

## NEBRASKA ADMINISTRATIVE CODE

Last date issued: January, 2001  
Updated - June 2004

### Title 153 - STATE FIRE MARSHAL

#### Chapter 1 - NEBRASKA STATE FIRE CODE REGULATIONS

001. The following list of National Fire Protection Association standard codes is adopted by reference in their entirety as they existed on the date these regulations became effective, unless otherwise noted. The full text of these regulations is available for viewing at the office of the State Fire Marshal, 246 S. 14th Street, Lincoln, Nebraska 68508 and at the Nebraska Secretary of State, Rules and Regulations Division, Room 343, State Capitol, Lincoln, Nebraska.

	NFPA Code Pamphlet No ▼
<u>002.</u> Agricultural Commodities and Food Products Facilities, Prevention of Fires and Dust Explosions (amended for existing facilities)	61- 1995 ed.
<u>003.</u> Air Conditioning and Ventilating Systems	90A - 2002 ed.
<u>004.</u> Aircraft Fueling Ramp Drainage	415 - 2002 ed.
<u>005.</u> Aircraft Fuel Servicing	407 - 2001 ed.
<u>006.</u> Aircraft Hangars	409 - 2001 ed.
<u>007.</u> Airport Terminal Buildings (Repealed 2004)	416 - 1993 ed.
<u>008.</u> Ammonium Nitrate, Storage of (2002 edition adopted but will be using 1998 edition)	490 - 2002 ed.
<u>009.</u> Aluminum Processing, Finishing (Repealed 2004)	65 - 1993 ed.
<u>010.</u> Automotive and Marine Service Station Code	30A - 2000 ed.
<u>011.</u> Building Construction and Demolition Operations	241 - 2000 ed.
<u>012.</u> Building Construction, Types of	220 - 2000 ed.

<u>013.</u>	Carbon Dioxide Extinguishing Systems	12 - 2000 ed.
<u>014.</u>	Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances	211 - 2003 ed.
<u>015.</u>	Clean Agent Fire Extinguishing Systems	2001 - 2000 ed.
<u>016.</u>	Closed-Head Foam-Water Sprinkler Systems (Repealed 2004)	16A - 1994 ed.
<u>017.</u>	Combustion Engines and Gas Turbines, Stationary	37 - 2002 ed.
<u>018.</u>	Communications Systems, Public Fire Service (Repealed 2004)	1221 - 1994 ed.
<u>019.</u>	Compressed Natural Gas (CNG) Vehicular Fuel Systems	52 - 2002 ed.
<u>020.</u>	Computer/Data Processing Equipment, Protection of (2003 edition adopted but will be using 1999 edition)	75 - 2003 ed.
<u>021.</u>	Commercial Cooking Operations, Ventilation and Fire Protection of	96 - 2001 ed.
<u>022.</u>	Cooling Towers, Water	214 - 2000 ed.
<u>023.</u>	Dipping and Coating Processes Using Flammable or Combustible Liquids	34 - 2000 ed.
<u>024.</u>	Dry Chemical Extinguishing Systems	17 - 2002 ed.
<u>025.</u>	Dry-Cleaning Plants	32 - 2000 ed.
<u>026.</u>	Electrical Code, National	70 - 2002 ed.
<u>027.</u>	Electrical Maintenance for One- and Two-Family Dwellings (Repealed 2004)	73 - 1994 ed.
<u>028.</u>	Electrical Safety Requirements for Employee Workplaces (Repealed 2004)	70E - 1995 ed.
<u>029.</u>	Emergency and Standby Power Systems	110 - 2002 ed.
<u>030.</u>	Emergency and Standby Power Systems, Stored Energy	111- 2001 ed.
<u>031.</u>	Exhaust Systems for Air Conveying of Materials	91 - 1999 ed.
<u>032.</u>	Explosion Prevention Systems	69 - 2002 ed.

<u>033.</u>	Fire Alarm Code, National	72 - 2002 ed.
<u>034.</u>	Fire Doors and Windows	80 - 1999 ed.
<u>035.</u>	Fire Extinguishers, Portable	10 - 2002 ed.
<u>036.</u>	Fire Hose (Repealed 2004)	1961 - 1992 ed.
<u>037.</u>	Fire Hose, Care, Use, Service, and Testing (Repealed 2004)	1962 - 1993 ed.
<u>038.</u>	Fire Pumps, Centrifugal	20 - 1999 ed.
<u>039.</u>	Fire Walls and Fire Barrier Walls (2000 edition adopted but will be using 2000 edition)	221 - 2001 ed.
<u>040.</u>	Fireworks, Manufacture, Transportation and Storage	1124 - 2003 ed.
<u>041.</u>	Flammable and Combustible Liquids Code	30 - 2000 ed.
<u>042.</u>	Flammable and Combustible Liquids, Farm Storage of	395 - 1993 ed.
<u>043.</u>	Flammable and Combustible Liquids, Tank Vehicles for	385 - 2000 ed.
<u>044.</u>	Flammable and Combustible Liquids, Underground Leakage of	329 - 1999 ed.
<u>045.</u>	Flammable Liquids and Gases in Manholes, Sewers (Repealed 2004)	328 - 1992 ed.
<u>046.</u>	Foam, Low Expansion	11 - 2002 ed.
<u>047.</u>	Foam Systems, Medium and High Expansion	11A- 1999 ed.
<u>048.</u>	Foam-Water Sprinkler and Spray Systems	16 - 2003 ed.
<u>049.</u>	Fuel Gas Code, National (As Amended)	54 - 2002 ed.
<u>050.</u>	Garages, Repair (Repealed 2004)	88B - 1991 ed.
<u>051.</u>	Halon 1301 Fire Extinguishing Systems	12A - 1997 ed.
<u>052.</u>	Health Care Facilities	99 - 2002 ed.
<u>053.</u>	Hypobaric Facilities	99B - 1999 ed.
<u>054.</u>	Incinerators, Waste and Linen Handling	

	Systems and Equipment	82 - 1999 ed.
<u>055.</u>	Industrial Trucks, Powered	505 - 2002 ed.
<u>056.</u>	Laboratories Using Chemicals	45 - 2000 ed.
<u>057.</u>	Life Safety Code ( <u>As Amended</u> ) *New Amendments and Deletions	101 - 2000 ed.
	A] Amendments to Life Safety Code, “Special Amusement Buildings” Sections 8-4.6.2 & 8-4.6.3 and 9-4.6.2 & 9-4.6.3. (Repealed 2004)	101 - 1994 ed.
	B] Amendments to Life Safety Code, “Subdivision of Building Spaces” Sections 16-3.7 & 18-3.7. (Repealed 2004)	101 - 1994 ed.
<u>058.</u>	Liquefied Natural Gas, Production, Storage and Handling	59A - 2001 ed.
<u>059.</u>	Liquefied Natural Gas, Vehicular Fuel Systems	57 - 2002 ed.
<u>060.</u>	Liquefied Petroleum Gases at Utility Gas Plants	59 - 2001 ed.
<u>061.</u>	Liquefied Petroleum Gases, Storage and Handling (As Amended)	58 - 2001 ed.
<u>062.</u>	Manufacture and Storage of Aerosol Products	30B - 2002 ed.
<u>063.</u>	Manufactured Home Installations, Sites and Communities	501A - 2003 ed.
<u>064.</u>	Marinas and Boatyard	303 - 2000 ed.
<u>065.</u>	Mobile Foam Apparatus (Repealed 2004)	11C - 1995 ed.
<u>066.</u>	Oil Burning Equipment, Installation of	31 - 2001 ed.
<u>067.</u>	Organic Peroxide, Storage of (Repealed 2004)	43B - 1993 ed.
<u>068.</u>	Ovens and Furnace	86 - 1999 ed.
<u>069.</u>	Oxidizing Materials, Liquid and Solid, Storage of	430 - 2000 ed.
<u>070.</u>	Oxygen-Fuel Gas Systems for Welding and Cutting	51 - 2002 ed.

<u>071.</u>	Oxygen Systems, Bulk, at Consumer Sites	50 - 2001 ed.
<u>072.</u>	Parking Structures	88A - 2002 ed.
<u>073.</u>	Pesticides, Storage of ( <u>as amended January 2001</u> )	43D -1994 ed.
<u>074.</u>	Plastics, Chemical, Dye and Pharmaceutical Industries, Dust Explosions in	654 - 2000 ed.
<u>075.</u>	Portable Cylinder, Storage, Use & Handling of Compressed and Liquefied Gases	55 - 2003 ed.
<u>076.</u>	Private Fire Service Mains, Installation of	24 - 2002 ed.
<u>077.</u>	Racetrack Stables, Fire Safety in	150 - 2000 ed.
<u>078.</u>	Rack Storage of Materials (Repealed 2004)	231C - 1995 ed.
<u>079.</u>	Rubber Tires, Storage of (Repealed 2004)	231D - 1994 ed.
<u>080.</u>	Safe Entry of Underground Storage Tanks	326 - 1999 ed.
<u>081.</u>	Smoke-Management Systems in Malls, Atria, and Large Areas (Repealed 2001)	92B - 1995 ed.
<u>082.</u>	Spray Application Using Flammable & Combustible Materials	33 - 2000 ed.
<u>083.</u>	Sprinkler Systems, Installation of	13 - 2002 ed.
<u>084.</u>	Sprinkler Systems, Installation in Residential Occupancies	13R - 2002 ed.
<u>085.</u>	Sprinkler Systems, One-and Two-Family Dwellings	13D - 2002 ed.
<u>086.</u>	Standpipe and Hose Systems	14 -2003 ed.
<u>087.</u>	Static Electricity	77 - 2000 ed.
<u>088.</u>	Storage, General (Repealed 2004)	231 - 1995 ed.
<u>089.</u>	Tanks, Containers, Small, Cleaning (Repealed 2004)	327 - 1993 ed.
<u>090.</u>	Tents and Membrane Structures, Assembly Seating	102 -1995 ed.
<u>091.</u>	Terminals, Motor Freight (Repealed 2004)	513 - 1994 ed.

<u>092.</u>	Warm Air Heating and Air Conditioning Systems, Installation of	90B - 2002 ed.
<u>093.</u>	Water Spray Fixed Systems	15 - 2001 ed.
<u>094.</u>	Water-based Fire Protection Systems Inspection, Testing and Maintenance	25 - 2002 ed.
<u>095.</u>	Water Tanks for Private Fire Protection	22 -2003 ed.
<u>096.</u>	Wet Chemical Extinguishing Systems	17A -2002 ed.
<u>097.</u>	Wetting Agents	18 -1995 ed.
<u>098.</u>	Wood Processing and Woodworking, Dust Explosion Prevention	664 -2002 ed.
<u>099.</u>	Guide to Alternative Approaches to Life Safety	101A - 2001 ed.
<u>100.</u>	Fire Prevention Code	1 - 2003 ed.
<u>101.</u>	Solvent Extraction Plants	36 - 2001 ed.
<u>102.</u>	Standard System for the Identification of the Hazards of Materials for Emergency Response	704 - 2001 ed.
<u>103.</u>	Gaseous Hydrogen Systems at Consumer Sites	50A - 1999 ed.
<u>104.</u>	Liquefied Hydrogen Systems at Consumer Sites	50B - 99 ed.
<u>105.</u>	Boiler and Combustion Systems Hazards Code	85 - 2001 ed.
<u>106.</u>	Flame Effects Before an Audience	160 - 2001 ed.
<u>107.</u>	Fire Protection of Storage	230 - 2003 ed.
<u>108.</u>	Methods of Tests of Fire Endurance Building Construction and Materials	251 - 1999 ed.
<u>109.</u>	Methods of Fire Tests of Door Assemblies	252 - 1999 ed.
<u>110.</u>	Methods of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source	253-2000 ed.
<u>111.</u>	Method of Test Surface Burning Characteristics of Building Materials	255 - 2000 ed.

<u>112.</u>	Methods of Fire Tests of Roof Coverings	256 - 1998 ed.
<u>113.</u>	Fire Test for Window and Glass Block Assemblies	257 - 2000 ed.
<u>114.</u>	Test Method for Potential Heat of Building Materials	259 - 2003 ed.
<u>115.</u>	Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture (2003 edition adopted but will be using the 1998 edition)	260 - 2003 ed.
<u>116.</u>	Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes	261 - 1998 ed.
<u>117.</u>	Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls	265 - 2002 ed.
<u>118.</u>	Method of Test for Fire characteristics of Mattresses and Bedding Assemblies Exposed to Flaming Ignition Source	267 - 1998 ed.
<u>119.</u>	Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	286 - 2000 ed.
<u>120.</u>	Aircraft Hand Portable Fire Extinguishers	408 - 1999 ed.
<u>121.</u>	Heliports	418 - 2001 ed.
<u>122.</u>	Storage of Organic Peroxide Formulations	432 - 2002 ed.
<u>123.</u>	Standard for Combustible Metals, Metal Powders, and Metal Dusts	484 - 2002 ed.
<u>124.</u>	Methods of Fire Tests for Flame Propagation of Textiles and Films	701 - 1999 ed.
<u>125.</u>	Fire Retardant Impregnated Wood and Fire Retardant Coating for Building Materials	703 - 2000 ed.
<u>126.</u>	Water Mist Fire Protection Systems	750 - 2003 ed.
<u>127.</u>	Fire Protection in Waste-water Treatment and Collection Facilities	820 - 1999 ed.
<u>128.</u>	Use of Pyrotechnics Before a Proximate Audience	1126 - 2000 ed.

(2000 edition adopted but will be using 2001 edition)

<u>129.</u>	Protection of Life and Property from Wildfire	1144 - 2002 ed.
<u>130.</u>	Recreational Vehicle Parks and Campgrounds	1194 - 2002 ed.
<u>131.</u>	Life Safety Code Handbook	101 - 2000 ed.
<u>132.</u>	Marinas and Boatyards	303 - 2000 ed.
<u>133.</u>	Handling Releases of Flammable and Combustible Liquids and Gases	329 - 1999 ed.

Previous amendments to Title 153, Chapter 1, Sec. 057 (NFPA 101) and Title 153, Chapter 1, Sec. 061 (NFPA 58) are repealed.

Statutory Authority:

Neb. Rev. Stat. 81-502 (1996 Reissue)

Legal Citation:

Title 153, Ch. 1, Nebraska State Fire Marshal.



## AMENDMENTS TO TITLE 153, CHAPTER 1, SEC. 057 (NFPA 101)

**9.4.2.2** Remove section as shown:

### **9.4.2.2**

~~Except as modified herein, existing elevators, escalators, dumbwaiters, and moving walks shall conform to the requirements of ASME/ANSI A17.3, *Safety Code for Existing Elevators and Escalators*.~~

This amendment removes the requirement for existing elevators to meet a national standard that is not required by the State Elevator Inspector.

**12.2.5.1.1** Add new section:

**12.2.5.1.1** Dead-end corridors shall not exceed 20 ft. (6.1m)

**13.2.5.1.1** Add new section:

**13.2.5.1.1** Dead-end corridors shall not exceed 20 ft. (6.1m)

This change adds a requirement to limit dead-end corridors in new and existing Assembly Occupancies. Dangerous dead-end corridors are not addressed in the code, as written. This change is consistent with the 2003 edition of the *Code*.

**13.4.7.2** Change as shown:

**13.4.7.2\*** Every special amusement building, other than buildings or structures not exceeding 10 ft (3 m) in height and not exceeding 160 ft<sup>2</sup> (14.9 m<sup>2</sup>) in horizontal projection shall be protected throughout by an approved automatic sprinkler system installed and maintained in accordance with Section 9.7. Where the special amusement building is movable or portable, the sprinkler water supply shall be permitted to be provided by an approved, temporary means.

*Exception: Previously approved special amusement buildings.*

This amendment allows the approval existing special amusement buildings without a fire sprinkler system.

**16.5.1.3.2** Add new exception:

**17.6.2.4.2** Every room used for sleeping, living, or dining purposes shall have not less than two means of escape, not less than one of which shall be a door or stairway providing a means of unobstructed travel to the outside of the building at street or ground level. The second means of escape shall be permitted to be a window in accordance with 17.2.11.1. No room or space that is accessible only by a ladder or folding stairs or through a trap door shall be occupied for living or [sleeping purposes](#).

*Exception: Previously approved means of escape.*

**17.6.2.4.3** Add new exception:

**17.6.2.4.3** In group day-care homes where spaces on the story above the level of exit discharge are used by clients, not less than one means of escape shall be an exit discharging directly to the outside. The second means of escape shall be permitted to be a window in accordance with 17.2.11.1.

Exception: Previously approved means of escape.

These amendments allow existing day-care homes to utilize previously approved egress from basements and second stories.

**16.6.3.1** Add new exception:

**16.6.3.1 Protection of Vertical Openings.**

For group day-care homes, the doorway between the level of exit discharge and any story below shall be equipped with a door assembly having a 20-minute fire protection rating. Where the story above the level of exit discharge is used for sleeping purposes, there shall be a door assembly having a 20-minute fire protection rating at the top or bottom of each stairway.

Exception: When located in a One-and-Two-Family Dwelling, hard-wired smoke alarms meeting the requirements of 9.6.2.10 shall be permitted when placed at the top and bottom of the vertical opening.

**17.6.3.1** Add new exception:

**17.6.3.1 Protection of Vertical Openings.**

For group day-care homes, the doorway between the level of exit discharge and any story below shall be equipped with a door assembly having a 20-minute fire protection rating. Where the story above the level of exit discharge is used for sleeping purposes, there shall be a door assembly having a 20-minute fire protection rating at the top or bottom of each stairway.

Exception 1: Existing self-closing 1<sup>3</sup>/<sub>4</sub>-in. (4.4-cm) thick, solid-bonded wood doors without rated frames shall be permitted to be continued to be used by the authority having jurisdiction.

Exception 2: Previously approved protection features.

These exceptions for new and existing day-care homes allow open stairs when smoke alarms are added to protect the opening.

**16.7.4.1** Change as shown:

**16.7.4.1** Draperies, curtains, and other similar furnishings and decorations in day-care occupancies in which more than 12 clients receive care shall be in accordance with the provisions of 10.3.1

#### **17.7.4.1** Change as shown:

**17.7.4.1** Draperies, curtains, and other similar furnishings and decorations in day-care occupancies in which more than 12 clients receive care shall be in accordance with the provisions of 10.3.1

These amendments exempt new and existing day-care homes from meeting the requirement for flame resistant window treatments.

#### **19.3.6.3.2** Change as shown:

**19.3.6.3.2\*** Doors shall be provided with a means suitable for keeping the door closed that is acceptable to the authority having jurisdiction. The device used shall be capable of keeping the door fully closed if a force of 5 lbf (22 N) is applied at the latch edge of the door. Roller latches shall be prohibited on corridor doors after March 11, 2006, in buildings not fully protected by an approved automatic sprinkler system in accordance with 19.3.5.2.

*Exception No. 1: ~~Doors to toilet rooms, bathrooms, shower rooms, sink closets, and similar auxiliary spaces that do not contain flammable or combustible materials.~~*

*Exception No. 2: ~~Existing roller latches demonstrated to keep the door closed against a force of 5 lbf (22 N) shall be permitted to be kept in service.~~*

This change is needed for Health Care Occupancies to be in compliance with CMS federal mandates.

#### **21.6.2** Change as shown:

**22.7.2** Books, clothing and other combustible personal property allowed in sleeping rooms shall be stored in closable metal lockers, ~~or a fire-resistant container,~~ or the building shall be protected throughout by an approved, supervised automatic sprinkler system.

#### **22.6.2** Change as shown:

**23.7.2** Books, clothing and other combustible personal property allowed in sleeping rooms shall be stored in closable metal lockers, ~~or a fire-resistant container,~~ or the building shall be protected throughout by an approved, supervised automatic sprinkler system.

These amendments give new and existing detention occupancies an additional choice to allow personal storage in sleeping rooms.

#### **31.3.4.1** Change as shown:

##### **31.3.4.1 General.**

Apartment buildings with more than three stories or with more than ~~††~~ 12 dwelling units shall be

provided with a fire alarm system in accordance with Section 9.6, except as modified by 31.3.4.2 through 31.3.4.5.

*Exception: Where each dwelling unit is separated from other contiguous dwelling units by fire barriers (see 8.2.3) having a fire resistance rating of not less than 1/2 hour, and where each dwelling unit has either its own independent exit or its own independent stairway or ramp discharging at grade.*

This change will exempt existing 12-plex apartment buildings from the requirement for a fire alarm system. This change is consistent with past codes.

**41.7** Change as shown:

## **42.7\* SPECIAL PROVISIONS FOR GRAIN OR OTHER BULK STORAGE ELEVATORS**

### **42.7.1**

The requirements of Sections 42.1 through 42.5 shall be met, except as modified by 42.7.2 through 42.7.4. Sections 42.7.2 through 42.7.4 shall apply to newly constructed structures only.

### **42.7.2**

There shall be not less than two means of egress from all working levels of the head house. One of these means of egress shall be a stair to the level of exit discharge that is enclosed by a dust-resistant 1-hour fire resistance-rated enclosure in accordance with 7.1.3.2. The second means of egress shall be one of the following:

- (1) An exterior stair or basket ladder-type fire escape accessible from all working levels of the head house that provides a passage to ground level
- (2) An exterior stair or basket ladder-type fire escape accessible from all working levels of the head house that provides access to the top of adjoining structures and that provides a continuous path to the means of egress described in 42.7.3

~~*Exception: Stair enclosures in existing structures shall be permitted to have non-fire-rated dust-resistant enclosures.*~~

### **42.7.3**

An exterior stair or basket ladder-type fire escape shall provide passage to ground level from the top of the end of an adjoining structure, such as a silo, conveyor, gallery, or gantry.

### **42.7.4 Underground Spaces.**

#### **42.7.4.1**

Underground spaces shall have not less than two means of egress, one of which shall be permitted to be a means of escape. The means of escape shall be arranged to eliminate dead ends.

#### 42.7.4.2

Travel distance to means of escape or exit shall not exceed 200 ft (60 m).

*Exception No. 1: Existing facilities.*

*Exception No. 2: In a building protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, travel distance shall not exceed 400 ft (122 m).*

These changes are necessary to maintain consistency with changes made to the grain elevator code in January of 2000. The changes remove requirements for existing grain elevators.

#### 2.1.1 Change as shown:

##### 2.1.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 10, *Standard for Portable Fire Extinguishers*, ~~1998~~ 2002 edition. (9.7.4.1)

NFPA 13, *Standard for the Installation of Sprinkler Systems*, ~~1999~~ 2002 edition. [8.2.5.12 Exc. No. 1, 9.7.1.1, 9.7.4.2, 12.4.5.7, 12.4.5.12, 12.7.4.3.7 Exc. No. 1, 13.4.5.12, 13.7.4.3.7 Exc. No. 1, 18.3.5.5, 19.3.5.5, 26.3.5.1 Exc. No. 1, 28.1.5, 28.3.5.1 Exc., 29.1.5, 29.3.5.1 Exc. No. 1, 30.3.5.1 Exc. No. 1, 30.3.5.1 Exc. No. 2, 31.2.2.1.3, 31.3.5.1 Exc. No. 2, 32.2.3.5.2 Exc. No. 3, 33.2.3.5.2 Exc. No. 3, 36.4.4.2.5(2), 36.4.5.3.1(1), 36.4.5.5(1), 37.4.4.2.5(2), 37.4.5.3.1(1), 37.4.5.5(1), 38.1.5.2, 39.1.5.2]

NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, ~~1999~~ 2002 edition. [9.7.1.1 Exc. No. 2, 24.3.5, 26.3.5.1, 32.2.3.5.2 Exc. No. 1, 32.2.3.5.2 Exc. No. 2, 33.2.3.5.2 Exc. No. 1, 33.2.3.5.2 Exc. No. 2]

NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, ~~1999~~ 2002 edition. [9.7.1.1 Exc. No. 1, 24.3.5, 26.3.5.1, 28.3.5.1, 29.3.5.1, 30.3.5.1, 31.3.5.1, 32.2.3.5.2 Exc. No. 4, 32.2.3.5.2 Exc. No. 5, 32.3.3.5.1 Exc. No. 1, 33.2.3.5.2 Exc. No. 4, 33.2.3.5.2 Exc. No. 5, 33.3.3.5.1 Exc. No. 1]

NFPA 14, *Standard for the Installation of Standpipe, Private Hydrants, and Hose Systems*, ~~2000~~ 2003 edition. (9.7.4.2, 12.4.5.12, 13.4.5.12)

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, ~~1998~~ 2002 edition. (9.7.5, 9.7.6.2)

NFPA 30, *Flammable and Combustible Liquids Code*, ~~1996~~ 2000 edition. [8.4.3.1, 36.4.5.3.1(2), 36.4.5.5(2), 37.4.5.3.1(2), 37.4.5.5(2), 42.2.6.3 Exc. No. 2]

NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*, ~~1998~~ 2002 edition. [36.4.5.3.1(3), 36.4.5.5(3), 37.4.5.3.1(3), 37.4.5.5(3)]

NFPA 31, *Standard for the Installation of Oil-Burning Equipment*, ~~1997~~ 2001 edition. (9.2.2)

NFPA 40, *Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film*, ~~1997~~ 2001 edition. (12.4.6.1, 12.4.6.3, 13.4.6.1, 13.4.6.3)

NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, ~~1996~~ 2000 edition. (8.4.4, 9.2.4)

NFPA 54, *National Fuel Gas Code*, ~~1999~~ 2002 edition. (8.4.3.1, 9.1.1, 9.2.2, 14.5.2.2, 15.5.2.2, 16.5.2.2, 17.5.2.2, 26.5.2.2, 28.5.2.2 Exc., 29.5.2.2 Exc., 30.5.2.2, 31.5.2.2 Exc.)

NFPA 58, *Liquefied Petroleum Gas Code*, ~~1999~~ 2001 edition. [8.4.3.1, 9.1.1, 11.9.5.1.3, 11.10.7.1.3, 11.11.6.1.3, 12.7.1.4(5), 13.7.1.4(5)]

NFPA 70, *National Electrical Code*<sup>®</sup>, ~~1999~~ 2002 edition. (7.9.2.4, 8.2.5.13, 9.1.2, 9.2.2, 9.6.1.4, 9.6.1.7, 10.2.4.5, 11.8.4.2, 11.8.4.2, 12.4.3.4, 22.5.1.2, 23.5.1.2, 23.5.1.2 Exc.)

NFPA 72, *National Fire Alarm Code*<sup>®</sup>, ~~1999~~ 2002 edition. [7.2.1.8.2(3), 7.2.1.9.2(4), 8.2.4.4.3, 8.3.5.2, 8.3.5.2 Exc. No. 2, 8.3.5.3, 9.6.1.4, 9.6.1.7, 9.6.2.8, 9.6.2.9, 9.6.2.10.1, 9.6.2.10.2, 9.6.3.4, 9.6.3.5, 9.6.3.6, 9.6.3.7 Exc. No. 2, 9.6.3.10, 9.6.4, 9.6.5.4, 9.7.2.1, 11.8.3.2, 14.3.4.2.3(1), 15.3.4.2.3(1), 22.3.4.1.2, 22.3.7.9, 23.3.4.1.2, 23.3.7.9, 32.3.3.4.8]

NFPA 80, *Standard for Fire Doors and Fire Windows*, 1999 edition. [7.2.1.14(5), 8.2.3.2.1(a), 8.2.3.2.2, 8.2.4.3.4, 18.3.6.3.1, 18.3.6.3.6, 19.3.6.3.1, 19.3.6.3.6]

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, 1999 edition. (9.5.2)

NFPA 88A, *Standard for Parking Structures*, ~~1998~~ 2002 edition. (28.3.5.4, 30.3.5.4)

NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*, ~~1999~~ 2002 edition. (8.2.7.1 Exc. No. 2, 9.2.1)

NFPA 90B, *Standard for the Installation of Warm Air Heating and Air-Conditioning Systems*, ~~1999~~ 2002 edition. (9.2.1)

NFPA 91, *Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids*, 1999 edition. (9.2.2)

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, ~~1998~~ 2001 edition. (9.2.3)

NFPA 99, *Standard for Health Care Facilities*, ~~1999~~ 2002 edition. (8.4.4 Exc., 8.4.5, 9.2.4, 18.2.9.2, 18.2.10.2, Table 18.3.2.1, 18.3.2.2, 18.3.2.3, 18.3.2.4, 18.5.1.2, 18.5.1.3, 19.3.2.2, 19.3.2.3, 19.3.2.4, 20.2.9.2, 20.3.2.1, 20.3.2.2, 21.2.9.2, 21.3.2.1, 21.3.2.2)

NFPA 101A, *Guide on Alternative Approaches to Life Safety*, ~~1998~~ 2001 edition. (33.2.1.3.2 Exc. No. 5, 33.2.3.6.1 Exc. No. 4)

NFPA 110, *Standard for Emergency and Standby Power Systems*, ~~1999~~ 2002 edition. (7.9.2.3, 9.1.3, 11.8.4.2)

NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*, ~~1996~~ 2001 edition. (7.9.2.3, 9.1.4)

NFPA 160, *Standard for Flame Effects Before an Audience*, ~~1998~~ 2001 edition. (12.7.2 Exc. No. 2, 13.7.2 Exc. No. 2)

NFPA 211, *Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances*, ~~2000~~ 2003 edition. (9.2.2)

NFPA 220, *Standard on Types of Building Construction*, 1999 edition. (8.2.1, 10.2.3.1 Exc. No. 1, 20.1.6.2, 21.1.6.2)

NFPA 221, *Standard for Fire Walls and Fire Barrier Walls*, ~~1997~~ 2000 edition. [8.2.1(1), 8.2.2.2]

NFPA 230, *Standard for the Fire Protection of Storage*, ~~1999~~ 2003 edition [36.4.5.3.1(4), 36.4.5.5(4), 37.4.5.3.1(4), 37.4.5.5(4)]

~~NFPA 231D, *Standard for Storage of Rubber Tires*, 1998 edition. [36.4.5.3.1(5), 36.4.5.5(5), 37.4.5.3.1(5), 37.4.5.5(5)]~~

NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, ~~1996~~ 2000 edition. (18.7.9.2, 19.7.9.2, 20.7.9.2, 21.7.9.2)

NFPA 251, *Standard Methods of Tests of Fire Endurance of Building Construction and Materials*, 1999 edition. [3.3.21, 3.3.160, 8.2.3.1.1, 8.2.3.1.1 Exc. No. 2, 12.4.5.7(e)]

NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, 1999 edition. [3.3.159, 8.2.3.2.1(a), 8.2.3.2.3.1 Exc. No. 1 to (2), 8.2.3.2.3.1 Exc. to (3), 8.3.4.2(1)]

NFPA 253, *Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source*, 2000 edition. (10.2.7.1)

NFPA 255, *Standard Method of Test of Surface Burning Characteristics of Building Materials*, 2000 edition. [10.2.3.1, 10.2.3.1 Exc. No. 1, 10.2.3.1 Exc. No. 2, 10.2.3.2, 12.4.5.7(f)]

NFPA 256, *Standard Methods of Fire Tests of Roof Coverings*, 1998 edition. [11.9.1.5, 11.10.1.4, 18.1.6.2 Exc. (a), 19.1.6.2 Exc. (a), 23.1.6.3 Exc. No. 1(a), 32.3.1.3.3 Exc.(a), 33.3.1.3.3 Exc.(a)]

NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*, 2000 edition. [3.3.159, 8.2.3.2.2(1)]

NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, ~~1998~~ 2003 edition (3.3.118)

NFPA 260, *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*, 1998 edition. [10.3.2(1)]

NFPA 261, *Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes*, 1998 edition. [10.3.2(2)]

NFPA 265, *Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings*, ~~1998~~ 2002 edition. [10.2.3.5, 10.2.3.5.1, 10.2.3.5.2, 10.2.4.1.5, 10.2.4.2(5)]

NFPA 266, *Standard Method of Test for Fire Characteristics of Upholstered Furniture Exposed to Flaming Ignition Source*, 1998 edition. (10.3.3)

NFPA 267, *Standard Method of Test for Fire Characteristics of Mattresses and Bedding Assemblies Exposed to Flaming Ignition Source*, 1998 edition. (10.3.4)

NFPA 286, *Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*, 2000 edition. [10.2.3.1 Exc. No. 1, 10.2.3.5, 10.2.3.5.3, 10.2.4.2(6)]

NFPA 418, *Standard for Heliports*, ~~1995~~ 2001 edition. (18.3.2.7)

NFPA 430, *Code for the Storage of Liquid and Solid Oxidizers*, 2000 edition. [36.4.5.3.1(6), 37.4.5.3.1(6)]

NFPA 432, *Code for the Storage of Organic Peroxide Formulations*, ~~1997~~ 2002 edition. [36.4.5.3.1(7), 37.4.5.3.1(7)]

NFPA 434, *Code for the Storage of Pesticides*, 1998 edition. [36.4.5.3.1(8), 37.4.5.3.1(8)]

NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*, 1999 edition. [10.3.1, 12.4.5.11, 12.7.4.3.4(3), 13.4.5.11, 13.7.4.3.4(3)]

NFPA 703, *Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials*, ~~1995~~ 2000 edition. [10.2.6.1, 12.7.4.3.4(2), 13.7.4.3.4(2)]

NFPA 1126, *Standard for the Use of Pyrotechnics before a Proximate Audience*, ~~1996~~ 2001 edition. (12.7.2 Exc. No. 1, 13.7.2 Exc. No. 1)

### **2.1.2 Other Publications:**

ANSI A14.3-1984, *Safety Code for Fixed Ladders*, American National Standards Institute, 11 West 42nd Street, New York, NY 10036. (7.2.9.2.1)

CABO/ANSI A117.1-1992, *American National Standard for Accessible and Usable Buildings and Facilities*, American National Standards Institute, 11 West 42nd Street, New York, NY 10036. (3.3.14.1, 7.2.12.3.5, 7.10.1.3, 9.6.3.6)

ANSI A1264.1-1989, *Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems*, American National Standards Institute, 11 West 42nd Street, New York, NY 10036. (7.2.9.2.1 Exc. No. 2, 40.2.2.10)

ANSI/UL 2079, *Test of Fire Resistance of Building Joint Systems*, Underwriters Laboratories Inc., 333 Pfingsten Rd., Northbrook, IL 60062. (8.2.5.2 Exc. No. 3)

ASME/ANSI A17.1-1993, *Safety Code for Elevators and Escalators*, including Addenda A17.1a-1994 and A17.1b-1995, American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. (7.2.12.2.4, 7.2.13.9, 7.2.13.11, 9.4.2, 9.4.4, 9.4.8)

ASME/ANSI A17.3-1993, *Safety Code for Existing Elevators and Escalators*, including Addenda A17.3a-1994 and A17.3b-1995, American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. (9.4.3, 9.4.5)



ASTM D 2898, *Test Method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (12.4.8.3.2, 12.4.8.3.3 Exc., 13.4.8.3.2 Exc., 13.4.8.3.3 Exc.)

ASTM E 136-1982, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (3.3.131)

ASTM E 1537, *Standard Method for Fire Testing of Real Scale Upholstered Furniture Items*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (10.3.3)

ASTM E 1590-1994, *Standard Method for Fire Testing of Real Scale Mattresses*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (10.3.4)

ASTM E 1591-1994, *Standard Guide for Data for Fire Models*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (5.6.3.1)

ASTM F 851-1983, *Standard Test Method for Self-Rising Seat Mechanisms*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (12.2.5.5.1, 13.2.5.5.1)

ASTM G 26, *Practice for Operating Light/Exposure Apparatus (Zenon-Arc Type) With and Without Water for Exposure of Non-Metallic Materials*, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. (3.3.211)

BHMA/ANSI A-156.19-1997, *American National Standard for Power Assist and Low Energy Power Operated Doors*, Builders Hardware Manufacturers Association, 355 Lexington Avenue-17th Floor, New York, NY 10017-6603. [7.2.1.9.2(6)]

*Code of Federal Regulations 16*, Part 1632. [10.3.2(3)]

UL 924, *Standard for Safety Emergency Lighting and Power Equipment*, Underwriters Laboratories Inc., 333 Pfingsten Rd., Northbrook, IL 60062. (7.10.7.1)

UL 1975, *Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes*, Underwriters Laboratories Inc., 333 Pfingsten Rd., Northbrook, IL 60062. [10.3.7, 12.4.5.11, 12.7.3.3, 12.7.4.3.4(6), 12.7.4.3.4(7), 12.7.4.3.6, 13.7.3.3, 13.7.4.3.4(6), 13.7.4.3.4(7), 13.7.4.3.6]

Webster's Third New International Dictionary of the English Language, Unabridged.

These changes are necessary to reference the correct code that is to be adopted. Many unused and unnecessary codes are removed.

**AMENDMENTS TO TITLE 153, CHAPTER 1, SEC. 049  
NFPA 54 - 2002 edition - "Fuel Gas Code, National"  
February 2004**

**Amendment 1**

Delete Section 1.4 in the 2002 Edition of NFPA 54 and insert in lieu thereof the following:

**4.1. Qualified Agency**

- 4.1.1 Installation, testing, and replacement of gas piping, gas utilization equipment, or accessories, and repair and servicing of equipment, shall be performed only by a qualified agency.
  - 4.1.2 Persons who install, service, test, or maintain propane gas utilization equipment, or gas piping systems of which the equipment is a part, or accessories, within the scope of this code, shall be trained in the proper procedures in accordance with applicable gas codes. Refresher training shall be provided at least every three years. The training shall be documented.
- A 4.1 Completion of the Certified Employee Training Program of the National Propane Gas Association or of another training program that is substantially equivalent shall satisfy the training requirements of this section.

**AMENDMENTS TO TITLE 153, CHAPTER 1, SEC. 061  
NFPA 58 - 2001 edition - "Liquefied Petroleum Gases, Storage and Handling"  
February 2004**

**Amendment 1**

**Section 3.2.18 Internal Valves.**

- 3.2.18 The requirements for installation of internal valves were relocated in the 2001 edition to this new section so that all the installation's requirements for internal valves are in one place. Internal valves must be installed in the liquid and vapor openings of a container over 4000 gal (15.1 m<sup>3</sup>) that is installed after July 1, ~~2003~~ 2005. Similar protection is also required for existing containers over 4000 gal (15.1 m<sup>3</sup>) after July 1, ~~2011~~ 2005. Refer to 2.3.3.32(b) for the equipment requirements.
- 3.2.18.2 Automatic shutdown of internal valves in liquid service shall be provided using thermal (fire) actuation. The thermal element shall be within 5 ft (1.5 m) of the internal valve.
- 3.2.18.3 At least one remote shutdown station for internal valves in liquid service shall be installed not less than 25 ft (7.6 m) or more than 100 ft (30 m) from the liquid transfer point).
- 3.2.18.4 Emergency remote shutdown stations shall be identified by a sign incorporating the words "Propane - Container Liquid Valve Emergency Shutoff" in block letters of not less than 2 in. (51 mm) in height on a background of contrasting colors to the letters. The sign shall be visible from the point of transfer.

The paragraphs in 3.2.18 establish performance and identification requirements for internal valves that are required on new containers over 4000 gal (15.1 m<sup>3</sup>) that are installed after July 1, 2003. Refer to 2.3.3.2(b) for the equipment requirements. The following are required for internal valves:

- Remote manual shutdown from a remote location from within distances specified
- Identification of the remote shutdown station using 2-in. (51-mm) letters for visibility
- Automatic shutdown if fire is sensed within 5 ft (1.5 m) of the internal valve

These requirements are similar to those of an emergency shutoff valve, which also requires operation at the valve. There are retrofit requirements in 2.3.3.2(b) for existing containers after July 1, 2011, and they can be met by installing an emergency shutoff valve at the container connection.

The purpose of an internal valve is to allow remote shutdown of flow from a propane container in the event of uncontrolled release. There have been incidents where damage to propane tank installations has caused extensive property damage and loss of life that could have been prevented if the flow of propane from damaged piping could have been stopped remotely.

## **Amendment 2**

Tentative Interim Amendment

Include the TIA 01-1 2-2.1.5 in the adoption of the 2001 Edition of 58 issued on January 10, 2002 with an extension of the effective date of the TIA to July 1, 2005.

Reference: 2-2.1.5

TIA 01-1 (NFPA 58)

1. *Add a new exception to Section 2.2.1.5 to read as follows:*

**2.2.1.5\*** Cylinders shall be filled, continued in service, and transported in accordance with DOT regulations. Any cylinder that is out of qualification date shall not be refilled until requalified by methods prescribed in DOT regulations.

*Exception: This requirement shall not be applicable until July 1, 2005, for cylinders 100 lb. Propane capacity and larger in stationary installations that are filled on site.*

## **Amendment 3**

Tentative Interim Amendment

Include the TIA 01-2 to Section 3.4.8.5 in the adoption of the 2001 Edition of NFPA 58 issued on July 19, 2002 with an effective date of August 8, 2002.

Reference: 3.4.8.5

TIA 01-2 (NFPA 58)

1. *In section 3.4.8 add section 3.4.8.5 to read as follows:*

**3.4.8.5** Cylinders used temporarily in buildings for flame effects before an audience shall be in accordance with the following:

- (a) The flame effect shall comply with NFPA 160, *Standard for Flame Effects Before an Audience*.
- (b) The maximum water capacity of individual cylinders shall be 50 lb (23 kg) {nominal 20 lb. (9.1 kg) LP-Gas capacity}.
- (c) If more than one such cylinder is located in the same room, the cylinders shall be separated by at least 20 ft (6.1 m).

#### **Amendment 4**

Delete section 1.5 i the 2001 Edition of NFPA 58 and insert in lieu thereof the following:

#### **1.5 Qualification of Personnel.**

1.5.1 Persons who transfer liquefied petroleum gas, who are employed to transport liquefied petroleum gas, or whose primary duties fall within the scope of this code shall be trained in proper handling procedures. Refresher training shall be provided at least every three years. The training shall be documented.

A 1.5 Completion of the Certified Employee Training Program of the National Propane Gas Association or of another training program that is substantially equivalent shall satisfy the training requirements of this section.