



# International Code Council

**ICC 1100-20XX**  
**Ballot Comments Agenda**  
**based on input received**  
**on Ballot Draft #1**

**For October, 2018**  
**Public Teleconference Meeting**

## ICC 1100-20XX Initial Draft Proposals

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### **Ballot Submitter**

B. Tollisen, affirmative

### **List of Comments**

none

### **Ballot Submitter**

B. Caldwell, affirmative with comment (See page 7)

### **List of Comments**

Title revision

### **Ballot Submitter**

R. Morrison, affirmative with comment (See page 8)

### **List of Comments**

Editorial

**Ballot Submitter**

R. Childers, affirmative

**List of Comments**

None

**Ballot Submitter**

E. Banks, negative (see page 4)

**Ballot Submitter**

J. Phelan, affirmative

**List of Comments**

none

**Ballot Submitter**

J. Thomas, affirmative

**List of Comments**

None

## IS-FPI ICC 1100

**Commenter:** Eric W. Banks

**Ballot:** Negative

### Comments:

Eric W. Banks votes Negative to ICC 1100 Standard for Spray-applied Polyurethane Foam Plastic Insulation, Ballot Draft #1 – April 2018, for the following reasons: 1) The draft standard requires technical and editorial revision and correction such that it is not yet suitable for approval and publication and 2) Necessary and suggested revision/correction include:

- a) **Section 101.1** – The sentence is awkward and slightly confusing (probably an editorial fix)
- b) **Section 102.1**, second paragraph – this paragraph should be clear with regard to qualifying insulation thickness in excess of the 4-inch thickness limitation of ASTM E84
- c) **Section 202 – Defined Terms**
  - i) All Construction Planes – editorial – “or crawl space” should follow the second “attic”
  - ii) Alternative Ignition Barrier Assembly – editorial – delete “302.2.4”
  - iii) Alternative Thermal Barrier Assembly – for consistency, this term should reference Section 302.4 of the draft standard
  - iv) Covering – should not state “...boards, sheet goods, or liquid-applied coatings. ...” Should this definition not also differentiate from facings or facers?
  - v) Free Rise – Technically, insulated metal panels (IMPs) meet this definition.
  - vi) Ignition Barrier – Why no IBC/IRC reference?
  - vii) Roofing Applications – the term “roof covering” is more appropriate than “roof assembly” in the context of this definition.
  - viii) Thermal barrier – Why no IBC/IRC reference or reference to NFPA 275?
- d) **Table 1** –
  - i) “Sample Preparation” should read “Specimen Preparation”
  - ii) Thermal Resistance
    - (1) Sample/Specimen preparation should include language regarding the ageing as-received (i.e. with skins and substrates attached)
    - (2) What about number of lifts or knit-lines?
- e) **Table 2** – Same comments as to Table 1
- f) **Section 301.2** –
  - i) The issue of density is a persistent challenge with spray PU foam (SPF). Is “intended for use” the best language? Yes, this is code-language, however, is it accurate and representative? Perhaps “recognized density” or “marketed density” are more useful terms.
  - ii) Second paragraph – “Supplemental thermal resistance” sentence should reference ASTM C1058 (and C1058 added to the Referenced Standards section)
  - iii) Third paragraph –
    - (1) See 2)f)i) comment regarding density
    - (2) Other editorials
      - (a) ...based on... should read ...determined using

- (b) ...extrapolated based on tested R-values... should read ...extrapolated using the Rvalue...
- g) **Section 301.3** – “Air impermeable insulation” sentence is redundant (not adding value) given the term is defined
- i) E283 modification #1 the last sentence should require the air leakage of the wood fiberboard *must* be verified as  $> 1.0 \text{ L/s}\cdot\text{m}^2$  through testing of a blank specimen
  - ii) E283 modification #4 – should read “Air leakage shall be determined in both infiltration and exfiltration configurations.”
- h) **Section 301.4** – IBC and IRC define the VR classes, so recommend citations
- i) **Section 302.1** –
- i) Density item again; perhaps better language is “...maximum thickness and representative of the in-place density...”
  - ii) Change “low-density and medium-density *spray-applied foam plastic* insulation” to “*insulation applications*” for consistency
- j) **Sections 302.2.1 & 302.2.2** – Density issue
- k) **Section 302.2.3** –
- i) “Testing” should read “Qualification”
  - ii) This section of the standard is missing the concept and option of “other testing [...] related to actual end-use configuration”
- l) **Section 302.3** –
- i) Density item again
  - ii) Does not reference NFPA 275
- m) **Section 302.4** –
- i) Second paragraph – The *spray-applied polyurethane foam* is not qualified, it is the assembly that is getting qualified
  - ii) Density item again
  - iii) “...shall comply with the average measured distance between the corner walls and the burner or crib as shown in Figure 1.”
- n) **Section 302.4.1**
- i) “...NFPA 286 it shall comply with the following Conditions 1 through 5.” Should read “...NFPA 286, the conditions of acceptance area as follows:
  - ii) Also, should refer back to IBC/IRC sections on interior finishes
- o) **Section 302.4.3** – This section has essentially the same name as Section 302.4, thus a little confusing
- p) **Section 302.4.3.1** –
- i) This section and the limitation is out of place based on the context and placement within AC377. AC377 effectively makes this a stand-alone section not connected to either the Special Approval or Alternative Thermal Barrier Assemblies.
- q) **Section 302.5.1** – Better to indicate “Option A [or 1]” vs “Test Method A”
- r) **Section 302.5.2** – This “Method B” is, for all intents and purpose, a 15 min Special Approval / Alternate Thermal Barrier Assembly test. For the sake of brevity (and good common sense) why not either (1) reference back to Section 302.4?
- s) **Section 302.6.1.2.1** – Same comment as to 302.5.2

- t) **Section 302.7** – “Building types” should read “construction types”
- u) **Section 302.9.3.2** – somewhat editorial – would read better as “Smoke developed index is not limited for roofing applications in accordance with Section 2603.3...”
- v) **Section 303.1.2** – better to indicate “...insulation in *insulation applications* in walls, floors, and the underside of roof decks shall be separated from...”

DRAFT

## IS-FPI ICC 1100

**Commenter:** Ben Caldwell

**Ballot:** Affirmative with Comment

### Comments:

#### Revise title and standard as follows:

Standard for Spray-applied ~~Polyurethane~~ Foam Plastic Insulation

**Reason:** We need to continue to consider removing “polyurethane from Title & Standard, allowing for current and future use of a variety of plastic materials.

DRAFT

## IS-FPI ICC 1100

**Commenter:** Roger Morrison  
**Ballot:** Affirmative with comment  
**Comments:**

### SECTION 202 DEFINED TERMS

#### 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 Section 302.5 or 302.6 ~~302.2.4~~ of this standard.

**THERMAL BARRIER.** A material ~~applied over~~ which separates the *spray-applied foam plastic* insulation for the interior of the building designed to slow the temperature rise of the foam during a fire situation and delay its involvement in the fire.

**Reason:** Consistent with building code language.

#### 302.4.3 Alternative Thermal Barrier Assembly

Revise last paragraph:

Where the spray-applied foam plastic assembly is tested in accordance with NFPA 286 or UL1715 the assembly is suitable for use in all ceiling height.

**303.1.2.1 Roofing Application Thermal Barrier Requirements** Installation of *spray-applied foam plastic* insulation in *roofing applications* shall be separated from the interior of the building as set forth in Section 2603.4.1.5 of the International Building Code or Section R316.4-5.2 of the International Residential Code, as applicable.

**Reason:** roofing T. B. section