



## International Energy Conservation Code Consistency and Administrative Subcommittee

### Meeting Agenda (Revised 7/24/23)

July 25, 2023  
12:30 PM EST to 2:00 PM EST (1.5 hours)

[Webex Link](#)

**Committee Chair:** Richard Potts  
**Committee Vice Chair:** Rich Truitt

1. Call to order.
2. Roll Call.
3. Meeting Conduct. Staff
  - 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.
4. Action Items – Review Proposals.

Proposal Number	#	cdp id	Code Section(s)	Description	Proponent
RE2D-01-23	1	1810	R101.2.1	Appendices	Eric Tate
RE2D-02-23	2	1744	R110.4	Administration	Greg Johnson
RE2D-03-23	3	1585	R202	Emittance	Emily Lorenz
RE2D-04-23	4	1741	R202	Renewable Energy definition	Rachael Mascolino
RE2D-05-23	5	1812	R202	Fuel gas definition	Eric Tate
RE2D-28-23	28	1691	R405.5.2	SEHPCAC/BCAC accessible term replacement	SEHPCAC

5. Other business
6. Upcoming meetings: August 1, 2023

- Proposals carried over from July 25, 2023

7. Adjourn.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

[ICC Energy webpage](#)

[Code Change Monograph](#)

# RE2D-1-23

IECC RE: R101.2.1

**Proponents:**

Eric Tate, representing Atmos Energy (eric.tate@atmosenergy.com)

## 2024 International Energy Code [RE] [RE Project] R3

**Delete without substitution:**

### ~~R101.2.1~~ Appendices.

~~Provisions in the appendices shall not apply unless specifically adopted.~~

**Reason Statement:**

Appendices are non-mandatory and should not be referred to in the body of code requirements. Other comments on appendices help clarify the informative nature of IECC appendices.

**Cost Impact:**

The code change proposal will neither increase nor decrease the cost of construction.

The deletion is largely editorial.

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RE2D-1-23

# RE2D-2-23

IECC RE: R110.4

## Proponents:

Greg Johnson, representing National Multifamily Housing Council (gjohnsonconsulting@gmail.com)

## 2024 International Energy Code [RE] [RE Project] R3

### Revise as follows:

## R110.4 Administration.

The *code official* shall take action ~~without delay~~ in accordance with the decision of the board.

### Reason Statement:

This change will correlate the provisions of the IECC-R with the IECC-C, which says this: "*C110.4 Administration The code official shall take action in accordance with the decisions of the board.*"

There is no reason for 'without delay.' The code official will act as necessary to comply with the intent of the appeals board; any other conclusion is misinformed about how a building department works.

### Cost Impact:

The code change proposal will neither increase nor decrease the cost of construction.

This is an administrative provision with no direct financial implications.

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RE2D-2-23

# RE2D-3-23

## IECC RE: SECTION 202

### Proponents:

Emily Lorenz, representing International Institute of Building Enclosure Consultants (emilyblorenz@gmail.com)

## 2024 International Energy Code [RE] [RE Project] R3

### Revise as follows:

IECC2024D3RERE\_RE\_Ch02\_SecR202\_DefEMITTANCE EMITTANCE. The ratio of the radiant heat flux emitted by a specimen measured on a scale from 0 to 1, where a value of 1 indicates perfect release of thermal radiation~~emission~~.

### Reason Statement:

When changing the definition of "emittance" during the last round of public comments, potential confusion was introduced. The word "emission" is frequently used to describe pollutants. However, in this case, we are referring to the property of a material that is related to the release of thermal radiation (or heat). The edit included in this code change proposal corrects the definition for technical accuracy related to the property of "emittance."

### Bibliography:

U.S. Environmental Protection Agency. 2008. "Reducing urban heat islands: Compendium of strategies." Draft. <https://www.epa.gov/heat-islands/heat-island-compendium>. (see Section 2.2, Properties of Urban Materials)

VanGeem, M. G., and A. E. Fiorato. 1983. "Thermal Properties of Masonry Materials for Passive Solar Design – A State-of-the-Art Review." U.S. Department of Energy Report No. DOE/CE/30739. Also PCA R&D Serial No. 0888, Portland Cement Association. [http://www.vangeemconsulting.com/SN\\_888\\_Thermal\\_Properties\\_of\\_Masonry\\_Materials\\_VanGeem\\_Fiorato.pdf](http://www.vangeemconsulting.com/SN_888_Thermal_Properties_of_Masonry_Materials_VanGeem_Fiorato.pdf)

### Cost Impact:

The code change proposal will neither increase nor decrease the cost of construction.

This CCP only clarifies a definition; it does not change any requirements.

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RE2D-3-23

# RE2D-4-23

IECC RE: CHAPTER 2 [RE], SECTION R202

## Proponents:

Rachael Mascolino, representing VEIC (rmascolino@veic.org)

2024 International Energy Code [RE] [RE Project] R3

## CHAPTER 2 [RE] DEFINITIONS

# SECTION R202 — GENERAL DEFINITIONS

### Reason Statement:

The New Buildings Institute has proposed a revision to the residential code language that limits the qualification of biomass energy as a renewable energy source to biomass wastes and offers a definition of Biomass wastes that “excludes wood and wood-derived fuels (including black liquor), biofuel, feedstock, biodiesel, and fuel ethanol.” The following is the reasoning provided by NBI in RED1-23-22, Proposal # 1071:

*There is currently no definition for biomass in the residential IECC even though biomass was recently listed as a potential renewable energy resource. Because there are many flavors of biomass, it is important for the IECC to clarify which forms of biomass energy count towards reducing a residential buildings' ERI score. The revision limits the biomass sources that count as renewable energy resources to those that are specified as waste products and ensures that virgin material of unknown origin does not count as a steady source of renewable energy. Without an available standard to cite in the IECC for sustainable biomass, it is critical to ensure that biomass used in compliance with the IECC is derived from waste products or byproducts. The definition of biomass waste is taken from the glossary of the Energy Information Administration. **A similar amendment has been approved by the commercial IECC and is included in the draft code.***

VEIC is a mission-driven sustainable energy non-profit organization with decades of real-world experience in operating energy efficiency utilities and delivering sustainable energy programs and projects across North America. Over this time, the application of advanced wood heating systems relying on locally sourced wood fuels has played a critical role in our ability to meet thermal energy savings targets, provide residential and commercial customers with cost-effective alternatives to heating with fossil fuels, and stimulating the local economies – especially in rural, cold, and forested regions of the country.

While we agree with the intent to bring clarity to the “many flavors of biomass” and certain aspects of the proposed changes, we would like to point out several critical problems with the proposed changes and the rationale for the categorical exclusion of wood and wood-derived fuels. Although there are many forms of biomass energy that have the potential for yielding significant negative impacts, there are also many forms of biomass energy that can and should be promoted. Using local wood fuels sourced from well-managed forests in high-efficiency appliances to provide reliable, cost-effective heating and to directly displace fossil heating fuels, SHOULD NOT be excluded from the standard.

The primary reason given by NBI for the exclusion of wood fuels is to “ensure that virgin material of unknown origin does not count as a steady source of renewable energy”. There are several points to consider regarding this:

- **The reason given implies virgin (or harvested) wood is bad and not renewable.** Yet, trees regrow after a forest management-driven harvest, and periodic thinning of trees in a forest can actually stimulate growth and help improve forest health. There are many examples of wood fuels sustainably and locally sourced from well-managed forests all across North America. As just one example, in

Vermont where VEIC administers Efficiency Vermont, thousands of homes and commercial buildings are heated with wood fuels sourced from local, well-managed forests. While some wood fuels are derived as wastes from sawmills, a majority of wood fuels, (cordwood, chips, and pellets) are sourced directly from integrated timber harvests according to forest management plans and involving a professional forester. These harvests produce a range of commercial products including veneer, sawlogs, pulpwood, and fuelwood. The economic driver of the harvesting activity is the high-value sawlogs and once the sawlog portion of the tree stem is removed, wood fuels are produced using the left-over upper section of that harvested tree. This may not be considered a “waste” product by the EIA, but it is the left-over portion of the harvested stem. Also, in Vermont (and many other states and regions) forests are growing more new wood annually than is harvested.

· **The reason given implies that all (or at least a majority) of virgin wood comes from “unknown sources”. This is not accurate.** In fact, a large majority of harvested wood sold into the forest products industry (including wood fuel producers) has been tracked. Furthermore, over the past few decades there has been an increasing portion of wood harvested under third-party verification programs to document and confirm the source of the wood products. Programs such as [FSC](#), SFI, and Tree Farm provide rigorous systems and accountability for not only the source of wood, but also the quality of the forest management.

· **The reason given implies that use of virgin wood is a questionable practice and should be discouraged in international code. By this logic, should we not cut trees for timber products and instead build homes and commercial buildings from steel and concrete?** Of course not. So, if constructing buildings from harvested wood instead of steel and concrete is widely recognized as a preferred GHG mitigation choice, why would we exclude wood fuels as a way to displace fossil heating fuel in those same buildings?

· **The proposed change may appear benign, yet there are serious unintended consequences that need to be considered.** If not for harvested wood, then what? Misalignment with state policies, waste sources competition and impacts on other markets like animal bedding are examples of unintended consequences of the proposed edits and the ripple effect of regional adoption of the code. Based on VEIC’s direct experience with industries that have biomass waste as a byproduct, we see the potential for negative impacts of this code revision on the waste biomass market driving a fuel switch from biomass back to fossil fuel for industrial customers. Use of waste products is a result of bottom line, and a waste stream market could disrupt this.

· **The proposed change will impact the most vulnerable population disproportionately.** Based on VEIC’s direct experience providing technical assistance under renewable energy grant funded projects, we see the potential for this revision to disproportionately impact rural, low income, and underfunded communities and municipalities. To effectively decarbonize existing building stock in New England, we have numerous examples of advanced wood heating systems fueled by locally sourced wood fuels as being the only environmentally responsible and sound engineering approach to decarbonization.

In summary, when wood fuels are sourced locally from well-managed forests and used in high efficiency heating application to directly displace fossil fuels, wood heating can be an excellent and vital approach to decarbonizing building energy. Wood heating simultaneously helps achieves multiple benefits – reducing fossil fuel use, increasing local energy security and reliability, retaining wealth in rural communities and regions, and supporting a working forested landscape. The proposed change to the language in the code would eliminate this as a viable strategy. We encourage the committee to not amend the code as proposed by the NBI in proposal number 1071.

#### **Cost Impact:**

The code change proposal will neither increase nor decrease the cost of construction.

We are proposing that the definition of Renewable Energy Resources remain unchanged. There are no construction cost implications to

not changing.

RE2D-4-23

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# RE2D-5-23

IECC RE: SECTION 202

**Proponents:**

Eric Tate, representing Atmos Energy (eric.tate@atmosenergy.com)

## 2024 International Energy Code [RE] [RE Project] R3

IECC2024D3RERE\_RE\_Ch02\_SecR202\_DefFUEL\_GAS FUEL GAS. A natural gas, manufactured gas, liquified petroleum gas or a mixture of these.

**Reason Statement:**

The ICC PMG CAC is currently developing a revision to its “fuel gas” definition for use across I-Codes to include admixtures of natural gas with up to and including 5% hydrogen. The proposed definition here does not accommodate this proposed change. Action on the definition should be deferred until the PMG CAC work is completed (November of 2023) and the definition can be harmonized.

**Cost Impact:**

The code change proposal will neither increase nor decrease the cost of construction.

The definition is largely editorial for the code requirements.

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RE2D-5-23

# RE2D-28-23

IECC RE: R405.5.2

## Proponents:

Shane Hoeper, representing SEHPCAC

## 2024 International Energy Code [RE] [RE Project] R3

### Revise as follows:

# R405.5.2 Testing required by software vendors.

Prior to approval, software tools shall be tested by the software vendor in accordance with ANSI/ASHRAE Standard 140 Class II, Tier 1 test procedures. During testing, hidden inputs that are not normally ~~accessible~~ available to the user shall be permitted to avoid introducing source code changes strictly used for testing. Software vendors shall publish, on a publicly available website, the following ANSI/ASHRAE Standard 140 test results, input files, and modeler reports for each tested version of a software tool:

1.	Test results demonstrating the software tool was tested in accordance with ANSI/ASHRAE Standard 140.
2.	The modeler report in ANSI/ASHRAE Standard 140, Annex A2, Attachment A2.7.

### Reason Statement:

Because the term 'accessible' is most commonly understood as requiring access for persons with disabilities we are making the changes to delete the word accessible from the remaining codes and replace it with other words, defined terms or phrases that are not attributed to requiring access for the physically disabled. Many of the codes use the defined term 'access (to)' or 'ready access (to)' for access by maintenance and service personnel or fire departments. This proposal provides clarity and consistency in the remaining codes where those coordination modifications missed or came in as part of new code changes.

This a correlation piece for proposals over the last couple of cycles. This effort was started by the CACs in 2015/16 code change cycle, and continued in 2018/19. This proposal is to provide coordination with the action taken with -P84-15, M2-15, RB2-16, F12-16, CE137-16 Part 1, CE29-19 Part 1 and 2 . G1-21 Part 1 was disapproved; however Part 2 through 7 were approved

### Cost Impact:

The code change proposal will neither increase nor decrease the cost of construction.

Editorial. Will not change the cost of construction.

RE2D-28-23