



**International Code Council
International Energy Conservation Code
2024 Development Committee
Residential Sections
Existing Buildings Subcommittee
Meeting Minutes**

Meeting Date: April 12, 2022

Subcommittee Chair: Gil Rossmiller gil.rossmiller@shumscoda.com

Subcommittee Vice Chair: Edwin Hensley EHensley@habitat.org (Absent)

1. Call to order.

a. The meeting was called to order at approximately 2:03 PM EST.

2. Meeting Conduct.

a. IECC Secretariat Kris Stenger introduced this item and made attendees aware of ICC [Council Policy 7](#) Committees: Section 5.1.10 Representation of Interests and ICC [Code of Ethics](#).

3. Roll Call.

a. Subcommittee members in attendance at Roll Call:

Present	Name
N	Avila, Elgin
N	Berg, Molly (alternate)
Y	Brown, Michael
Y	Chen, Yan (non-voting)
Y	Demers, Paul
Y	Dent, Stephen
N	Hensley, John E.
N	Krimgold, Fred
Y	Rossmiller, Gil

Y	Schwarz, Robby
N	Swope, Clifford
Y	Wiley, Seth
Y	Zengel, Jim

b. Public in attendance: *See Attendee List from Online Meeting Platform below.*

c. ICC Staff in attendance: Kris Stenger

4. Approval of Minutes.

a. March 22nd Meeting Minutes. Demers motion to approve. Wiley second. No nays. Unanimous approval.

5. Administrative Issues.

a. Agenda approval Demers motion. Zengel second. No nays. Unanimous approval.

6. Action Items.

a. Discuss REPI-143a-12.

1. Proponent Schwarz explains proposal has been split as recommended by Subcommittee, plus additions and modifications to the proposal per the Subcommittee. 501.7 exceptions were limited per Subcommittee recommendations.

- - Public Comments - -

2. A Martino requests definition of “brought into full compliance with this code” from Proponent.

3. Proponent responds that language is consistent with current code language, meaning “compliance with this code” means in compliance with the code including things like windows.

4. Martino and Proponent discuss hypothetical example of conditioning previously-unconditioned basement space.

5. Wiley comments that making unconditioned space conditioned requires being brought up to code.

6. Rossmiller comment similar to Wiley.

7. Demers comments similar to Wiley.

8. *Schwarz motion to approve as amended. Demers second.*

- - Subcommittee Discussion - -

9. Demers questions whether Proponent motion is in order.

10. Chair confirms it is in order.

11. *Motion to approve as modified 6 hands in favor. 0 against. Motion carries.*

12. *Reason statement from Schwarz: Proposal brings change in space condition that didn't belong in addition section into general section where it belongs better.*

b. Discuss REPI-143b-12.

1. Proponent statement this proposal is the second half of 143 to demonstrate how additions comply with code. Makes 502.1 vague language into true compliance section. Includes language from Subcommittee recommendations. Compliance sections gives 3 ways which mirrors base code, prescriptive, UA, ERI, Performance with blower door requirements. Provides further details of proposal as written and viewed including RESNET 301 ERI pathway including language and metrics which provide flexibility for jurisdictions to work with.
2. Crandell comments might not be fully satisfied - with UA pathway due to timing of construction, with ERI pathway due to too conservative, and with Addition ERI which may be too lax.
3. Martino questions blower door test only required in Total UA.
4. Proponent responds blower door test required as part of base code.
5. Martino questions whether / how existing older buildings will / can reasonably comply with blower door test.
6. Proponent responds that compliance pathway to older homes with additions larger than 600 sf would need to do more work to the existing homes under current or previous code, and clarifies that air sealing would be required, and clarifies that other compliance pathways would not have this requirement allowing tradeoff. Proponent clarifies that proposal does not require upgrades to mechanical.
7. Martino questions whether pre- and post- addition blower door test could be included to ease compliance.
8. Proponent responds that blower door test is required at the beginning – which would help builders, architect, and others to plan for leakage.
9. Martino comments that 5 ACH may be too restrictive and suggest softening 5 ACH requirement.
10. Crandell comments that blower door tests on older homes can be difficult and create complexity.
11. Proponent agrees that blower door test can require work, and clarifies that blower test is required under current code.
12. Crandell comments that possibly good to require that air barrier requirements be required and that blower door test be run at end to document what's achieved and then add commercial-type provisions with “training wheels”.
13. Proponent agrees with Crandell.
14. Wiley comments on current projects of existing homes which can achieve ACH requirements.
15. Demers comments that the ACH requirement is not something he may be able to support.
16. Proponent comments on importance of making existing homes efficient and difficulty with how to best address.
17. Denniston questions UA pathway.
18. Proponent clarifies compliance.
19. Denniston comments that prescriptive options like R408 may be useful to help ease the ACH and that some of the language is clunky.
20. Wiley comments that older homes are challenging but that Habitat for Humanity in the area typically achieves less than code ACH.
21. Demers agrees with Denniston comments.
22. Proponent comments possible Performance and Prescriptive paths be removed and that ERI path be preserved to allow flexibility.
23. Brown comments that simplicity is important, and that 2 blower door tests should be required, and that the final blower door test should need to show the building is equal or better

air tightness wise.

24. Martino comments that she likes having 3 approaches in the proposal and encourages finding a better ACH requirement.

25. Denniston comments that the need to be 3 compliance paths to allow real adoptable options for the country, and suggests options such as pre- and post- blower door with percentage improvement.

26. Proponent agrees and asks to develop language and asks whether there is time for resubmittal.

27. Chair comments that there is more time for resubmittal.

28. Crandell comments that prescriptive needs to remain because it's so popular and it needs blower door test percentage improvement with clarification that addition should be built to new code; and that performance path should remain using audit for baseline of existing plus new addition to code and require 10% or other improvement better.

29. Brown comments on need for knowledge in the marketplace of how to best apply ERI framework to existing homes and existing homes plus additions, so he's concerned that complexity of rules may decrease use.

30. Dent comments that many states offer free or low cost energy audits with blower door tests so that makes some of this reasonable to apply, and that performance path is good for some code users. Comments / questions that possibly only 1 blower door at end may simplify proposal.

31. Chair requests what Proponent would like to do.

32. Proponent requests to take back proposal and requests meeting with Subgroup for further refinement to bring back to Subcommittee. Crandell, Brown, Matrino, and Denniston volunteer.

33. Chair says no motion required.

34. Martino comments she is not part of Subcommittee but willing and happy to help in the Subgroup.

35. *Demers motion to remand back to Proponent. Wiley second. 1 nay. Motion passes.*

36. *Chair requesting Proponent to bring back in 1 week so sufficient time to review before next Subcommittee meeting.*

c. Discuss REPI-144-21.

1. Proponent clarified overall proposal. Leverages substantial additions and renovations to use R408 options. 2 primary concerns from previous review: 1) threshold for alterations be clarified – so he defined activities similar to how its done on the commercial side and in the existing building code, 2) work area be clarified – so he defined that similar to how its defined elsewhere. He further clarifies that code alteration typologies are not a good fit for the energy code so he developed the proposed approach.

2. Martino reads alteration types from other code provisions, and comments that the 3 alteration types should be addressed in some fashion.

3. Proponent responds that proposal is developed based on working with code officials especially in the Washington area – alteration types are based on egress paths and code officials do not want to use them for the energy code.

4. Martino reasserts point and disagrees with proponent.

5. Brown questions what “interior surfaces” are.

6. Proponent responds that includes walls, floors, and ceilings.

7. Brown comments that there's a lot of work in existing building ceilings.

8. Proponent and Brown continue conversation.

9. Crandell agrees with Brown – interior surface area should apply to interior of thermal envelop. And agrees that current code alteration types are not good fits for energy code and

likes proposal's framework. 502.3.5 "may be used" should be changed to "shall be permitted" may be better. Crandell comments on liking the proposal and that it can be used possibly with Schwarx REPI 143 and work well together.

10. Proponent responds that it would be good to coordinate with REPI 143.

11. Demers comments that current code doesn't do a good job of dealing with residential and residential energy. Comments that it may be onerous to require efficiency packages if simply replacing all lighting to LEDs or replacing water heater with hybrid heat pump.

12. Proponent responds that those examples actually meet the proposal intent so wouldn't trigger any further work.

13. Schwarz comments that like proposal and ways it deals with mechanical and lighting, and that envelop may be the area where REPI 143 and this proposal overlap thus need coordination.

14. Zengel asks whether attic is included in "exterior wall envelop".

15. Proponent and Zengel discuss.

16. Crandell comments that could dovetail with REPI 143 in terms of upgrades to envelop be included as credits. Possibly that flexibility / credit could help both proposals.

17. Proponent responds that R506 hopes to see such proposals in the future which become efficiency packages – exactly what the Subcommittee comments.

18. Chair asks proponent what he'd like to do.

19. Proponent responds with modification regarding R503.1.5 #4 about clarification of "interior surfaces" to include "exterior wall envelope" and R502.3.5 about "shall be" instead of "may be".

20. Chair modifies proposal.

21. Schwarz asks Proponent if he'd like to table until REPI 143 is heard.

22. Chair clarifies that REPI-143 is now known as RECPI-5-21.

23. *Wiley motion to send back to Sub-working-group to coordinate with REPI-143 / RECPI-5-21. Demers second. No nays. Motion passes unanimously.*

7. Open Discussion. (See Chat Room below)

- a. Crandell requests clarification that these two proposals are the final two for the Subcommittee.
- b. Chair confirms.
- c. Chair clarifies that no additional proposals have been added to the Subcommittee meeting.

8. Other Business.

a. Next Meeting is April 26, 2022. Meeting to discuss:

1. RECPI-5-21 (previously REPI-143b)
2. REPI-144-21

9. Adjournment.

- a. Motion to adjourn by Zengel. Second by Demers. No nays.
- b. The meeting was adjourned at approximately 3:36 pm EST.

Attendee List from Online Meeting Platform:

Name	Attendee Email
Kristopher Stenger	kstenger@iccsafe.org
GilRossmiller	gil.rossmiller@shumscoda.com
Seth Wiley	AIA
Jim Zengel	jim@zengelgroup.com
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Jerry Phelan	jerry.phelan@covestro.com
RobbySchwarz	robby@btankinc.com

Chat Room:

from Joe Cain to everyone: 2:00 PM
 Joe Cain, Solar Energy Industries Association (SEIA)
 from Jim Zengel to everyone: 2:00 PM
 Jim Zengel is on the call
 from Jay Crandell to everyone: 2:03 PM
 Jay Crandell, representing FSC
 from Jerry Phelan to everyone: 2:18 PM

Jerry Phelan, Covestro
from Kristopher Stenger to everyone: 2:20 PM
moving on to the consensus committee this proposal 143b will be renumbered RECPI-5-21
from GilRossmiller to everyone: 2:23 PM
got it
from Amy Martino to everyone: 2:35 PM
Robby, I agree no one knows how to deal with an addition and how it is tested
from Amy Martino to everyone: 2:40 PM
Amy Martino, Building Site Synergy- non- subcommittee member
from Yan Chen to everyone: 2:46 PM
Is it possible to have the blower door test done before the addition, and then after, and make sure
the ACH does not increase or only increase 10% or less or give credits to decrease by 10%?
from Amy Martino to everyone: 2:59 PM
I feel it needs to be simple. enforceable and encourage renovations
from RobbySchwarz to everyone: 3:07 PM
Can those interested in working on this please put your email in the chat. Thanks you all
from Amy Martino to everyone: 3:08 PM
Amy Martino.. AMartino@BuildingSiteSynergy.com
from Yan Chen to everyone: 3:08 PM
Yan Chen, yan.chen@pnnl.gov
from Seth Wiley, AIA, Committee Member to everyone: 3:08 PM
Can everyone mute
from Paul Demers to everyone: 3:14 PM
Paul Demers, Paul.a.demers@maine.gov
from Michael Brown to everyone: 3:35 PM
michael.brown@dc.gov