



International Code Council

ICC 1100-20XX Public Input Agenda based on input received on Public Comment Draft #2 – January 2019

**For July 25, 2019
Committee Teleconference Meeting
Supersedes June 18, 2019**

ICC 1100-20XX Public Comment Draft #2 Comments

IS-FPI 37-17 ICC 1100-20XX Section 202

Proponent: Paul Warren

Warren 01 202

Revise as follows:

ALL CONSTRUCTION PLANES. Within an attic or crawl space, any surface exposed to the interior space of the attic or crawl space. ~~regardless of its orientation within that space.~~

Reason: Removed additional text as “any surface exposed to the interior space of the attic or crawlspace.” is easy to understand and is very clear. Additional text may add confusion.

Committee Action:

Committee Reason:

IS-FPI 38-17

ICC 1100-20XX Section 202

Proponent: Paul Warren

Warren 02 202

Revise as follows:

ALTERNATIVE IGNITION BARRIER ASSEMBLY: An assembly consisting of either the exposed *spray-applied foam plastic* or the *spray-applied foam plastic with a fire-protective covering*, that has been tested in accordance with and complies with the conditions of acceptance of either Section 302.5 or 302.6 of this Standard or as permitted in the Special Approval section of the International Building Code, Section 2603.9, or Specific Approval section of the International Residential Code, Section R316.6. ~~Referenced test procedures include NFPA 286, UL 1715, FM 4880 or UL 1040.~~

Reason: By citing the code sections relevant to the IBC and IRC, the user is directed to those specific sections that clarify all requirements for code compliance. The referenced test procedures are included in the body of those sections and as such, “**Referenced test procedures include NFPA 286, UL 1715, FM 4880 or UL 1040.**” become redundant and unnecessary. Partial reproduction of code sections referenced in this document provide opportunity for misinterpretation. If elements of specific code sections warrant the need for reproduction in this document, the code section should be reproduced in its entirety.

Committee Action:

Committee Reason:

IS-FPI 39-17

ICC 1100-20XX Section 202

Proponent: Paul Warren

Warren 03 202

Revise as follows:

ALTERNATIVE THERMAL BARRIER ASSEMBLY: An assembly consisting of either the exposed *spray-applied foam plastic* or the *spray-applied foam plastic* with a fire-protective *covering*, ~~that has been tested in accordance with and complies with~~ shall comply with the Special Approval section, 2603.9, of the International Building Code or the Specific Approval section, R316.6 of the International Residential Code and shall meet the conditions of acceptance of Section 302.4 of this Standard ~~and that complies with the Special Approval section of the International Building Code or the Specific Approval section of the International Residential Code.~~

Reason: Alternative thermal barrier assemblies, as we define in the SPF industry, fall under the jurisdiction of the specific/special approval sections of the IBC/IRC first and foremost. We are adding specific mandatory elements, not defined in those sections. The original messaging, although accurate, would be confusing to a lay-person and this verbiage, in my opinion, better clarifies this documents intent and reduces potential confusion.

Committee Action:

Committee Reason:

IS-FPI 40-17

ICC 1100-20XX Section 202

Proponent: Paul Warren

Warren 04 202

Revise as follows:

Attic Storage: Objects or personal effects placed in uninhabitable unvented attics that are not functioning elements essential to the operation or code compliance of the unvented attic such as but not limited to *Utilities*. Although these spaces may be capable of or designed to accommodate storage per Table R301.5 of the IRC or Table 1607.1 of the IBC, Section 302.5.1.2.4 of this Standard prohibits storage.

Reason: There is a lot of ambiguity surrounding attic storage. I am attempting to define storage applicably within the context of this Standard so we can add clarity and some level of consistency that will hopefully translate to various jurisdictions. Currently AHJ's rely entirely on their interpretation of a system that many lack the fundamental knowledge of the principles surrounding unvented attics.

Committee Action:

Committee Reason:

IS-FPI 41-17

ICC 1100-20XX Section 301.1 Table 2

Proponent: Paul Warren

Warren 05 301.1 Table 2

Revise as follows:

**TABLE 2. PHYSICAL PROPERTIES OF MEDIUM-DENSITY SPRAY-APPLIED FOAM PLASTIC
(nominal core density 1.5 – 3.5 pcf)**

PROPERTY	TESTS	VALUE	NUMBER OF SPECIMENS	SAMPLE PREPARATION
Thermal Resistance	ASTM C177, ASTM C518, or ASTM C1363	As reported	5 at each thickness	Samples shall be conditioned at: (a) 73 ± 2°F (23 ± 1°C) and 50 ± 5 % relative humidity for 180 ± 5 days; or (b) 140 ± 2°F (60 ± 1°C) and dry heat for 90 ± 2 days
Core Density	ASTM D1622	As reported	3	In accordance with Section 6.3 of the test standard
Tensile Strength	ASTM D1623	15 lbf/in ² (100 kPa) min	5	In accordance with test standard
Compressive Strength	ASTM D1621	15 lbf/in ² (100 kPa) min	5	In accordance with test standard
Dimensional Stability	ASTM D2126	15% total change	2 min	In accordance with ASTM C1029, Section 9.4 and 10.6

For SI: 1 pfc = 16.02 kg/m³, 1 lbf/in² = 6.89 kPa

Reason: The dimensional stability methodology proposed is a significant departure from what is currently used in AC377. In my estimation this method will produce values worse than we observe using current methodologies. I haven't seen any technical justification to warrant this change. We call out the methodology of C1029 but fail to use their requirement of a maximum linear change of 9% (assuming a Type II) and use the current AC377 value of 15% total change. Core dimensional stability provides no meaningful information and implementing a methodology that will, from an optics perspective, likely show negative performance vs current practice is not prudent unless there is a sound technical argument that proves otherwise.

Committee Action:

Committee Reason:

IS-FPI 42-17

ICC 1100-20XX Section 301.2

Proponent: Eric Banks

Banks 01 301.2

Revise as follows:

301.2 Thermal Resistance. Thermal resistance shall be determined in accordance with ASTM C177, ASTM C518 or ASTM C1363. Test specimen density shall be within ± 10 percent of the nominal density intended for use.

The reporting of thermal resistance shall be based on a mean-test temperature of $75^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($23.8^{\circ}\text{C} \pm 2.8^{\circ}\text{C}$) with a minimum temperature gradient of 40°F (22°C). Supplemental thermal resistance values at other mean temperatures may be included at the option of the manufacturer. *R*-values of less than 10 shall be rounded to the nearest tenth. *R*-values of 10 or more shall be rounded to the nearest whole number.

The thermal-resistance (*R*-values) for the *spray-applied foam plastic* shall be established for the range of thicknesses and the density intended for use. Nominal thicknesses tested shall be 1 inch (25.4 mm) and a thickness greater than or equal to $3\frac{1}{2}$ inches (89 mm). Calculated *R*-values for thicknesses between 1 inch (25.4 mm) and the maximum thickness tested shall be based on linear interpolation. Calculated *R*-values for thicknesses greater than the maximum thickness tested shall be extrapolated based on tested *R*-values at the maximum thickness tested.

Exception: For *spray-applied foam plastic* that is intended for use at a thickness less than $3\frac{1}{2}$ inches, tests shall be conducted at a 1-inch (25.4 mm) thickness and at the maximum thickness intended for use. Calculated *R*-values shall follow the rounding and interpolation rules stated above.

All samples shall be conditioned prepared (i.e. with skins or substrates attached) and as set forth in Table 1 or Table 2, as applicable. Samples shall be sprayed to dimensions sufficient to accommodate the test equipment and the required thickness. Samples shall be ~~conditioned~~ aged in the as-sprayed configuration, then cut to the required dimensions at the conclusion of the ~~conditioning~~ aging period. Samples sprayed in multiple "lifts" shall be identified.

Reason: The proper term is aging. Conditioning is that period just prior to testing where the test specimens are conditioned to a constant state (e.g. temperature, mass, moisture content, etc.) immediately prior to testing.

Committee Action:

Committee Reason:

IS-FPI 43-17

ICC 1100-20XX Section 301.2

Proponent: Paul Warren

Warren 06 301.2

Revise as follows:

301.2 Thermal Resistance. Thermal resistance shall be determined in accordance with ASTM C177, ASTM C518 or ASTM C1363. Test specimen density shall be within ± 10 percent of the reported nominal density intended for use determined in accordance with Section 6.3 of ASTM D1622.

The reporting of thermal resistance shall be based on a mean-test temperature of $75^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($23.8^{\circ}\text{C} \pm 2.8^{\circ}\text{C}$) with a minimum temperature gradient of 40°F (22°C). Supplemental thermal resistance values at other mean temperatures may be included at the option of the manufacturer. *R*-values of less than 10 shall be rounded to the nearest tenth. *R*-values of 10 or more shall be rounded to the nearest whole number.

The thermal-resistance (*R*-values) for the *spray-applied foam plastic* shall be established for the range of thicknesses ~~and the density~~ intended for use. Nominal thicknesses tested shall be 1 inch (25.4 mm) and a thickness greater than or equal to $3\frac{1}{2}$ inches (89 mm). Calculated *R*-values for thicknesses between 1 inch (25.4 mm) and the maximum thickness tested shall be based on linear interpolation. Calculated *R*-values for thicknesses greater than the maximum thickness tested shall be extrapolated based on tested *R*-values at the maximum thickness tested.

Exception: For *spray-applied foam plastic* that is intended for use at a thickness less than $3\frac{1}{2}$ inches, tests shall be conducted at a 1-inch (25.4 mm) thickness and at the maximum thickness intended for use. Calculated *R*-values shall follow the rounding and interpolation rules stated above.

All samples shall be conditioned as prepared (i.e. with skins or substrates attached) and as set forth in Table 1 or Table 2, as applicable. Samples shall be sprayed to dimensions sufficient to accommodate the test equipment and the required thickness. Samples shall be conditioned in the as-sprayed configuration, then cut to the required dimensions at the conclusion of the conditioning period. ~~Samples sprayed in multiple “lifts” shall be identified.~~

Reason: The intent here is not to be within ± 10 percent of the density intended for use but rather the density reported on the code report as determined by ASTM D1622. This would, for example, present the potential to measure and report a 0.5pcf foam but perhaps the actual intention was a 0.75 pcf foam which may erroneously inflate the thermal performance of the product in question. By clarifying this, verbiage, direct or indirect references to density, such as, “The thermal-resistance (*R*-values) for the spray-applied foam plastic shall be established for the range of thicknesses **and the density** intended for use.” and, “Samples sprayed in multiple “lifts” shall be identified.” are unnecessary.

Committee Action:

Committee Reason:

IS-FPI 44-17

ICC 1100-20XX Section 301.3

Proponent: Paul Warren

Warren 07 301.3

Revise as follows:

301.3 Air Permeance. ~~When determination of the air permeance of the spray-applied foam plastic is sought, the air permeance~~ Insulation to be characterized as *Air Impermeable Insulation* shall be measured in accordance with ASTM E283, as modified below or ASTM E2178 ~~to establish that the insulation qualifies as *air impermeable insulation*.~~

Testing in accordance with ASTM E283 shall be modified as follows:

1. The test frame shall be a minimum of 24 inches (610 mm) square, and a 1/2-inch-thick (12.7 mm), low-density fiberboard substrate ~~complying with ASTM C208~~ fastened and sealed on the panel edges. The fiberboard shall have a minimum air permeance of 1.0 L/s-m² (0.20 ft³ /min-ft²).

Reason: Initial paragraph was confusing as written. No change to the content just worded for better understanding.

I have had trouble finding low-density fiberboard complying with ASTM C208 unless I ship it in over great distances and at quantities in excess of what is required. As I understand the intent, we want to use a low-density fiberboard that will not influence the results obtained, i.e. significantly higher permeance than the specimen as defined by the requirement of 1.0 L/s-m² (0.20 ft³ /min-ft²). I fail to see the importance of an ASTM tested product for the purposes of this evaluation.

Committee Action:

Committee Reason:

IS-FPI 45-17

ICC 1100-20XX Section 301.4

Proponent: Paul Warren

Warren 08 301.4

Revise as follows:

301.4 Vapor Retarder. Insulation to be characterized as one ~~When determination of the~~ vapor retarder classifications defined below ~~of the spray applied foam plastic is sought,~~ the vapor retarder classification shall be determined based on testing in accordance with ASTM E96, Procedure A (desiccant method). Based on the results of this testing the associated vapor retarder classification shall be assigned ~~based on the following~~ at the thickness and density tested:

- Class I: 0.1 perm or less
- Class II: $0.1 < \text{perm} \leq 1.0$ perm
- Class III: $1.0 < \text{perm} \leq 10$ perm

Reason: No change to intent it just reads better and is easier to understand.

Committee Action:

Committee Reason:

IS-FPI 46-17

ICC 1100-20XX Section 302.2.3

Proponent: Paul Warren

Warren 09 302.2.3

Revise as follows:

302.2.3 Qualification of thicknesses greater than 4 inches. For *spray-applied foam plastic* insulation that is intended to be applied at a thickness greater than 4 inches (102 mm), fire testing shall be conducted in accordance with NFPA 286 (with acceptance criteria of Section 803.1.2.1 of the International Building Code), FM 4880, UL 1040, UL 1715.

~~302.3 Use with a Thermal Barrier.~~ Exception: When the *spray-applied foam plastic* insulation is intended to be installed with a *thermal barrier* separating the insulation from the interior of a building, there is no limitation on the thickness when the *spray-applied foam plastic* has a flame-spread index no greater than 25 and smoke-developed index no greater than 450 when tested in accordance with ASTM E84 or UL 723 at a thickness of 4 inches (102 mm) and the maximum density intended for use. The *thermal barrier* shall comply with the requirements of IBC Section 2603.4 or IRC Section R316.4, as applicable.

Reason: 302.2.3 As written has the potential to be interpreted as a stand-alone requirement regardless of the statement in 302.3. I believe that removing the header Section 302.3 Use with a Thermal Barrier and replacing with "Exception" as this really is an exception to the requirements of Section 302.2.3 and removes potential confusion while adding clarity to the intent.

Committee Action:

Committee Reason:

IS-FPI 47-17

ICC 1100-20XX Section 302.4

Proponent: Brad Glazier

Glazier 01 302.4

Revise as follows:

SECTION 302

302.4 Alternative Thermal Barrier Assembly – Room Corner Fire Tests. When the *spray applied foam plastic* insulation is intended to be installed without the use of a *thermal barrier* separating the insulation from the interior of a building, the requirements of this section shall apply.

Assemblies containing *spray-applied foam plastic* insulation shall be qualified by use of one of the room corner fire tests specified in Sections 302.4.1, ~~302.4.2~~ or 302.4.3. The testing shall be performed on *spray-applied foam plastic* insulation at the maximum thickness and density intended for use. Placement of the gas burner ~~or wood crib~~ under this section shall comply with the maximum average measured distance between the burner ~~or crib~~ as shown in Figure 1.

~~**302.4.2 UL 1715.** When the spray-applied foam plastic insulation is tested in accordance with UL 1715 the requirements of Sections 302.4.2.1 and 302.4.2.2 shall apply.~~

~~**302.4.2.1 Smoke Determination.** Determination of excessive smoke levels shall be as follows and shall consider the following:~~

1. Visual documentation	Smoke determination shall be recorded in accordance with the visual records procedures within UL 1715; digital video and photographic documentation is permitted. Video and still photographs shall be in color and time stamped. Where a high level of smoke is generated during the test, the <i>spray-applied foam plastic</i> insulation will be considered to fail the test
2. Test specimen.	For each test, when the test is for wall systems only, a new section of uncoated and unpainted ⁵/₈-inch thick (15.9 mm) gypsum wallboard, 2 feet by 2 feet (610 mm by 610 mm), shall be installed in the ceiling at the wall corner intersection directly above the crib

~~**302.4.2.2 Reports of test results.** The test report shall provide the details described below.~~

1. Description	The description of the room test setup, with details of the test room construction and materials tested
2. Observations	The test observations, commencing with crib ignition and ending with a final description of panels after all combustion ceases
3. Thermocouple readings	Temperature readings from all thermocouples

4. Condition of acceptance	A statement of passing or failing based upon observation of test conditions and smoke levels generated during the test
5. Photographic records	A photographic record of the test.

302.4.32 Alternative Thermal Barrier Assembly. When the *spray-applied foam plastic insulation* is intended to be installed as a component of an *alternative thermal barrier assembly*, the assembly shall be qualified by ~~one or more of~~ the following methods:

1. Room corner fire tests in Section 302.4.1 ~~or 302.4.2.~~
2. As permitted in Section 2603.9 of the International Building Code or Section R316.6 of the International Residential Code, as applicable.

When a *covering* or coating is used to cover the *spray-applied foam plastic* insulation, the thickness of the *covering* shall be identified in units appropriate for the specific *covering* or coating. In the case of liquid-applied coatings, the installed thickness (in mils), in both wet film thickness and dry film thickness, and the corresponding application rate (in square feet per gallon) shall be identified and included in the test report.

Assemblies tested in accordance with Section 302.4.1 ~~or 302.4.2~~ shall be limited to the construction plane for which it was tested; i.e., if the assembly was only tested with insulation in walls it is limited to installation in walls only. Assemblies tested simultaneously with insulation in walls and ceilings shall be acceptable for installation on all construction planes at the same time.

Where the *spray-applied foam plastic* assembly is tested in accordance with NFPA 286 ~~or UL 1715~~ the assembly is suitable for use in all ceiling heights.

Reason: Delete use of UL 1715 as an acceptable method. There are no guidelines to measure “high” levels of smoke as required in 302.4.2.1, item 1. There is no limiting smoke concentration measurement or requirements in UL 1715. The ICC-ES has implemented some requirements for observed smoke development when considering UL 1715 tests for acceptance in AC377, Appendix C [13]. This document applies some additional requirements for the video camera and lighting conditions and describes that tests where the smoke level is “obviously high” will be deemed unacceptable. In contrast, while NFPA 286 also requires photographic and video recordings, these are not utilized for evaluation of smoke level. Instead, quantitative measurements of smoke obscuration are made during the test

Evaluation of the performance of UL 1715 is based entirely on the visual observations made during the test. Further evaluations for the issuance of an evaluation report are dependent on the person reviewing the test observations and video/photo evidence as a result it is open to interpretation and subjective in the eyes of the reviewer and therefor the requirement as proposed is unenforceable and inconsistent.

A sharp distinction between the two tests is the instrumentation used in the apparatus, and the pass/fail criteria derived from these measurements. UL 1715 places a number of thermocouples throughout the room, but these are for information only and are not used for any quantitative evaluation of flame spread test results. The UL 1715 requires visual observation of smoke generation and extent of flame spread. In contrast to the UL test, NFPA 286 requires that temperatures be measured along the ceiling (used to calculate the average upper layer gas temperature), heat flux to the floor be measured via a Schmidt-

Boelter water cooled heat flux gauge and by the ignition of two paper targets, and heat release rate and total smoke production to be measured via the collection of exhaust gases in a duct. These measurements are all used for assessment of the pass/fail result of the NFPA 286 test as stipulated in Chapter 8 of the IBC, while the sole pass/fail criteria of flames not reaching the extremity in UL1715 exist in solely UL1715 are not prescriptively listed in the I Codes.

With the only measured pass/fail criteria of UL1715 being flames reaching the extremity of a sample The use of concave foam insulation between wood studs and especially between roof joists parallel to the back wall, can provide erroneous test results due to the interruption of the flame spread over the surface of the test sample. By providing a significant obstacle to flame spread, users of 1715 testing with studs in the assembly are not addressing the use in applications that do not contain studs. The elimination of a thermal barrier is a significant fire hazard and thus the testing for this elimination must be as rigorous as possible, clearly the use of studs is having a significant impact on the UL1715 results and is not testing the worst-case scenario.

NFPA 286 provides a significantly better fire test than the UL 1715 for the determination of flame and fire growth of materials within a compartment. The ignition source, compartment geometry, and sample configuration of the NFPA 286 test facilitate a more severe thermal environment than that of the UL 1715 test. Furthermore, the NFPA 286 test provides significantly better quantitative measurements for heat release, flashover and smoke generation. These measurements provide the quantitative basis for the pass/fail criteria required in the codes and standards. The UL 1715 provides information based solely on observations made during the test and/or from photographic data. These observations can be highly subjective and may not be consistent from test to test. It is recommended that the NFPA 286 fire test be used to determine the flame and fire growth of materials within a compartment. This test method provides a more data-based approach to determining fire performance and thus, results in a more robust test on which to regulate combustible materials in the codes and standards.

Committee Action:

Committee Reason:

IS-FPI 48-17

ICC 1100-20XX Section 302.4.3

Proponent: Eric Banks

Banks 02 302.4.3

Revise as follows:

302.4.3 Alternative Thermal Barrier Assembly. When the *spray-applied foam plastic* insulation is intended to be installed as a component of an *alternative thermal barrier assembly*, the assembly shall be qualified by one or more of the following methods:

1. Room corner fire tests in Section 302.4.1 or 302.4.2.
2. As permitted in Section 2603.9 of the International Building Code or Section R316.6 of the International Residential Code, as applicable.

When a *covering* or coating is used to cover the *spray-applied foam plastic* insulation, the thickness of the *covering* shall be identified in units appropriate for the specific *covering* or coating. In the case of liquid-applied coatings, the installed thickness (in mils), in both wet film thickness and dry film thickness, and the corresponding application rate (in square feet per gallon) shall be identified and included in the test report.

Recognition of assemblies foam plastic or foam plastic plus covering tested in accordance with Section 302.4.1 or 302.4.2 shall be limited to the construction plane(s) for which it was tested; i.e., if the assembly was only tested with insulation in walls only, then recognition is limited to installation in walls only. Recognition shall be limited to the product formulations tested. Assemblies tested simultaneously with insulation in walls and ceilings shall be acceptable for installation on all construction planes at the same time.

Where the spray-applied foam plastic assembly is tested in accordance with NFPA 286 or UL 1715 the assembly is suitable for use in all ceiling heights.

Reason: Improved language to clarify the intent of the section is with regard to recognition. Also, language added to confirm recognition of only those product formulations tested.

Committee Action:

Committee Reason:

IS-FPI 49-17

ICC 1100-20XX Section 302.5

Proponent: Eric Banks

Banks 03 302.5

Revise as follows:

302.5 Testing for Alternative Ignition Barrier Assembly for Use in Attics – General.

When the *spray-applied foam plastic* insulation is intended to be installed as a component of an *alternative ignition barrier assembly* (i.e. without the use of a code-prescribed *ignition barrier* separating the insulation from the interior of the attic or crawl space), the assembly shall be qualified by one or more of the following methods:

1. Room corner fire tests described in this section~~in Section 302.5 or 302.6.~~
2. As permitted in Special Approval section of the International Building Code or the Specific Approval section of the International Residential Code, as applicable.

All testing shall be conducted with the foam plastic installed at the maximum density and maximum thickness intended for use.

When the *spray-applied foam plastic* insulation is intended to be installed as a component of an *alternative ignition barrier assembly* (i.e. without a code-prescribed *ignition barrier*), the assembly shall be qualified by testing as set forth in either Section 302.5.1 (Test Method A) or 302.5.2 (Test Method B) of this Standard or as permitted in the Special Approval section of the International Building Code or the Specific Approval section of the International Residential Code. Assemblies tested in accordance with Section 302.5.1 or 302.5.2 are acceptable for installation on *all construction planes*. The requirements of this section apply to both an exposed *spray-applied foam plastic* insulation or to a *spray-applied foam plastic* insulation system using a *covering*.

Reason: Section 302.6 is specifically for recognition of crawl spaces, not attics.

Committee Action:

Committee Reason:

IS-FPI 50-17

ICC 1100-20XX Section 302.5.1.2.4

Proponent: Paul Warren

Warren 10 302.5.1.2.4

Revise as follows:

302.5.1.2.4 Attic Installation Limitations. When testing is in accordance with Section 302.5.1, the Conditions 1 through 7 ~~8~~ regarding installation under the International Building Code or the International Residential Code shall apply.

1. Entry to the attic shall only be to service utilities, and no storage is permitted.
2. There shall be no interconnected attic areas.
3. Air in the attic shall not be circulated to other parts of the building.
4. Attic ventilation is provided when required by 2018 and 2015 Section 1203.2 of the International Building Code or Section R806 of the International Residential Code, except when *air impermeable insulation* is permitted in unvented attics in accordance with the Section 1203.3 of the International Building Code or Section R806.5 of the International Residential Code.
5. The foam plastic insulation shall be limited to the maximum thickness and density tested.
6. Combustion air is provided in accordance with Section M1701 of the International Residential Code or Section 2801 of the International Building Code, where applicable.
7. The installed coverage rate or thickness of coatings, if part of the insulation system, shall be equal to or greater than that which was tested.
8. Signage shall be permanently affixed in the attic and shall be visible from all entry points into the attic. The sign shall state "Caution, this is an unvented attic by design as per Section XXXX of Code Report YYYY. Entry to the attic shall only be to service utilities, and no storage is permitted. There shall be no interconnected attic areas. Air in the attic shall not be circulated to other parts of the building. Combustion air is provided in accordance with Section M1701 of the International Residential Code, where applicable. Modifications to this design can contravene building code compliance.

Reason: The knowledgeable individuals in our industry have a firm grasp on the requirements for unvented attics using SPF. However, the general public, subsequent building owners, designers etc. do not. We must make a concerted effort as an industry to communicate these requirements to all of our stakeholders. Having them just stated in this document opens our industry to potential liability. Ensuring the information proposed for the signage is identified on building plans as required and contractors having the responsibility of posting the signage in the unvented attics they spray will better discourage the building owner/future

building owners etc. from creating an unsafe and non-code compliant situation and will significantly reduce exposure to our industry.

I have also referenced the IBC regarding combustion air.

Committee Action:

Committee Reason:

IS-FPI 51-17

ICC 1100-20XX Section 302.6.1.1

Proponent: Paul Warren

Warren 11 302.6.1.1

Revise as follows:

302.6.1.1 Crawl Space Installation Limitation: When testing is in accordance with Section 302.6.1, the Conditions 1 through 7 8 regarding installation under the International Building Code or the International Residential Code shall apply.

1. Entry to the crawl space shall only be to service utilities, and no storage is permitted.
2. There shall be no interconnected crawl space areas.
3. Air in the crawl spaces shall not be circulated to other parts of the building.
4. Under-floor (crawl space) ventilation is provided when required by Section 1203.3 of the International Building Code or Section R408.1 of the International Residential Code, as applicable.
5. The foam plastic insulation shall be limited to the maximum thickness and density tested.
6. Combustion air is provided in accordance with IMC Section M1701, where applicable.
7. The installed coverage rate or thickness of coatings, if part of the insulation system, shall be equal to or greater than that which was tested.
8. Signage shall be permanently affixed in the crawlspace and shall be visible from all entry points into the crawl space. The sign shall state "Caution, this is an unvented crawlspace by design as per Section XXXX of Code Report YYYY. Entry to the crawl space shall only be to service *utilities*, and no storage is permitted. There shall be no interconnected crawl space areas. Air in the crawlspace shall not be circulated to other parts of the building. Under-floor (crawl space) ventilation is provided when required by Section 1203.3 of the International Building Code or Section R408.1 of the International Residential Code, as applicable. Combustion air is provided in accordance with the IMC Section M1701, where applicable. Modifications to this design can contravene building code compliance.

Reason: The knowledgeable individuals in our industry have a firm grasp on the requirements for unvented crawl spaces using SPF. However, the general public, subsequent building owners, designers etc. do not. We must make a concerted effort as an industry to communicate these requirements to all of our stakeholders. Having them just stated in this document opens our industry to potential liability. Ensuring the information proposed for the signage is identified on building plans as required and contractors having the responsibility of posting the signage in the unvented crawl spaces they spray will better discourage the

building owner/future building owners etc. from creating an unsafe and non-code compliant situation and will significantly reduce exposure to our industry.

Committee Action:

Committee Reason:

IS-FPI 52-17

ICC 1100-20XX Section 302.6.1.2.2.6

Proponent: Paul Warren

Warren 12 302.6.1.2.2.6

Revise as follows:

302.6.1.2.2.6 Installation Limitations. When testing is in accordance with this section, the following limitations 1 through 7 8 regarding use and installation shall apply:

1. Entry to the crawl space is only to service utilities and no storage is permitted.
2. There are no interconnected crawl space areas.
3. Air in the crawl space is not circulated to other parts of the building.
4. Under-floor (crawl space) ventilation is provided, when required by Section 1203.3 of the International Building Code or Section R408 of the International Residential Code, as applicable.
5. The foam plastic insulation is limited to the maximum thickness and density tested.
6. Combustion air is provided in accordance with Section M1701 of the International Mechanical Code, where applicable.
7. The installed coverage rate or thickness of coatings, if part of the insulation system, shall be equal to or greater than that which was tested.

8. Signage shall be permanently affixed in the crawlspace and shall be visible from all entry points into the crawl space. The sign shall state "Caution, this is an unvented crawlspace by design as per Section XXXX of Code Report YYYY. Entry to the crawl space shall only be to service *utilities*, and no storage is permitted. There shall be no interconnected crawl space areas. Air in the crawlspace shall not be circulated to other parts of the building. Under-floor (crawl space) ventilation is provided when required by Section 1203.3 of the International Building Code or Section R408.1 of the International Residential Code, as applicable. Combustion air is provided in accordance with the IMC Section M1701, where applicable. Modifications to this design can contravene building code compliance.

Reason: The knowledgeable individuals in our industry have a firm grasp on the requirements for unvented crawl spaces using SPF. However, the general public, subsequent building owners, designers etc. do not. We must make a concerted effort as an industry to communicate these requirements to all of our stakeholders. Having them just stated in this document opens our industry to potential liability. Ensuring the information proposed for the signage is identified on building plans as required and contractors having the responsibility of posting the signage in the unvented crawl spaces they spray will better discourage the building owner/future building owners etc. from creating an unsafe and non-code compliant situation and will significantly reduce exposure to our industry.

Committee Action:

Committee Reason: