



MCA/Steamfitters Local 638: Fire deaths plummet 43% since 2001 and 70% since first comprehensive N.Y.C. sprinkler law enacted; 40th anniversary of fire safety law

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In 2012 the city recorded the lowest number of fire fatalities in its history, despite structural fires increasing 1%. This news comes on the 40th anniversary of N.Y.C. Local Law #5 of 1973, a pioneering building and fire safety measure and a dozen years since Local Law #10 of 1999, which required newly constructed dwellings of three or more units or those undergoing major renovation to be sprinklered. In 2012 fire related deaths in N.Y.C. declined 12% to 58, from 66 in 2011. 2012 was the seventh consecutive year with fewer than 100 fire-related deaths and just the 12th time since the city began compiling fire death statistics in 1916.

In the last ten years (2002-12) there was a remarkable drop in fire deaths, falling 43% since 2001. The decline can be directly traced to the vast increase of sprinkler use in buildings. In March 1999, the city enacted Local Law 10, which mandated that all newly constructed multifamily dwellings with three or more units must be fully protected by fire sprinklers. Local Law 10 also says that in existing buildings, sprinklers have to be installed as renovations or alterations equal more than 50% of the value of the building. Another key measure, Local Law 55 of 1989 mandated all contractors who install and maintain fire sprinkler systems be licensed by the city. This law coincides with the city's sharpest one-year drop in fire deaths (296 in 1990 to 187 in 1991).

"The lowering of fire fatalities in N.Y. begins with property owners' commitment to install and maintain sprinkler systems, which have proven to protect lives, property and extinguish fires at their earliest stages," said Tim Bowe, president of ABCO Peerless Sprinkler Corp. and board member of the Mechanical Contractors Association of N.Y. (MCA). "As fire safety technology has improved, buildings have added the latest smoke detection and smoke controls, fire alarms and elevator recall capability, making a tremendous impact." MCA companies install the mechanical and sprinkler equipment systems in N.Y.'s residential, industrial and commercial structures.

Beginning on January 18, 1973, Local Law #5 mandated any existing high-rise office buildings 100 ft. or more to be sprinklered and have two-way communication between building lobbies and individual floors for the purpose of fire department command and communications. Many experts recognize this landmark legislation, which other cities and building codes followed, as a watershed event in the reduction of fire deaths. In the three preceding years the city had 310 fire fatalities in 1970; 292 in 1971 and 270 in 1972.

According to the National Institute of Standards and Technology (NIST), modern fires can reach 2,000 degrees in less than three minutes due to the increased use of synthetics and petroleum based compounds in the manufacture of modern furnishings that give fuel to rapid fire acceleration. Patrick Dolan, president of the Enterprise Association of the Steamfitters Local 638 said, "When lives are lost due to tragic and fatal fires, new laws are written to protect both life and property. The

fire suppression industry has responded with the best and safest protection to meet the new requirements. The city of New York's data is a clear case study illustrating that the passage of these fire safety laws, coupled with building owners strong adherence to the mandates, has made a tremendous difference in saving lives, without even factoring in the protection of tenants property, which is also a critical consideration within the commercial property sector."

Latest Fire Fatality Statics Illustrate a Safer, More Secure City:

Average fire-related deaths for 10-year period 2002 to 2012: 85 per year;

This marks a 39.3 % decrease of 1990's average of 140 fire deaths per year;

It is a 64% reduction from 1980's when fire deaths averaged 236 per year;

A drastic 69.4% decrease in fire deaths since the 1970's, when it averaged 278 annual fire deaths;

The high mark for fire deaths for the period 1970-2012 was 310 in 1970;

Rocco Abbate, Senior Vice President of Sirina Fire Protection Corp. and an MCA board member said, "From a fire suppression perspective, New York's mechanical contracting industry working in tandem with the city's landlords, the Buildings Department and FDNY, has played a critical role in New York becoming the safest big city to live or work in, all while closely adhering to U.S. Green Building Council's LEED certification requirements. Given the vast age and diversity of New York City's enormous building inventory, this steady drop off in fire deaths is quite a remarkable accomplishment."

The National Fire Protection Association (NFPA) finds that from 2006 - 2010 the death rate per 1,000 fires was 83% lower with wet pipe sprinklers than with no automatic extinguishing equipment. Direct property damage per reported fire was 69% lower when wet pipe sprinklers were present, compared to fires with no automatic extinguishing equipment present.

SUMMARY OF NEW YORK CITY SPRINKLER LAWS

Local Law 5 of 1973 (LL 5/73) - Required existing high-rise office buildings 100 feet or more in height to be equipped with a sprinkler system, or, in lieu of a sprinkler system, compartmentation with stair pressurization. For sprinkler system installations, sprinkler protection was permitted to be omitted from certain areas in accordance with departmental directives and interpretations. 40th Anniversary is January 18, 2013.

Local Law 41 of 1978 - Following a fire at the Blue Angel nightclub, law strengthened sprinkler provisions for places of public assembly, and a requirement that sprinklers be retroactively installed in existing nightclubs.

Local Law 16 of 1984 (LL 16/84) - Amended the building code to require all new office buildings over 75 feet in height to be protected throughout by an automatic sprinkler system, and did not provide the same exemptions permitted for LL 5/73 compliance. LL 16/84 did not retroactively mandate sprinklers for existing buildings.

Local Law 55 of 1989 - Required individuals installing and modifying fire sprinkler systems to be licensed by the City of New York. This law coincides with the city's sharpest one-year drop in fire deaths (from 296 in 1990 to 187 in 1991), with a continuous drop in fire fatalities ever since.

Local Law 10 of 1999 - New York City Local Law 10 was enacted in March of 1999, mandating that all newly constructed multifamily dwellings with 3 or more units must be fully protected by fire sprinklers. For existing buildings, sprinklers have to be installed: as renovations, or as alterations with costs if renovations or alterations total more than 50 percent of the value of the building. (This was a result of a fire on December 23, 1998 at 124 W 60th Street - 4 deaths - aka the McCauley Culkin Fire) - Also December 18, 1998 - 3 Firefighter deaths Dec 18 - aspects of the law also

established stricter inspection and maintenance standards.

Local Law 26 of 2002 - after the tragic death of 3 firefighters on Father's Day 2001, this law was enacted to require automatic fire sprinklers in mercantile occupancies which contain below grade storage of flammable or combustible mixtures.

Local Law 26 of 2004 - Was enacted after a 2003, the World Trade Center Building Code Task Force found that compartmentation and smoke alarms do not provide the same level of fire protection as a full system of automatic sprinklers, and recommended automatic sprinkler protection throughout all high-rise office buildings. As a result, Local Law 26 of 2004 (LL 26/04) amended Building Code sections 27-228.5 and 27-929.1 to retroactively require sprinkler protection for existing office buildings measuring 100 feet or more in height by July 1, 2019. Per section 27-929.1(a)(3), these requirements do not apply to a building in existence on October 22, 2004 in which a full system of automatic sprinklers was installed or required to be installed pursuant to any other provision of law (i.e. LL5/73 or LL16/84).

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