

NEMA Standards Publication

Guide for Proper Use of Smoke Detectors in Duct Applications

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Foreword

Proper Use of Smoke Detectors in Duct Applications

The purpose of this guide is to provide much needed information concerning the proper use of smoke detectors in duct applications. Duct mounted smoke detectors are designed to provide a specific type of protection that cannot be duplicated by any other type of system. However, there has been a tendency to misapply these devices—attempting to use them as a substitute for an early warning smoke detection system. This fact, coupled with new methods of detecting smoke in ducts, has prompted the writing of this industry guide.

Fire Protection Engineers, Mechanical and Electrical Engineers, Fire Alarm System designers, and installers should find the contents both educational and informative.

This information is intended as a technical guide, as distinct from a listing of mandatory requirements.

This ***Guide for Proper Use of Smoke Detectors in Duct Applications*** has been published by the National Electrical Manufacturers Association Fire Alarm Group of the Signaling, Protection, and Communication Section 3-SB for the automatic fire detection and alarm industry.

About the National Electrical Manufacturers Association (NEMA):

For more than 80 years, the National Electrical Manufacturers Association has been developing standards for the electrical manufacturing industry and is today one of the leading standards development organizations in the world. NEMA contributes to an orderly marketplace and helps ensure the public safety.

NEMA, with headquarters in Rosslyn, Virginia, has nearly 500 member companies, including large, medium, and small businesses. The organization is divided into eight divisions: Industrial Automation, Lighting Equipment, Building Equipment, Insulating Materials, Wire and Cable, Power Equipment, and Diagnostic Imaging and Therapy Systems. Within these divisions are over 50 product-specific sections. The Signaling Section is one such Section in the Electronics Division.

About the NEMA Signaling, Protection, and Communication Section (3-SB):

The objective of the section is to be the principal source of technical, training, and educational materials essential for the specification and manufacture of reliable life safety products, their installation, performance, and inspection.

The section currently represents over 40 U.S., U.K., and Japanese manufacturers in support of the automatic fire detection and alarm industry and the health care communications industry. Fire detection and alarm products include life safety/fire alarm systems and devices that provide early warning of an impending or actual fire or gaseous hazard. The products detect, notify, and initiate control functions in case of hazard to life or property.

For more information on NEMA and the Signaling Section, go to <http://www.nema.org> and search for the "Signaling Section" or "Fire Alarm."