



International Energy Conservation Code Envelope & Embodied Energy Subcommittee

Meeting Minutes

January 20, 2022
11:00 AM to 1:00 PM EST (2 hours)
[Webex Link](#)

Committee Chair: Tom Culp, Birch Point Consulting
Committee Vice Chair: Emily Lorenz, IIBEC

1. Call to order.

2. Meeting Conduct - Culp

- a. Antitrust Reminder – Reminder given.
- 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.

3. Roll Call – Lorenz – Roll taken and recorded.

Name	Organization		Name	Organization	
*Culp, Tom (chair)	Glazing Industry Code Cmte; Aluminum Extruders Council	X	Humble, Jonathan	Amer Iron & Steel Institute	X
*Lorenz, Emily (vice chair)	Intl Inst of Building Enclosure Consultants	X	*Johnson, Greg	Natl Multifamily Housing Council	X
Altenhofen, David	RWDI	X	Kochkin, Vladimir	National Association of Homebuilders	X
*Ashley, Danielle	Johns Manville	X	*Ross, Bob	Austin Ind. School District	X
*Belcher, Matt	Enhanced Bldg Systems	X	Ross, Loren	American Wood Council	X
*Brooks, Scott	Disney	X	Sanders, Helen	Façade Tectonics Inst.	X
*Burton, Richard	City of Lincoln, NE		Spiriev, Bistra	GA Finance & Investment	X
Cinnamon, Tony	Wiss, Janney, Eltner	X	*Tillou, Mike	PNNL	X

*Churchill Norbert, Zepherinus	CARICOM	X	VanGeem, Martha	Masonry Alliance for Codes and Standards	X
*Clausing, Chris	Clausing Builders	X	Weston, Teri	Air Barrier Assoc of Amer.	X
Crandell, Jay	American Code Council's Foam Sheathing Coalition	X	Witco, Christin	City of Boulder, CO	
DeWein, Mike	North Branch Services	X	Zani, Andrea	Permasteelisa	X
Guttman, Maureen	Energy Solutions	X			

*Member of the main IECC Commercial Committee

NOTE: Christin Witco had to resign. Tom Culp to work with ICC w/r to replacement if needed.

4. Approval of Agenda

No objections to agenda. One correction noted by Mike Tillou; he is a member of the main E4C and should be noted as such in the roster.

5. Approval of Minutes - January 6, 2022 meeting

No objections to minutes – approved by acclamation.

6. Administrative issues.

Chair reviewed approach for considering proposals and reminded to be concise.

7. Action Items.

a. Thermal Bridging Update

Thermal bridging proposal coordination update was provided by Helen Sanders. Three proposals condensed to two. Should be ready a week before next meeting.

b. Air leakage continued:

Standalone – items that can mostly be decided independent of, or overlay, the other proposals

CEPI-59-21 sealing between roof deck and roof membrane (Tabled 1/6/22 until this meeting, but may push back to 2/3 meeting at request of proponent)

CEPI 59 proponent not present – move to next meeting.

CEPI-60-21 air sealing of electrical boxes

Proponent presented updated proposal. Proposal further modified by subcommittee.

Add new text as follows:

C402.5.1.1 Air barrier construction. The *continuous air barrier* shall be constructed to comply with the following:

5. Electrical and communication boxes shall comply with C402.5.12 to maintain the integrity of the *air barrier*.

Add new text as follows:

C402.5.112 Electrical and communication boxes. ~~Other than air-sealed~~ Electrical and communication boxes that penetrate the *air barrier* of the *building thermal envelope*, and that do not comply with C402.12.5.1, shall be caulked, taped, gasketed, or otherwise sealed to the *air barrier* element being penetrated. ~~The air barrier shall extend behind all boxes. All concealed openings on the concealed portion of into the box shall be sealed. Where present, insulation shall rest against all completely fill the concealed portions area around of the box.~~

C402.5.112.1 Air-sealed boxes. Where air-sealed boxes are installed, they shall be tested and marked in accordance with NEMA OS 4. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

(renumber current C402.5.11 as C402.5.12)

Greg Johnson (Motion AM); Mike Tillou (2nd) – hand vote: 17(yes) – 0(no) – 1(abstain), chair not voting.

Reason statement: clarifies requirement for the sealing of electrical boxes that penetrate the air barrier.

CEPI-69-21 approved 3rd party, and adds ASTM E1186
(will only discuss once ASTM standard is available to subcommittee)
Reference ASTM standard not available yet – move to next meeting.

Structure of the Code Section – focus on clarity and organization of the section, separate from stringency.

Proponents working on a possible combined proposal.

CEPI-55-21
CEPI-56-21
CEPI-57-21 structural, but also testing and stringency changes – see those groups also
CEPI-63-21 Pt I
CEPI-70-21

Also consider structure aspects in CEPI-58 when reviewing

Report on progress given by Teri Weston on reconciliation of proposals for reformatting, restructuring, and clarification.

Testing – how, where, and under what conditions is testing required

CEPI-61-21 removes exceptions so testing required in all zones
CEPI-62-21 removes exceptions based on climate zone, keep one exception > 25,000 ft²
CEPI-57-21 removes exceptions based on climate zone, requires testing < 10,000 ft²
CEPI-66-21 Pt I dwelling unit test pressure (can also overlay other proposals)
CEPI-63-21 Pt I changes dwelling unit testing carve-out to only dwelling unit with exterior access (can overlay other proposals)

Tom Culp gave a slide presentation on variation in criteria (target air leakage rates, building size exceptions, climate zone exceptions) in the different proposals to aid subcommittee discussion. Subcommittee members expressed opinions and preferences on different criteria options. Also, discussed cost-effectiveness data may be needed to identify lowest leakage rate with positive net present value.

Straw Poll Votes:

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Keep “Oops” clause:
15(y) – 3(n)

Remove exceptions for Climate Zone:
10(y) – 8(n) – consensus less clear

Building Air leakage criteria:
0.40 – 0 (y)
0.35 – 12 (y)
0.30 – 5 (y)
0.25 – 1(y)
Not sure yet – 1(y)

Building Size:
Should there be testing exemption based on building size for non-RES?
11(y) – 7(n)

Group discussed test pressure with general consensus that 75 Pa for whole-building testing and 50 Pa for dwelling unit testing is most appropriate. Air leakage rates subject to further discussion.

Discussed future work items and proposals to address. Need any updated proposals at least 1 week in advance of meetings. Next meeting Feb 3rd. There will be some Env SC items also to be considered on next EC4 main committee meeting on January 26, 2022.

Meeting adjourned.

Stringency – what amount of air leakage is allowed

CEPI-57-21	air leakage level, but also overlaps with structure & testing groups (building size)
CEPI-58-21	air leakage level, but also overlaps with structure & testing groups (exceptions)
CEPI-71-21	air leakage level

b. Roofing:

- CEPI-11 Pt 1
- CEPI-17 Pt 1
- CEPI-19 Pt 1
- CEPI-41
- CEPI-42
- CEPI-47
- CEPI-50
- CEPI-51
- CEPI-222
- CEPI-223
- CEPI-224
- CEPI-225

8. Other business.

- 9. Upcoming meetings**—first and third Thursdays of every month
- a. February 3, 2022, 11:00 AM to 1:00 PM EST.
 - b. February 17, 2022, 11:00 AM to 1:00 PM EST

10. Adjourn.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

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

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

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