Stand Pipe and Commercial Building's Common Mistakes

By: Goran Dara Hadi

ID:7534-Mechanical Engineer

Content

Beginning:

Fire has an important role in human life, in a good way and bad way, fir was the missing element in his food, when he discovered fire, he taste the pleasure of food, in the other side he found that the fire is uncontrollable destroyer.

Purpose:

The purpose of this writing is to show a part of many mistakes in installation of stand pipes in commercial buildings and indicate the mistakes by NFPA codes, because we haven't have our own codes yet like most country of the world.

Fire in history

Fire has been a vital part of human's existence and survival, Rome burned in64 AC the streets were narrow, tall building, combustible building material, and common walled buildings contributed to the fire devastation.

This disaster leads to the Emperor Nero to create a rule in the new urban plan by:

1- Making wider streets.
2- Restriction on the height of houses, no more tall buildings.
3- No common walled between the buildings.
4- Using fire resistance material in building such as stone instead of wooden pillars.

First American Building Code:

Boston, Massachusetts, 1631, John Winthrop, Governor of Boston, outlawed the building of wooden chimneys and thatched roofs of homes as each of these were found to cause more fires and dangerous fires throughout the community. This became the first American Building Code.

First Volunteer Fire Department:

December 7, 1736-First Union Fire Company established in Philadelphia, Pennsylvania by Benjamin Franklin. Good men agreed to respond to fires and attempt to extinguish the fires. Use of strong bags, baskets, and (more commonly) leather buckets coined the phrase the “Bucket Brigade. Home owners required to provide a bucket on their doorsteps for the first arriving volunteers to use. Approximately 30 men made up the first volunteer fire department.

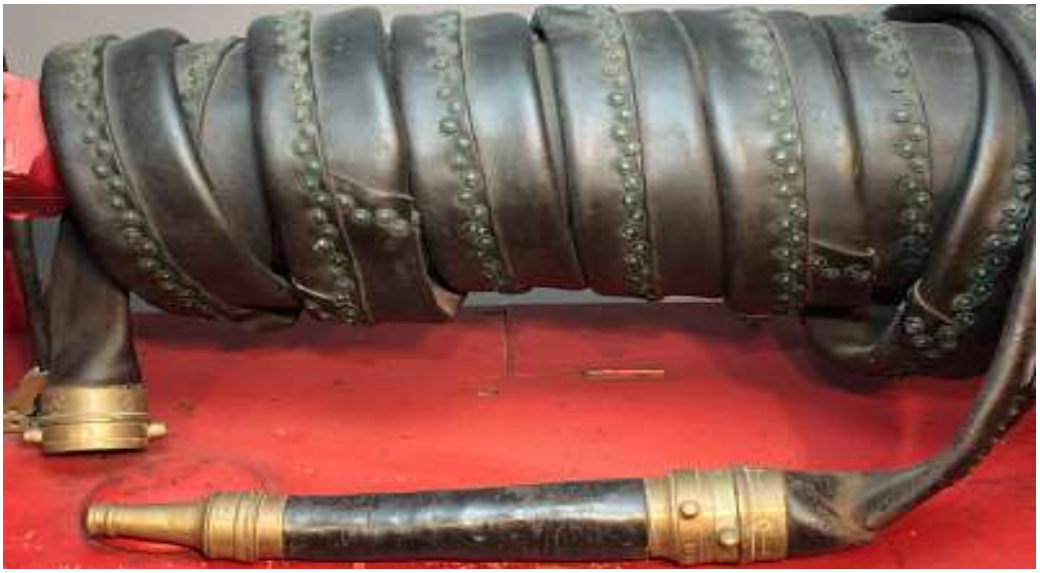
NFPA Codes and Standards:

NFPA, the National Fire Protection Association, is a global nonprofit organization established in 1896. The NFPA's mission is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating scientifically-based consensus codes and standards, research, training and education. The leader in providing fire, electrical, and life safety standards, NFPA membership totals more than 75,000 individuals from around the world and more than 80 national trade and professional organizations. NFPA's 300 codes and standards are designed to minimize the risk and effects of fire by establishing criteria for building, processing, design, service, and installation around the world.

NFPA publishes more than 300 consensus codes and standards intended to minimize the possibility and effects of re and other risks. NFPA codes and standards, administered by more than 250 Technical Committees comprising approximately 8,000 volunteers, are adopted and used throughout the world.

NFPA 14 Standard for the Installation of Standpipe and Hose Systems:

The first practical fire hose was invented in Holland in 1673. It consisted of 50-foot lengths of leather (or sailcloth) and was sewn together in a single seam. Brass screw threads were attached at the ends, so sections could be connected. (The inventor, the Superintendent of the Fire Brigade, also created the first version of rigid suction hose.)



First Fire Hose

First Fire Wagon

Origin and Development of NFPA 14

This standard dates from 1912, when an initial report was made by the Committee on
Standpipe and Hose Systems. The report was amended in 1914 and adopted by the Association in 1915. Revisions were adopted in 1917.

NFPA 14 is talking all about stand pipe and its regulation as below:

Administration

1.1 Scope.

1.1.1 *This standard covers the minimum requirements for the installation of standpipes and hose systems.*

1.2 Purpose.

1.2.1 The purpose of this standard is to provide a reasonable degree of protection for life and property from fire through installation requirements for standpipes and hose systems based on sound engineering principles, test data, and field experience.

NFPA mentioned the side that has authority to decide on the required list of stand pipe:

3.2.1 Approved. Acceptable to the authority having jurisdiction.*

3.2.2 Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.*

3.3.4 Fire Department. An organization providing rescue, fire suppression, and related activities, including any public, governmental, private, industrial, or military organization engaging in this type of activity. [1002, 2009]

NFPA consider a building of 23m tall as a high rise:

3.3.5 High-Rise Building. A building where the floor of an occupied story is greater than 75 ft (23 m) above the lowest level of fire department vehicle access. [5000, 2009]

Stand pipe types:

3.3.11 Standpipe. The system piping that delivers the water supply for hose connections, and for sprinklers on combined systems, vertically from floor to floor.

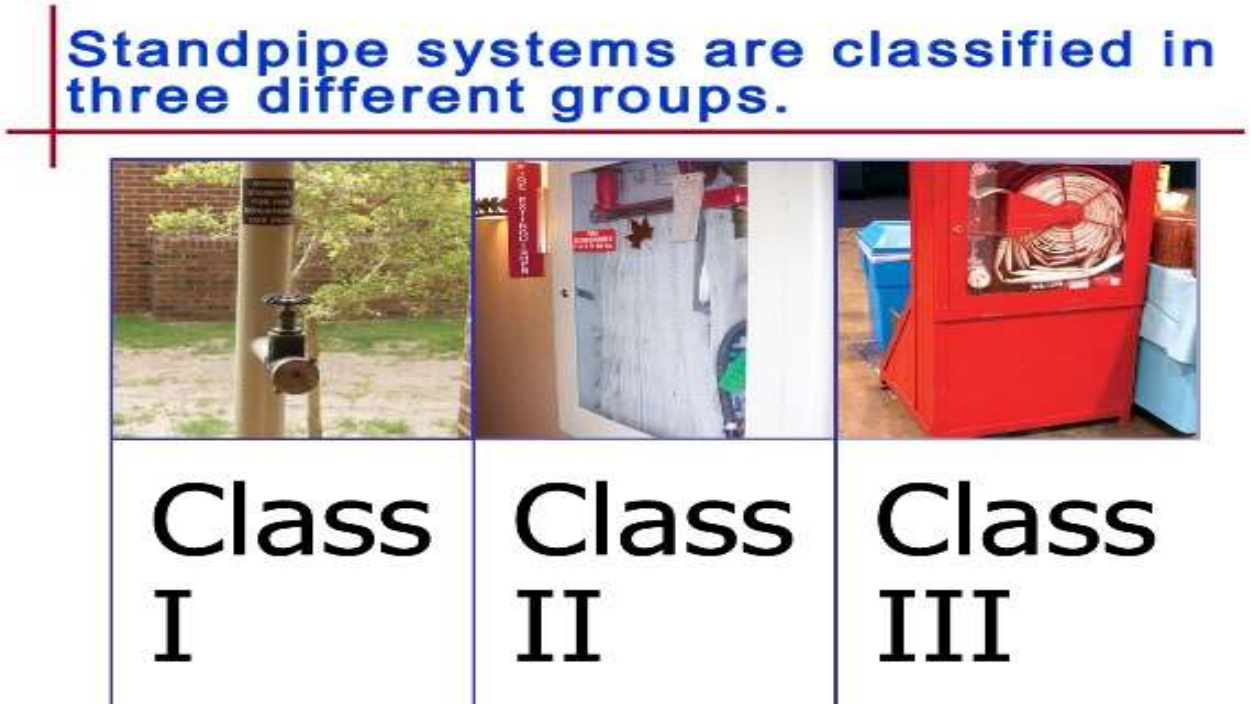
3.3.11.1 Horizontal Standpipe. The horizontal portion of the system piping that delivers the water supply for two or more hose connections, and for sprinklers on combined systems, on a single level.

3.3.12 Standpipe System. An arrangement of piping, valves, hose connections, and allied equipment installed in a building or structure, with the hose connections located in such a manner that water can be discharged in streams or spray patterns through attached hose and nozzles, for the purpose of extinguishing a fire, thereby protecting a building or structure and its contents in addition to protecting the occupants.*

3.3.12.1 Automatic Dry Standpipe System. A standpipe system permanently attached to a water supply capable of supplying the system demand at all times, containing air or nitrogen under pressure, the release of which (as from

opening a hose valve) opens a dry pipe valve to allow water to flow into the piping system and out of the opened hose valve.
3.3.12.2 Automatic Wet Standpipe System. A standpipe system containing water at all times that is attached to a water supply capable of supplying the system demand at all times and that requires no action other than opening a hose valve to provide water at hose connections.
3.3.12.3 Combined System. A standpipe system that supplies both hose connections and automatic sprinklers.
3.3.12.4 Manual Dry Standpipe System. A standpipe system with no permanently attached water supply that relies exclusively on the fire department connection to supply the system demand.
3.3.12.5 Manual Wet Standpipe System. A standpipe system containing water at all times that relies exclusively on the fire department connection to supply the system demand.
3.3.12.6 Semiautomatic Dry Standpipe System. A standpipe system permanently attached to a water supply that is capable of supplying the system demand at all times arranged through the use of a device such as a deluge valve and that requires activation of a remote control device to provide water at hose connections.
3.3.12.7 Wet Standpipe System. A standpipe system having piping containing water at all times.
3.3.13 Standpipe System Zone. A vertical subdivision of a standpipe system limited or determined by the pressure limitations of the system components.
3.3.14 System Classes.*
3.3.14.1 Class I System. A system that provides 21⁄2 in. (65 mm) hose connections to supply water for use by fire departments.
3.3.14.2 Class II System. A system that provides 11⁄2 in. (40 mm) hose stations to supply water for use primarily by trained personnel or by the fire department during initial response.
3.3.14.3 Class III System. A system that provides 11⁄2 in. (40 mm) hose stations to supply water for use by trained personnel and 21⁄2 in. (65 mm) hose connections to supply a larger volume of water for use by fire departments.
3.3.15 System Demand. The flow rate and residual pressure required from a water supply, measured at the point of connection of a water supply to a standpipe system, to deliver the total water flow rate and the minimum

residual pressures required for a standpipe system at the hydraulically most remote hose, and the minimum water flow rate for sprinkler connections on combined systems.



In chapter 4 it is mentioning the type of material to be used in installation:

4.2 Pipe and Tube.

4.2.1 Pipe or tube used in standpipe systems shall meet or exceed one of the standards in Table 4.2.1 or shall be in accordance with 4.2.2 through 4.2.6.

4.2.2 Where ductile iron pipe is installed in accordance with Table 4.2.1, it shall be lined in accordance with AWWA C104, Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.

4.2.3 Where steel pipe specified in Table 4.2.1 is used and joined by welding as specified in Section 4.4 or by roll-grooved pipe and fittings as specified in Section 4.4, the minimum nominal wall thickness for pressures up to 300 psi (20.7 bar) shall be in accordance with Schedule 10 for pipe sizes up to 5 in. (127 mm), 0.134 in. (3.40 mm) for 6 in. (150 mm) pipe, and 0.188 in. (4.78 mm) for 8 in. and 10 in. (203 mm and 254 mm) pipe.

4.2.3.1 Pressure limitations and wall thickness for steel pipe listed in accordance with 4.2.6 shall be in accordance with the listing requirements.

Table 4.2.1 Pipe or Tube Materials and Dimensions

Materials and Dimensions (Specifications)	Standard
Ferrous piping Ductile-Iron Pipe, Centrifugally Cast, for Water	*AWWAC151*
Flanged Ductile-Iron Pipe with Ductile-Iron Or Gray-Iron Threaded Flanges	AWWA C115
Electric-resistance-welded steel pipe	
Standard Specification for Electric-Resistance–Welded Steel Pipe	ASTM A 135
Welded and seamless steel	
Standard Specification for Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use	ASTM A 795
Welded and seamless steel pipe	
Standard Specification for Pipe, Steel, Black And Hot-Dipped, Zinc-Coated, Welded and Seamless	ASTM A 53
Welded and Seamless Wrought Steel Pipe	ANSI B36.10M
Copper tube (drawn, seamless)	
Standard Specification for Seamless Copper Tube	ASTM B 75
Standard Specification for Seamless Copper Water Tube	ASTM B 88
Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube	ASTM B 251
Brazing filler metal (classifications BCuP-3 or BCuP-4)	
Specification for Filler Metals for Brazing and Braze Welding	WS A5.8

There is no mention of PPR pipe to be used in fire piping which is used by commercial building in Sulaimanyah.

PPR pipe used

PPR pipe used

The distribution of stand pipe mentioned in ch.5

System Requirements

5.1 General.

5.1.1 The number and arrangement of standpipe equipment necessary for protection shall be governed by local conditions such as the occupancy, character, and construction of the building and its accessibility.

.

.

.

.

The dry fireman connection shall not take 3 min for the water, it will not work in high rise building.

5.2.1.2.1 Where the system design is such that water is delivered to the system at the most remote hose connection in not more than 3 minutes,

starting at the normal air pressure on the system and at the time of fully opened hose connection.

.
.
.

5.2.1.3* Location and Protection of Dry Pipe Valve. [13:7.2.5]

5.2.1.3.1* General. The dry pipe valve and supply pipe shall be protected against freezing and mechanical injury. [13:7.2.5.1]

In the picture below, the fire hose cabinet no protection, in a car park area, and exposed to weather which leads to water freezing inside the pipe.

Wrong location of the stand pipe

5.2.1.3.2.3 Heat tape shall not be used in lieu of heated valve enclosures to protect the dry pipe valve and supply pipe against freezing. [13:7.2.5.2.3]

.
.
.

6.1.2.3.1 Antifreeze solutions shall not be used to protect standpipe system piping from freezing.

6.1.2.3.2 Listed heat tracing shall be permitted to be used for protection from freezing, provided that it is installed and insulated in accordance with the manufacturer's specifications.

.
.
.

6.3.1.1 Connections to each water supply shall be provided with an approved indicating-type valve and check valve located close to the supply, such as at tanks, pumps, and connections from waterworks systems.

Most of commercial buildings are putting the water source on the roof, this is prohibited in section 5.2.1.3

6.3.1.2 Fire department connections shall not be provided with isolation valves.

6.3.2 Valves shall be provided to allow isolation of a standpipe without interrupting the supply to other standpipes from the same source of supply.

6.3.3 Listed indicating-type valves shall be provided at the standpipe for controlling branch lines for remote hose stations.

.
.
.

7.2* Pressure Limitation.

7.2.1 The maximum pressure at any point in the system at any time shall not exceed 350 psi (24 bar).

7.2.2 Express mains supplying higher standpipe zones shall be permitted to be designed with pressures in excess of 350 psi
(24 bar) in accordance with their materials listings or as approved by the AHJ.

7.2.2.1 Where express mains supply higher standpipe zones, there shall be no hose outlets on any portion of the system where the pressure exceeds 350 psi (24 bar).

7.2.3* Maximum Pressure at Hose Connections.

7.2.3.1 Where the residual pressure at a 1½ in. (40 mm) outlet on a hose connection available for trained personnel use exceeds 100 psi (6.9 bar), an approved pressure-regulating device shall be provided to limit the residual pressure at the flow required by Section 7.10 to 100 psi (6.9 bar).

.
.
.

7.3 Locations of Hose Connections.

7.3.1* General.

7.3.1.1 Hose connections and hose stations shall be unobstructed and shall be located not less than 3 ft (0.9 m) or more than 5 ft (1.5 m) above the floor.

7.3.1.2 The hose connection shall not be obstructed by the closed or open door or other objects on the landing.

7.3.2* Class I Systems. Class I systems shall be provided with 2½ in. (65 mm) hose connections in the following locations:

(1) At the main floor landing in exit stairways

(2) On each side of the wall adjacent to the exit openings of horizontal exits

(3) In other than covered mall buildings, in each exit passageway at the entrance from the building areas into the passageway

(4) In covered mall buildings, at the entrance to each exit passageway or exit corridor, and at the interior side of public entrances from the exterior to the mall

(5)*At the highest landing of stairways with stairway access to a roof, or on roofs with a slope of less than 4 in 12 where stairways do not access the roof

7.3.2.1 Hose connections shall be permitted to be located at the highest intermediate landings between floor levels in exit stairways where required by the AHJ.

7.3.2.2* Where the most remote portion of a non-sprinklered floor or story is located in excess of 150 ft (45.7 m) of travel distance from a required exit containing or adjacent to a hose connection or the most remote portion of a

sprinklered floor or story is located in excess of 200 ft (61 m) of travel distance from a required exit containing or adjacent to a hose connection, additional hose connections shall be provided, in approved locations, where required by the local fire department or the AHJ.

7.3.3* Class II Systems.

7.3.3.1 Class II systems shall be provided with 11⁄2 in. (40 mm) hose stations so that all portions of each floor level of the building are within 130 ft (39.7 m) of a hose connection provided with 11⁄2 in. (40 mm) hose or within 120 ft (36.6 m) of a hose connection provided with less than 11⁄2 in. (40 mm) hose.

7.3.3.2 Distances shall be measured along a path of travel originating at the hose connection.

7.3.4 Class III Systems. Class III systems shall be provided with hose connections as required for both Class I and Class II systems.

Wrong pipe size, over size branch

Wrong pipe size, under size branch

7.10.1.2* Hydraulic Calculation Requirements.

7.10.1.2.1 Hydraulic calculations and pipe sizes for each standpipe shall be based on providing 250 gpm (946 L/min) at the two hydraulically most

remote hose connections on the standpipe and at the topmost outlet of each of the other standpipes at the minimum residual pressure required by Section 6.9 bar.

.
.
.

7.10.3 Maximum Flow Rates for Individual Connections.

7.10.3.1 The maximum flow required from a 2½ in. (65 mm) hose connection shall be 250 gpm (946 L/min).

7.10.3.2 The maximum flow required from a 1½ in. (40 mm) hose connection shall be 100 gpm (379 L/min).

.
.
.

Water Supply

9.1* Required Water Supply.

9.1.1 Automatic and semiautomatic standpipe systems shall be attached to an approved water supply capable of supplying the system demand.

9.1.2 Manual standpipe systems shall have an approved water supply accessible to a fire department pumper.

9.1.3 A single automatic or semiautomatic water supply shall be permitted where it is capable of supplying the system demand for the required duration.

9.1.4 Where fire department pumpers cannot supply the required system demand through a fire department connection, an auxiliary water supply consisting of high-level water storage with additional pumping equipment or other means acceptable to the AHJ shall be provided.

.
.
.

9.1.4.1 The auxiliary water supply shall meet the 30-minute minimum water supply requirements of Sections 9.2 and 9.3.

By this code you can size the amount of water tank for one or more stand pipe.

9.1.5 Water supplies from the following sources shall be permitted:

(1) A public waterworks system where pressure and flow rate are adequate

(2) Automatic fire pumps connected to an approved water source in accordance with NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*

(3) Manually controlled fire pumps in combination with pressure tanks.

You are allowed to use single pump and booster tank in a commercial building to reduce the total cost.

(4) Pressure tanks installed in accordance with NFPA22, *Standard for Water Tanks for Private Fire Protection*

(5) Manually controlled fire pumps operated by remote control devices at each hose station, supervised in accordance with *NFPA 72*, *National Fire Alarm and Signaling Code*, at each hose station

(6) Gravity tanks installed in accordance with NFPA 22, *Standard for Water Tanks for Private Fire Protection*

9.2 Minimum Supply for Class I and Class III Systems. The water supply shall be capable of providing the system demand established by Sections 7.8 and 7.10 for at least 30 minutes.

9.3 Minimum Supply for Class II Systems. The minimum supply for Class II systems shall be capable of providing the system demand established by Sections 7.8 and 7.10 for at least 30 minutes.

.

.

.

11.3 Hose Threads.

11.3.1 All hose connection and fire department connection threads shall be tested to verify their compatibility with threads used by the local fire department.

11.3.2 The test shall consist of threading coupling samples, caps, or plugs onto the installed devices.

This Installation of FHC and fire department connection.

11.4 Hydrostatic Tests.

11.4.1* General. All new systems, including yard piping and fire department connections, shall be tested hydrostatically at not less than 200 psi (13.8 bar) of pressure for 2 hours, or at 50 psi (3.5 bar) in excess of the maximum pressure where the maximum pressure is in excess of 150 psi (10.3 bar).

11.4.2 The hydrostatic test pressure shall be measured at the low elevation point of the individual system or zone being tested.

11.4.3 The standpipe system piping shall show no leakage other than as permitted by NFPA24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*.

11.4.4 Underground pipe shall be tested in accordance with NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*.

11.4.5 Where cold weather prevents testing with water, an interim air test shall be permitted to be conducted prior to the standard hydrostatic test.

11.4.5.1 An air pressure leakage test at 40 psi (2.8 bar) shall be conducted for 24 hours.

11.4.5.2 Any leakage that results in a loss of pressure in excess of 1 1/2 psi (0.1 bar) during a continuous 24-hour period shall be corrected.

11.4.6 Fire Department Connection. Piping between the fire department connection and the check valve in the inlet pipe shall be tested hydrostatically in the same manner as the balance of the system.

.
.
.

11.5.3 The filling arrangement for suction tanks shall be verified by shutting down all supplies to the tank, draining the tank to below the designated low water level, and then opening the supply valve to ensure operation of its automatic features.

.
.
.

12.9.2 Fire department connections and hose connections shall be protected against physical damage.

This FHC is in front of a car park.

Departure:

The main problem in a commercial building design is fire scenario, every building must have a fire scenario to know the criteria of design data input. After design it comes to supervision of construction and execute the building work to make sure of installing the fire frightening system in the building. Those codes above must interpreted and distribute it over the bureaus and engineering offices for commercial uses to avoid fatal mistakes.

List of NFPA Codes and Standards

Code/Standard Name

NFPA 2 Hydrogen Technologies Code
NFPA 3 Standard for Commissioning of Fire Protection and Life Safety Systems
NFPA 4 Standard for Integrated Fire Protection and Life Safety System Testing
NFPA 10 Standard for Portable Fire Extinguishers
NFPA 11 Standard for Low-, Medium-, and High-Expansion Foam
NFPA 11A Standard for Medium- and High-Expansion Foam Systems
NFPA 11C Standard for Mobile Foam Apparatus
NFPA 12 Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A Standard on Halon 1301 Fire Extinguishing Systems
NFPA 13 Standard for the Installation of Sprinkler Systems
NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
NFPA 13E Recommended Practice for Fire Department Operations in Properties Protected by Sprinkler and Standpipe Systems
NFPA 13R Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies
NFPA 14 Standard for the Installation of Standpipe and Hose Systems
NFPA 15 Standard for Water Spray Fixed Systems for Fire Protection
NFPA 16 Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems.
NFPA 17 Standard for Dry Chemical Extinguishing Systems
NFPA 17A Standard for Wet Chemical Extinguishing Systems
NFPA 18 Standard on Wetting Agents
NFPA 18A Standard on Water Additives for Fire Control and Vapor Mitigation
NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection
NFPA 22 Standard for Water Tanks for Private Fire Protection
NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances
NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
NFPA 30 Flammable and Combustible Liquids Code
NFPA 30A Code for Motor Fuel Dispensing Facilities and Repair Garages
NFPA 30B Code for the Manufacture and Storage of Aerosol Products
NFPA 31 Standard for the Installation of Oil-Burning Equipment
NFPA 32 Standard for Dry cleaning Facilities
NFPA 33 Standard for Spray Application Using Flammable or Combustible Materials
NFPA 34 Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids
NFPA 35 Standard for the Manufacture of Organic Coatings.
NFPA 36 Standard for Solvent Extraction Plants
NFPA 37 Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines
NFPA 40 Standard for the Storage and Handling of Cellulose Nitrate Film
NFPA 42 Code for the Storage of Pyroxylin Plastic
NFPA 45 Standard on Fire Protection for Laboratories Using Chemicals
NFPA 46 Recommended Safe Practice for Storage of Forest Products
NFPA 50 Standard for Bulk Oxygen Systems at Consumer Sites
NFPA 50A Standard for Gaseous Hydrogen Systems at Consumer Sites
NFPA 50B Standard for Liquefied Hydrogen Systems at Consumer Sites

NFPA 51 Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes
NFPA 51A Standard for Acetylene Cylinder Charging Plants
NFPA 51B Standard for Fire Prevention during Welding, Cutting, and Other Hot Work
NFPA 52 Vehicular Natural Gas Fuel Systems Code
NFPA 53 Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres.
NFPA 54 National Fuel Gas Code
NFPA 55 Compressed Gases and Cryogenic Fluids Code.
NFPA 56 Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems
NFPA 57 Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code
NFPA 58 Liquefied Petroleum Gas Code
NFPA 59 Utility LP-Gas Plant Code
NFPA 59A Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)
NFPA 61 Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities
NFPA 67 Guide on Explosion Protection for Gaseous Mixtures in Pipe Systems
NFPA 68 Standard on Explosion Protection by Deflagration Venting
NFPA 69 Standard on Explosion Prevention Systems
NFPA 70® National Electrical Code®
NFPA 70A National Electrical Code® Requirements for One- and Two-Family Dwellings
NFPA 70B Recommended Practice for Electrical Equipment Maintenance
NFPA 70E® Standard for Electrical Safety in the Workplace®
NFPA 72® National Fire Alarm and Signaling Code®
NFPA 73 Standard for Electrical Inspections for Existing Dwellings
NFPA 75 Standard for the Fire Protection of Information Technology Equipment
NFPA 76 Standard for the Fire Protection of Telecommunications Facilities
NFPA 77 Recommended Practice on Static Electricity
NFPA 78 Guide on Electrical Inspections
NFPA 79 Electrical Standard for Industrial Machinery
NFPA 80 Standard for Fire Doors and Other Opening Protectives
NFPA 80A Recommended Practice for Protection of Buildings from Exterior Fire Exposures
NFPA 82 Standard on Incinerators and Waste and Linen Handling Systems and Equipment
NFPA 85 Boiler and Combustion Systems Hazards Code
NFPA 86 Standard for Ovens and Furnaces
NFPA 86C Standard for Industrial Furnaces Using a Special Processing Atmosphere
NFPA 86D Standard for Industrial Furnaces Using Vacuum as an Atmosphere
NFPA 87 Standard for Fluid Heaters
NFPA 88A Standard for Parking Structures
NFPA 88B Standard for Repair Garages
NFPA 90A Standard for the Installation of Air-Conditioning and Ventilating Systems
NFPA 90B Standard for the Installation of Warm Air Heating and Air-Conditioning Systems
NFPA 91 Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Particulate Solids
NFPA 92 Standard for Smoke Control Systems
NFPA 92A Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences

NFPA 92B Standard for Smoke Management Systems in Malls, Atria, and Large Spaces
NFPA 96 Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
NFPA 97 Standard Glossary of Terms Relating to Chimneys, Vents, and Heat-Producing Appliances
NFPA 99 Health Care Facilities Code
NFPA 99B Standard for Hypobaric Facilities
NFPA 101 Life Safety Code
NFPA 101A Guide on Alternative Approaches to Life Safety
NFPA 101B Code for Means of Egress for Buildings and Structures
NFPA 102 Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures
NFPA 105 Standard for Smoke Door Assemblies and Other Opening Protectives
NFPA 110 Standard for Emergency and Standby Power Systems
NFPA 111 Standard on Stored Electrical Energy Emergency and Standby Power Systems
NFPA 115 Standard for Laser Fire Protection
NFPA 120 Standard for Fire Prevention and Control in Coal Mines
NFPA 121 Standard on Fire Protection for Self-Propelled and Mobile Surface Mining Equipment
NFPA 122 Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities
NFPA 123 Standard for Fire Prevention and Control in Underground Bituminous Coal Mines
NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems
NFPA 140 Standard on Motion Picture and Television Production Studio Soundstages, Approved Production Facilities, and Production Locations
NFPA 150 Fire and Life Safety in Animal Housing Facilities Code
NFPA 160 Standard for the Use of Flame Effects Before an Audience
NFPA 170 Standard for Fire Safety and Emergency Symbols
NFPA 203 Guide on Roof Coverings and Roof Deck Constructions
NFPA 204 Standard for Smoke and Heat Venting
NFPA 211 Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances
NFPA 214 Standard on Water-Cooling Towers
NFPA 220 Standard on Types of Building Construction
NFPA 221 Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls
NFPA 225 Model Manufactured Home Installation Standard
NFPA 230 Standard for the Fire Protection of Storage
NFPA 231 Standard for General Storage
NFPA 231C Standard for Rack Storage of Materials
NFPA 231D Standard for Storage of Rubber Tires
NFPA 231E Recommended Practice for the Storage of Baled Cotton
NFPA 231F Standard for the Storage of Roll Paper
NFPA 232 Standard for the Protection of Records
NFPA 232A Guide for Fire Protection for Archives and Records Centers
NFPA 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations
NFPA 251 Standard Methods of Tests of Fire Resistance of Building Construction and Materials
NFPA 252 Standard Methods of Fire Tests of Door Assemblies
NFPA 253 Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials
NFPA 256 Standard Methods of Fire Tests of Roof Coverings
NFPA 257 Standard on Fire Test for Window and Glass Block Assemblies

NFPA 258 Recommended Practice for Determining Smoke Generation of Solid Materials
NFPA 259 Standard Test Method for Potential Heat of Building Materials
NFPA 260 Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture
NFPA 261 Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes
NFPA 262 Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces
NFPA 265 Standard Methods of Fire Tests for Evaluating Room Fire
Growth Contribution of Textile or Expanded Vinyl Wall Coverings on Full Height Panels and Walls
NFPA 266 Standard Method of Test for Fire Characteristics of Upholstered Furniture Exposed to Flaming Ignition Source
NFPA 267 Standard Method of Test for Fire Characteristics of Mattresses and Bedding Assemblies Exposed to Flaming Ignition Source
NFPA 268 Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source
NFPA 269 Standard Test Method for Developing Toxic Potency Data for Use in Fire Hazard Modeling
NFPA 270 Standard Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single Closed
NFPA 271 Standard Method of Test for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter
NFPA 272 Standard Method of Test for Heat and Visible Smoke Release Rates for Upholstered Furniture Components or Composites and Mattresses Using an Oxygen Consumption Calorimeter
NFPA 274 Standard Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation
NFPA 275 Standard Method of Fire Tests for the Evaluation of Thermal Barriers
NFPA 276 Standard Method of Fire Test for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-
Deck Roofing Components.
NFPA 277 Standard Methods of Tests for Evaluating Fire and Ignition Resistance of Upholstered Furniture Using a Flaming Ignition Source
NFPA 285 Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components
NFPA 286 Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
NFPA 287 Standard Test Methods for Measurement of Flammability of Materials in Cleanrooms Using a Fire Propagation Apparatus (FPA)
NFPA 288 Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies
NFPA 289 Standard Method of Fire Test for Individual Fuel Packages
NFPA 290 Standard for Fire Testing of Passive Protection Materials for Use on LP-Gas Containers
NFPA 291 Recommended Practice for Fire Flow Testing and Marking of Hydrants
NFPA 295 Standard for Wildfire Control
NFPA 297 Guide on Principles and Practices for Communications Systems
NFPA 298 Standard on Foam Chemicals for Wildland Fire Control
NFPA 299 Standard for Protection of Life and Property from Wildfire
NFPA 301 Code for Safety to Life from Fire on Merchant Vessels
NFPA 302 Fire Protection Standard for Pleasure and Commercial Motor Craft
NFPA 303 Fire Protection Standard for Marinas and Boatyards

NFPA 306 Standard for the Control of Gas Hazards on Vessels
NFPA 307 Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves
NFPA 312 Standard for Fire Protection of vessels during Construction, Conversion, Repair, and Lay-Up
NFPA 318 Standard for the Protection of Semiconductor Fabrication Facilities
NFPA 326 Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair
NFPA 328 Recommended Practice for the Control of Flammable and Combustible Liquids and Gases in Manholes, Sewers, and Similar Underground Structures
NFPA 329 Recommended Practice for Handling Releases of Flammable and Combustible Liquids and Gases
NFPA 350 Guide for Safe Confined Space Entry and Work
NFPA 385 Standard for Tank Vehicles for Flammable and Combustible Liquids.
NFPA 386 Standard for Portable Shipping Tanks for Flammable and Combustible Liquids
NFPA 395 Standard for the Storage of Flammable and Combustible Liquids at Farms and Isolated Sites
NFPA 400 Hazardous Materials Code
NFPA 402 Guide for Aircraft Rescue and Fire-Fighting Operations
NFPA 403 Standard for Aircraft Rescue and Fire-Fighting Services at Airports
NFPA 405 Standard for the Recurring Proficiency of Airport Fire Fighters
NFPA 407 Standard for Aircraft Fuel Servicing
NFPA 408 Standard for Aircraft Hand Portable Fire Extinguishers
NFPA 409 Standard on Aircraft Hangars
NFPA 410 Standard on Aircraft Maintenance
NFPA 412Standard for Evaluating Aircraft Rescue and Fire-Fighting Foam Equipment
NFPA 414 Standard for Aircraft Rescue and Fire-Fighting Vehicles
NFPA 415 Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways
NFPA 418 Standard for Heliports
NFPA 422 Guide for Aircraft Accident/Incident Response Assessment
NFPA 423 Standard for Construction and Protection of Aircraft Engine Test Facilities
NFPA 424 Guide for Airport/Community Emergency Planning
NFPA 430 Code for the Storage of Liquid and Solid Oxidizers
NFPA 432 Code for the Storage of Organic Peroxide Formulations
NFPA 434 Code for the Storage of Pesticides
NFPA 450 Guide for Emergency Medical Services and Systems
NFPA 451 Guide for Community Health Care Programs
NFPA 471 Recommended Practice for Responding to Hazardous Materials Incidents
NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents
NFPA 473 Standard for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents
NFPA 475 Recommended Practice for Organizing, Managing, and Sustaining a Hazardous Materials/Weapons of Mass Destruction Response Program
NFPA 480 Standard for the Storage, Handling, and Processing of Magnesium Solids and Powders
NFPA 481 Standard for the Production, Processing, Handling, and Storage of Titanium
NFPA 482 Standard for the Production, Processing, Handling, and Storage of Zirconium
NFPA 484 Standard for Combustible Metals
NFPA 485 Standard for the Storage, Handling, Processing, and Use of Lithium Metal
NFPA 490 Code for the Storage of Ammonium Nitrate
NFPA 495 Explosive Materials Code
NFPA 496 Standard for Purged and Pressurized Enclosures for Electrical Equipment

NFPA 497 Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified)
Locations for Electrical Installations in Chemical Process Areas
NFPA 498 Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives
NFPA 499 Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas
NFPA 501 Standard on Manufactured Housing
NFPA 501A Standard for Fire Safety Criteria for Manufactured Home
Installations, Sites, and Communities
NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways
NFPA 505 Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations
NFPA 513 Standard for Motor Freight Terminals
NFPA 520 Standard on Subterranean Spaces
NFPA 550 Guide to the Fire Safety Concepts Tree
NFPA 551 Guide for the Evaluation of Fire Risk Assessments
NFPA 555 Guide on Methods for Evaluating Potential for Room Flashover
NFPA 556 Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles
NFPA 557 Standard for Determination of Fire Loads for Use in Structural Fire Protection Design
NFPA 560 Standard for the Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation
NFPA 600 Standard on Facility Fire Brigades
NFPA 601 Standard for Security Services in Fire Loss Prevention
NFPA 610 Guide for Emergency and Safety Operations at Motorsports Venues
NFPA 650 Standard for Pneumatic Conveying Systems for Handling
Combustible Particulate Solids
NFPA 651 Standard for the Machining and Finishing of Aluminum and the Production and Handling of Aluminum Powders
NFPA 652 Standard on the Fundamentals of Combustible Dust
NFPA 654Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
NFPA 655 Standard for Prevention of Sulfur Fires and Explosions
NFPA 664 Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities
NFPA 701 Standard Methods of Fire Tests for Flame Propagation of Textiles and Films
NFPA 703 Standard for Fire Retardant—Treated Wood and Fire–Retardant Coatings for Building Materials
NFPA 704Standard System for the Identification of the Hazards of Materials for Emergency Response
NFPA 705 Recommended Practice for a Field Flame Test for Textiles and Films
NFPA 720 Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment
NFPA 730 Guide for Premises Security
NFPA 731 Standard for the Installation of Electronic Premises Security Systems
NFPA 750 Standard on Water Mist Fire Protection Systems
NFPA 770 Standard on Hybrid (Water and Inert Gas) Fire Extinguishing Systems
NFPA 780 Standard for the Installation of Lightning Protection Systems
NFPA 790 Standard for Competency of Third-Party Field Evaluation Bodies
NFPA 791 Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation
NFPA 801 Standard for Fire Protection for Facilities Handling Radioactive Materials
NFPA 803 Standard for Fire Protection for Light Water Nuclear Power Plants
NFPA 804 Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants

NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants
NFPA 806 Performance-Based Standard for Fire Protection for Advanced Nuclear Reactor Electric Generating Plants Change Process
NFPA 820 Standard for Fire Protection in Wastewater Treatment and Collection Facilities
NFPA 850 Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations
NFPA 851 Recommended Practice for Fire Protection for Hydroelectric Generating Plants
NFPA 853 Standard for the Installation of Stationary Fuel Cell Power Systems
NFPA 855 Standard for the Installation of Stationary Energy Storage Systems
NFPA 900 Building Energy Code
NFPA 901Standard Classifications for Incident Reporting and Fire Protection Data
NFPA 902 Fire Reporting Field Incident Guide
NFPA 903 Fire Reporting Property Survey Guide
NFPA 904 Incident Follow-up Report Guide
NFPA 906 Guide for Fire Incident Field Notes
NFPA 909 Code for the Protection of Cultural Resource Properties -Museums, Libraries, and Places of Worship
NFPA 914 Code for the Protection of Historic Structures
NFPA 915 Standard for Remote Inspections
NFPA 921 Guide for Fire and Explosion Investigations
NFPA 950 Standard for Data Development and Exchange for the Fire Service
NFPA 951 Guide to Building and Utilizing Digital Information
NFPA 1000 Standard for Fire Service Professional Qualifications Accreditation and Certification Systems
NFPA 1001 Standard for Fire Fighter Professional Qualifications
NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications
NFPA 1003 Standard for Airport Fire Fighter Professional Qualifications
NFPA 1005 Standard for Professional Qualifications for Marine Fire Fighting for Land-Based Fire Fighters
NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications
NFPA 1021 Standard for Fire Officer Professional Qualifications
NFPA 1026 Standard for Incident Management Personnel Professional Qualifications
NFPA 1031 Standard for Professional Qualifications for Fire Inspector and Plan Examiner
NFPA 1033 Standard for Professional Qualifications for Fire Investigator
NFPA 1035 Standard on Fire and Life Safety Educator, Public Information Officer, Youth Fire setter Intervention Specialist and Youth Fire setter Program Manager Professional Qualifications
NFPA 1037 Standard on Fire Marshal Professional Qualifications
NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications
NFPA 1051 Standard for Wildland Firefighting Personnel Professional Qualifications
NFPA 1061 Standard for Public Safety Telecommunications Personnel Professional Qualifications
NFPA 1071 Standard for Emergency Vehicle Technician Professional Qualifications
NFPA 1072 Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications
NFPA 1081 Standard for Facility Fire Brigade Member Professional Qualifications
NFPA 1082 Standard for Facilities Fire and Life Safety Director Professional Qualifications

NFPA 1091 Standard for Traffic Incident Management Personnel Professional Qualifications
NFPA 1122 Code for Model Rocketry
NFPA 1123 Code for Fireworks Display
NFPA 1124 Code for the Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles
NFPA 1125 Code for the Manufacture of Model Rocket and High-Power Rocket Motors
NFPA 1126 Standard for the Use of Pyrotechnics before a Proximate Audience
NFPA 1127 Code for High Power Rocketry
PYR 1128 Standard Method of Fire Test for Flame Breaks
PYR 1129 Standard Method of Fire Test for Covered Fuse on Consumer Fireworks
NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas
NFPA 1142 Standard on Water Supplies for Suburban and Rural Fire Fighting
NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire
NFPA 1145 Guide for the Use of Class A Foams in Fire Fighting
NFPA 1150 Standard on Foam Chemicals for Fires in Class A Fuels
NFPA 1192 Standard on Recreational Vehicles
NFPA 1194 Standard for Recreational Vehicle Parks and Campgrounds
NFPA 1201 Standard for Providing Fire and Emergency Services to the Public
NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems
NFPA 1231 Standard on Water Supplies for Suburban and Rural Fire Fighting
NFPA 1250 Recommended Practice in Fire and Emergency Service Organization Risk Management
NFPA 1300 Standard on Community Risk Assessment and Community Risk Reduction Plan Development
NFPA 1401 Recommended Practice for Fire Service Training Reports and Records
NFPA 1402 Standard on Facilities for Fire Training and Associated Props
NFPA 1403 Standard on Live Fire Training Evolutions
NFPA 1404 Standard for Fire Service Respiratory Protection Training
NFPA 1405 Guide for Land-Based Fire Departments that Respond to Marine Vessel Fires
NFPA 1407 Standard for Training Fire Service Rapid Intervention Crews
NFPA 1408 Standard for Training Fire Service Personnel in the Operation, Care, Use, and Maintenance of Thermal Imagers
NFPA 1410 Standard on Training for Emergency Scene Operations
NFPA 1451 Standard for a Fire and Emergency Service Vehicle Operations Training Program
NFPA 1452 Guide for Training Fire Service Personnel to Conduct Community Risk Reduction for Residential Occupancies
NFPA 1500™ Standard on Fire Department Occupational Safety, Health, and Wellness Program
NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications
NFPA 1561 Standard on Emergency Services Incident Management System and Command Safety
NFPA 1581 Standard on Fire Department Infection Control Program
NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments.
NFPA 1583 Standard on Health-Related Fitness Programs for Fire Department Members
NFPA 1584 Standard on the Rehabilitation Process for Members during Emergency Operations and Training Exercises
NFPA 1600® Standard on Continuity, Emergency, and Crisis Management
NFPA 1616 Standard on Mass Evacuation, Sheltering, and Re-entry Programs
NFPA 1620 Standard for Pre-Incident Planning
NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents

NFPA 1700 Guide for Structural Fire Fighting
NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments
NFPA 172 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments
NFPA 1730 Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations
NFPA 1801 Standard on Thermal Imagers for the Fire Service
NFPA 1802 Standard on Two-Way, Portable RF Voice Communications Devices for Use by Emergency Services Personnel in the Hazard Zone
NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
NFPA 1852 Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA)
NFPA 1855 Standard on Selection, Care, and Maintenance of Protective Ensembles for Technical Rescue Incidents
NFPA 1858 Standard on Selection, Care, and Maintenance of Life Safety Rope and Equipment for Emergency Services
NFPA 1859 Standard on Selection, Care, and Maintenance of Tactical Operations Video Equipment
NFPA 1877 Standard on Selection, Care, and Maintenance of Wildland Fire
Fighting Clothing and Equipment
NFPA 1891 Standard on Selection, Care, and Maintenance of Hazardous Materials Clothing and Equipment
NFPA 1901 Standard for Automotive Fire Apparatus
NFPA 1906 Standard for Wildland Fire Apparatus
NFPA 1911 Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles
NFPA 1912 Standard for Fire Apparatus Refurbishing
NFPA 1914 Standard for Testing Fire Department Aerial Devices
NFPA 1915 Standard for Fire Apparatus Preventive Maintenance Program
NFPA 1917 Standard for Automotive Ambulances
NFPA 1925 Standard on Marine Fire-Fighting Vessels
NFPA 1931 Standard for Manufacturer's Design of Fire Department Ground Ladders
NFPA 1932 Standard on Use, Maintenance, and Service Testing of In-Service Fire Department Ground Ladders
NFPA 1936 Standard on Rescue Tools
NFPA 1937 Standard for the Selection, Care, and Maintenance of Rescue Tools.
NFPA 1951 Standard on Protective Ensembles for Technical Rescue Incidents
NFPA 1952 Standard on Surface Water Operations Protective Clothing and Equipment
NFPA 1953 Standard on Protective Ensembles for Contaminated Water Diving
NFPA 1961 Standard on Fire Hose
NFPA 1962 Standard for the Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances
NFPA 1963 Standard for Fire Hose Connections
NFPA 1964 Standard for Spray Nozzles and Appliances
NFPA 1965 Standard for Fire Hose Appliances
NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
NFPA 1975 Standard on Emergency Services Work Apparel

NFPA 1976 Standard on Protective Ensemble for Proximity Fire Fighting
NFPA 1977 Standard on Protective Clothing and Equipment for Wildland Fire Fighting
NFPA 1981 Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services
NFPA 1982 Standard on Personal Alert Safety Systems (PASS)
NFPA 1983 Standard on Life Safety Rope and Equipment for Emergency Services
NFPA 1984 Standard on Respirators for Wildland Fire Fighting Operations
NFPA 1986 Standard on Respiratory Protection Equipment for Tactical and Technical Operations
NFPA 1987 Standard on Combination Unit Respirator Systems for Tactical and Technical Operations
NFPA 1989 Standard on Breathing Air Quality for Emergency Services Respiratory Protection
NFPA 1991 Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies and CBRN Terrorism Incidents
NFPA 1992 Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies
NFPA 1994 Standard on Protective Ensembles for First Responders to Hazardous Materials Emergencies and CBRN Terrorism Incidents
NFPA 1999 Standard on Protective Clothing and Ensembles for Emergency Medical Operations
NFPA 2001 Standard on Clean Agent Fire Extinguishing Systems
NFPA 2010 Standard for Fixed Aerosol Fire-Extinguishing Systems
NFPA 2112 Standard on Flame-Resistant Clothing for Protection of
Industrial Personnel against Short-Duration Thermal Exposures from Fire
NFPA 2113 Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel against Short-Duration Thermal Exposures from Fire
NFPA 2400 Standard for Small Unmanned Aircraft Systems (SAS) used for Public Safety Operations
NFPA 2800 Standard for Emergency Action Planning
NFPA 3000™ (PS) Standard for an Active Shooter/Hostile Event Response (ASHER) Program
NFPA 5000® Building Construction and Safety Code®
NFPA 8501 Standard for Single Burner Boiler Operation
NFPA 8502 Standard for the Prevention of Furnace Explosions/Implosions in Multiple Burner Boilers
NFPA 8503 Standard for Pulverized Fuel Systems
NFPA 8504 Standard on Atmospheric Fluidized-Bed Boiler Operation
NFPA 8505 Standard for Stoker Operation
NFPA 8506 Standard on Heat Recovery Steam Generator Systems.

Above are all fire code to avoid as much as possible from accident and control it. There are many regulation of controlling fire in NFPA