



# International Energy Conservation Code Envelope & Embodied Energy Subcommittee

## Meeting Notes

March 17, 2022  
11:00 AM to 2:00 PM EST (3 hours)

[WebEx Link](#)

**Committee Chair:** Tom Culp, Birch Point Consulting

**Committee Vice Chair:** Emily Lorenz, IIBEC

### 1. Call to order.

Meeting called to order by Culp – 11:03 AM EST

### 2. Meeting Conduct - Culp

- a. Antitrust Reminder
- b. Identification of Representation/Conflict of Interest
- c. ICC [Council Policy 7](#) Committees: Section 5.1.10 Representation of Interests
- d. ICC [Code of Ethics](#): ICC advocates commitment to a standard of professional behavior that exemplifies the highest ideals and principles of ethical conduct which include integrity, honesty, and fairness. As part of this commitment it is expected that participants shall act with courtesy, competence and respect for others.

Culp reviewed Meeting Conduct items. No questions – No discussion.

### 3. Roll Call - Lorenz

| Name                           | Organization  |   | Name                 | Organization                            |   |
|--------------------------------|---|---|----------------------|---|---|
| *Culp, Tom<br>(chair)          | Glazing Industry<br>Code Cmte;<br>Aluminum Extruders<br>Council | X | Humble,<br>Jonathan  | Amer Iron & Steel<br>Institute          | X |
| *Lorenz, Emily<br>(vice chair) | Intl Inst of Building<br>Enclosure<br>Consultants               | X | *Johnson,<br>Greg    | Natl Multifamily<br>Housing Council     | X |
| Altenhofen,<br>David           | RWDI  | X | Kochkin,<br>Vladimir | National Association of<br>Homebuilders | X |
| *Ashley, Danielle              | Johns Manville  | X | Melley,<br>Michele   | State of CT                             | X |
| *Belcher, Matt                 | Enhanced Bldg<br>Systems  | X | *Ross, Bob           | Austin Ind. School<br>District          | X |

|                                |   |   |                 |  |   |
|--------------------------------|---|---|-----------------|--|---|
| *Brooks, Scott                 | Disney  |   | Ross, Loren     | American Wood Council                    | X |
| *Burton, Richard               | City of Lincoln, NE                                   | X | Sanders, Helen  | Façade Tectonics Inst.                   | X |
| Cinnamon, Tony                 | Wiss, Janney, Elstner                                 | X | Spiriev, Bistra | GA Finance & Investment                  | X |
| *Churchill Norbert, Zepherinus | CARICOM   | X | *Tillou, Mike   | PNNL                                     | X |
| *Clausing, Chris               | Clausing Builders                                     | X | VanGeem, Martha | Masonry Alliance for Codes and Standards | X |
| Crandell, Jay                  | American Chemistry Council's Foam Sheathing Coalition | X | Weston, Teri    | Air Barrier Assoc of Amer.               | X |
| DeWein, Mike                   | North Branch Services                                 | X | Zani, Andrea    | Permasteelisa                            | X |
| Guttman, Maureen               | Energy Solutions                                      | X |                 |  |   |

\*Member of main IECC Commercial Committee

#### 4. Approval of Agenda

Agenda Approved – No Discussion – No Objections.

#### 5. Approval of Minutes – Mar 3, 2022 meeting

Minutes Approved – No Discussion – No Objections.

#### 6. Administrative issues.

No administrative issues.

#### 7. Action Items.

##### a. Air leakage:

**CECPI-3** New merged restructuring proposal (with results from CEPI-71 and 61 as modified dropped in)

- **Motion / Second** by Weston / Humble:
- **Motion:** Replace v6 with v5 from last meeting.
- **Notes:** approved agency and approved third party are different terms and shouldn't necessarily be made consistency.
- **Passes:** 18 – 0 – 1 (CNV)
- **Reason:** To update the version number to be the most-current based on additional feedback from committee members and interested parties

Original motion from 3/3/22 meeting

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- Motion / Second by Weston / DeWine: Motion to approve as modified by overlay results of CEPI-71 & CEPI-61.
- **Passes:** 18 – 0 – 1 (CNV)
- **Reason:** This proposal is a merged proposal based on parts or all of proposals CEPI-55, CEPI-56, CEPI-57, CEPI-58, CEPI-63 Pt1, and CEPI-70 aimed primarily at reorganizing the structure of Section C402.5 to reduce redundancy and improve the clarity of the section. Section C402.5 is currently one of the most intricate and potentially confusing sections of the code, and this proposal seeks to simplify it by improving the flow of the text. Reorganization focused on the re-structure of the existing testing requirements to have clear performance requirements, testing criteria requirements and whole building testing exceptions.

CEPI-55            restructure proposal from ABAA  
 CEPI-56            restructure proposal from SEHPCAC  
 CEPI-57            overall proposal from ASHRAE  
 CEPI-70            restructure proposal from ABAA

- **Motion / Second** by Weston / Sanders:
- **Motion:** Disapprove CEPI-55, CEPI-56, CEPI-57, and CEPI-70
- **Passes:** 17 – 0 – 2 (CNV)
- **Reason:** Based on previous action on CECPI-3

CEPI-58            testing and dwelling units – see modification.

Filename: “2022-03-17\_CEPI-58-21\_MOD1\_REVISED\_03\_15\_2022\_Mtg edits.docx”

- **Motion / Second** by Weston / Humble
- **Motion:** Approved as modified.
- **Notes:** Proponent to provide revised reason statement and cost effectiveness statement so that when it goes for public review, reviewers will understand.
- **Passes:** 18 – 0 – 4 (CNV)
- **Reason:** CEPI-58 was modified by the proponents to remove overlapping changes with other proposals that also addressed re-structuring, test exemptions, and test stringency. The remaining modifications were supported by the SC because they:
  - clarify terminology,
  - clarify which spaces outside of dwelling or sleeping units must be tested,
  - limit the scope of this test method to Group R-2 and I-1, and
  - introduce an equivalent test metric for the points associated with Reduced Air Infiltration when testing dwelling/sleeping units

~~CEPI-66 Pt1 – dwelling unit test pressure~~ **Withdrawn by proponent**

**b. Items referred to envelope:**

Full committee referred the following for our consideration and vote:  
 CEPI-1            car wash facilities; process energy – see modification

- **Motion / Second** by Lorenz / Altenhofen
- **Motion:** Disapprove
- **Passes:** 16 – 0 – 3 (CNV)

- **Reason for CEPI-1:** The definition of process application needs work, and the remaining parts of the text could use some clean up. Committee members also voiced concerns over other industries wanting similar exceptions.

### c. Thermal bridging

No votes. Please continue to provide feedback on revised proposal (sent out 2/23/22, updated version to be sent out in near future).

- No discussion – feedback requested for Helen Sanders to continue work.

### d. Opaque / Wall / Insulation items:

Start on the next grouping:

CEPI-13 Pt1 Conditioned space definition

- **Motion / Second** by VanGeem / Guttman
- **Motion:** Disapprove
- **Passes:** 19 – 0 – 1 (CNV)
- **Reason:** Did not increase clarity of the code.

CEPI-21 Insulation R-value ratings, FTC rule

- **Motion / Second** by Crandell / Altenhofen
- **Motion:** Disapprove
- **Passes:** 17 – 0 – 1 (CNV)
- **Reason:** All the information that is needed is in the FTC R-value rule and we don't need to repeat that information in the IECC.

CEPI-27 Opaque sections reorganization

Discussion and feedback:

- Correlate with changes made already in this section.
- Change section numbers rather than moving sections so that the whole section isn't up for rebalot.
- Jay will work on this more before we decide on it; will circulate a Word version.
- Recommendation was to format proposal similar to how Teri did it with color coding.
- Will work on discussing at our meeting in 4 weeks.

CEPI-28 Make U, C, F-factor table primary

- **Motion / Second** by Crandell / Weston
- **Motion:** Approved as modified
- **Modification:**  
C402.1 General.

*Building thermal envelope* assemblies for buildings that are intended to comply with the code on a prescriptive basis in accordance with the compliance path described in Item 1 of Section C401.2.1 shall comply with the following:

1. The opaque portions of the *building thermal envelope* shall comply with the specific insulation requirements of Section C402.2 and the thermal requirements of either the R-value-based method of U-, C- and F-factor-based method of Section C402.1.3; the U-, C- and F factor-based method of R-value-based method of Section C402.1.4; or the component performance alternative of Section C402.1.5.

2. Roof solar reflectance and thermal emittance shall comply with Section C402.3.
3. Fenestration in building envelope assemblies shall comply with Section C402.4.
4. Air leakage of building envelope assemblies shall comply with Section C402.5.

Alternatively, where buildings have a vertical fenestration area or skylight area exceeding that allowed in Section C402.4, the building and *building thermal envelope* shall comply with Item 2 of Section C401.2.1 or Section C401.2.2.

Walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with Section C403.11.

~~C402.1.4 C402.1.3~~ Insulation component R-value ~~alternatives based method~~.

*Building thermal envelope* opaque assemblies shall comply with the requirements of Sections C402.2 and C402.4 based on the *climate zone* specified in Chapter 3. For opaque portions of the *building thermal envelope* ~~using this section as an alternative to Section C402.1.3~~ intended to comply on an insulation component R-value basis, the R-values for cavity insulation and continuous insulation shall be not less than that specified in Table C402.1.4 C402.1.3.

- **Passes:** 15 – 0 – 1 (CNV)
- **Reason:** To align with IBC with IRC and assign U-factors as the primary basis; modifications were added for increased clarity.

## 8. Other business.

- None.

## 9. Upcoming meetings—first and third Thursdays of every month

- a. April 7, 2022, 11:00 AM to 2:00 PM EST
- b. April 21, 2022, 11:00 AM to 2:00 PM EST

No changes.

## 10. Adjourn.

- Meeting adjourned by Culp 1:48 PM EST.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

[ICC Energy webpage](#)  
[Code Change Monograph 2nd printing](#)

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

**Committee Chair:** Tom Culp, Birch Point Consulting, [culp@birchpointconsulting.com](mailto:culp@birchpointconsulting.com)

**Committee Vice Chair:** Emily Lorenz, IIBEC, [emilyblorenz@gmail.com](mailto:emilyblorenz@gmail.com)

We have started an interested-party email list for various subcommittee communications. Please contact Tom Culp to be placed on that email list.

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