

Retrofit Fire Sprinkler Program - A Partial Listing

Alabama

All nursing homes are required to have sprinkler systems installed. Phase 1 will require sprinkler systems to be installed by January 1, 2006; Phase 2 requires systems to be installed by September 1, 2006, and Phase 3 by February 1, 2007. (Source: Alabama Department of Public Health (334) 206-5300)

Alaska

Fairbanks - Retrofit required for all residential. (Source: AHMA 1992 article)

Juneau - Retrofit required for high-rise 75 ft or more in height. (Source: AHMA 1992 article)

Arizona

Phoenix - In 1976, the City of Phoenix began requiring all assembly areas within high-rise buildings to be sprinklered if the building did not already have a complete fire sprinkler system. Source: Phoenix Fire Department (602) 262-6849). In 1991, new ordinance required retrofit of all high-rise. (Same Source - Joe Radocovich)

Scottsdale - All high-rise required to be retrofit. (Source: AHMA 1992 article)

Tucson - The City of Tucson successfully passed the ordinance requiring retrofit of all high-rise buildings greater than 50 ft. in height. Individuals were given a 3 year time frame to comply. Source: Northwest Fire District, Tucson, AZ (520) 742-4749.

California

Adult Residential Facilities and Residential Care Facilities for the Elderly that house or care for no more than 6 patients, must have an approved, operable automatic fire sprinkler system if they are licensed before December 31, 2005. The bill would require every facility for which a license is newly issued on or after January 1, 2006, to have an approved, operable automatic fire sprinkler system on and after the date of issuance.

Chino Hills - When additions to existing buildings are 50% or greater of the original building square footage, the existing building shall be retrofitted throughout. Both the new construction and existing building shall be equipped with an automatic fire sprinkler system as set forth in NFPA 13D

Felton - The Felton Fire Protection District modified it's fire code to include a fire sprinkler ordinance for all new structures. Remodels that modify more than 75% of the structure are considered new construction and require retrofit fire sprinklers.

Fremont-Corridors serving more than ten occupants in existing buildings two stories or more in heights which contain Group R Division occupancies (hotels and apartments) must be protected with automatic sprinkler systems, with a sprinkler adjacent to each door opening within each guest room or dwelling unit. Permits are to be obtained within one year after notification, with work completed within three years. (Source: Ordinance No. 2270 adopted December 9, 1997)

Fresno - In 1961, Fresno began encouraging sprinkler retrofit as a part of a downtown urban renewal program. This was changed to a requirement in 1974 when all buildings over 3,000 sq ft in the central business district were required to comply. In 1979, the sprinkler requirement was extended to include all buildings in the city exceeding 5,000 sq ft in area. By 1983, 90 percent of the 5.2 million sq ft within two major areas of the city (one commercial and one industrial) were sprinklered. Total fire losses for these areas between 1970 and 1983 were \$72,335 with more than one-third of the loss accounted for by two fires in unsprinklered buildings. (Source: Fresno Fire Marshal's Office (209) 488-1023)

Los Angeles - In July of 1988, the Los Angeles City Council enacted a law to require sprinklers in all buildings 75 or more ft in height, except apartments and condominiums. This ordinance affected approximately 300 buildings. Since this law was passed, about 50% of the complexes have been sprinklered. The remaining retrofit market was estimated to be about \$50 million. (A 1974 ordinance required sprinklers in all new construction exceeding 75 ft. Retrofit of pre-1974 residential high-rise was considered by the City Council in late 1991). (Source(s): September 30, 1991 Engineering News-Record. BFGoodrich Report. Sales personnel at Fire Protection Group, Los Angeles.)

Petaluma – As of July 1, 2000, all new construction in Petaluma, both residential and commercial, has required installation of an approved fire sprinkler system. The current policy calls for building owners in the heart of downtown to install sprinklers in their basements by 2011 and above ground by 2017. The city is offering to pay 10 percent of the cost, up to \$10,000.

Ventura - All new and existing buildings over 5,000 sq ft have been required to be fully sprinklered since 1991. (Source: Ventura Fire Marshal's Office (805) 654-7760)

San Diego - All non-residential high-rise buildings 75 ft or more in height and hotels/motels over 75 ft to be sprinklered. Estimated market is \$10-15 million. (Source(s): AHMA 1992 article. BFGoodrich Report. Western Fire Protection, Inc.)

San Francisco - All hotels. Retrofit ordinance was passed in 1989 that required all nonresidential high-rise buildings (75 ft or more) to be sprinklered. Almost 100% complete. All commercial buildings 75 ft and higher are required to be sprinklers by an ordinance passed 11/15/93, excluding apartment and condominium buildings. (Source(s): AHMA 1992 article. BFGoodrich Report.)

San Jose - All business and residential high-rise ordinance was passed in January 1990. Owners are given one year for plans, another year to get water supply in place and a third year to finish the system. (Source: AHMA 1992 article)

Colorado

Boulder - In 1988, the city of Boulder passed an ordinance which requires fire sprinklers throughout existing buildings of the following types: residential occupancies more than 55 ft in height, health care occupancies, dormitories, hotels above two stories in height except 3-story hotels with exterior exit balconies for all guest rooms, windowless structures except small well-divided warehouses with individual access and aircraft hangers, and basements greater than 2,500 sq ft which are below places of assembly. All work must be completed by May of 1993, with installation contracts by May of 1992.

Denver - Certain business, hotel and mercantile occupancies. (Source: AHMA 1992 article)

Connecticut - In June of 1988, the State of Connecticut passed a law to require sprinklers in all hotels, motels and housing for the elderly which are more than 4 stories in height. Hotels and motels must be sprinklered by October of 1992, while homes for the elderly must comply by October of 1993. In a law that took effect April 15, 1987, the State of Connecticut began to require sprinkler systems in all assembly occupancies for 300 or more people, on the story of the assembly and any story below the assembly occupancy. Exceptions are provided for places of worship, multi-purpose rooms of less than 12,000 sq ft not used for exhibition, and gymnasiums, skating rinks, and swimming pools with audience seating for less than 300 people. (Source: Bureau of State Fire Marshal (203) 238-6624) By July 1, 2005 each chronic or convalescent nursing home or rest home with nursing supervision is required to have an automatic sprinkler system on each floor.

Florida - In 1983, the State of Florida enacted legislation to require fire sprinkler systems throughout all public lodging establishments three stories or more in height including time share units. Sprinklers can be omitted from closets not over 24 sq ft and bathrooms not over 55 sq ft located in guest rooms of time share units. Buildings with construction contracts let prior to October 1, 1983 may install a sprinkler system only in corridors and public areas if the building is non-combustible with 1-hour separations between guest rooms and along corridors. All buildings were required to comply by 1990. This is nearly 100% completed with about a \$50 million market remaining. Florida is also requiring any assisted living facility (ALF) to be retrofitted with sprinklers. 30% of the 1800 assisted living facilities in the state of Florida remain to be sprinklered, a \$60 million dollar market. Finally, all prisons must

be sprinklered, a value estimated at \$100 million. (Source(s): Division of State Fire Marshal (904) 488-8268. See ordinance #509.215 per AHMA 1992 article. BFGoodrich Report. Consultant Benlolo for BFG Blazemaster.)

Miami Beach - Requiring all existing condos to be retrofitted with sprinklers by 1999. Approximately 70 remain, a \$5 million dollar market. (Source: BFGoodrich Report)

Dade County- schools are required to be retrofitted with sprinklers. (Source: BFGoodrich Report)

Boca Raton- Ordinance passed approximately 10 years ago which required all nursing homes and health care occupancies to be sprinklered. (Source(s): BFGoodrich Report. Boca Raton Fire Prevention Bureau.)

Georgia

Atlanta - The City of Atlanta passed legislation in December of 1989 to require sprinkler protection of buildings more than 6 stories or 75 ft in height of the following types: all business, mercantile, institutional, and residential, including hotels. Sprinklers were also required throughout assembly occupancies with exhibition or display areas exceeding 15,000 sq ft.

All systems must be installed by the end of 1995, although buildings exceeding one million sq ft are permitted an extension until the end of 1999. (Source: City of Atlanta Bureau of Buildings (404) 330-6152)

DeKalb County - All 5 high-rise buildings constructed prior to the adoption of fire sprinkler laws must be retrofitted within 4 years (by July 1994). This includes three residential and two hotel buildings. High-rise buildings inside DeKalb's cities are not covered. (Source: DeKalb News/Era July 12, 1990)

Hawaii

Honolulu - The City and County of Honolulu enacted legislation to require that all hotels 75 ft and higher, with more than 50 percent of the building used as hotel rooms, be equipped with complete smoke detection and fire sprinkler systems. The law affected 82 existing buildings within the city and county. (Source: Honolulu Fire Chief's Office (808) 943-3301)

Maui - All high-rise buildings. (Source: AHMA 1992 article)

Illinois - State-wide retrofit ordinance passed in 1976 requiring nursing homes to be sprinklered. (enforces 1985 NFPA 101 provisions - AHMA 1992 article). (Source: BFGoodrich Report). In 2004 legislation was passed requiring dormitories at all public and private colleges and universities to have fire sprinkler systems installed by 2013. The statute also provides for low interest loans to finance the installation (Source: NIFSAB Advisory Report).

Champaign – Effective November 16, 2004, the Municipal Code was amended to require sprinklers in dormitories, nursing homes and high-rise buildings within a five-year timeframe.

Chicago - In 1935, the City of Chicago required all men's dormitories to be equipped with automatic sprinkler systems. In 1963, all schools and similar institutional occupancies were required to be sprinklered. By 1970, all exhibition areas in the city were required to be sprinklered. Following two severe nursing home fires in the mid-1970's, the City passed legislation requiring all nursing homes to be sprinklered by 1977. The law was challenged in the courts, and a Circuit Court Judge ruled it unconstitutional, but the law was ultimately upheld by the Illinois Supreme Court. (Source: Chicago Fire Prevention Engineer's Office (312) 744-1876) On December 15, 2004 Chicago City Council voted to enact an ordinance requiring all high-rise commercial buildings constructed before 1975 to be completely protected by automatic fire sprinklers by 2017. The ordinance also requires that high-rise residential and landmark buildings be subjected to a code equivalency analysis to ensure that some minimum level of fire safety is achieved. (Source: NFPA Journal, March/April 2005)

Evanston – Fire Prevention Regulations were adopted in November 2005 to require automatic fire sprinklers in

existing dormitories, hospitals, non-owner occupied rooming/lodging houses and nursing homes in accordance with the 2003 IBC. All retrofits must be completed by December 31, 2008. (Source: City of Evanston Fire & Life Safety Services)

Oak Brook - In 1979, Oak Brook enacted an ordinance requiring that all buildings without approved fire alarm systems as of that date be equipped with automatic sprinkler systems. In a 1981 survey, only 6.3 percent of the 12.9 million sq ft of building area was not protected with sprinklers. By the time of a 1984 estimate, the unsprinklered percentage had been reduced to 1 percent. (Source: Oak Brook Director of Fire Prevention (312) 990-3000)

In 2004, legislation passed requiring dormitories at all public and private colleges and universities in Illinois to have fire sprinkler systems installed by 2013. The newly enacted statute also provides for low interest loans to finance the installation of dormitory sprinkler systems.

Wheeling - Fire sprinkler systems are required in all new construction regardless of its square footage. Existing commercial, industrial, and multi-family occupancies are required to be retrofitted with fire sprinkler systems if, the structure is increased in square footage and/or the degree of fire hazard is increased as defined by the Village of Wheeling Building Code. (Source: Village of Wheeling, IL)

Hodgkins - The new automatic fire sprinkler ordinance requires an automatic fire sprinkler

system to be installed in all existing multifamily residential buildings containing more

than four units. It also requires fire sprinklers in all new construction multi-family buildings with

more than four units. The ordinance was passed November 8,2004. Working plans for retrofitting

the buildings are due March 31,2005.Installation must be completed by November 30,2005.

Iowa

Ames – *Ames City Council passed a retrofit sprinkler ordinance on May 9, 2006 regarding Greek Housing. The ordinance allows 10 years to complete the retrofitting.*

Kansas

Lawrence – In 1993 a retrofit ordinance passed requiring all of then 39 fraternities and sororities in Lawrence to retrofit their buildings with sprinkler systems.

Kentucky

Louisville- passed ordinance in 1993 that stated all high-rise buildings (75ft or more) must be sprinklered except for airport control towers, open parking garages, outdoor assemblies, low hazard use, telephone equipment rooms, and owner occupied residential co-ops. All compliance must be completed by 2005. (Source: AHMA 1992 Article)

Louisiana - All existing high-rise (over 75 ft) must be fully protected with sprinklers by the end of 1999. Plans must be submitted by the end of 1991. (Source: June/July 1990 Fire News)

Maryland- Does not have a state wide retrofit ordinance. However, a resolution passed that requires government employees to stay at sprinklered hotels/motels has led many existing hotels/motels to be sprinklered. (Source: BFGoodrich Report)

Ocean City - In 1981, Ocean City required sprinklers to be installed in public areas of all high-rise occupancies. (Source: Ocean City Fire Marshal's Office (301) 289-8221)

Baltimore County - Adopted the Life Safety Code in the mid 1980's, which required any new high rise over 75 ft. to

be sprinklered. According to the Baltimore County Fire Marshall, 99% now conform. (Source: BFGoodrich Report)

Prince George's County - The city recently required off-campus dorm-style housing — mostly university- owned fraternity and sorority houses — to install fire sprinkler systems, and a task force is studying the feasibility of retrofitting high-rises with sprinklers.

Massachusetts - In 1986, the Commonwealth of Massachusetts required that sprinkler systems be installed in all buildings over 70 ft in height and built prior to 1975 (the date from which all new high-rise buildings were required to be fully sprinklered).

The state also established a local option to permit municipalities to require that sprinklers be provided in all boarding homes with more than five residents. The local option was first exercised by the cities of Beverly and Salem. (Source: State Fire Marshal's Office (617) 566-4500)

Worcester - Requires retrofit of lodging and rooming houses. (Source: AHMA 1992 article)

In 2004, legislation passed requiring the installation of automatic fire sprinklers within three years in places of assembly with occupancy of 100 people or more.

Minnesota

St. Paul - requires retrofit per Appendix 1A of Uniform Building Code. (Source: AHMA 1992 article)

Missouri

St. Louis - Requires retrofit of buildings over 12 stories at time of ownership change. (Source: AHMA 1992 article)

Montana

Billings - Retrofit of all high-rise buildings required. (Source: AHMA 1992 article)

Nebraska - Uses 1994 Life Safety Code, including existing buildings chapters. (Source: State Fire Marshalls Office (402-471-2027))

Nevada - In 1982, the State of Nevada required that sprinklers be provided in corridors, and in each room above any door opening onto the corridor, in all existing hotels, offices, apartment and condominium buildings with floors for human occupancy more than 55 ft above the ground. Also, any building of at least 12,000 sq ft with 5,000 sq ft used for public assembly was required to be protected with a sprinkler system. Any building used for public assembly with an occupant load greater than 300 is also required to be sprinklered unless interior finish is controlled. (Source: Nevada State Fire Marshal's Office (702) 687-4290).

New Hampshire

Nashua - Requires retrofit of 12-unit, 3-story or more? (Source: AHMA 1992 article)

New Jersey - The State of New Jersey in 1986 required retrofit of all hospitals, hotels/motels, non-residential high rises, rooming and boarding homes and all residential health care facilities. Some assembly occupancies have also been required to be retrofitted on a case-by-case basis under Phase 1 of Subchapter 4 of the Fire Safety Code, primarily night clubs, dance halls, and discotheques. (Source: Office of the State Fire Marshal (609) 633-6130)

New York

Greenburgh - In 1982, the town of Greenburgh passed an ordinance requiring existing hotels, motels, child and day care centers, hospitals, infirmaries, sanitariums, nursing homes, nightclubs, restaurants, group homes, and halfway houses to be sprinklered within 5 years, with valid installation contracts to be signed within 3 years.

(Source: Greenburgh Bureau of Fire Prevention (914) 682-5223)

New York City - Local Law 5, originally enacted in 1973 and finally upheld by the courts in 19____, mandated retrofit of either a complete sprinkler system or a package of compartmentation, stair pressurization, and detection for office buildings exceeding 75 ft in height, although an equivalency system later provided for exemptions of some buildings. Local Law 41, enacted in 19____ required sprinklers in nightclubs, discotheques, and social clubs. Local Law 16, enacted in 19____, required sprinklers in storage areas, laundry rooms, and rubbish areas, not protected with smoke detectors, of high-rise and low-rise hotels. Also, buildings leased to the Federal Government must be sprinklered. (Source(s): Office of Fire Prevention (718) 403-1367. BFGoodrich Report. Fire Marshals Office.)

Poughkeepsie- The Town of Poughkeepsie passed an ordinance in July of 1987 to require sprinkler systems in all hotels, motels, child-care institutions, hospitals, infirmaries, sanitariums, nursing homes, nightclubs, public restaurants, day-care centers, group homes and halfway houses. Systems must be installed by June of 1993, with an installation contract required by June of 1991. (Source: Poughkeepsie Fire Inspector's Office (914) 485-3600). NOTE: Retrofit ordinance rescinded in January of 1992.

New York City – Local Law 126-A was signed into law on June 25, 2004. It requires all office buildings of 100 feet in height or more to be retrofitted with sprinklers no later than July 1, 2019. A one-year report is due July 1, 2005. Subsequent reports of plans and progress are due July 1, 2011 and July 1, 2018 with the final report and project completion by July 1, 2019. (Source: NYC Department of Buildings (212) 566-5000)

North Carolina

Chapel Hill- Ordinance in effect which requires all dormitories, fraternities and sorority houses to be sprinklered by 2001. An estimated \$1-2 million dollar market exists. (Source(s): BFGoodrich Report. Bolton Corporation in Raleigh, NC.)

Ohio

COLUMBUS – If high-rise buildings have adequate egress, they have to retrofit with sprinklers on a floor-by-floor basis as they get new tenants.

Pennsylvania

Harrisburg - In December of 1987, the Harrisburg City Council passed a law to require sprinkler systems in all business and apartment buildings over 75 ft in height, and in all hotels and motels. Owners must comply by the end of 1992. All occupancies except one- and two-family dwellings when renovating 50 percent or more (Source: AHMA 1992 article)

Philadelphia - An ordinance was enacted in December of 1991 which requires sprinkler systems retroactively in all high-rise buildings exceeding 75 ft in height except Group R-2 residential occupancies. Group R-2 includes multiple - family dwellings, boarding houses and similar buildings with sleeping accommodations in which the occupants are not transient in nature. All retrofit work must be completed within eight years, i.e. by the year 2000. An earlier ordinance enacted in the 1980s had required all basements with rooms in excess of 2500 sq ft, or in excess of 120 sq ft used for storage of combustibles, all assembly and mercantile occupancies in high rises, commercial kitchens, trash and rubbish chutes and rooms, and any occupancy below a residential occupancy to be equipped with fire sprinklers.

Another ordinance passed in December 1991 requires all existing high-rise (more than 75 ft from highest floor to lowest level of fire department vehicle access) buildings to be sprinklered except apartment buildings with wet standpipes which also meet other requirements. The ordinance gives building owners a schedule of compliance dates. Within 18 months (July 1993) water supplies must be available to all floors.

Within 30 months (July 1994) 20 percent of the floors in the building must be fully sprinklered. Within 39 months (April 1995) 40 percent of the floors must be fully sprinklered. Within 48 months (January 1996) 60 percent of the floors must be fully sprinklered. Within 57 months (October 1996) 80 percent of the floors must be fully sprinklered. And within 66 months (July 1997) 100 percent of the building must be fully sprinklered. (Source:

Department of Licenses and Inspections (215) 686-2471)

Pittsburgh- Requires all business high rise office buildings to be retrofitted with sprinklers, but only when tenants change. (Source: BFGoodrich Report)

Rhode Island – All new and existing places of assembly with a maximum occupancy of 300 must be fully sprinklered in accordance with NFPA 13(2002) by July 1, 2005, places of assembly with a maximum occupancy of 150 – 299 must be fully sprinklered in accordance with NFPA 13(2002) by July 1, 2006.

South Dakota - A number of schools have been required to retroactively install sprinklers in accordance with the provisions for existing educational occupancies of the NFPA Life Safety Code, such as windowless classrooms and classrooms below grade. (Source: Office of the State Fire Marshal 605-773-3562)

Tennessee - All nursing homes are required to have sprinkler systems installed. Phase 1 will require sprinkler systems to be installed by January 1, 2006; Phase 2 requires systems to be installed by September 1, 2006, and Phase 3 by February 1, 2007.

Texas – All High-rise dormitories are now retrofitted.

Virginia - Virginia has a state wide ordinance that requires all hotels/motels four stories or greater to be sprinklered by March of 1997. Strongly enforced in the Virginia Beach and northern Virginia areas. Also, a limited retrofit ordinance is in effect requiring the patient areas and adjacent halls in hospitals to be sprinklered by January 1998, an estimated market of \$10 million. All nursing homes and nursing facilities to be sprinklered by January 1, 1993. General Assembly to receive report on further retrofit from Board of Housing Community Development in November 1990. (Source: June/July 1990 Fire News) Nursing homes and hotels by 1997 (Source (s): AHMA 1992 article. BFGoodrich Report. Worshem Sprinkler Co.).

Virginia Beach - Strictly enforcing the state retrofit ordinance for hotels/motels. An estimated 25 hotels/motels, still need sprinklering, a market of 7-8 million. (Source(s): BFGoodrich Report. Worshem Sprinkler Co.).

Washington

Mercer Island – As of **July 1, 2004** automatic fire-sprinkler is required during additions and substantial alterations costing 50 percent or more of the current assessed value to existing buildings regardless of use when floor area equals 5,000 or greater square feet.

Seattle - In May, 2005, the Washington State Legislature approved a law which requires fire sprinklers to be installed in existing nightclubs by December 1, 2007.

Wisconsin

On December 21, 2005 Wisconsin Governor Jim Doyle signed into law a landmark bill that requires automatic fire sprinkler systems installed in all new construction residence facilities on private campuses, all residence halls greater than 60 feet in height, all Greek housing in private and public colleges and privately owned high-rise buildings that have a student population of 50 percent or more. Five years ago, a bill was passed requiring fire sprinkler systems installed in all high-rise residence halls located on public

campuses. Colleges have eight years to comply.

Wyoming

Casper - Retrofit all high-rise. (Source: AHMA 1992 article)