

NORTH CAROLINA DEPARTMENT OF LABOR
DIVISION OF OCCUPATIONAL SAFETY AND HEALTH
RALEIGH, NORTH CAROLINA

Field Information System

Operational Procedure Notice #80

Subject: Citing the 1991 Edition of Life Safety Code 101

A. Standard:

This standard adoption is included in 13 NCAC Subchapter 7F of the North Carolina Administrative Code (13 NCAC 7F.0 102) which states:

"All places of employment shall be designed, constructed, maintained, and occupied in accordance with the standards set out in the 1991 edition of the Code for Safety to Life from Fire in Buildings and Structures, ANSI/NFPA 101, which is hereby incorporated by reference. This incorporation shall not include any subsequent editions of amendments to this code. Copies may be obtained from the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269, for \$27.50. This rule supersedes any standards based on earlier editions of the Life Safety Code."

B. Discussion:

The adoption of the Life Safety Code is intended to provide additional protection for employees and to assist in the inspection process.

There have been many major structural fires in hotels, nightclubs and workplaces that have resulted in tragic loss of lives. For NCDOL/OSH, the most notable was the Imperial Food Products fire in Hamlet, NC. Proper consideration of exits, means of egress, and extinguishment systems would have prevented the fatalities, injuries and human suffering; resulting from structural fires.

The Life Safety Code is a consensus standard designed to consider these factors and to protect lives in the event of a fire. NCDOL/OSHA has adopted; the Life Safety Code, 1991 NFPA-101, to provide improved employee safety with regard to all aspects of building occupancies and means of egress.

C. Enforcement:

An evaluation of compliance with the 1991 NFPA-101 requirements shall be conducted on every inspection.

D. Citations:

Citations shall be issued to require employers to correct any condition which represents a violation of the 1991 NFPA-101.

Where a violative condition is addressed by both OSHA standards and the 1991 NFPA-101 requirements, NFPA-101 shall take precedence.

Where an employer has relied upon the interpretation of a local building inspector or Fire Marshall regarding code requirements, and the compliance officer can verify that the interpretation was provided as stated by the employer, a presumption will be made that the employer is in compliance. When a safety officer believes that the interpretation was wrong, the CSHO shall document the facts of the case and discuss with the supervisor whether or not to issue a citation.

Citations will be issued by citing 13 NCAC 07F.0102, stating the violated requirement in negative (like the SAVES) and referencing the Life Safety Code chapter and section number.

For example:

13 NCAC 07F.0102: The enclosing walls of exits were not arranged so as to provide a continuous path of travel, including landings and passageways, to an exit discharge. (Ref NFPA 101-1991 5-1.3.2):

a) west stairwell - landing of exit stairwell not enclosed.

E. Violation Classification:

A violation of the 1991 NFPA-101 may be classified as serious or other than serious depending on the conditions and circumstances related to the specific situation. Refer to your Operations Manual, Chapter IV.

Also attached for your use is a table which correlates the 1991 NFPA-101 with existing 1910, Subpart E standards. (Table is named "Attachment 1").

March 8, 1995

Date

Signed on Original

Charles N. Jeffress

Director

Attachment 1

Comparison of Subpart E and NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
Definitions	1910.35	Chapter 3, 4, 5	*Approved limit to listed/labeled in Subpart E, expanded in Code *Emergency Evacuation Plan not defined in Code, but incorporated in Chapter 31 *Emergency Escape Route not defined in Code: emphasis on multiple paths of egress	NFPA 101
Application	1910.36(a)	1-2.1, 1- 3.5, 1-6.1, 1- 6.3, 30- 1.32, 30- 6.1, 30-6.2	*Code requires documentation that alternative system/method/device is equivalent *Code includes vehicles and vessels used as buildings	NFPA 101
Sufficient Exits	1910.36(b)(1)	2-1	*Subpart E addresses EXITS; Code addresses EXITS AND OTHER SAFEGUARDS	NFPA 101
Arrangement to Prevent Danger	1910.36(b)(2)	2-2	*Code addresses Defend In Place concept	NFPA 101
Number and Location of Exits	1910.36(b)(3)	2-3	*Code references persons with impaired mobility	NFPA 101
Free Access; No Locks	1910.36(b)(4)	2-4	*Code requires accessibility for persons with impaired mobility	NFPA 101
Clearly Visible Exit Routes	1910.36(b)(5)	2-5	None	NFPA 101
Illumination of Exits	1910.36(b)(6)	2-6	*Subpart E addresses illumination if building is	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
			equipped; Code requires exit illumination	
Fire Alarm Facilities	1910.36(b)(7)	2-7	None	NFPA 101
At Least 2 Means of Egress	1910.36(b)(8)	2-8	None	NFPA 101
Protection of Vertical Openings	No Correlation	2-9	*Subpart E does not address vertical openings between floors	NFPA 101
Other Provisions for Safety	1910.36(b)(9)	2-10	None	NFPA 101
Occupation of Buildings Under Construction	1910.36(c)(1)	1-7.1	*Subpart E requires "Exit Facilities" to be in place prior to occupancy; Code requires compliance with all Code components (alarms, illumination, ect.) prior to occupancy.	NFPA 101
Continuous Fire protection and exits during repair/renovations	1910.36(c)(2)	1-7.3	None	NFPA 101
Flammable/ Explosive Substances	1910.36(c)(3)	31-1.1.2	None	NFPA 101
Maintenance of Exits Free of	1910.36(d)(1)	31-1.2.1	None	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
Obstructions				
Fire Protection Devices in Continuous Operation	1910.36(d)(2)	1-8.1, 31-1.3.1, 31-1.3.2	*Subpart E requires equipment to be in proper operating condition when provided Code requires it when required by the code.	NFPA 101
Exit Components	1910.37(a)	Chapter 5	*Code provides detailed requirements for all aspects of means of egress.	NFPA 101
1-Hour Fire Rating for Exits for 3 Stories or Less	1910.37(b)(1)	5-1.3.1(a)	None	NFPA 101
2-Hour Fire Rating for Exits for 4 or More Stories	1910.37(b)(2)	5-1.3.1(b)	*Code allows sprinklered apartment buildings and hotels to have 1-hour fire rating	NFPA 101
Self-Closing Fire Door	1910.37(b)(3)	5-1.3.1(c)	None	NFPA 101
Openings in Exit Enclosures	1910.37(b)(4)	5-1.3.1(d) and (e)	*Code allows penetrations/ openings in exit enclosures for duct work and pressurization equipment, sprinkler piping and standpipes, and electrical	NFPA 101
Exit Capacity	1910.37(c)(1)(i)(ii)	Section 5-3	*Subpart E requires a set number of persons per 22-inch width unit; Code uses formula: person using exit divided by no. of exits, multiplied by required inches per person.	NFPA 101
Ramp Widths and Designations	1910.37(c)(1) (iii)	5-2.5.2	*Code requires shallower slopes in deference to persons with impaired mobility.	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
Exit width Measurement Units	1910.37(c)(2)	Section 5-3	*See Exit Capacity, above.	NFPA 101
Measurement and Narrowest Point	1910.37(c)(3)	5-3.2, 5-2.1.4.3	*Subpart E allows handrails to extend into required width 5 inches but doors cannot narrow passage during swing. Code allows only 3 1/2 inches but allows door to narrow hallway to 1/2 during swing and 7 inches when fully open.	NFPA 101
Exit Capacity Sufficient for Occupant Load	1910.37(d)(1)	5-3.1.1	None	NFPA 101
Occupant Load Per Floor	1910.37(d)(2)	5-3.1.2	None	NFPA 101
Arrangement of Exits	1910.37(e)	5-5.1.3	*Subpart E requires exits to be remotely located from each other when more than 1 is required per story; Code requires same when more than 1 is required from building or portion.	NFPA 101
Exit Accessible At All Times	1910.37(f)(1)	5-5.1.1, 5-5.1.2	None	NFPA 101
Doors	1910.37(f)(2)	5-2.1.4.1, 5-2.1.4.2	Code recognizes and regulates sliding doors, horizontal and vertical security grilles, and revolving doors in specific occupancies and conditions.	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
No Exit through Rooms Subject to Locking	1910.37(f)(3)	5-5.2.1	None	NFPA 101
Exits Clearly Recognizable; Nothing May Obscure or Conceal	1910.37(f)(4)	5-5.2.2	None	NFPA 101
No Travel Toward High Hazard Areas	1910.37(f)(5)	5-5.1.7	None	NFPA 101
Minimum Exit Width	1910.37(f)(6)	5-3.4.1	*Subpart E minimum width for means of egress: 28 inches. Code minimum: 36 inches with exception of 28 inches for existing buildings.	NFPA 101
Conformance of Exterior Ways of Exit Access	1910.37(g)(1)	5-5.3.1	None	NFPA 101
Smooth Level Floors and Guards, Exterior Ways of Exit Access	1910.37(g)(2)	5-5.3.7	None	NFPA 101
Roof Protection for Exterior Ways of Exit Access	1910.37(g)(3)	5-5.3.8	*Subpart E allows exception to roof requirement if it serves as normal means of access; Code does not.	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
Reasonably Straight Path of Travel; No Obstructions (Exterior Ways of Exit Access)	1910.37(g)(4)	5-5.3.3, 5-5.3.4	None	NFPA 101
Dead-Ends in Exterior Ways of Exit Access	1910.37(g)(5)	5-5.3.5	*Code does not address unenclosed exits served by exterior means of access.	NFPA 101
Exterior Exit Access Projecting Beyond Outside Wall of Building	1910.37(g)(6)	5-5.3.6	None	NFPA 101
Exits Discharge to Street or Public Way	1910.37(h)(1)	5-7.1	None	NFPA 101
Clear Direction to Discharge: Stairs Continuing Downward Past Discharge Floor	1910.37(h)(2)	5-7.3	None	NFPA 101
Headroom	1910.37(i)	5-1.5	None	NFPA 101
Changes in Elevation	1910.37(j)	5-1.6	None	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
Construction of Means of Egress Free of All Obstructions	1910.37(k)(1)	5-1.7.1	None	NFPA 101
Continuously Maintained Means of Egress Free of All Obstructions	1910.37(k)(2)	5-1.7.3	*Code includes snow and ice as an obstruction.	NFPA 101
Alarms and Devices Installed on Exit Doors	1910.37(k)(3)	5-1.7.2	None	NFPA 101
Furnishings and Decorations	1910.37(l)(1)	31-1.2.2.1, 31-1.2.2.2, 31-1.2.2.3	*Code prevents railings, barriers, and gates from becoming obstructions.	NFPA 101
No Flammable/ Explosive Decorations or Furnishings	1910.37(l)(2)	31-1.4	*Code requires flammability tests, cigarette burn tests, and mattress flammability tests.	NFPA 101
Automatic Sprinkler Systems	1910.37(m)	31-1.3.6	*Code requires evacuation of building or approved fire watch when sprinklers are out of service longer than 4 hours.	NFPA 101
Fire Alarm Signaling Systems	1910.37(n)	7-6.1.4	*Subpart E requires maintenance and testing to requirements of 1910.165(d). Code requires same to NFPA standards 70, 71, 72, 72E, 74, and 1221.	NFPA 101

Topic	Subpart E	NFPA 101	Difference	Recommended
Fire Retardant Paints	1910.37(o)	6-5.6.2	None	NFPA 101
Readily Visible Exit Sign	1910.37(q)(1)	5-10.1.2, 5-10.1.3	None	NFPA 101
NOT AN EXIT	1910.37(q)(2)	5-10.4.2	*Code gives specific design requirements for No Exit Signs, but excepts existing signs.	NFPA 101
Exit Sign Requirements	1910.37(q)(3)	5-10.1.5	None	NFPA 101
Exit Sign Distinctive Color	1910.37(q)(4)	5-10.1.5	None	NFPA 101
Directional Exit Signs	1910.37(q)(5)	5-10.4.1.2	*Code gives specific design standards for Directional Exit Signs, but excepts existing signs.	NFPA 101
Exit Sign Illumination	1910.37(q)(6)	Subsection 5-10.3	*Code does not have specific requirements for external light size.	NFPA 101
Internally Illuminated Exit Signs	1910.37(q)(7)	5-10.3.2, 5-10.3.3	*Subpart E requires internally illuminated exit signs where lights can be dimmed. Code requires 5 foot candles on face of sign, externally or internally, at all times.	NFPA 101
Design Specifications of Exit Signs	1910.37(q)(8)	5-10.2	*Code provides more design specifications for the word Exit on signs.	NFPA 101
Emergency Action Plans and Fire	1910.38	Chapter 31	*Subpart E requires plans wherever required by an OSHA standard. Code requires	NFPA 101 for scope in all occupancies

Topic	Subpart E	NFPA 101	Difference	Recommended
Prevention Plans			written plans for Health Care, Detention and Correctional, and board and care homes; employee evacuation training in all occupancies except industrial and storage; and employee fire extinguisher use training in assembly, detention, mercantile, and business occupancies.	except 2; Subpart E for Scope in Industrial and Storage Occupancies; Subpart E for Plan Details.