



December 14, 2011

Harford County Residential Sprinkler Inspection Provisions for One and Two Family Dwellings

Background

In accordance with Bill 11-51, the 2012 International Residential Code has been adopted by Harford County, MD with local amendments and became effective on December 13, 2011. One key element of the Bill will have enforcement of the 2012 I-codes with amendments commence on July 1, 2012. This means all projects in which permit applications are submitted on or after the July 1, 2012 date will have to comply with all of the provisions of the 2012 I-Codes. Section R313.2 of the 2012 IRC specifically addresses the requirement to install an automatic residential fire sprinkler system in all new one and two family dwellings with local amendments.

To provide some clarification the code requirement will only be applicable to ***NEW*** one and two family dwellings. There are some exceptions that will apply;

1. An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.
2. An automatic residential fire sprinkler system shall not be required for a new one- or two-family dwelling constructed on a lot served by an existing service line from a water main to the property line that is less than a nominal 1 inch size or a lot subject to a valid unexpired public works utility agreement that was executed prior to March 1, 2011. For a property to qualify for an exemption due to an undersized existing water service line, the water service line must be (1) approved and owned by the public or private water system that owns the mains, (2) installed prior to March 1, 2011, and (3) fully operational from the public or private main to a curb stop or meter pit located at the property line.

Townhomes

On July 1, 1992, the State Fire Prevention Code was modified to require an automatic residential fire sprinkler system to be installed in all newly constructed townhomes in the State of Maryland. The addition of the requirement in the IRC will have no effect on the existing State requirement. In fact the current process of inspection and approvals of the systems in townhomes will still remain the responsibility of the State Fire Marshals Office.

Modular Homes (State Approved Industrialized Buildings)

One and two family dwellings constructed under the State of Maryland industrialized building program are handled differently. The factory built portions of these units must be built to the State Model Performance Code. Currently the MPC adopts the 2009 IRC and in accordance with Section R313.2 of

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the 2009 IRC, the effective date for an automatic residential fire sprinkler system was January 1, 2011. The Building Services Division at the time of permit submittal and plan review will verify that a system is to be installed. Inspections will be done as described in the "Design and Installation" and "Inspection of Systems" sections of this document for all site installed portions of the system. The Department by state law only has jurisdiction over the site installed portions.

The State of Maryland will be adopting the 2012 International Residential Code as part of the Model Performance Code on January 1, 2012. There will be no changes to the requirement for installation of an automatic residential fire sprinkler system for these types of units.

Manufactured Homes

The provisions of the local building code are not applicable to the factory built portions of manufactured housing units constructed and approved under the National Manufactured Housing Construction and Safety Standards. In accordance with federal regulations a local jurisdictions authority may not extend into the factory built portions of these units unless specifically modified on site. Based upon the federal provisions, a residential automatic fire suppression system will not be required in manufactured homes until such time as the National Manufactured Housing Construction and Safety Standards provides for the requirement.

Design and Installation

When an automatic residential fire sprinkler system is required to be installed the design and installation must be done in accordance with state law by a state licensed sprinkler contractor. This will be the best source for individuals desiring to learn more about the particulars of the system that will provide for the efficient and economical design and the best reliable water source. Based upon the IRC, systems are allowed to be designed in accordance with one of two standards, IRC Section P2904 and NFPA 13D. The choice will be made between the system designer, builder and or owner of the property.

Document Submittal at Plan Review

All permit applications for new one and two family dwellings made on or after January 1, 2012 will be required to be accompanied by construction plans depicting construction methods and design for the proposed structure as normal. These plans however will have to be noted either that an automatic residential fire sprinkler system will be installed or note that the project will meet one the exceptions listed in the "background" section of this document. Those projects that will be utilizing exception #2 will be required to submit a completed "Sprinkler Exception Verification" as supplied by DILP.

Permitting and Fees

The Building Permit and Plumbing Permit process will see no changes for additional permitting requirements other than the previously discussed commitment at time of plan review. No additional fees will be applicable. Inspections of the systems will be performed as discussed. When applicable Re-inspection fees in accordance with Harford County Code §157-16D will be assessed when the systems are either not ready for inspection during the framing and rough in stages or when multiple trips are required to verify compliance. Re-inspection fees will be the responsibility of the Permit applicant and must be paid prior to issuance of a Certificate of Occupancy

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Inspection of Systems

The inspection of the automatic residential fire suppression system will be conducted in a two phase approach by the Building Services Division and the Plumbing Services Division. It is imperative that the systems are ready for inspections at these time in order to prevent unnecessary trips by inspection staff

1. Phase one will be at the framing and rough in inspection stage of the project. At that time the contractor will be required to have the approved system design made available to the inspection staff for review. The Building Services Division will review the installation of the system design for placement of heads and review for any unforeseen obstructions that might have occurred. The Plumbing Services Division will be responsible for reviewing the installation of the piping system and backflow prevention device.
2. Phase two will see the Building Services Division to perform one final review of the system for installation for installation of the correct sprinkler head (manufacture and model based upon the approved system design) and a final self certification by the State Licensed Sprinkler Contractor. The self certification shall include but not be limited to a statement that the system has been installed and tested in accordance with the Design and applicable design standard and the system is operational.

Once the systems are installed and made operational by the Sprinkler contractor, the Department of Inspections, Licenses and Permits will not require any future inspections or certifications unless modifications are made to the automatic residential fire sprinkler system based upon future modifications and or additions to the structure.

Questions

Questions regarding the installation of an automatic residential fire sprinkler system may be directed to:

Harford County Building Services Division

Plans Reviewer – (410) 638-3366

Harford County Plumbing Services Division

Scott Schott – (410) 638-3215

Harford County Water and Sewer

Exemption Questions

Darryl Ivins – (410) 638-3300

Fees

TinaRawl – (410) 638-3300