



545 WASHINGTON BOULEVARD JERSEY CITY, NJ 07310-1686

TEL: (201) 469-2000 www.iso.com

## **ISO's Response to the IRC Requirement for Residential Sprinkler Systems in Newly Constructed Homes**

The 2009 International Residential Code (IRC) requires fire sprinkler systems in all new one- and two-family homes and townhouses. Forty-six states use the IRC as the basis for regulating new home construction.

This document summarizes some of the ways in which ISO's products and programs respond to the new IRC requirement.

### **Homeowners Policy Program Manual**

ISO develops and publishes manuals of rules that many insurers use in calculating the premiums for insurance policies. Those manuals are subject to review and approval by insurance regulators in each state.

ISO's Homeowners Policy Program Manual allows insurers to grant a discount of up to 13% on the insurance premiums for homes with residential fire sprinkler systems. Under the approved manual rule, each insurance company determines availability of the discounts and eligibility for them.

### **Public Protection Classification (PPC™) Program**

ISO's Public Protection Classification (PPC™) program helps insurance companies measure and evaluate the effectiveness of fire-mitigation services in more than 46,000 fire districts across the United States. The program gathers information about the fire departments, fire alarm and communications systems, and water supplies. ISO uses that information to develop gradings for each community, and many insurers use those gradings in developing premiums for properties in the communities. In general, the price of fire insurance in a community with a good PPC is substantially lower than in a community with a poor PPC, assuming all other factors are equal.

One factor in the PPC evaluation is how the amount of water a community can deliver to a fire compares with the needed fire flow (NFF) — the amount of water that should be available for providing fire protection at selected locations throughout the community. ISO reduces its estimate of the NFF for new subdivisions built in compliance with the requirements of the National Fire Protection Association's handbook entitled *NFPA 13D: Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*.

Typically, building a subdivision with properly designed and installed sprinkler systems reduces the amount of water needed to fight a fire and makes it easier for the water system — supply works, water mains, and hydrants — to meet the demand. Therefore, adopting a model building code, like the 2009 IRC, containing a residential sprinkler requirement could help a community get and maintain a better PPC.

The PPC program is not specifically designed to prevent property loss or enhance life safety. Therefore, ISO makes no comments on the property-loss-prevention or life-safety elements of residential sprinklers.

### **Building Code Effectiveness Grading Schedule (BCEGS®) Program**

ISO's Building Code Effectiveness Grading Schedule (BCEGS®) program assesses the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigation of losses from natural hazards. Like the PPC program, the BCEGS program offers information that insurers can use in determining premiums for property insurance policies.

Wildland fire and lightning are both natural hazards affecting wide areas across the country. The ten most costly wildland fires in U.S. history caused a total of more than \$8 billion in insured losses. Using the latest available data, between 2002 and 2005, lightning strikes caused 15.3% of home fires.

To receive a favorable BCEGS classification, a community needs to adopt and enforce a national model building code such as the IRC. ISO does not make judgments regarding any technical aspects of the code but rather provides maximum credit for adopting the latest edition of the code without amendments. **Amendments that weaken the provisions of the national code will reduce the points a community can score under the program.**

Failure to adopt the residential sprinkler code mandated by the IRC could result in a loss, on average, of 4 points out of the 100 points available under BCEGS for personal lines. That point loss may or may not result in a worse BCEGS grade.

**The National Flood Insurance Program's Community Rating System takes a community's BCEGS classification into account in developing a classification used in determining the premium for flood insurance.**