

CHANGE TYPE: Modification

CHANGE SUMMARY: The installation, inspection, testing, and maintenance of aerosol fire-extinguishing systems are now addressed through applicable references to Sections 901 and 904.4 of the IBC and NFPA 2010, as well as the system's listing and manufacturer's instructions.

2018 CODE: **904.14 Aerosol Fire-extinguishing Systems.** Aerosol fire-extinguishing systems shall be installed, periodically inspected, tested and maintained in accordance with Sections 901 and 904.4, NFPA 2010, and in accordance with their listing.

Such devices and appurtenances shall be listed and installed in conformance with manufacturer's instructions.

CHANGE SIGNIFICANCE: NFPA 2010 *Standard for Fixed Aerosol Fire Extinguishing Systems* was first published in 2006. Since then, the International Code Council Evaluation Service (ICC-ES) has published the ICC-ES Acceptance Criteria for Fixed Condensed Aerosol Fire-Extinguishing Systems, AC432. In 2014, the ICC-ES published evaluation report ESR-3230 for an aerosol fire-extinguishing system in compliance with the 2009 and 2012 editions of the IFC as an alternative to IFC Section 904.9, Halon Fire-extinguishing Systems. The IBC now addresses the installation, inspection, testing, and maintenance of aerosol fire-extinguishing systems through applicable references to Sections 901 and 904.4 of the IBC and NFPA 2010, as well as the system's listing and manufacturer's instructions.

Condensed aerosol fire-suppression systems used as total flooding systems for the protection of Class A (surface), Class B, and Class C hazards can reduce construction, installation, and maintenance costs compared with existing fire-extinguishing systems. This technology does not use compressed gas cylinders nor pressure-rated piping. Generally, these systems are electrically operated when integrated with approved fire alarm and releasing control systems and releasing panels, or are deployed as automatic stand-alone fire-extinguishing units.

As there are no piping distribution systems required, no special storage requirements for compressed gas bottles and the ability of the flooding agent to protect areas with limited leakage, the construction costs for these systems are typically lower than for conventional chemical and gas fire-extinguishing systems requiring gas pressure.

The technology remains effective even with leakage in the space, and therefore offers an alternative technology for installations involving reconstruction, or new construction in areas with special hazards, or where total room integrity construction is problematic.

904.14

Aerosol Fire Extinguishing Systems



Photo courtesy of Fireaway Inc.

Electrically-operated aerosol fire-extinguishing device



This excerpt is taken from *Significant Changes to the International Building Code®*, 2018 Edition. Significant Changes publications take you directly to the most important changes that impact projects. Key changes are identified then followed by in-depth discussion of how the change affects real-world application. Photos, tables and illustrations are included to further clarify application. Available for the IBC, IRC, IFC and IPC/IMC/IFGC, the Significant Changes publications are very useful training and review tools for transitioning to a new code edition.