a quality control program with periodic inspections 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



**TABLE 2
ALTERNATIVE THERMAL BARRIER ASSEMBLIES^{1,5}**

FIRE-PROTECTIVE COATING/COVERING			MAXIMUM SPF THICKNESS (inch)	
TYPE	MINIMUM THICKNESS (mils)	THEORETICAL APPLICATION RATE	WALLS AND VERTICAL SURFACES	CEILING AND OVERHEAD SURFACES
60-60A ²	14 WFT (9 DFT)	0.87 gal/100 ft ²	7.5	9.5
DC315 ³	14 WFT (9 DFT)	0.87 gal/100 ft ²	7.5	9.5
Plus ThB ⁴	14 WFT (9 DFT)	0.87 gal/100 ft ²	7.5	9.5

For SI: 1 inch = 25.4 mm, 1 mil = 0.0254 mm, 1 gal = 3.79 L

¹ Fire-protective coatings and coverings shall be applied over all exposed SPF surfaces in accordance with the coating/covering manufacturer’s instructions and this report.

² Flame Control Coatings, recognized in IAPMO UES ER-596.

³ International Fireproof Technology Inc., recognized in IAPMO UES ER-499.

⁴ No-Burn, Inc., recognized in IAPMO UES ER-305.

⁵ Assemblies were tested to NFPA 286 and comply with the requirements in IBC Section 2603.9.

**TABLE 3 – NFPA 285 COMPLYING EXTERIOR WALL ASSEMBLIES
ACCUFOAM CC-HFO APPLIED IN WALL STUD CAVITY**

Wall Component	Material Description
Interior Sheathing	One layer of minimum 5/8-inch Type X gypsum wallboard
Base Wall (BWS) Use Item 1 or 2	<ol style="list-style-type: none"> Nominal 2x4 inch or larger Fire-retardant Treated (FRT) wood studs spaced a maximum of 24 inches OC. Openings shall be framed with the same FRT wood studs. Steel Stud Wall - 1 layer of 5/8-inch minimum Type X gypsum wallboard installed on the interior side of minimum 3 3/8-inch deep minimum No. 20 gauge steel studs spaced a maximum of 24 inches on center. Openings shall be framed with minimum 20-gauge steel C-channels matching the depth of the studs.
Fire-Stopping in Stud Cavity at Floor Lines Use Item 1 for Base Wall Item 1 or Use Item 2 for Base Wall Item 2	<ol style="list-style-type: none"> One layer of nominal 2x FRT lumber – minimum 1 1/2 inches thick total. 4-inch 4 pcf mineral wool (friction fit or installed with Z-Clips)
Cavity Insulation Use Item 1 or 2	Accufoam CC-HFO up to a thickness of 3 1/2 inches thick within approved stud cavity.
Exterior Sheathing Use items 1, 2, or 3	<ol style="list-style-type: none"> Minimum 5/8-inch-thick Type X exterior Gypsum Sheathing. One layer of 5/8-inch Type X glass mat gypsum wallboard. One layer of 5/8-inch Type C gypsum wallboard.
Exterior Insulation	Any approved exterior insulation with NFPA 285 testing or approvals with appropriate wall coverings and water-resistive barriers (WRB).
Exterior Wall Covering Use either 1,2, or 3	<ol style="list-style-type: none"> Any noncombustible exterior wall covering material using any standard installation technique. Any noncombustible exterior wall covering system with a combustible WRB for use as a component of an assembly that has successfully passed an NFPA 285 test or allowed by code. Any combustible exterior wall covering system that has successfully passed an NFPA 285 test.
Window Detail	Window detail shall follow the approvals for any of the exterior wall components, such as exterior insulation, WRB, and exterior wall coverings. The tested or approved system shall have information on window perimeter flashing.

For SI: 1 inch = 25.4 mm



TABLE 4
NFPA 285 COMPLYING EXTERIOR WALL ASSEMBLIES WITH ACCUFOAM CC- HFO IN WALL CAVITY AND ON EXTERIOR SIDE OF WALL ASSEMBLY

Wall Component	Materials
Interior Sheathing	One layer of minimum 5/8-inch Type X gypsum wallboard.
Base Wall System (BWS)- Use either 1, 2, 3, or 4	<ol style="list-style-type: none"> 1. Cast Concrete Wall. 2. Concrete Masonry Unit Wall. 3. Nominal 2x4 inch or larger Fire-retardant Treated (FRT) wood studs spaced a maximum of 24 inches OC. Openings shall be framed with the same FRT wood studs. 4. Minimum 3 1/2-inch deep, minimum No. 20-gauge equivalent thick steel studs spaced a maximum of 24 inches on center. Openings shall be framed with minimum No. 20-gauge steel C-channels matching the depth of the studs.
Floor Line Fire-Stopping Use Item 1 for Base Wall Item 3 or Item 2 for Base Wall Item 4 ¹	<ol style="list-style-type: none"> 1. One layer of nominal 2x FRT lumber – minimum 1 1/2 inches thick. 2. Minimum 4-inch-thick 4 pcf mineral fiber (wool) safing insulation (friction fit or installed with Z-clips).
Cavity Insulation – Use any Item 1-5	<ol style="list-style-type: none"> 1. None 2. Any noncombustible insulation per ASTM E136. 3. Maximum 3 1/2-inch thickness of Accufoam CC-HFO within any approved stud cavity. 4. Fiberglass batt insulation (faced or unfaced). 5. Mineral fiber insulation (faced or unfaced).
Exterior Sheathing Use Item 1, 2, or 3	<ol style="list-style-type: none"> 1. One layer of 5/8-inch-thick Type X exterior type gypsum sheathing. 2. One layer of 1/2-inch glass mat exterior gypsum wallboard. 3. One layer of 5/8-inch Type X Gypsum Wallboard.
Exterior Insulation Use Item 1 or Item 2 based on Exterior Cladding	<ol style="list-style-type: none"> 1. Maximum 3 1/2 inches thickness of Accufoam CC-HFO. 2. Maximum 3 3/4-inch-thick Accufoam CC-HFO coated with No Burn Plus ThB (20 mils WFT)³
Exterior Cladding Use either item 1-22 depending on exterior insulation used. Use Exterior Cladding Items 1-6 if Exterior Insulation Item 1 is used. (Air gap shall not exceed 2.67 inches between cladding and insulation.) Use Exterior Cladding Items 7-22 if Exterior Insulation Item 2 is used. (Air gap shall not exceed 2.67 inches between cladding and insulation.)	<ol style="list-style-type: none"> 1. Brick – Nominal 4-inch clay brick. Standard brick ties/anchors installed 24 inches o.c. (max) vertically on each stud. 2. Concrete – minimum 2-inch thick – open or non-open joint. 3. CMU-minimum 2-inch-thick – open or non-open joint. 4. Stone Veneer – minimum 2 inch thick – open or non-open joint. 5. Terracotta Cladding – minimum 1 1/4 inches thick (solid) using any standard open or non-open joint installation technique such as shiplap. 6. Stucco – 7/8-inch minimum exterior cement plaster and lath – open or non-open joint 7. Brick – Nominal 2-inch clay brick. Standard brick ties/anchors installed 24 inches o.c. (max) vertically on each stud. 8. Concrete – minimum 1-inch thick – open or non-open joint. 9. CMU-minimum 1-inch-thick – open or non-open joint. 10. Stone Veneer – minimum 1-inch thick – open or non-open joint. 11. Terracotta Cladding – minimum 1 1/4 inches thick (solid or hollow) using any standard open or non-open joint installation technique such as shiplap. 12. Stucco – 7/8-inch minimum exterior cement plaster and lath – open or non-open joint. 13. Aluminum cladding – 0.08-inch minimum thickness – open or non-open joint. 14. Steel cladding – 0.0149-inch minimum thickness – open or non-open joint. 15. Copper cladding – 0.0216-inch minimum thickness – open or non-open joint. 16. Zinc cladding – 0.104-inch minimum thickness – open or non-open joint. 17. Terreal Zephir Evolution Rainscreen System (or similar terracotta), minimum 9/16-inch thick – open or non-open joint. 18. 1/4-inch minimum fiber cement cladding – open or non-open joint. 19. SwissPearl Carat Panels – 0.315-inch minimum thickness – open or non-open joint. 20. One-coat Stucco – 3/8-inch minimum exterior cement plaster and lath- open or non-open joint. 21. Thin brick adhered (with noncombustible mortar) to stucco base 3/4-inch minimum – open or non-open joint. 22. FunderMax M.Look Panels – 1/4-inch thick (min) – open or non-open joint.
Opening Detail	The window header, jambs sill, and other openings are completely covered from interior gypsum wallboard to exterior cladding with minimum 20-gauge aluminum flashing.

For SI: 1 inch = 25.4 mm; 1lb/ft³=16 kg/m³

¹ Fireblocking per Section 718 of the IBC and thermal barrier material requirements shall be met for BWS 1 and 2, as required by specific wall construction details when combustible concealed space is created on the exterior side of the exterior wall assembly.

² Combustible exterior wall coverings shall be installed in accordance with the manufacturer's installation requirements.

³ Documentation shall be provided to the building official to show the weathering performance of the coating.



ENERGY STAR – SEAL AND INSULATE SUPPLEMENT

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ACCUFOAM CC-HFO SPRAY FOAM INSULATION

CSI Section:
07 21 00 Thermal Insulation

1.0 PURPOSE

Accufoam CC-HFO Spray Foam Insulation has been certified for use as thermal *insulation* under the Seal and Insulate with ENERGY STAR® Program. The *insulation* has been evaluated for thermal resistance, surface burning characteristics (flame spread, and smoke-development), and complies with the following codes and regulations:

- EPA Definitions and Testing Requirements for Residential Insulation Version 1.0
- 2024 and 2021 International Building Code® (IBC)
- 2024 and 2021 International Residential Code® (IRC)
- 2024 and 2021 International Energy Conservation Code® (IECC)

2.0 DEFINITIONS

2.1 General Definitions

Insulation: Any material mainly used to slow down heat flow. It may be mineral or organic, fibrous, cellular, or reflective (aluminum foil). It may be in rigid, semi-rigid, flexible, or loose-fill form.

Residential Buildings: Single family homes (attached or unattached), multifamily buildings with 4 units or fewer, or multifamily buildings (e.g., condominiums and apartments) with 3 stories or less in height above grade.

2.2 Insulation Product Definitions

Spray or Pour Foam Insulation: A thermal insulating material that is sprayed or poured (as a gel or foamy liquid) into place and expands or sets into a cellular foam and cures at the point of installation through a chemical reaction. Foamed materials include, but are not limited to, polyurethane, polyisocyanurate, phenolic, and cementitious insulation.

Board Insulation: The Semi-rigid or rigid insulation is performed into rectangular units having a degree of suppleness particularly related to their geometrical dimensions. Typical materials include, but are not limited to, fiberglass, expanded polystyrene (EPS), extruded polystyrene (XPS), polyisocyanurate, and polyurethane. The product may or may not be faced.

2.3 Insulation Performance Definitions

R-value: The inverse of the time rate of heat flow through a body from one of its bounding surfaces to the other surface for a unit temperature difference between the two surfaces, under steady state conditions, per unit area. For the purposes of this program, Imperial units will only be accepted [i.e., (h ft² °F)/Btu].

Smoke-Development Index: The characteristic of a material to emit smoke when exposed to flame or fire compared to red oak and inorganic cement.

Flame-Spread Index: The characteristic of a material to resist the spreading of flames when exposed to flame or fire compared to red oak and inorganic cement.

3.0 PRODUCT USE

3.1 General: Accufoam CC-HFO Spray Foam Insulation is a *Spray Foam Insulation for use in residential buildings.*

3.2 Thermal Resistance: *R-Values* are provided in Table 1 of this report. These R-Values are taken from testing in accordance with ASTM at a mean temperature of 75°F with a temperature differential of 50°F +/- 10°F.

TABLE 1 - Thermal Resistance (R-Values)	
Thickness (inch)	Accufoam CC-HFO R-Value (°F·ft ² ·h/Btu)
1	7.5
2	14
2.5	17
3	21
3.5	24
4	27
5	34
6	41
7	48
7.25	49
8	54
9	61
10	68
11	75
12	81

For SI: 1 inch = 25.4 mm, 1°F·ft²·h/Btu = 0.176 110 K·m²/W.

¹ R-Values are calculated based on tested K values at 1-inch and 3.5-inch thicknesses.

² R-Values greater than 10 are rounded to the nearest whole number.



3.3 Surface Burning Characteristics:

At a maximum thickness of 3 1/2 inches (89 mm) and a nominal density of 2.1 pcf (16 kg/m³), the Accufoam CC-HFO spray foam insulation 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. Greater thicknesses, depending on end use, are recognized when installed in accordance with this report.

3.4 Installation:

3.4.1 Installation General: Installation shall be in accordance with ER-833 and the manufacturer’s published installation instructions. Accufoam CC-HFO Spray Foam Insulation is mixed and applied on site exclusively by installers approved by Creative Polymer Solutions, LLC or by the Spray Polyurethane Foam Alliance.

3.4.2 Personal Protection Equipment and Ventilation. Installation instructions provide the following information on personal protective equipment and ventilation requirements:

Spraying of polyurethane foam results in the atomizing of the components to a fine mist. Inhalation and exposure to the atomized particles must be avoided. Applicators must use personal protective equipment recommended by the Center of Polyurethanes Industry for use in high-pressure spray foam application. Personal protective equipment includes, but not limited to:

- Full-face mask or hood with fresh air source
- Fabric coveralls
- Non-permeable gloves
- Solvent-resistant gloves when handling materials and cleaning solvents

NOTE:EXPOSURE MAY OCCUR WHEN NO NOTICEABLE ODOR IS ENCOUNTERED.

Please visit www.spraypolyurthane.org for additional information on appropriate personal protection equipment selection and use.”

VENTILATION: The mechanical ventilation instructions state the following. “A mechanical ventilation system is required to be utilized in a workplace where spray-applied polyurethane foam is applied. The mechanical ventilation system to be used in workspace needs to be able to exhaust air directly to the exterior of the building.

3.4.3 Occupancy Time After Installations: After the application of the spray foam, a minimum of a 1-hour ventilation period at 10 air changes per hour is required before re-entry of the space for unprotected workers. An additional 1-hour ventilation period is required for re-occupancy by the general population.

3.4.4 Installation Drawings

Installation Drawings follow at the end of this supplement.

4.0 PRODUCT DESCRIPTION

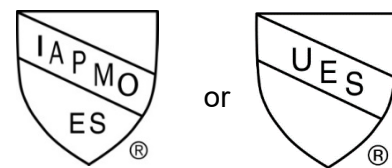
Accufoam CC-HFO spray foam insulation is a spray-applied, polyurethane closed cell foam plastic and complies as a medium-density insulation in accordance with Section 3.1.1 and Table 1 of AC377. The insulation is a two-component spray foam plastic with a nominal in-place density of 2.1 pcf (33.6 kg/m³).

The spray-applied insulation is mixed in the field by combining a polymeric isocyanate (A component) and a resin blend (B component). The liquid components shall be stored in 55-gallon (208 L) drums at temperatures between 60°F and 90°F (16°C and 32°C). When Component A and Component B are stored in factory-sealed containers at the recommended temperatures, the maximum shelf life is six months.

5.0 IDENTIFICATION

Accufoam CC-HFO spray foam insulation’s containers are identified by the manufacturer’s name (Creative Polymer Solutions, LLC) address and telephone number, product name, use instructions, density, flame-spread and smoke-development indices, date of manufacture, and evaluation report number (ER-833).

The IAPMO UES Mark of Conformity may also be used as shown below:



IAPMO UES ER-833

6.0 SUBSTANTIATING DATA

6.1 Manufacturer’s descriptive literature and installation instructions.

6.2 Data in accordance with the Acceptance Criteria for Spray-applied Foam Plastic Insulation, ICC-ES AC377, dated June 2023, including Appendix X.

6.3 Report of Flammability Testing in accordance with NFPA 286.

6.4 Reports of fire propagation characteristics in accordance with NFPA 285

6.5 Third party engineering analysis for extension of NFPA 285 results.

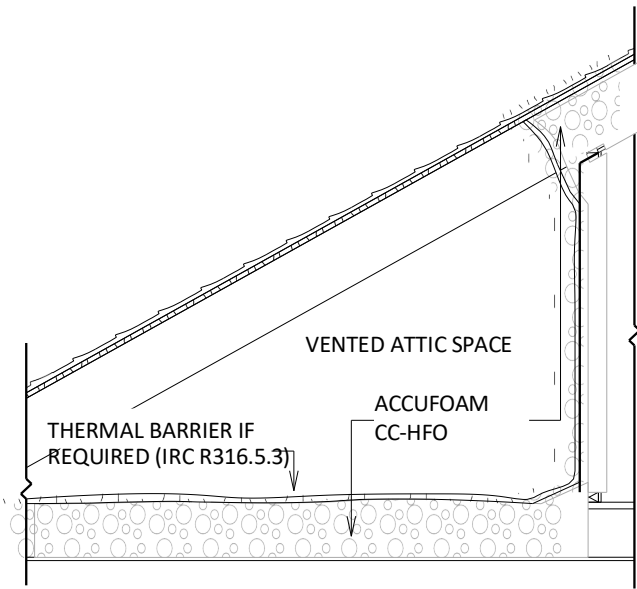


6.6 Data in accordance with 2019 ICC 1100 Standard for Spray-applied Polyurethane Foam Plastic Insulation.

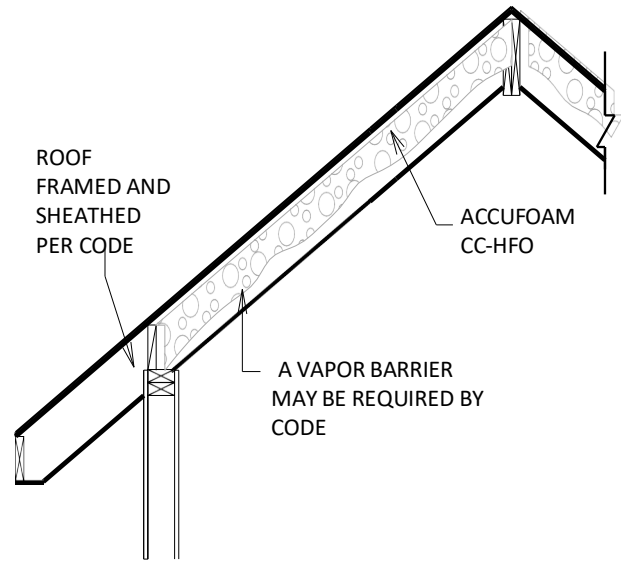
6.8 This supplement expires concurrently with ER-833.

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

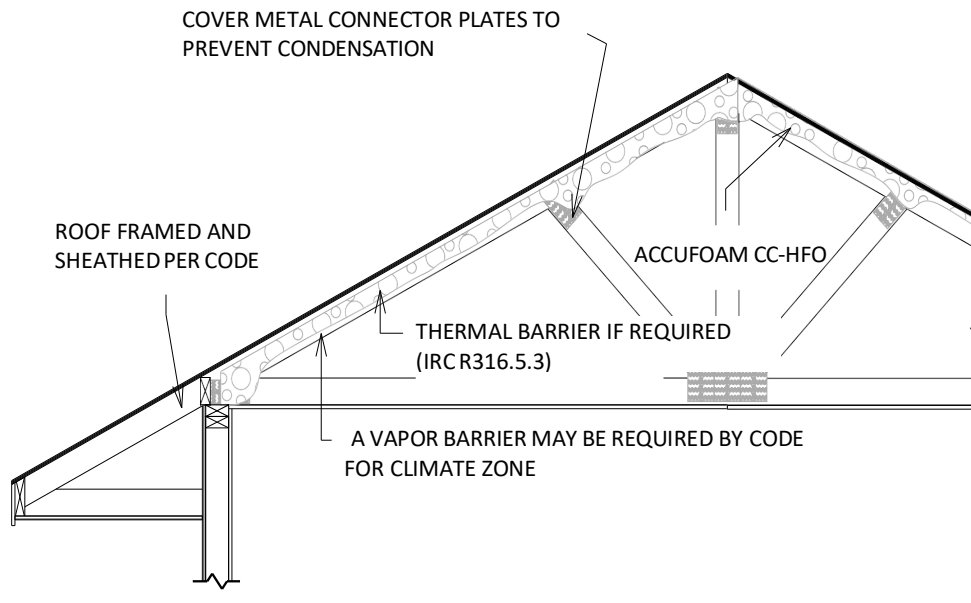
For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org



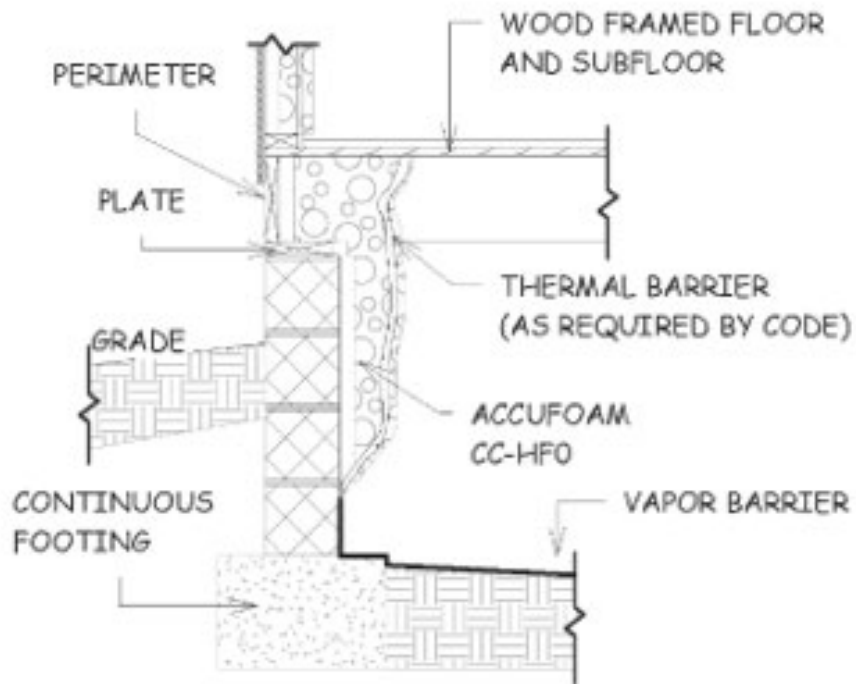
ATTIC KNEE WALL CLOSED CELL



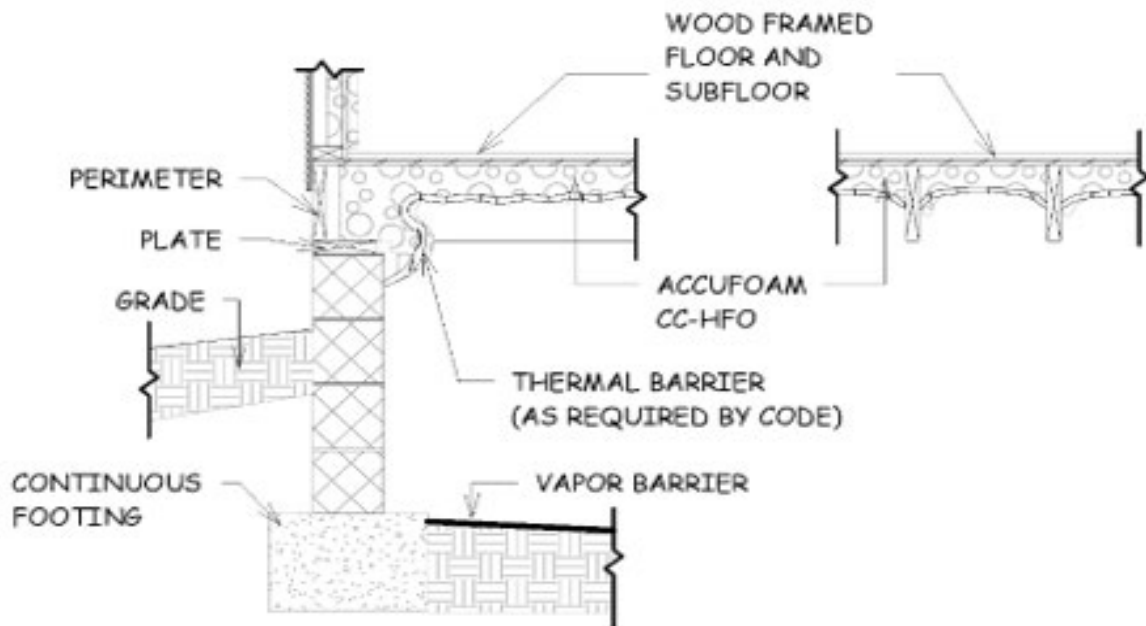
CATHEDRAL CEILING DETAIL CLOSED CELL



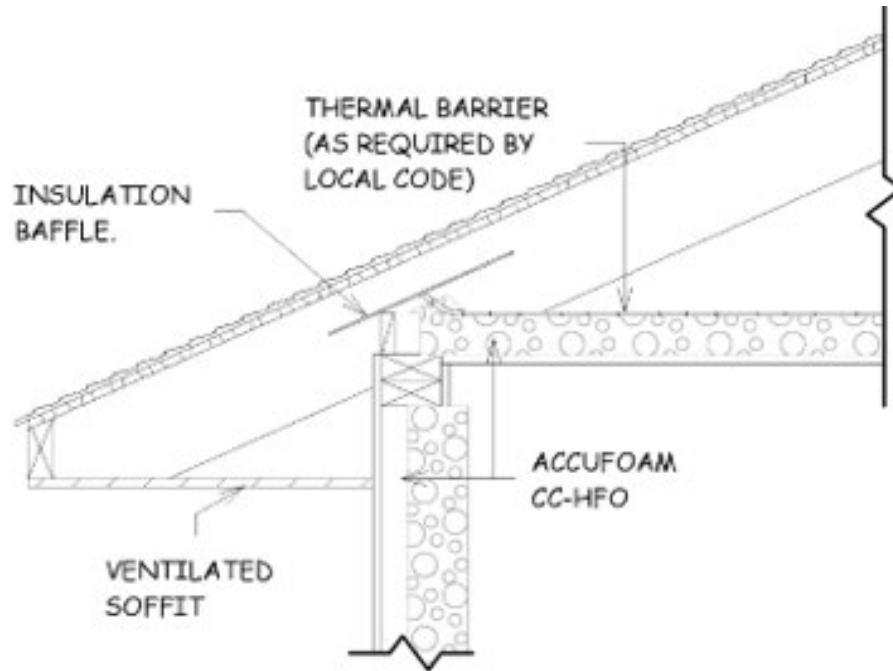
UNVENTED ATTIC INSULATED ROOF DECK CLOSED CELL



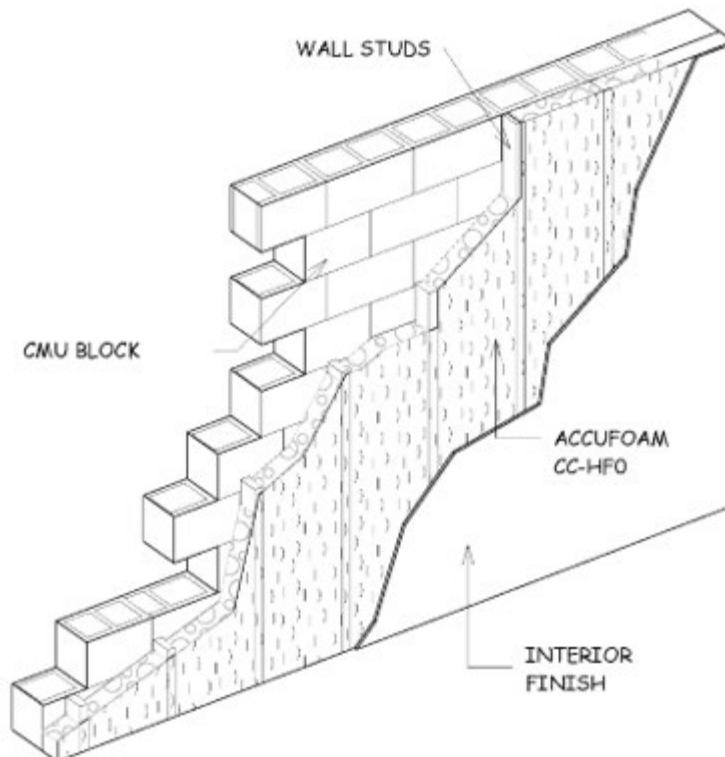
CRAWLSPACE UNVENTED CLOSED CELL



CRAWLSPACE VENTED CLOSED CELL



VENTED ATTIC FLOOR SOFFIT CLOSED CELL



BELOW GRADE WALL INSULATION CLOSED CELL