

RE1 –09/10

N1101.2, N1101.2.1 through N1101.9, N1102, N1103, Appendix R (New)

Proponent: Bill Fay, Efficient Codes Coalition; Brian Dean, ICF International

1. Revise as follows:

N1101.2 Compliance. Compliance shall be demonstrated by ~~either meeting the requirements of the *International Energy Conservation Code* or meeting the requirements of this chapter. Climate zones from Figure N1101.2 or Table N1101.2 shall be used in determining the applicable requirements from this chapter.~~

2. Delete Sections N1101.2.1-N1101.9, N1102 and N1103 in their entirety (including all tables).

3. Add new text as follows to the appendix to the International Residential Code:

APPENDIX R INTERNATIONAL ENERGY CONSERVATION CODE

(This appendix excerpts sections of the *International Energy Conservation Code* relevant to buildings regulated by the *IRC*. This appendix is informative and is not part of the code; however, note that section N1101.2 requires building regulated by the *IRC* to meet the requirements of the *IECC*.)

Reprint the following sections of the *International Energy Conservation Code* as Appendix R:

- (1) *IECC* Chapter 1 Administration (all Sections, except Sections 101.1-101.2, 101.4.6, and 101.5)
- (2) *IECC* Chapters 2-4 and Chapter 6.

Reason: This proposal is intended to permanently resolve the growing inconsistencies between the *IECC* (which is also referenced in the *IBC*) and the *IRC* by referencing a single set of energy efficiency requirements for all three codes (the *IECC*) and, for ease of reference, including the requirements in new Appendix R of the *IRC*. The proposal also makes code compliance and enforcement more uniform and streamlined.

The Problem. The problem of an inconsistent *IRC* and *IECC*, where the *IRC* energy provisions are weaker and less rigorous than the *IECC*, is well-known. The *IECC* and *IRC* are reviewed by two different code development committees. Proposals must be heard twice (using substantially more resources and prolonging the hearings by days), and the outcome is frequently different. It is then up to the code officials at the Final Action Hearing to sort through the two committees' differing opinions and decide on the best course. As long as there are two codes and two committees, inconsistency will continue to grow, creating problems for jurisdictions that seek to implement a single set of energy efficiency requirements for residential buildings.

The Solution. This proposal presents the best long-term solution for code consistency and uniform enforcement. Just as *IBC* Chapter 13 references the *IECC* for its energy efficiency requirements, *IRC* Chapter 11 would reference the *IECC*. To preserve the convenience of a single-volume residential code, ICC would reprint the relevant sections of the *IECC* in a new Appendix at the end of the *IRC*. In subsequent cycles, as the *IECC* is updated, the *IRC* Chapter 11 would be automatically (and identically) updated by virtue of the reference to the *IECC*. Because Chapter 11 would already require compliance with the *IECC*, jurisdictions would not need to specifically adopt the new appendix in order for the *IECC* to be effective.

The general approach of replacing the *IRC* energy chapter with the *IECC* has already been tested in several states. In fact, the *IRC* already references the *IECC* for the performance path (N1101.2), so any state that adopts the *IRC* already automatically adopts the requirements of the *IECC* as a compliance option. Several states have already taken the step suggested by this proposal by exclusively referencing the *IECC* for energy efficiency requirements. The new appendix will add even more convenience to this solution.

The *IECC* Is the Best Single Energy Efficiency Standard. The *IECC* is recognized in federal law and nationwide as the comprehensive model energy code for all residential and commercial buildings. More than two thirds of states have adopted the *IECC* as their mandatory statewide energy code. National, state and local policymakers are demanding a substantially improved level of energy efficiency in building energy codes to meet the nation's security, environmental and energy cost needs. At the same time, building officials demand uniformity and consistency in the International family of codes.

Under the federal Energy Policy Act of 1992, the US Department of Energy (DOE) is required to review each new version of the *IECC* and determine if it is an improvement in energy efficiency over previous versions. (*IRC* Chapter 11 does not undergo such a rigorous assessment by DOE, so it is not clear whether it would meet the same high standard for energy efficiency improvement.) States are also required by federal law to undertake a review of the state energy code and determine whether state energy efficiency requirements meet the stringency of the *IECC* every time the Department of Energy makes a determination on the updated *IECC*.

The *IECC* also serves as the basis for federal tax credits for energy efficient homes, energy efficiency standards for federal buildings, and qualification for FHA mortgages. The *IECC* is also referenced in LEED and many other state and federal programs.

Most recently, the adoption of the 2009 *IECC* was designated by Congress as a threshold requirement for states to receive \$3.2 billion in State Energy Program funds through the American Recovery and Reinvestment Act (Stimulus Bill). None of these programs even references the *IRC*. For all these reasons, the *IECC* is the logical selection as the single energy efficiency standard for the International Codes.

The Benefits of the *IECC* as the Single Energy Efficiency Standard

- **True Consistency.** This proposal fixes inconsistencies between the *IRC* and the *IECC/IBC* that have developed over time, and ensures consistency in the future. Even if all code change proposals in the current cycle were 100% consistent, the *IECC* and *IRC* would still be different because of changes made in earlier editions, and would likely be different in the future because two separate committees are reviewing the same code language.

This proposal does not expand or reduce the number of compliance options available to builders. It simply consolidates them in the most reasonable place. The energy efficiency requirements of the *IBC*, *IRC* and *IECC* would be unified into a single set of requirements that comply with all three codes and ensures that all three codes meet the same energy efficiency and building quality standards in the future.

- **Proposals Reviewed and Approved By a Balanced Committee of Experts.** The *IECC* is currently developed by a committee that it is populated by experts in building energy efficiency and where no organization has more than one voting seat.

- **Streamlined Enforcement.** Once all three I-codes have a unified set of energy efficiency requirements, enforcement will become much simpler. A builder complying with the *IRC* Chapter 11 will automatically meet the requirements of the *IBC* and *IECC*. Builders will only need to follow one set of requirements, and code officials can enforce a single set of requirements.

Less Complicated Code Hearings. This proposal would eliminate a good deal of redundancy in the current code development process by centralizing the energy efficiency requirements in a single committee. Rather than force proponents and code officials to endure hours – even days – of the same testimony before two different committees, this proposal would streamline the process and yield a more consistent result.

Cost Impact: The code change proposal will increase the cost of construction.

Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

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