



**National Association of State Fire Marshals
Public Comments to
International Green Construction Code Version 1.0
Submitted May 14, 2010**

NASFM submitted comments on the following sections of Version 1.0 of the International Green Construction Code, which are described in the following pages:

102.1.1	Code Conflicts
202	Definitions
406.6	Vegetative Roofs
406.6.1 (New)	Vegetative Roofs – Roof Gardens and Landscaped Roofs
710.6	Automatic Fire Sprinkler System Project Elective

Note that the following comments submitted by NASFM are intended to supplement comments that have been submitted separately by the International Code Council's Joint Fire Service Review Committee, on which NASFM is represented.

Section: 102.1.1

Commenter: Alan Shuman, President, National Association of State Fire Marshals, representing the National Association of State Fire Marshals
(Name, Company, Representing - Please do not use acronyms for your company or

Revise as follows:

102.1.1 Code Conflicts. Where there is a conflict between a general requirement and a specific requirement of this code, the specific requirement shall be applicable. Where, in any specific case, different sections of the code specify different materials, methods of construction or other requirements, the most practical and effective requirement to meet the intent of the code shall govern, but in no case shall the minimum fire safety requirements of the *International Building Code* or the *International Fire Code* or other referenced ICC Codes be reduced.

Reason: Subsequent section 102.4 and the following subsections appear to indicate that the minimum requirements of the other ICC codes must be met, but wording in this section can result in confusion in the field as to conflicts. While the IGCC continually hints that other ICC Codes must be met, we believe the intent should be perfectly clear, and a statement such as the above should be included. The current wording of this section is one example of a requirement that may be misinterpreted.

Section: 202 Definitions

Commenter: Alan Shuman, President, National Association of State Fire Marshals, representing the National Association of State Fire Marshals

Revise as follows:

[E] RESIDENTIAL BUILDING. For energy purposes only, includes detached one- and two-family dwellings, and multiple single-family dwellings (townhouses), *buildings* under the scope of the *International Residential Code*, and Group R-2, R-3 and R-4 *buildings*, all of which are three stories or less in height above grade.

Reason: The proposed definition seems to be more limiting than the International Energy Conservation Code (IECC) definition. Adding the word “includes” seems to more appropriately match that definition.

Section: 406.6

Commenter: Alan Shuman, President, National Association of State Fire Marshals, representing the National Association of State Fire Marshals

Revise as follows:

406.6 Vegetative roofs. *Extensive and intensive vegetative roofs*, where provided in accordance with Section 404.3 shall comply with ASTM E2396; ASTM E2397; ASTM E2398 and ASTM E2400 or, shall comply with the following:

1. All plantings shall be selected according their United States Department of Agriculture hardiness zone classifications and shall be capable of withstanding the climate conditions of the *jurisdiction* and the micro climate conditions of the *building site* including, but not limited to, wind, precipitation and temperature. Planting density shall provide complete coverage within two years of the date of installation unless a different time period is established in the *approved* design. Plants shall be distributed to meet the coverage requirements. ~~Invasive plant species shall not be planted. Selected plants shall not add to the potential for fire hazard in the event of severe drought.~~ There shall be a diversity of types and species of plants.

Reason: After much thought, the NASFM Model Codes Committee believes these sentences will create a large enforcement problem. Did the committee consider how this would be enforced, as well as who would enforce and what qualifications would be necessary? Who predicts severe droughts such as we had in certain parts of the south a few years ago followed by flooding a couple of years later? How many code officials are well versed enough in Horticulture to make those calls? Invasive plants are in part defined as weeds. As those who have worked on farms, raised vegetable or flower gardens, or even tried to grow grass know weeds certainly find a way to move into any area in substantial amounts. It appears a building permit would be required with every change of plant variety or other changes required by the climate. We are aware this is a design section, but felt that these two items in particular would result in enforcement problems. The intent of the wording is sound, but consideration should be given to enforcement.

Section: NEW 406.6.1

Commenter: Alan Shuman, President, National Association of State Fire Marshals, representing the National Association of State Fire Marshals

Revise as follows:

406.6 Vegetative roofs. *Extensive and intensive vegetative roofs*, where provided in accordance with Section 404.3 shall comply with ASTM E2396; ASTM E2397; ASTM E2398 and ASTM E2400 or, shall comply with the following:

1. All plantings shall be selected according their United States Department of Agriculture hardiness zone classifications and shall be capable of withstanding the climate conditions of the *jurisdiction* and the micro climate conditions of the *building site* including, but not limited to, wind, precipitation and temperature. Planting density shall provide complete coverage within two years of the date of installation unless a different time period is established in the *approved* design. Plants shall be distributed to meet the coverage requirements. *Invasive plant* species shall not be planted. Selected plants shall not add to the potential for fire hazard in the event of severe drought. There shall be a diversity of types and species of plants.
2. The engineered soil medium shall be designed for the physical conditions and local climate to support the plants and shall consist of non-synthetic materials. The planting design shall provide a wind erosion blanket that protects the engineered soil medium until the plants are established. The engineered soil medium that shall be not less than 3 inches in depth in all areas.
3. All roof penetrations, changes in elevation and parapet walls shall be provided with a non-vegetated buffer not less than 12 inches wide. Where access to the *building* facades is provided from locations on the perimeter of the roof, non-vegetated buffers adequate to support associated equipment and to protect the roof shall be provided.
4. Plantings shall be managed to maintain the function of the vegetative roof.

406.6.1 ROOF GARDENS AND LANDSCAPED ROOFS. Roof gardens and landscaped roofs shall meet the minimum requirements of the International Building Code and International Fire Code.

Reason: This proposal is based on National Association of State Fire Marshals proposed change F8 09/10 to the 2012 *International Fire and Building Codes* to be heard in Dallas, which is after the submittal date for these public comments. F8 was approved as modified by the committee in Baltimore in 2009. If F8 is successful in Dallas, it should be incorporated into the IGCC by reference or the provisions should be included in this document to prevent confusion and ensure that the minimum requirements are met.

Section: 710.6

Commenter: Alan Shuman, President, National Association of State Fire Marshals, representing the National Association of State Fire Marshals

Revise as follows:

710.6 Automatic fire sprinkler system project elective. Where projects are intended to qualify for an automatic fire sprinklers system *project elective* in accordance with Section 303.4 and meet the requirements of NFPA 13 or NFPA13R listed in Chapter 12. The automatic fire sprinkler systems shall be supplied with *non-potable* water from an on-site *rainwater* collection system. Such *rainwater* collection system shall comply with Section 707. The requirements of Sections 710.6.1 and 710.6.2 shall apply to the fire sprinkler system and the on-site *rainwater* collection system.

**CHAPTER 12
REFERENCED STANDARDS**

NFPA National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269

Standard Reference number	Title	Referenced in code section number
NFPA 70-2011	National Electrical Code.....	604.4.4, 611.2.3.2, 611.3.3.1
NFPA 72-2010	National Alarm and Signaling Code.....	710.6.2
NFPA 13-2007	Standard for Installation of Sprinkler Systems	710.6
<u>NFPA 13R-2007</u>	<u>Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height</u>	<u>710.6</u>

Reason: We believe it is important that sprinkler systems meet the requirements of NFPA 13 or 13R regarding water supply. This is an appropriate change and reference to help ensure that the systems function as required. In fact, we feel it is important to reference other NFPA documents such as NFPA 13D, 14, 20, 22 and others that may apply to water supply. Debris, contamination, bacteria and other problems could result in failure if not properly addressed. Reference to the appropriate standards helps prevent that. The intent may be somewhere in the code, but stating it certainly provides better guidance.