



## Issue: Smoke Alarms/Detectors—Investment in Life Safety Technology

Smoke alarms save lives, and according to the National Fire Protection Association (NFPA), civilian home fire deaths have decreased 59 percent nationally from 5,865 in 1977 to 2,380 in 2012, despite a 43 percent increase in the U.S. population. Over roughly the same period of time, NFPA estimates that the percentage of U.S. homes with at least one smoke alarm has risen by 74 percent. This is why the installation and use of smoke alarms are promoted by fire and life safety experts around the world.

The U.S. Consumer Product Safety Commission (CPSC), U.S. Fire Administration, NFPA, International Association of Fire Chiefs, and National Association of State Fire Marshals endorse the lifesaving benefits of smoke detection and have acknowledged that both ionization and photoelectric technologies provide safe egress time, recommending the use of both technologies.

### Position:

NEMA supports the installation and proper maintenance of smoke alarms or detectors in all residential and commercial occupancies. NEMA member companies manufacture smoke alarms and detectors, employing a wide variety of detection technologies that have been tested to meet rigorous product performance standards adopted by nationally-recognized life safety standards developing organizations (SDOs). Tested products include the ionization and photoelectric devices that have been commercially available for years, but also new fire detection technologies that are designed to provide better detection and enhanced immunity to unwanted alarm activations.

The industry continues to improve the performance of smoke alarms and detectors, regardless of sensor type, to more quickly detect smoldering and flaming fires. Manufacturers actively participate in the development of national consensus codes and standards by providing technical expertise to various SDOs to pave the way for technologies that detect fires faster, while at the same time decreasing unwanted alarm activations. NEMA and its member companies are committed to continued proactive efforts to further advance protection.

### Importance:

It is important for all Americans to have working smoke alarms/detectors installed in their homes. To be most effective, the devices should be installed in accordance with the manufacturer's instructions and the placement requirements of NFPA 72 National Fire Alarm and Signaling Code. NFPA 72 is the installation standard that sets requirements for placement of smoke alarms/detectors for best detection performance. The code requires smoke alarms or detectors on all floors of a dwelling, including basements. It also requires these devices in all sleeping and guest rooms and outside of each separate sleeping area.

In order to be most effective, smoke alarms must be properly maintained. Batteries should be replaced regularly and alarms tested to ensure they operate as intended. Smoke alarms installed in one- and two-family dwellings should be replaced in their entirety when they fail to respond to operability tests or after 10 years of the date of manufacture, whichever comes first. More information about smoke alarms/detectors is available at [www.lifesafetysolutionsonline.com](http://www.lifesafetysolutionsonline.com).

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*NEMA is the association of electrical equipment and medical imaging manufacturers, founded in 1926 and headquartered in Rosslyn, Virginia. Nearly 400 members strong, its companies manufacture a diverse set of products including power transmission and distribution equipment, lighting systems, factory automation and control systems, and medical imaging and radiation therapy systems. Total U.S. shipments for electroindustry products exceed \$100 billion annually.*

### Did You Know?

- NEMA Members include industry leaders and innovative small businesses that manufacture products used in the generation, transmission and distribution, control, and end-use of electricity.
- NEMA promotes safety, innovation, interoperability, environment, and market enhancement through advocacy, business information, and standards for products, systems, and technologies.
- NEMA publishes over 600 standards, application guides, white papers, and technical papers.
- NEMA responds to codes and standards proposals of other organizations in the U.S. and around the world, facilitating the development of international and North American harmonized standards.
- NEMA was named in the Energy Independence and Security Act of 2007 to work with federal agencies on efforts to enhance the efficiency, sustainability, and security of the electricity grid. As part of this, NEMA has been instrumental in the Smart Grid Interoperability Panel (SGIP) and the National Institute of Standards and Technology (NIST) Smart Grid Federal Advisory Committee.



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