# Understanding ANSI, ASTM International, FM Global, NFPA, SEI, UL and CSA Group — Quick Tips



#### Introduction

Many non-governmental agencies affect the products and services offered to the safety industry. Those discussed here include: American National Standards Institute (ANSI), ASTM International, FM Global, National Fire Protection Association (NFPA), Safety Equipment Institute (SEI), Underwriters' Laboratories Inc. (UL) and Canadian Standards Association (CSA) Group.

## American National Standards Institute

The American National Standards Institute (ANSI) is a diversified and unique nonprofit organization that includes industry, standards developing organizations, trade associations, professional and technical societies, government, labor and consumer groups. ANSI oversees the creation, promulgation and use of thousands of standards and guidelines that directly impact businesses in nearly every sector. ANSI is also actively engaged in accreditation — assessing the competence of organizations determining conformance to standards. ANSI was formed originally as the American Engineering Standards Committee on Oct. 19, 1918. ANSI's mission is to enhance both the global competitiveness of U.S. business and the U.S. quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems; and safeguarding their integrity.

## **ASTM International**

ASTM International, originally known as the American Society for Testing and Materials, was formed in 1898, when a group of engineers and scientists got together to address frequent rail breaks. Their work led to standardization on the steel used in railroad construction. ASTM International is a not-for-profit organization that provides a forum for the development and publication of voluntary consensus standards for materials, products, systems and services. It is one of the largest voluntary standards developing organizations in the world. Standards developed at ASTM International are the work of over 30,000 members. Technical experts represent producers, users, consumers, government and academia from over 1400 countries. Members belong to one or more committees, each of which covers a subject area. These committees develop more than 12,000 ASTM International standards that can be found in the 77-volume Annual Book of ASTM Standards.

#### FM Global

FM Global is one of the world's largest commercial and industrial property insurance and risk management organizations specializing in property protection. It was formed in 1835 by Zachariah Allen, who felt the need for an industrial insurance group to focus on loss control. FM Global has six business units:

- FM Global Group Mitigating business risk through all its business units
- AFM Commercial property insurance and property insurance expertise for the Middle Market
- FM Approvals Third-party certification for company products worldwide
- FM Global Cargo Comprehensive cargo coverage and risk engineering services
- Mutual Boiler RE Provides breakdown treaty reinsurance and related support services for boiler systems
- Emergency Response Consultants Offers hands-on emergency response training to all levels of fire brigades, hazardous material emergency responders, technical and confined-space rescue teams, emergency medical services and local fire departments

Each unit helps its clients manage their property risks through a variety of products and services. The FM Approvals business unit certifies industrial and commercial products and services. When a product or service meets FM Approvals' standards, it is issued the FM Approved mark to signify it will perform as expected and support property loss prevention. The FM Approvals business unit backs its evaluations with scientific research and testing and lists more than 45,000 certified products in its approval guide.

# **National Fire Protection Association**

The National Fire Protection Association (NFPA) is an international nonprofit organization founded in 1896, devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. NFPA membership totals more than 60,000 individuals and more than 80 national trade and professional organizations. NFPA's mission is to help save lives and reduce loss with information, knowledge and passion. NFPA's 300 codes and standards influence every building, process, service, design and installation in the U.S. and many of those used in other countries. The National Electric Code (NFPA 70), Life Safety Code (NFPA 101) and Flammable and Combustible Liquids Code (NFPA 30) are widely used.

## Safety Equipment Institute

The Safety Equipment Institute (SEI) was organized in 1981 and is headquartered in Arlington, Virginia. It is a private, nonprofit organization with third-party certification programs to test and certify a wide array of safety equipment. SEI's certification programs are accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) in accordance with ISO Guide 65 General Requirements for Bodies Operating Product Certification Systems. SEI has an alliance with INSPEC International, Ltd., a notified body located in the UK. Together, they offer a variety of testing services, CE Marking and ISO Registration.

SEI certification programs include ongoing product testing and quality assurance audits of product models voluntarily submitted by manufacturers. All product testing is done in accordance with the selected voluntary, government or other standards available for the given product. SEI will certify the manufacturer's product model and grant the right to use the SEI certification label when:

• The testing lab has determined that the product model has been tested and

successfully meets the appropriate product standard.

• The quality assurance auditor has determined that the manufacturer complies with SEI quality assurance requirements.

SEI publishes a certified product list and it is continuously updated to reflect the latest information. SEI **does not** offer a warranty for the performance of the product, but having a product certified by SEI shows that the manufacturer is taking responsibility for producing a quality product.

## Underwriters' Laboratories Inc.

Underwriters' Laboratories Inc. (UL) is an independent, not-for-profit product safety certification organization that has been testing products and writing safety standards since 1894. UL publishes 1,614 safety standards, and performs approximately 96,000 product evaluations of components, materials and systems with 22 billion UL marks appearing on 71,000 manufacturers' products each year.

UL's mission is to conscientiously advance safety science through careful research and investigation, applying their efforts to prevent or reduce loss of life and property and to promote safe living and working environments for all people. This is supported by 170 testing and certification facilities and a staff of 11,615 employees located in 40 countries.

# Canadian Standards Group (CSA)

The Canadian Standards Group (formerly the Canadian Standards Association) is an independent, not-for-profit, member-based association dedicated to advancing safety, sustainability and social good. It is an internationally accredited standards development and testing and certification organization. They also provide consumer product evaluation and education and training services. They provide a broad range of knowledge and expertise that includes: industrial equipment, plumbing and construction, electro-medical and healthcare, appliances and gas, alternative energy, lighting and sustainability. The CSA mark appears on billions of products around the world.

## **Product Regulation Reference**

These seven agencies affect many products in the Grainger catalog. Here are some examples of sections in which they appear:

## American National Standards Institute (ANSI)

- Evewear
- Hard hats
- Fall protection
- Eye wash/showers

#### **ASTM International**

- Clothing
- Footwear

#### FM Global

- Lighting
- Safety cans

## National Fire Protection Association (NFPA)

- Safety cabinets
- Lighting
- Respirators

# Safety Equipment Institute (SEI)

- Air monitors
- Eyewear
- Hard hats

# Underwriters' Laboratories (UL)

- Lighting
- Lockout/tagout
- Safety cans

# Canadian Standards Group (CSA)

- Eyewear
- Fall protection
- Head protection
- Protective footwear

#### Sources

ANSI Headquarters 1899 L. Street, NW, 11th Floor Washington, DC 20036 (202) 293-8020

ANSI Operations 25 W 43rd Street, 4th Floor New York, NY 10036 (212) 642-4900 www.ansi.org

ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428 (610) 832-9585 www.astm.org

Canadian Standards Group 178 Rexdale Boulevard Toronto, ON Canada M9W 1R3 1-800-463-6727 http://www.csagroup.org

FM Global Corporate Offices 270 Central Avenue Johnston, RI 02919 (401) 275-3000 www.fmglobal.com

FM Approvals 1151 Boston-Providence Turnpike Norwood, MA 02062 (781) 762-4300 www.fmapprovals.com

National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471 (617) 770-3000 www.nfpa.org

Safety Equipment Institute 1307 Dolly Madison Boulevard Suite 3A McLean, VA 22101 (703) 442-5732 www.seinet.org

Underwriters' Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062 (847) 272-8800 www.ul.com

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