

International Energy Conservation Code Consensus Committee-Residential

Draft Meeting Agenda (6/22 posting) Webex Meeting Link

June 23, 2022 2:00 PM EST to 5 PM EST (3 hours)

Committee Chair: JC Hudgison, CBO, Assoc. AIA Committee Vice Chair: Bridget Herring & Robin Yochum, LEED Green Associate

- 1. Call to order.
- 2. Meeting Conduct.
 - a. Identification of Representation/Conflict of Interest
 - b. ICC Council Policy 7 Committees: Section 5.1.10 Representation of Interests

c. ICC <u>Code of Ethics</u>: 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.

d. ICC Antitrust Compliance Guideline

- 3. Roll Call.
- 4. Approve Agenda
- 5. Approval of Minutes
- 6. Administrative issues-staff

RECPI-10-21 (Water Heater Efficiency) REPI-138-21 (Service water heating units) REPI-99-21 (Electric resistance zone heat unit) REPI-56-21 (Insulation installation) (HVACR as modified 6-3-2) (HVACR disapprove 6-5) (HVACR as modified 7-1-1) (Envelope as modified 11-2)

9. Other business.

10. Upcoming meetings. June 30 at 12 PM EST

11. Adjourn.

FOR FURTHER IECC Residential INFORMATION BE SURE TO VISIT THE ICC WEBSITE: <u>IECC</u> <u>Residential Website</u>

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Kristopher Stenger, AIA, CBO Director of Energy Programs International Code Council kstenger@iccsafe.org



Proposal #

International Energy Conservation Code Code Change Proposal Tracking Sheet

REPI-113

| R402.1.1 Vapor retarder |
|--|
| R402.2.3 Eave baffle |
| R402.2.4.1 Access hatches and doors |
| R402.2.10.1 Crawl space wall insulation installations |
| R402.4.1.1 Installation |
| R402.4.1.2 Testing |
| R402.5 Maximum fenestration U-factor and SHGC |
| Mechanical |
| R403.1 Controls |
| R403.3, including R403.3.1, except Sections R403.3.2, R403.3.3 |
| and R403.6 |
| Ducts |
| R403.4 Mechanical system piping insulation |
| R403.5.1 |
| Heated water circulation and temperature maintenance |
| systems |
| R403.5.3 Drain water heat recovery units |
| R403.6 Mechanical ventilation |
| R403.7 Equipment sizing and efficiency rating |
| R403.8 Systems serving multiple dwelling units |
| R403.9 Snow melt and ice systems |
| R403.10 Energy consumption of pools and spas |
| R403.11 Portable spas |
| R403.12 Residential pools and permanent residential spas |
| Electrical Power and Lighting Systems |
| R404.1 Lighting equipment |
| R404.2 Interior lighting controls |
| R404.4 Solar and energy storage inverters |
| a. Reference to a code section includes all the relative subsections |

a. Reference to a code section includes all the relative subsections except as indicated in the table. Copyright © 2021 International Code Council, Inc.

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Add new standard(s) as follows:

IEEE Institute of Electrical and Electronic Engineers 3 Park Avenue, 17th Floor New York NY 10016

<u>1547-2018a</u>

IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces

UL UL LLC 333 Pfingsten Road Northbrook IL 60062-2096

<u>1741</u>

<u>UL Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With</u> <u>Distributed Energy Resources</u>



| Proposal # | REPI-157-21 |
|-----------------|--|
| CDP ID # | |
| Code | IECC RE |
| Code Section(s) | IECC [®] : APPENDIX RC, SECTION RC102, RC102.2 (AX102.2) (New), RC102.2, TABLE RC102.2, ASHRAE Chapter 06 (New) |
| Location | |
| Proponent | Residential |

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a. The building shall meet the requirements of Table R406.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table R402.1.2 or R402.1.3.

Add new standard(s) as follows:

ASHRAE <u>ASHRAE/IES 90.2-2018:</u> <u>Including approved addenda (Addenda A (approved Jan 2021), B (June 2021) and D (February 2022))</u>

Modification Reason:

REPI-157 as originally proposed replaced the ERI Table with ASHRAE 90.2. This modification allows ASHRAE 90.2 as a compliance option while maintaining the current Appendix RC as an option.

This modification also adds the mandatory requirements to the base ERI score. The mandatory requirements are from Table R406.2 and Sections 406.3, 406.6 and 406.7.

The following mandatory requirements were added to the 90.2 option:

- R402.4.1.1 (Air barrier and insulation installation)
- R402.4.1.2 (Air barrier testing)
- R404.4 (Electric readiness) ------ (see REPI-111)
- R404.4 (Electric Vehicle Power Transfer Infrastructure) --- (see RECPI-6)

Updates reference standard ASHRAE 90.2 with approved Addenda:

- Addenda A (January 2021) Updates referenced standards including updates of ANSI/RESNET/ICC 301 to 2019 edition, ANSI/RESNET/ICC 380 to 2019 edition and the addition of ASTM E3158
- Addenda B (June 2021) Clarifies lighting provisions for common areas in multifamily structures
- Addenda D (February 2022) Adds basic indoor environmental quality requirements for lighting systems. Adds reference to



| Proposal # | REPI-160-21 | |
|---------------------|---|--|
| CDP ID # | | |
| Code | IECC RE | |
| Code Section(s) | RC102.2 (AX102.2) Energy Rating Index zero energy score. | |
| Location | | |
| Proponent | Residential Electrical, Power, Lighting and Renewables Subcommittee | |
| Proposal Status | | |
| Subcommittee | RE EPLR | |
| Subcommittee Notes | Proponent: Steve Rosenstock representing Edison Electric Institute This proposal would add the more inclusive term "renewable energy resources" instead of spelling out various types of renewable energy. It would also change the terms of an energy purchase contract or lease from not less than 15 years to not less than 10. Some subcommittee members disagreed with changing from 15 to 10 years. The proponent contended that 10 years is more in line with how long the majority of people stay in a home. | |
| Recommendation | Approve as submitted | |
| Vote | 9-4 | |
| Recommendation Date | 6/131 0.481 ref67.02 246.6 0.mi 10.98 0 0 10.98 0.001 Tc481 ref67.02 44.18 | |

| Committee Response | |
|--------------------|---|
| Vote | Affirmative Negative Table To Subcommittee |
| Date | |

REPI-160-21

IECC®: RC102.2

Proponents:

Steven Rosenstock, representing Edison Electric Institute (srosenstock@eei.org)

2021 International Energy Conservation Code

Revise as follows:

RC102.2 (AX102.2) Energy Rating Index zero energy score.

Compliance with this section requires that the rated design be shown to have a score less than or equal to the values in Table RC102.2 when compared to the Energy Rating Index (ERI) reference design determined in accordance with RESNET/ICC 301 for both of the following:

1. ERI value not including on-site power production (OPP) calculated in accordance with RESNET/ICC 301.

2. ERI value including on-site power production calculated in accordance with RESNET/ICC 301 with the OPP in Equation 4.1.2 of RESNET/ICC 301 adjusted in accordance with Equation RC-1.

(Equation RC-1)

where:

CREF = Community Renewable Energy Facility power production—the yearly energy, in kilowatt hour equivalent (kWheq),

contracted from a community renewable energy facility that is qualified under applicable state and local utility statutes and rules, and that allocates bill credits to the rated home.

REPC = Renewable Energy Purchase Contract power production—the yearly energy, in kilowatt hour equivalent (kWheq), contracted from an energy facility that generates energy with <u>renewable energy</u> <u>resources</u> photovoltaic, solar thermal, geothermal energy or wind systems, and that is demonstrated by an energy purchase contract or lease with a duration of not less than <u>15 10</u> years.



Proposal #

International Energy Conservation Code Code Change Proposal Tracking Sheet

REPI-

| Committee Response | |
|--------------------|---|
| Vote | Affirmative Negative Table To Subcommittee |
| Date | |

REPI-164-21

IECC®: RC103 (AX 103) (New)

Proponents:

Steven Rosenstock, representing Edison Electric Institute (srosenstock@eei.org)

2021 International Energy Conservation Code

Add new text as follows:

RC103 (AX 103) Alternative Scoring Programs and Standards.

Alternative programs or standards, such as but not limited to the US EPA Energy Star Homes, USGBC LEED for Homes, and the ICC-700 National Green Building Standard shall be allowed to be used to comply with this section when approved by code officials.



| Proposal # | RECPI-10-21 Committee Proposal for water heater efficiency | |
|--------------------|---|--|
| CDP ID # | 605 | |
| Code | IECC RE | |
| Code Section(s) | R408.2.3 New Section n | |
| Location | base | |
| Proponent | IECC RE HVACR & WH subcommittee | |
| Proposal Status | SC rev | |
| Subcommittee | RE HVACR & WH | |
| Subcommittee Notes | Original Proposal REPI-138-21 Proponent and AHRI have been working on this Proposal for months to gain consensus on a modification. After months of discussion both the Proponent and AHRI came back to the subcommittee with similar but still different modifications. After long discussion the subcommittee voted to Disapprove the modified version presented by the Proponent and Approve the version presented by AHRI. This created a committee Proposal listed and submitted separately. Proposal RECPI-10-21. | |

Recommendation







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|---|---|--|
| Proposal # | REPI-138-21 Service WH units | |
| CDP ID # | 499 | |
| Code | IECC RE | |
| Code Section(s) | R408.2.3 New Section n | |
| Location | base | |
| Proponent | Patricia Chawla patricia.chawla@austinenergy.com | |
| Proposal Status | SC rev | |
| Subcommittee | RE HVACR & WH | |
| Subcommittee Notes | Proponent and AHRI have been working on this Proposal for months to gain consensus on a modification. After months of discussion both the Proponent and AHRI came back to the subcommittee with similar but still different modifications. After long discussion the subcommittee voted to Disapprove the modified version presented by the Proponent and Approve the version presented by AHRI. This created a committee Proposal listed and submitted separately. Proposal RECPI-10-21. | |
| | The recommendation by the subcommittee after a long discussion voted to Disapprove the Proponents Proposal. | |
| First motion to approve Gary Klein with Chris Perry second. Motio | | |
| | | |

Recommendation

| Next Step | To Subcommittee To Advisory Group To Consensus Committeeyes |
|---------------------|---|
| Consensus Committee | |
| Committee Response | |
| Vote | Affirmative Negative Table To Subcommittee |
| Date | |



| Proposal # | REPI-056-21 insulation installation | |
|--------------------|--|--|
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| CDP ID # | 471 | |
| Code | IECC RE | |
| Code Section(s) | R402.4.1.1, TABLE R402.4.1.1, R402.4.1.2 New Section n | |
| Location | base | |
| Proponent | Mark Lyles markl@newbuildings.org | |
| Proposal Status | SC rev | |
| Subcommittee | RE Envelope | |
| Subcommittee Notes | Proponent: modified, closer to grade 1 level of performance, pull language form Title 24 | |
| Recommendation | Bobby Parks motion to disapprove, Greg Johnson seconded. Reason: Good info but mostly installation instructions rather than code language. Some of the language used such as "without voids" is problematic.Referred back to SC by full committee. Modifications made by SEHPCAC and SC. Motion to approve. Reason: this proposal will help increase the proper installation of insulation and therefore the performance of residential buildings. 145.02 14.88 1 | |
| Vote | 12-4-1 | |

| COMPONENT | AIR BARRIER CRITERIA | INSULATION INSTALLATION CRITERIA |
|-----------|----------------------|----------------------------------|
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