



**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

August 17, 2010

DOCKET No. FR-5221-FP-01

Comments of the International Code Council

David L. Karmol

Vice President, Federal and External Affairs

International Code Council

dkarmol@iccsafe.org

202-370-1800, ext 6243

Manufactured Home Construction and Safety Standards

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. The International Code Council publishes the International Energy Conservation Code (IECC), which is referenced in the Energy Independence and Security Act (EISA) of 2007, and is a national requirement in section 410 of the American Recovery and Reinvestment Act of 2009. Fifty states and the District of Columbia have adopted the I-Codes at the state or jurisdictional level. The IECC is in use or adopted in 45 states, the District of Columbia, and the U.S. Virgin Islands. 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. The Department of Defense references the International Building Code for constructing military facilities, including those that house U.S. troops, domestically and abroad. Puerto Rico and the U.S. Virgin Islands enforce one or more of the I-Codes.

The 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 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 has been 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.

We offer the following comments in order to assist HUD in assuring the safety of manufactured homes, and to increase the consistency of the HUD regulations with the building codes that affect residential housing enforced in most jurisdictions in the United States, that are based on the International Residential Code (IRC). All of our comments refer to the 2009 International Residential Code, the most recent and current version of that code.

First, we commend the Department for advancing standards for manufactured housing in a way that attempts to harmonize the requirements for manufactured housing with the building code in effect throughout the United States, in most jurisdictions that have adopted a mandatory building code, the International Residential Code (IRC).

The preamble notes that "Most of the proposed changes would codify existing building practices or conform HUD standards to HUD interpretive bulletins or existing building codes." With respect to all of the proposed standards, in general, it is preferable to have requirements for manufactured housing be consistent with requirements for similar materials and building elements regulated by the IRC model code, for occupant and user safety as well as consistency of enforcement by various enforcement and compliance bodies.

We also note that there is a concern for minimizing additional costs in the proposed rule, which may explain certain variations from the model code language.

In most instances where the proposed rule references the building codes, it tracks the specific language of the 2009 IRC. In a few instances, however, there appear to be variations from the specific requirements of the 2009 IRC which are not explained, and would create confusion and possibly less safe conditions than the requirements of the IRC.

We particularly note the following specific sections of the proposed rule, along with the relevant IRC model code section. Where there are significant differences between the proposed standard section, and the relevant model code provision from the 2009 IRC, the difference is described:

Sec. 3280.105 Exit Facilities; Exterior Doors- generally consistent with IRC Sec. R311, Means of Egress. We note that the Sec. R311 requires doors to provide a minimum clear width of 32

inches, and a minimum height of 78 inches, 4 inches larger for both dimensions than the requirements of Sec. 3280.105. This difference may be explained by the interest in minimizing costs.

Sec. 3280.111 Toilet Compartments- generally consistent with IRC Sec. R307, Toilet, Bath and Shower Spaces, although we note that Sec. 3280.111 permits a minimum dimension of 12 inches from a tub edge, while the IRC requires a minimum of 15 inches, from the tub edge. Again, cost may be a factor.

Sec. 3280.113 Glass and glazed openings- generally consistent with IRC Sec. R308, Glazing.

Sec. 3280.207 Requirements for thermal insulating materials- generally consistent with IRC R302.10. We note, however, that the test method referenced in Sec. 3280.207 is NFPA standard 225-96, while the two test methods permitted for determining the flame spread index in IRC R302.10 are ASTM E84 or UL 723.

HUD should consider allowing these two alternate/additional test methods for determining the flame spread index, to permit additional flexibility to manufacturers. We would note that the referenced NFPA standard was issued in 1996, and the ASTM E84 standard is available in an up-to-date 2010 version. The UL standard was also issued more recently than 1996. The addition of the two alternate test methods would have no incremental cost affect, and might reduce testing costs for manufacturers.

Sec. 3280.603 General requirements (2) Conservation- consistent with IRC Sec. P2903.2, Maximum Flow and Water Consumption.

Sec.3280.607 Plumbing Fixtures- consistent with IRC Sec. P2703, Tail Pieces; Sec. P2705, Installation, Sec. P2706, Waste Receptors, and Sec. P2720, Whirlpool Bathtubs. We note that the reference to ASSE 1016-1996 in subsection 3(v), may be out of date, and unusable by manufacturers. The following note can be found on ASSE's website:

When ASSE 1016-2005, 1069-2005 and 1070-2004 were approved, the ASSE Board of Directors and the ASSE Seal Control Board agreed to the following provisions to allow the manufacturer's time to transition their products from the ASSE 1016-1996 to the appropriate new standards.

**February 7, 2007:** The ASSE Seal Control Board approved the acceptance of applications for new listings to ASSE 1016-1996 until 12/31/2007 as long as an application, including a test report, to 1069-2005 or 1070-2004 was also submitted. ***This extension has now been closed and no new applications for new listings to 1016-1996 will be accepted.***

**November 4, 2007:** The ASSE Seal Control Board, approved to maintain all ASSE 1016-1996 listings until January 1, 2010. ***After this date, all listings to ASSE 1016-1996 will be removed.***

(<http://php.asse-plumbing.org/standards/1016%201069%201070%20Explain.pdf> )

With respect to all of the proposed standards, in general, it is preferable to have requirements for manufactured housing be consistent with requirements for similar materials and building elements regulated by the IRC model code, for occupant and user safety as well as consistency of enforcement by various enforcement and compliance bodies.

We also note that a new requirement of the 2009 IRC is contained in Sec. P2904, Dwelling Unit Fire Sprinkler Systems. This section was adopted to provide increased fire protection for residents and firefighters, and requires installation of an automatic sprinkler system to protect all areas of a dwelling unit, in accordance with the requirements of Sec. P2904 or NFPA 13D, which are considered equivalent. HUD may want to consider whether such a system should be required in manufactured housing, as retrofitting manufactured housing units with such a system would likely be prohibitively expensive. While the addition of sprinklers would have an incremental cost impact, the proven ability of sprinklers to extinguish fires rapidly, has proven to save lives, and dramatically reduce property damage, in jurisdictions where such requirements have been in place for 20 or more years (Scottsdale, AZ, for example).

We finally call attention to IRC Appendix E, which describes the means and scope of inspections of manufactured housing installed on privately owned (non-rental) lots within a jurisdiction that adopts that Appendix. Appendices of the model code are not mandatory unless adopted by the authority having jurisdiction. There may be issues that HUD may wish to coordinate with the requirements in Appendix E.

The International Code Council stands ready to provide any assistance to the Department it deems necessary in achieving consistency between the proposed regulations and the published model codes offered by ICC.