



# International Energy Conservation Code Consensus Committee-Residential

## Draft Meeting Agenda

[Webex Meeting Link](#)

January 26, 2024  
2:00 - 3:00 PM Eastern

**Committee Chair:** JC Hudgison, CBO, Assoc. AIA

**Committee Vice Chair:** Bridget Herring

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 [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.
  - d. ICC [Antitrust Compliance Guideline](#)
3. Roll Call.
4. Approve Agenda
5. Action Items- Response to Board of Director's request related to AHRI's letter (see attached)
6. Upcoming meetings. TBD
7. Adjourn.

FOR FURTHER IECC Residential INFORMATION BE SURE TO VISIT THE ICC WEBSITE: [IECC Residential Website](#)

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Kristopher Stenger, AIA, CBO  
Director of Energy Programs  
International Code Council  
[kstenger@iccsafe.org](mailto:kstenger@iccsafe.org)

**Join by meeting number**

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## Draft user note:

**User note.** In considering whether to adopt this appendix, please note that federal law might be found to preempt the provisions it prescribes. See for example subsection (c) in [42 USC 6297: Effect on other law \(house.gov\)](#). The risk of preemption may be mitigated by the addition of trade-off options or through other strategies. Whether this appendix or a modification thereof is subject to preemption may depend on court decisions or whether a waiver has been issued by the Department of Energy pursuant to subsection (d) of 42 USC 6297.

October 13, 2023

Dominic Sims, CBO  
Chief Executive Officer  
International Code Council  
200 Massachusetts Ave, NW  
Suite 250  
Washington, DC 20001

**Re: Notification of Proposed 2024 International Energy Conservation Code-Residential (IECC-R) Provisions in Conflict with U.S. Federal Law**

Dear Mr. Sims:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) respectfully submits this letter to notify you and the International Code Council (ICC) Board of Directors of a provision of the draft 2024 International Energy Conservation Code-Residential (IECC-R) that, if adopted by states, would be preempted by U.S. federal law. The Energy Policy and Conservation Act (EPCA) explicitly prohibits states and localities, including building codes, from setting minimum efficiency requirements for covered products that conflict with the federal energy conservation standards set by the Department of Energy (DOE). AHRI submits this letter, pursuant to ICC's [Council Policy 49-21](#), Section 3.1.1, for one IECC-R Consensus Committee actions from September 14, 2023 – the disapproval of proposal RE2D-49-23 as modified (CZ 0-3 modifications to stretch code).<sup>1</sup>

AHRI requests that the Board of Directors modify Appendix RG from 2024 IECC-R because the adoption of facially preempted energy conservation requirements violates the ICC's purpose, scope, bylaws, and procedures.

**The International Code Council's purposes and policies dictate adherence to federal law.**

AHRI appreciates the good work of the ICC in developing and maintaining model statutes and standards. The highest purpose of the International Code Council is prominently set forth in its [Bylaws](#): "With respect to buildings and structures: (a) the lessening of burdens of government through the development, maintenance and publication of model statutes and standards for the use by federal, state and local governments in connection with the administration of building laws and regulations, and (b) the lessening of the burdens of government through the

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<sup>1</sup> Per draft IECC RE Minutes from 9-14-23, the motion to approve as modified failed 19-16-2. The Motion to disapprove passed 19-15-2. The reason statement, "Disapproved as modification was not needed due to the presence of other compliance paths and because it weakens an appendix that was already approved and makes technical changes too late in the game" shows a lack of the Committee's understanding of federal preemption.

performance of certain services for the benefit of federal, state and local governments in connection with the administration of building law and regulation.”<sup>2</sup>

The ICC’s primary beneficiary is clear: government code bodies. The intent of developing the model code is to lessen the burden on code development agencies. However, the adoption of legally preempted provisions achieves the opposite and undermines the value and purpose of the ICC to government agencies.

Federally preempted provisions are de facto out of scope of the IECC and should be struck. Chapter 1 of the IECC, “Scope and Administration,” specifies that “[t]his code is **intended to be adopted as a legally enforceable document** and it cannot be effective without adequate provisions or administration and enforcement.” However, provisions in the stretch code, Appendix RG, cause IECC-R to fail one of the seven conditions codified in [42 U.S.C. § 6297\(f\)\(3\)](#) that must be satisfied for a state or locality’s building code to escape preemption issues.

### **Residential Stretch Code Violates EPCA’s Federal Preemption**

Proposed changes in Public Draft 2 added a new appendix for optional jurisdictional adoption, Appendix RG, that will require new buildings in Climate Zones (CZ) 0-3 to use higher than minimum efficiency federally covered products to meet the total energy efficiency credits. Appendix RG doubles the prescriptively required number of energy efficiency credits as is required in the main body of the code. AHRI, and others, have raised federal preemption concerns with the Committee multiple times, most recently at the September 14<sup>th</sup> IECC-R Consensus Committee, where necessary modification to RE2D-49-23, proposed by the National American Home Builders (NAHB), were not adopted. Specifically, the stretch code fails to satisfy all necessary elements of the building code exception of EPCA (42 U.S.C. § 6297(f)(3)(B)).

42 U.S.C. § 6297(f)(3)(B) requires that the building code not specifically require any covered products to exceed federal standards for energy efficiency (unless granted a waiver from the Secretary of Energy). However, as shown in the table below, the buildings in CZ 0-3 would be unable to meet energy efficiency credit requirement of 20 points without requiring increased efficiency above EPACT minimums.

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<sup>2</sup> ICC Bylaws Section 1.2 “General Purposes.” Bylaws for the International Code Council, Inc. A Delaware Nonprofit Nonstock Corporation Effective December 10, 2021. <https://www.iccsafe.org/wp-content/uploads/ICC-Bylaws-December-10-2021-Certified.pdf>

Table 1: Buildings in CZ 0-3 are unable to achieve 20 points using a reasonable package of measure without improvements above minimum regulated equipment efficiency presented to the IECC-R on September 14, 2023. Selected points for the package are highlighted yellow, credits for above-minimum efficiencies for EPCA-covered products, in grey, cannot be used.

| R408.2 Table   |   |              |      |      |
|----------------|---|--------------|------|------|
| Measure Number | Measure Description   | Credit Value |      |      |
|                |   | CZ 0 & 1     | CZ 2 | CZ 3 |
| R408.2.1.1(1)  | 2.5% Reduction in total UA  | 0            | 0    | 0    |
| R408.2.1.1(2)  | 5% Reduction in total UA  | 0            | 1    | 1    |
| R408.2.1.1(3)  | 7.5% Reduction in total UA  | 0            | 1    | 2    |
| R408.2.1.1(4)  | 10% Reduction in total UA   | 1            | 1    | 2    |
| R408.2.1.1(5)  | 15% Reduction in total UA   | 1            | 2    | 2    |
| R408.2.1.1(6)  | 20% Reduction in total UA   | 2            | 4    | 4    |
| R408.2.1.1(7)  | 30% Reduction in total UA   | 3            | 6    | 6    |
| R408.2.1.2(2)  | U-factor and SHGC for windows per Table R408.2.1  | 1            | 1    | 1    |
| R408.2.1.3     | Roof reflectance 0.75 (roof is part of thermal envelope directly above conditioned space)   | 1            | 1    | 0    |
| R408.2.1.3b    | Roof reflectance 0.75 (roof is above an unconditioned space that contains ductwork)   | 1            | 1    | 0    |
| R408.2.1.4     | Reduced Air Leakage (2.5 ACH50 for SF and 0.24 CFM50/sq ft for MF)  | 1            | 1    | 1    |
| R408.2.2(1)    | Ground source heat pump 16.1 EER/3.1 COP  | 4            | 8    | 12   |
| R408.2.2(2)    | High Performance Cooling (Option 1) 15.2 SEER2/12.0 EER2  | 5            | 4    | 3    |
| R408.2.2(3)    | High Performance Cooling (Option 2) 16.0 SEER2/12.0 EER2  | 6            | 4    | 3    |
| R408.2.2(4)    | High Performance Gas Furnace (Option 1) 97 AFUE   | NA           | NA   | NA   |
| R408.2.2(5)    | High Performance Gas Furnace (Option 2) 95 AFUE   | 0            | 1    | 2    |
| R408.2.2(6)    | High Performance Gas Furnace (Option 3) 90 AFUE   | 0            | 1    | 1    |
| R408.2.2(7)    | High Performance Gas Furnace and Cooling (Option 1) 90 AFUE + 15.2 SEER2 and 10.0 EER2  | 5            | 5    | 4    |
| R408.2.2(8)    | High Performance Gas Furnace and Cooling (Option 2) 95 AFUE + 16.0 SEER2 and 10.0 EER2  | 6            | 5    | 5    |
| R408.2.2(9)    | High Performance HP with gas furnace backup (Option 1) 90 AFUE + 7.8 HSPF2/15.2 SEER2/10.0 EER2   | 13           | 12   | 9    |
| R408.2.2(10)   | High Performance HP with electric resistance backup (Option 1) 7.8 HSPF2/15.2 SEER2/11.7 EER2   | 13           | 12   | 11   |
| R408.2.2(11)   | High Performance Gas Furnace and Cooling (Option 3) 95 AFUE + 15.2 SEER2/12.0 EER2  | NA           | NA   | NA   |
| R408.2.2(12)   | High Performance Gas Furnace and Cooling (Option 4) 97 AFUE + 16.0 SEER2/12.0 EER2  | NA           | NA   | NA   |
| R408.2.2(13)   | High Performance HP with gas furnace backup (Option 2) 95 AFUE + 8.1 HSPF2/15.2 SEER2 (cold climate heat pump)  | NA           | NA   | NA   |
| R408.2.2(14)   | High Performance HP with electric resistance backup (Option 2) 8.1 HSPF2/15.2 SEER2 (cold climate heat pump)  | NA           | NA   | NA   |
| R408.2.3(1)(a) | Gas-Fired Storage Water Heater (option 1) All Volumes and DPs: UEF = 0.81<br><del>Gas-Fired Storage Water Heater (option 2) &lt;= 55 gallons, Medium Draw Pattern: UEF = 0.81</del>   | 8            | 7    | 7    |
| R408.2.3(1)(b) | Gas-Fired Storage Water Heater (option 2) < 55 gallons, High Draw Pattern: UEF = 0.86<br>Gas-Fired Storage Water Heater (option 2) > 55 gallons, Medium or High Draw Pattern: UEF = 0.86<br>Gas-Fired Storage Water Heater (option 2) Rated input capacity > 75 kBtuh: UEF = 0.86 or Et = 94% | 9            | 8    | 8    |
| R408.2.3(2)(a) | Gas-Fired Instantaneous Water Heater (option 1) - All volumes, Medium or High DP: UEF = 0.92  | 10           | 9    | 9    |
| R408.2.3(2)(b) | Gas-Fired Instantaneous Water Heater (option 2) - All volumes, Medium or High DP: UEF = 0.95  | 11           | 10   | 9    |
| R408.2.3(3)(a) | Electric Water Heaters (option 1) - Integrated HPWH: All Volumes: Low, Medium or High DP: UEF = 3.30  | 12           | 11   | 11   |
| R408.2.3(3)(b) | Electric Water Heaters (option 2) - Integrated HPWH: All Volumes: Low, Medium or High DP: UEF = 3.75  | 12           | 11   | 11   |
| R408.2.3(4)    | Electric Water Heaters (option 3) - Integrated HPWH, 120 Volt/15 amp Circuit: UEF = 2.20  | 11           | 11   | 11   |
| R408.2.3(5)(a) | Electric Water Heaters (option 4) - Split System HPWH: UEF = 2.20 (compressor outdoors)   | 8            | 10   | 11   |
| R408.2.3(5)(b) | Electric Water Heaters (option 5) - Split System HPWH: UEF = 3.75 (compressor outdoors)   | 9            | 11   | 12   |
| R408.2.3(6)    | Electric Water Heaters (option 6) - Rated input capacity > 12 kW: COP = 3.0   | 12           | 11   | 11   |
| R408.2.3(7)(a) | Solar Water Heaters (option 1) - All Volumes and DPs, Electric Backup: SUEF = 3.00  | 13           | 13   | 13   |
| R408.2.3(7)(b) | Solar Water Heaters (option 2) - All Volumes and DPs, Gas Backup: SUEF = 1.80   | 10           | 9    | 9    |
| R408.2.3(6)    | Compact Hot Water Distribution  | 2            | 2    | 2    |
| R408.2.4(1)    | More Efficient Distribution System - Ductless   | 3            | 4    | 5    |
| R408.2.4(2)    | 100% of Ducts in Conditioned Space  | 2            | 3    | 4    |
| R408.2.4(3)    | >= 80% of ductwork inside conditioned space   | 2            | 3    | 3    |
| R408.2.4(4)    | Reduced Total Duct Leakage  | 1            | 1    | 1    |
| R408.2.5(1)    | ERV or HRV installed - more stringent SRE values  | 0            | 0    | 0    |
| R408.2.5(2)    | 2.0 ACH50 with ERV or HRV Installed   | 0            | 0    | 0    |
| R408.2.5(3)    | 2.0 ACH50 with a Balanced Ventilation System  | 0            | 0    | 0    |
| R408.2.5(4)    | 1.5 ACH50 with ERV or HRV Installed   | 0            | 0    | 0    |
| R408.2.5(5)    | 1.0 ACH50 with ERV or HRV Installed   | 0            | 0    | 1    |
| R408.2.6       | Energy Efficient Appliances   | 1            | 1    | 1    |
| R408.2.7       | On-Site Renewable Energy Measure  | 17           | 16   | 17   |
| R408.2.7b      | Off-Site Renewable Energy Measure   | 71           | 65   | 62   |
| R408.2.7b      | Off-Site Renewable Energy Measure   | 1            | 1    | 1    |
| R408.2.8       | Demand Responsive Thermostat  | 1            | 1    | 1    |
| R408.2.10      | Whole Home Lighting Control   | 0            | 0    | 0    |
| R408.2.10      | Higher Efficacy Lighting  | 0            | 0    | 0    |
|                |   | 11           | 15   | 16   |

Note: Maximum number of credits that can be achieved are shown in red text.

To resolve issues with federal preemption, AHRI recommends the ICC Board of Directors adopt the following exception (shown underlined) to RG101.3:

**RG101.3** Additional energy efficiency credit requirements Residential buildings shall earn not less than twenty credits from not less than two measures specified in Table R408.2. Five additional credits shall be earned for dwelling units with more than 5,000 square feet (465 m2) of living space located above grade plane. To earn credit as specified in Table R408.2 for the applicable Climate Zone, each measure selected for compliance shall comply with the applicable subsections of Section R408. Each dwelling unit or sleeping unit shall comply with the selected measure to earn credit. Interpolation of credits between measures shall not be permitted.

**Exception:** For climate zones 0, 1, 2, and 3, the minimum required number of credits shall be in accordance with Table RG101.3 where Items 1 and 2 apply:

1. Building meets one of the following:

- a. A dwelling unit with less than 500 square feet (46m2) of roof area oriented between 110 degrees and 270 degrees of true north.
- b. A building with a solar-ready zone area that is shaded for more than 70 percent of daylight hours annually.
- c. A building where an approved party certifies that the incident solar radiation available to the building is not suitable for installation of an onsite solar system.
- d. A building where an approved party certifies that a rooftop solar system cannot be installed because of rooftop equipment, skylights, vegetative roof areas or other obstructions.

2. Building is located on a site where an approved third-party certifies that the site is not suitable for installation of a ground source heat pump.

TABLE RG101.3. Minimum Required Number of Credits for Climate Zones 0, 1, 2, and 3

| <u>Climate Zones 0 and 1</u> | <u>Climate Zones 2</u> | <u>Climate Zones 3</u> |
|------------------------------|------------------------|------------------------|
| <u>11</u>                    | <u>15</u>              | <u>16</u>              |

For these Climate Zones and site conditions, the stretch code appendix does not offer enough measures to achieve 20 points without using equipment efficiencies above federal minimums. The proposed change reduces the number of required credits for these cases such that, if adopted, the provisions of the appendix do not violate federal preemption.

### **Summary**

In conclusion, AHRI appreciates the good work of the ICC in developing and maintaining model statues and standards. AHRI requests that the Board of Directors modify

Appendix RG from 2024 IECC-R because the adoption of facially preempted energy conservation requirements violates the ICC's purpose, scope, bylaws, and procedures.

Sincerely,

A handwritten signature in black ink, appearing to read 'LPGR', with a long horizontal flourish extending to the right.

Laura Petrillo-Groh  
Senior Director of Regulatory Affairs





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Director of Safety & Inspections  
City of St. Paul  
St. Paul, MN

**Chief Executive Officer**  
**DOMINIC SIMS, CBO**

December 18, 2023

JC Hudgison  
Chair of the Residential Energy Code Consensus Committee  
Chief Building Official  
Tampa, FL

Dear Committee Chair,

The Code Council received the attached letters from the Air-Conditioning, Heating, and Refrigeration Institute ("AHRI") regarding concerns related to specific sections of the IECC Residential and IRC Appendix NC that may potentially be preempted by the Energy Policy and Conservation Act ("EPCA"). The letters were submitted in accordance with [CP-49](#) (Conforming Codes and Standards to United States Federal Law and International Law).

The goal of CP-49 is for the Board to address potential legal issues regarding preemption based on the advice of legal counsel as early in the process as possible to allow the relevant committee to focus its attention on technical matters. Whereas most issues regarding the contents of each code are decided through committee votes, the question of whether certain content is likely to be preempted by federal law is a strictly legal determination. The Code Council must act judiciously when considering preemption issues and provide appropriate warnings to jurisdictions that may adopt its codes about potential preemption challenges.

In its letters, AHRI first argued that it would be impossible for all building types to meet the thresholds in Appendix RG (the 2030 Glide Path) with minimum efficiency equipment.

Second, AHRI argued that Appendix RE (all-electric residential buildings) is preempted by EPCA. The 9th Circuit recently held in *California Restaurant Association v. City of Berkeley* that EPCA preemption extends to regulations that address the products themselves, as well as the on-site infrastructure for the use of natural gas. AHRI asserted that Appendix RE is preempted based on this reasoning because by banning natural gas hookups, it effectively bans products that are covered under EPCA.

The Code Council's Board of Directors reviewed the preemption claims and identified a significant risk that Appendix RG (the 2030 Glide Path) and Appendix RE (all-electric residential buildings) could be found preempted by EPCA.

**Committee Action Requested:**

The Board requests that the IECC Residential committee take the following action in accordance with the committee consensus procedures and provide its response to the Board no later than January 30, 2024.

1. Address the assertion that it is not possible for all building types to comply with the 2030 Glide Path thresholds listed in Appendix RG using minimum efficiency equipment. If that assertion is correct, provide feedback on how the Board should alert jurisdictions considering adopting these provisions about the advisability of adding trade-offs to mitigate the risk of preemption.
2. Provide feedback on how the Board should alert jurisdictions considering adopting the provisions within Appendix RE about the risk that an all-electric solution could face a preemption challenge.

Please keep in mind as you direct the committee to provide feedback about how best to alert adopting jurisdictions about potential preemption challenges that the IECC will be revised under continuous maintenance. Any notation included with the relevant provisions regarding the risk of preemption will be subject to change as the legal landscape evolves.

I want to thank you on behalf of the Code Council Board of Directors for your leadership of the IECC Residential Committee. If you have any questions regarding the above, please contact me through the assigned committee secretariat, Kris Stenger, [kstenger@iccsafe.org](mailto:kstenger@iccsafe.org).

Sincerely,

Stuart Tom  
ICC Board President

Attachments:  
AHRI Letters

cc:  
Committee Vice Chair  
Dominic Sims, ICC CEO  
Jordana Rubel, ICC General Counsel  
ICC Board of Directors  
AHRI