



International Code Council
500 New Jersey Avenue, NW
Sixth Floor
Washington, DC 20001
tel: 888.icc.safe (422.7233)
fax: 202.783.2348
www.iccsafe.org

Docket No. EERE-2009-BT-BC-0021
Energy Efficiency Standards for Manufactured Housing

COMMENTS OF:
THE INTERNATIONAL CODE COUNCIL (ICC)
500 New Jersey Ave, NW
Washington, DC 20001

July 25, 2013

Contact:
David Karmol, dkarmol@iccsafe.org

The International Code Council (ICC) offers the following comments on the Request for Information, Docket No. EERE-2009-BT-BC-0021, published on June 25, 2013.

The International Code Council (ICC) is a membership association dedicated to building safety, fire prevention, and energy efficiency. The International Codes, or I-Codes, published by ICC, provide minimum safeguards for people at home, at school and in the workplace. Building codes benefit public safety and support the industry's need for one set of codes without regional limitations. Among the codes published by ICC is the International Energy Conservation Code (IECC), which is referenced in the Energy Conservation and Production Act (ECPA, Public Law 102-486), and the Energy Independence and Security Act (EISA) of 2007, and is a national requirement in the American Recovery and Reinvestment Act of 2009. ICC also publishes the International Green Construction Code (IgCC), which contains energy efficiency, water efficiency, air quality, siting and location considerations and sustainability provisions.

Fifty states and the District of Columbia have adopted the I-Codes at the state or jurisdictional level. Federal agencies including the Architect of the Capitol, General Services Administration, National Park Service, Department of State, U.S. Forest Service and the Veterans Administration also enforce the I-Codes for the facilities that they own or manage. The Department of Defense references the International Building Code for constructing military facilities, including those that house U.S. troops, domestically and abroad.

ICC was established in 1994 as a non-profit organization dedicated to developing a single set of comprehensive and coordinated national model construction codes. The founders of the ICC are Building Officials and Code Administrators International, Inc. (BOCA), International



International Code Council

500 New Jersey Avenue, NW
Sixth Floor
Washington, DC 20001
tel: 888.icc.safe (422.7233)
fax: 202.783.2348
www.iccsafe.org

Conference of Building Officials (ICBO), and Southern Building Code Congress International, Inc. (SBCCI). Since the early part of the last century, these non-profit organizations developed three separate sets of model codes used throughout the United States. Although regional code development was effective and responsive to our country's needs, the time came for a single set of codes. The nation's three model code groups responded by creating the International Code Council and by developing codes without regional limitations; the International Codes.

Background

We begin by noting that DOE was mandated at Sec. 413 of the Energy Independence and Security Act of 2007 (EISA) to establish by regulation standards for energy efficiency in manufactured housing "Not later than 4 years after December 19, 2007." See 42 U.S.C. 17071(a)(1).

ICC recognizes that the task of developing these standards has been a difficult process, involving a number of stakeholders, many of whom have been adversely affected by the downturn in the economy and the real estate market over the past five years, which has complicated the issues involved in this rulemaking.

In addition, DOE has devoted considerable resources in developing a methodology for a transparent and robust cost analysis model for energy efficiency codes and standards. This methodology takes into account the numerous variables involved in building energy efficiency, as well as the diverse building types, sizes and construction techniques involved in the residential dwellings subject to the International Energy Conservation Code (IECC).

Making this process even more difficult is the fact that Congress charged DOE with developing an enforcement system for its manufactured housing energy efficiency regulations that would impose a civil penalty on manufacturers who violate the regulations.

With that backdrop, DOE has requested additional input through this RFI, following on an RFI published in February 2010.

In response to that February 2010 RFI, ICC filed comments that encouraged DOE to develop standards that were as close to the IECC as possible, including using the IECC climate zones to the extent possible. A review of the IECC' 8 climate zones in comparison to the 3 climate zones in the HUD code (See 24 CFR 3280.506) shows that HUD climate zone 1 roughly corresponds with Zones 1 and 2 in the IECC map, and HUD zone 2 roughly corresponds with zone 4 of the IECC, and that HUD zone 3 includes all the remaining IECC zones, 5-8. We also note that while the IECC climate zones are specific to counties within states, the HUD zones include only entire states, and do not have divisions as the IECC zones do, that break states into two or more zones, based on specific heat and humidity characteristics. While generally more zones will allow for an energy code that is more precisely aligned with climate conditions, and for higher energy efficiency at lower cost, we do understand that there may be reasons for DOE to choose a simpler climate zone map to accommodate the fact that manufactured homes may be shipped to various states, and that more zones, and consequent manufacturing modifications, necessarily raise manufacturing costs. A more reasonable solution is to maintain a smaller



International Code Council

500 New Jersey Avenue, NW
Sixth Floor
Washington, DC 20001
tel: 888.icc.safe (422.7233)
fax: 202.783.2348
www.iccsafe.org

number of climate zones, as with the HUD code, and coordinate or align those codes with the divisions in the IECC climate zone map.

One of the complications which is introduced, however, with the requirement that DOE examine alternative practices that result in net energy consumption equal to or less than specific IECC standards is that in order to calculate baseline energy consumption, it is necessary to use the R-values, U-factors, and SHGC values that are specific to the eight climate zones within the IECC.

ICC also offers this comment that in light of the issues that arise with energy code enforcement, if a system can be devised that has the support of most manufactured housing producers, and accomplishes significant energy efficiency that approaches that of the IECC, at a reasonable first cost, such a scheme might be preferable to a scheme that provides equal efficiency, but at a higher initial cost, that lacks significant buy-in from producers. ICC believes that this approach is reflected in the IECC, due to the inclusive nature of the code development process.

Request for Information

The RFI requests information on several specific issues. We will comment on one of those individually:

3. Model systems of enforcement. ICC believes that an effective system to enhance enforcement is a private sector certification system, utilizing accredited certification bodies to work with the manufacturer to certify that his products meet the DOE energy efficiency criteria for the certification. We recommend that DOE examine a minimum certification system to meet the proposed EISA standards that DOE is proposing, as well as a higher level, EnergyStar label for high performing manufactured homes. The EnergyStar brand is one that has been carefully guarded by EPA to indicate a higher level of performance than the required minimum, not as an indicator that a product meets minimum energy efficiency standards.

The certification of manufactured products to a set of criteria, as determined by an independent, accredited third party certification body is a central element of the voluntary standards system in the United States, and is well suited for a program to ensure conformance with a minimum standard for complex manufactured products, such as manufactured homes. A certification system, such as those used by both the EnergyStar and WaterSense programs developed by the EPA, allows for product diversity, innovation and quality, while at the same time assuring that minimum standards are met. Certification programs are less costly to the government than direct government inspection systems, while achieving high compliance, with more flexibility for the affected manufacturers. In the construction industry certification providers assure technical compliance with standards and codes for a wide variety of products used in construction throughout the United States. ICC's affiliate, ICC Evaluation Service develops technical criteria for products, evaluates the manufacturers' products through rigorous program documentation and inspection, and then publishes reports that document code or standard compliance in web-published Evaluation Reports, that are available to code



International Code Council

500 New Jersey Avenue, NW
Sixth Floor
Washington, DC 20001
tel: 888.icc.safe (422.7233)
fax: 202.783.2348
www.iccsafe.org

officials, and the public, at no charge. A program such as this would provide assurance of compliance both to Federal regulators, and to local code officials who want to assure that a manufactured home meets all Federal, state and local requirements.

ICC continues to stand ready to work with the Department of Energy, in developing a workable set of standards governing the energy efficiency of manufactured homes, as well as an efficient system of enforcement.