

# WELCOME

Larry Horvath

Director Bureau of Community and Health Systems

# INTRODUCTION BUISNESS

JEFF TODY-FIRE SAFETY INSPECTOR-LANSING REGION

EMERGENCY EXITS

RESTROOMS

# INTRODUCTIONS

- JIM SCOTT-MANAGER HEALTH FACILITIES ENGINEERING
- DON CHRISTENSEN- FIRE SAFETY INSPECTOR- SOUTH EASTERN MICHIGAN DETROIT
- JOHN HAYNES – FIRE SAFETY INSPECTOR - GRAND RAPIDS WEST COAST TO CADILLAC
- PIER GEORGE ZANONI- HEALTH FACILITIES ENGINEER/FIRE SAFETY INSPECTOR
- ED HALE- FIRE SAFETY INSPECTOR – NORTHERN LOWER MICHIGAN UPPER PENINSULA
- MICHELLE ROEPKE- DIRECTOR FEDERAL SURVEY AND CERTIFICATION DIVISION

# **LIFE SAFETY CODE**

**DOCUMENTATION**

**DOCUMENTATION REVIEW**



# DOCUMENTATION IS.....?

- THE HEART OF A LIFE SAFETY CODE PROGRAM
- IF IT IS NOT DOCUMENTED IT DID NOT HAPPEN
- PUBLIC AND PRIVATE RECORD FOIA
- LEGAL DOCUMENTS



# WHO REQUIRES DOCUMENTATION?

- CMS- CHAPTER 42 CFR SUBPART 483.70(A)



- STATE OF MICHIGAN-



- NFPA- LSC 101 2000



# FROM THE FRONT DOOR



# CATEGORICAL WAIVERS

CMS Survey and Certification Letter 13-58

CMS Survey and Certification letter 12-21

# CATEGORICAL WAIVERS

## Waiver Process

Providers and suppliers that want to take advantage of one or more of the categorical waivers identified below must formally elect to use one or more of the waivers and must document their election decision. If a provider/supplier conforms to the requirements identified for each categorical waiver elected, it will not need to apply specifically to CMS for the waiver, nor will it need to wait until being cited for a deficiency in order to use this waiver. At the entrance conference for any survey assessing LSC compliance, a provider/supplier that has elected to use a categorical waiver must notify the survey team of this fact, and that it meets the applicable waiver provisions. It is not acceptable for a healthcare facility to first notify surveyors of waiver election after a LSC citation has been issued.

The survey team will review the provider's/supplier's documentation electing to use one or more of the categorical waivers and confirm it is meeting all applicable categorical waiver provisions. This will ensure an adequate level of protection is afforded. The waiver(s) elected by the provider/supplier must be described under Tag K000. Categorical waivers do not need to be cited as deficiencies nor do they require Regional Office approval. Therefore the applicable field on the Form CMS-2786 should be marked as "Facility Meets, Based Upon, 3. Waivers." If the survey team determines that the waiver provisions are not being met, the provider/supplier will be cited as a deficiency under §482.41(b)(2), §485.623(d)(3), §483.70(a)(2), §416.44(b)(2), or §418.110(d)(2), as appropriate.

# CATEGORICAL WAIVERS

## FIRST PIECE OF DOCUMENTATION YOU MUST PROVIDE

- OFFICIAL DOCUMENT ON LETTERHEAD
- DATE CREATED

# CATEGORICAL WAIVERS

## CMS Survey and Certification Letter 12-21

Due to the complex nature of some of the requirements, each waiver request will have to be evaluated separately in the interest of fire safety and to ensure that the facility has followed all LSC requirements and the equipment has been installed properly by the facility. All waiver requests will be processed in the regular fashion with input from the State Survey Agency and final approval by the CMS Regional Office.

S and C 13-58



### **8. Clarification of Process for LSC Waivers permitted under S&C-12-21**

CMS memorandum S&C-12-21-LSC, dated March 9, 2012, also provided for categorical waivers of several provisions of the 2000 LSC, but required each provider/supplier waiver to be evaluated separately before a survey was to be conducted, with final approval by the CMS Regional Office. Providers/suppliers seeking to take advantage of these categorical waivers may now use the categorical waiver process described above, so long as they are in compliance with all other requirements identified in S&C-12-21-LSC.

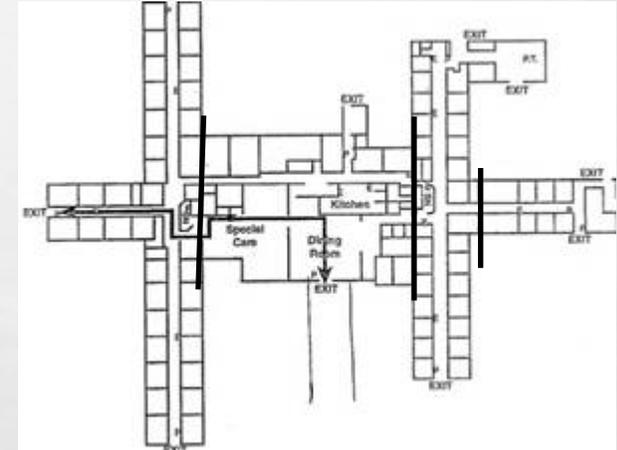
# DURING THE SURVEY- DOCUMENTATION REVIEW

- **CONFERENCE ROOM**
- **DOCUMENTATION IN 1 PLACE AND AVAILABLE**
- **PLAYING "FETCH"**



# WHAT IS REQUIRED FOR DOCUMENTS?

- FLOOR PLAN WITH IDENTIFIED SMOKE BARRIER WALLS
- WRITTEN PLANS
- POLICES
- INSPECTION TESTING MAINTENANCE REPORTS



Copy of floor plan or building Layout

Smoke Barrier Walls Identified

# WRITTEN PLANS

- FIRE EVACUATION PLAN
- FIRE WATCH/IMPAIRMENT PROCEDURE



# FIRE EVACUATION PLAN

- ALSO CALLED??? DISASTER PLAN??? FIRE ESCAPE PLAN???
- WHAT IS THE STAFF GOING TO DO? THEY DO WHAT THE BOOK TELLS THEM TO DO.
- COVER THE TYPES OF EVACUATIONS
- LOGISTICS, CONTACT NUMBERS
- R. A. C. E.

# FIRE WATCH

Fire Watch Policy:     Constant Rounds     Sole Duties

## IMPAIRMENT PROCEDURE

- CONTINUOUS
- SOLE DUTY
- DOCUMENTED WITH LOG- WHERE?



# POLICES

ON OFFICAL LETTERHEAD

- SMOKING
- ABHR
- OXYGEN USE IN BEAUTY SHOP
- PORTABLE HEATERS

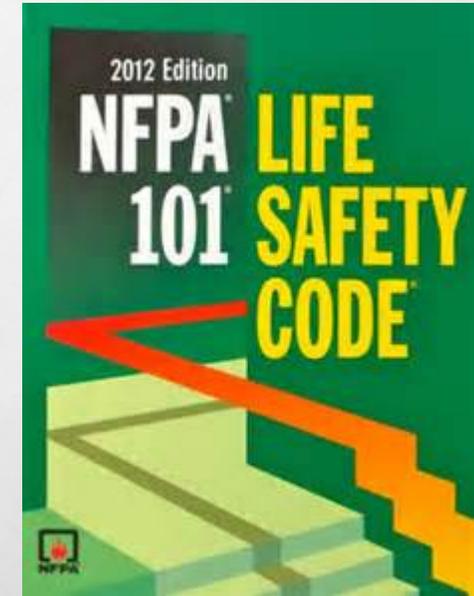
**Smoking Policy**

**ABHR Policy**

REVISION / REVIEW DATES

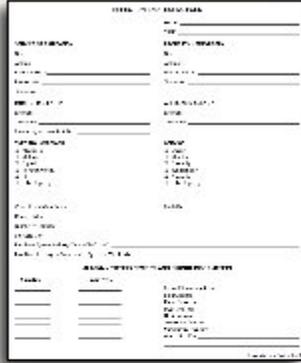
# INSPECTION, TESTING, MAINTENANCE

- NFPA 25- WATER BASED
- NFPA 72-FIRE ALARM
- NFPA 96-KITCHEN HOOD
- NFPA 110-GENERATOR / MANUFACTURE RECOMMENDATIONS
- NFPA 10-EXTINGUISHERS
- NFPA 70-ELECTRICAL

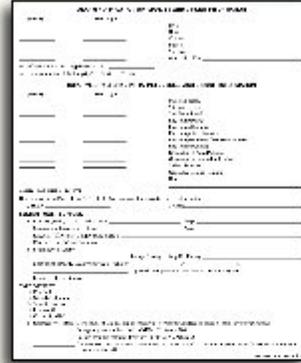


# NFPA Inspection & Installation Sample Form

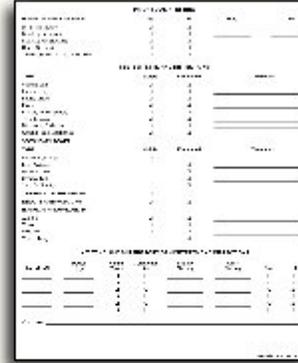
Click on each page image below to view a printable version of that page.

Thumbnail of the first page of the NFPA form, showing the header and initial sections for general information and inspection details.

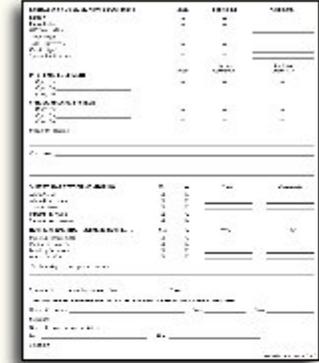
PDF, 33 KB

Thumbnail of the second page of the NFPA form, containing detailed inspection criteria and a checklist for various components.

PDF, 44 KB

Thumbnail of the third page of the NFPA form, featuring a table for recording inspection results and a section for the inspector's signature and date.

PDF, 35 KB

Thumbnail of the fourth page of the NFPA form, which includes a section for additional notes, a table for recording test results, and a final signature line.

PDF, 36 KB

- Not required to use NFPA form
- Custom form MUST NOT require less information

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If you do not have the Adobe Acrobat Reader software you can download it by clicking the following link: [Adobe Acrobat Reader download page.](#)

Internet Search: NFPA Sample Inspection Forms

# Code Requirements for Visual Inspections

## // Daily/Weekly

<b>Sprinklers</b>	<p>Gauges (Dry, Preaction, and Deluge Systems)            Valves, Valve Components, Trim Inspections                Sealed Control Valves                Master Pressure Reducing</p> <p>Fire Pump System                Casing Relief Valves                Pressure Relief Valves                Pump House, Heating Ventilating Louvers</p> <p>Backflow Prevention Assemblies                Reduced Pressure                Control Valves (locked/supervised)</p> <p>Standpipe                Sealed Control Valves                Gauges (Automatic Dry Standpipes)</p>
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## // Monthly

<b>Portable Fire Extinguishers</b> <small>NFPA 10</small>	<p>Location Pressure Tamper Indicator, Hose/Nozzle Sign, Hanger, Hazard Extinguishers Assessment, HMIS Label            Location in designated place            No obstruction to access or visibility            Operating instructions on nameplate legible and facing outward            Safety seals and tamper indicators not broken or missing            Fullness determined by weighing or "hefting"            Examination for obvious physical damage, corrosion, leakage or clogged nozzle            Pressure gauge reading or indicator in the operable range or position            Condition of tires, wheels, carriage, hose, and nozzle checked (for wheeled units)            HMIS Label in place</p>
<b>Automatic Fire Alarm</b> <small>NFPA 72, ULC S536</small>	Control Equipment: Fire Alarm Systems Unmonitored for Alarm, Supervisory, and Trouble Signals
<b>Sprinklers</b> <small>NFPA 25</small>	Gauges (wet, dry, preaction, and deluge systems) Valves, Valve Components, Trim Inspections

## // Semi-Annually (continued)

<b>Automatic Fire Alarm</b> <small>NFPA 72, ULC S536</small>	<p>Control Equipment: Fire Alarm Systems Unmonitored for Alarm, Supervisory, and Trouble Signals                Control Unit Trouble Signals                Emergency Voice/Alarm Communications Equipment                Remote Annunciators</p> <p>Batteries                Sealed Lead-Acid</p> <p>Initiating Devices                Air Sampling Smoke Detectors                Duct Smoke Detectors                Electromechanical Releasing Devices                Fire Extinguishing System(s) or Suppression System(s) Switches                Fire Alarm Boxes (Pull Stations)                Heat Detectors                Smoke Detectors                Interface Equipment                Alarm Notification Appliances – Supervised</p> <p>Supervising Station Fire Alarm Systems – Transmitters            DACT</p>
<b>Sprinklers</b> <small>NFPA 25</small>	<p>Private Fire Service Mains            Monitor Nozzles</p>

## // Annually

<b>Hood Suppression</b> <small>NFPA 17, 17A</small>	Fusible Links Cartridge (Hydrostatic Test/Replacement) - PYROCHEM
<b>Portable Fire Extinguishers</b> <small>NFPA 10</small>	All of monthly inspection, plus conductivity test (Carbon Dioxide), Determination of 6 year or Hydrotest, inspection of shell and nameplate Hanger/seismic bracing
<b>Automatic Fire Alarm</b> <small>NFPA 72, ULC S536</small>	<p>Control Equipment: Fire Alarm Systems Monitored for Alarm, Supervisory, and Trouble Signals ULC S536                Fuses                Interfaced Equipment                Lamps and LEDs                Batteries (seismic) Bracing</p>

# Code Requirements for Functional Testing

## // Monthly

Automatic Fire Alarm ULC 5536	Daily and Monthly Status Check Supervisory field devices, Supervisory circuits and DCL, in-and-out conductors of supervised circuits, ancillary device control circuit, one initiating field device, operation of common audible and visual trouble signals, one emergency phone, voice paging capability to one zone. Battery terminals are clean and lubricated, terminal clamps are secure, electrolyte level and specific gravity.
Portable Fire Extinguishers NFPA 10	Ensure in proper operating condition. Safety seals, tags, pressure gauge readings, HMIS Label
Emergency Lights NFPA 101	30 seconds quick check and battery check
Fire Pump NFPA 25	Weekly system procedures. Electric 10 min. Diesel 30 min.

## // Quarterly

Sprinklers NFPA 25	Mechanical Water Flow Devices Valves, Valve Components Main Drain (with Backflow Device) Low Air Pressure Alarms Quick Opening Devices Priming Water
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## // Semi-Annually

Hood Suppression NFPA 17A	All Kitchen Suppression Systems
Sprinklers NFPA 25	Valve Supervisory Devices
Automatic Fire Alarm NFPA 72	Batteries - Fire Alarm Systems Sealed Lead-Acid – Load Voltage Test

## // Annually

Portable Fire Extinguishers NFPA 10	Conductivity test of all carbon dioxide hose assemblies in proper operating condition. Safety seals, tags, pressure gauge reading.
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## // Annually (continued)

Sprinklers NFPA 25	Standpipe Main Drain Test Hose Valves Valves (all types) Private Fire Service Mains Monitor Nozzles Hydrants Fire Pump System Full Flow Alarm Signals Annual Maintenance
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## // 3 Year Interval

Sprinklers NFPA 25	Dry System Full Flow Trip Test Dry System Air Leakage
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## // 5 Year Interval

Portable Fire Extinguishers NFPA 10	Hydrostatic testing of Carbon Dioxide, wet chemical and foam Dry System Air Leakage Fire Extinguishers Hydrostatic testing of cartridges associated with portable fire extinguishers and wheeled units Hydrostatic testing of carbon dioxide hoses equipped with a shut-off valve
Sprinklers NFPA 25	Gauges (Test or Replace) Sprinklers – Extra-high Temperature/Corrosive Atmosphere Fire Department Connections Hydrostatic Test Siamese Connections, (city of Pittsburgh every 3 years) Standpipe - Full Flow Test Remote Point Hose Connection Pressure Reducing Valves (full flow) Hydrostatic Test Manual/Dry Standpipes 5 year test for new hoses and every 3 years thereafter

# INSPECTION REQUIREMENTS AND FREQUENCIES

- INTERNET SEARCH: TYCOSIMPLEXGRINNELL CODE REQUIREMENTS
- [WWW.TYCOSIMPLEXGRINNELL.COM](http://WWW.TYCOSIMPLEXGRINNELL.COM)

# PUTTING IT ALL TOGETHER

- VISUAL MANGEMENT TOOLS
- BOOKLETS/BINDERS FOR PLANS/PROCEDURES-MULTIPLE COPIES



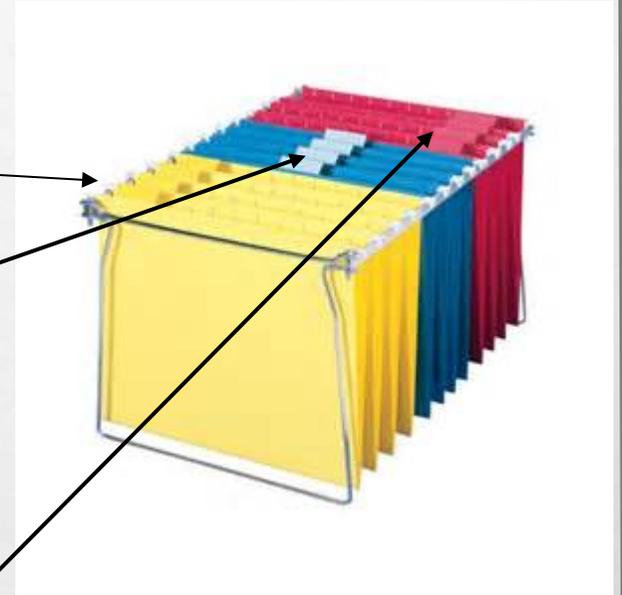
# FILE FOLDERS

- ARRANGE BY FREQUENCY AND TYPE
  - HIGHEST FREQUENCY TO LOWEST
  - EVERY FOLDER TABBED

Weekly  
Inspections

Monthly  
Inspections

Quarterly  
Inspections



# BOOKLETS/BINDERS

PERFECT FOR WRITTEN PLANS

- QUICK ACCESS
- EASY TO UNDERSTAND AND ACT ON



# VISUAL MANAGEMENT TOOLS

- DRY-ERASE BOARD
  - ALL REQUIREMENTS LISTED IN ROWS MARKED AFTER PERFORMED
  - REQUIREMENTS LISTED BY FREQUENCY HIGH TO LOW
  - MARK OFF WHEN COMPLETE



# HOMEWORK- WATCH

- [HTTP://WWW.CBSNEWS.COM/VIDEOS/NURSING-HOME-FIRE-RISKS/](http://www.cbsnews.com/videos/nursing-home-fire-risks/)

# THE END

- QUESTIONS?
- COMMENTS?
- COMPLAINTS?

BREAK FOR CHANGE OVER



# Most Cited K-Tags in an LSC Survey

John Hanes  
Fire Safety Inspector  
State of Michigan – LARA  
Health Facilities Engineering Section

# Objectives

**Requirements For Participation In Medicare/Medicaid**

**The Life Safety Code Survey**

**Most Common Citations**

# Legislation that Affects Facilities Participating in Medicare/Medicaid

42 CFR Subpart 483.70(a)

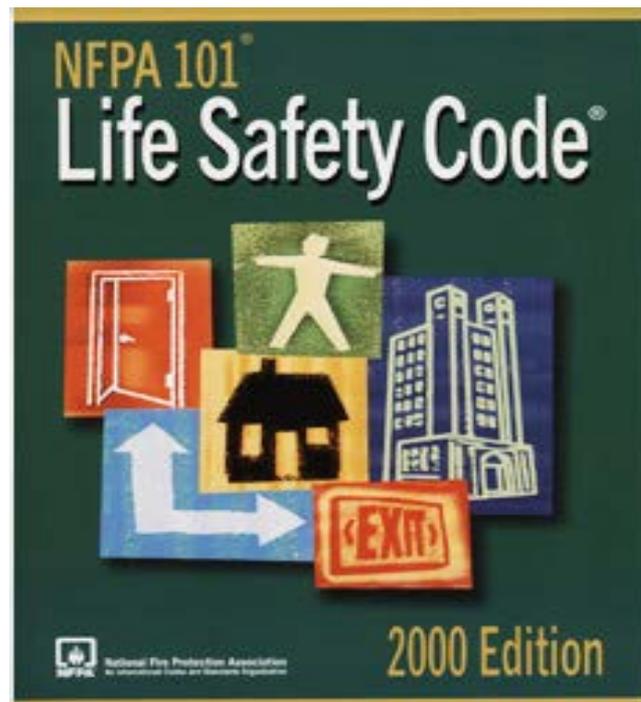
“Life Safety From Fire”

Requires that the facility must meet the applicable provisions of the 2000 edition of the Life Safety Code of the National Fire Protection Association (NFPA 101).



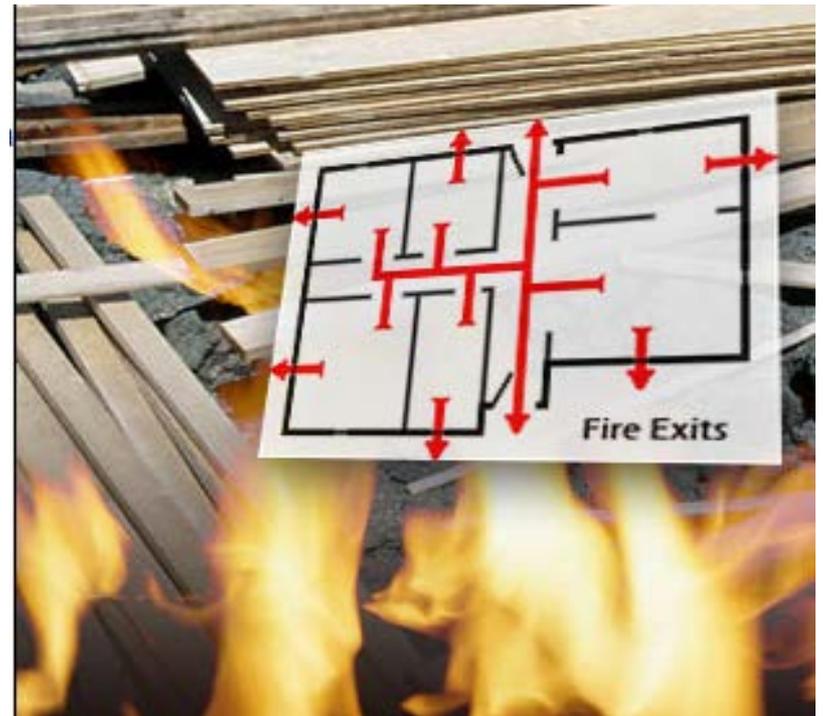
# Life Safety Code

The LSC is a set of fire protection requirements that, if met, provide reasonable degree of safety from fire



# Life Safety Code Survey

Covers construction, protection, and operational features that provide safety to life from fire, smoke and panic.



# Reporting Citations

CMS reports the citations in order of frequency and locations

## Citation Frequency Report

### Selection Criteria

**Begin Year:** 2015  
**End Year:** 2015  
**Display Options:** Display top 25 tags  
**Provider and Supplier Type(s):** Dually Certified SNF/NFs - Medicare and Medicaid  
**State:** Michigan  
**Deficiency Tags:** Any K Codes  
**Survey Focus:** Life Safety  
**Survey Type:** Traditional

Year Type:  Year:  Quarter:

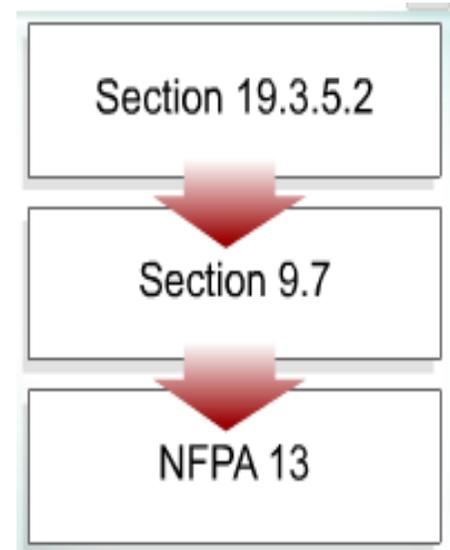
State	Tag #	Tag Description	# Citations	% Providers Cited	% Surveys Cited
		<b>Totals represent the # of providers and surveys that meet the selection criteria specified above.</b>		Michigan Active Providers=330	Total Number of Surveys=161
	<a href="#">K0147</a>	ELECTRICAL WIRING AND EQUIPMENT	100	28.5%	62.1%
	<a href="#">K0062</a>	SPRINKLER SYSTEM MAINTENANCE	100	29.1%	62.1%
	<a href="#">K0029</a>	HAZARDOUS AREAS - SEPARATION	97	28.2%	60.2%
	<a href="#">K0025</a>	SMOKE PARTITION CONSTRUCTION	54	16.1%	33.5%
	<a href="#">K0051</a>	FIRE ALARM SYSTEM	51	15.2%	31.7%
	<a href="#">K0018</a>	CORRIDOR DOORS	41	12.4%	25.5%
	<a href="#">K0038</a>	EXIT ACCESS	34	10.0%	21.1%
	<a href="#">K0027</a>	FURNISHING AND DECORATIONS	33	10.0%	20.5%
	<a href="#">K0064</a>	PORTABLE FIRE EXTINGUISHERS	29	8.5%	18.0%
	<a href="#">K0144</a>	GENERATORS INSPECTED/TESTED	28	8.5%	17.4%
	<a href="#">K0069</a>	COOKING EQUIPMENT	24	7.0%	14.9%
	<a href="#">K0052</a>	TESTING OF FIRE ALARM	20	6.1%	12.4%
	<a href="#">K0026</a>	MEDICAL GAS SYSTEM	19	5.8%	11.8%
	<a href="#">K0054</a>	SMOKE DETECTOR MAINTENANCE	18	5.5%	11.2%
	<a href="#">K0050</a>	FIRE DRILLS	17	4.5%	10.6%
	<a href="#">K0056</a>	AUTOMATIC SPRINKLER SYSTEM	14	4.2%	8.7%
	<a href="#">K0022</a>	DOORS IN SMOKE PARTITIONS	14	4.2%	8.7%
	<a href="#">K0046</a>	EMERGENCY LIGHTING	13	3.9%	8.1%
	<a href="#">K0146</a>	ALTERNATE SOURCE OF POWER	12	3.0%	7.5%
	<a href="#">K0022</a>	ENCLOSURE DOORS	12	3.6%	7.5%

# Life Safety Code Citations



A “K” Tag is a citation observed during the LSC Survey

That refers to sections of the LSC as well as other NFPA Publications



# Most Common Citations

The requirement at 42 CFR Subpart 483.70(a) is NOT MET as evidenced by:



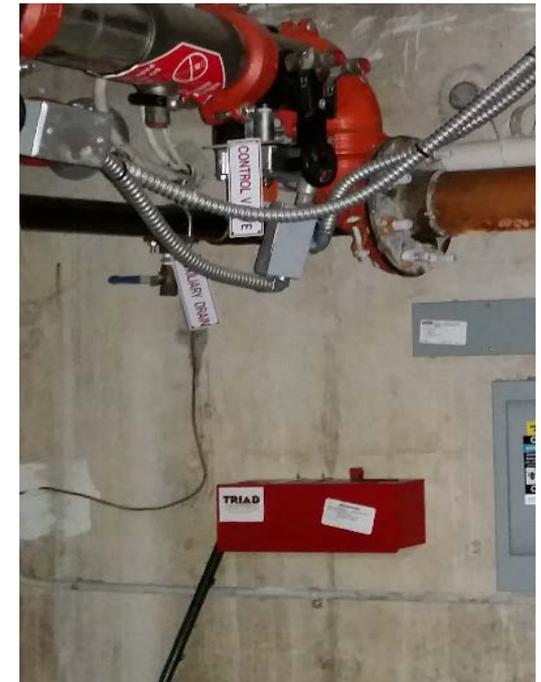
# K147 ELECTRICAL WIRING AND EQUIPMENT

Electrical wiring and equipment shall be in accordance with National Electrical Code. 9-1.2 (NFPA 99) 18.9.1, 19.9.1



# K62 SPRINKLER SYSTEM MAINTENANCE

Automatic sprinkler systems are continuously maintained in reliable operating condition and are inspected and tested periodically. 18.7.6, 19.7.6, 4.6.12, NFPA 13, NFPA 25, 9.7.5



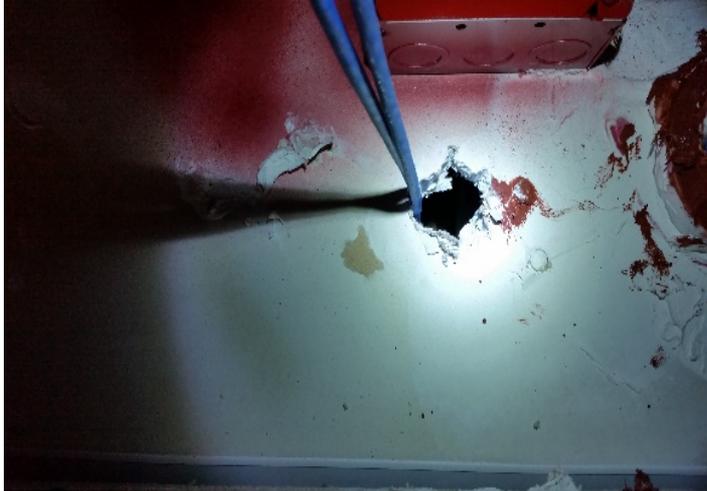
# K29 HAZARDOUS AREAS – SEPARATION

One hour fire rated construction (with  $\frac{3}{4}$  hour fire-rated doors) or an approved automatic fire extinguishing system in accordance with 8.4.1 and/or 19.3.5.4 protects hazardous areas. When the approved automatic fire extinguishing system option is used, the areas shall be separated from other spaces by smoke resisting partitions and doors. Doors shall be self-closing and non-rated or field-applied protective plates that do not exceed 48 inches from the bottom of the door are permitted. 19.3.2.1



# K25 SMOKE BARRIER CONSTRUCTION

Smoke barriers shall be constructed to provide at least a one half hour (existing) one hour (new) fire resistance rating and constructed in accordance with 8.3. Smoke barriers shall be permitted to terminate at an atrium wall. Windows shall be protected by fire-rated glazing or by wired glass panels in approved frames 8.3, 19.3.7.3, 18.3.7.3, 19.3.7.5, 18.3.7.5



# K51 FIRE ALARM SYSTEM

A fire alarm system is installed with systems and components approved for the purpose in accordance with NFPA 70, National Electric Code and NFPA 72, National Fire Alarm Code to provide effective warning of fire in any part of the building. Fire alarm system wiring or other transmission paths are monitored for integrity. Initiation of the fire alarm system is by manual means and by any required sprinkler system alarm, detection device, or detection system. Manual alarm boxes are provided in the path of egress near each required exit. Manual alarm boxes in patient sleeping areas shall not be required at exits if manual alarm boxes are located at all nurse's stations. Occupant notification is provided by audible and visual signals. In critical care areas, visual alarms are sufficient. The fire alarm system transmits the alarm automatically to notify emergency forces in the event of fire. The fire alarm automatically activates required control functions. System records are maintained and readily available. 18.3.4, 19.3.4, 9.6



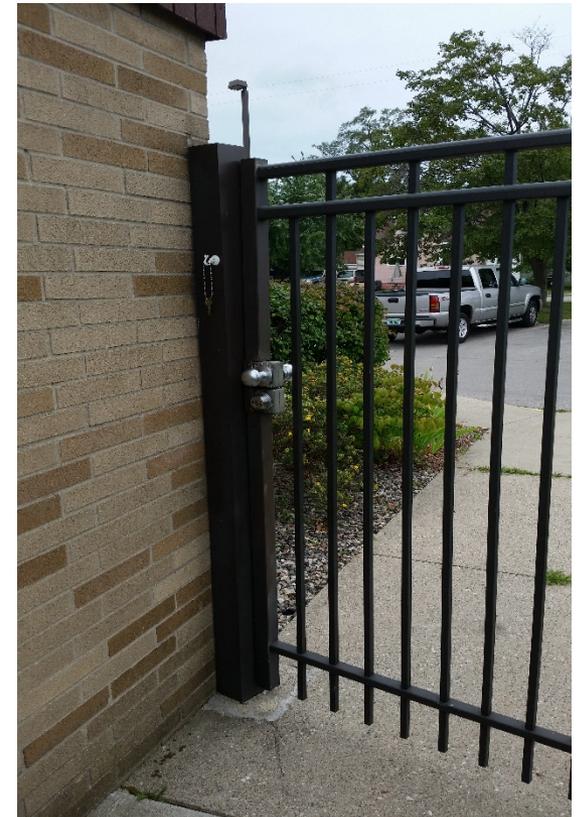
# K18 CORRIDOR DOORS

Doors protecting corridor openings in other than required enclosures of vertical openings, exits, of hazardous areas shall be substantial doors, such as those constructed of 1 ¾ inch solid-bonded core wood, or capable of resisting fire for at least 20 minutes. Clearance between bottom of door and floor covering is not exceeding 1 inch. Doors in fully sprinklered smoke compartments are only required to resist the passage of smoke. There is no impediment to the closing of the doors. Hold open devices that release when the door is pushed or pulled are permitted. Doors shall be provided with a means suitable for keeping the door closed. Dutch doors meeting 19.3.6.3.6 are permitted. Door frames shall be labeled and made of steel or other materials in compliance with 8.2.3.2.1. Roller latches are prohibited by CMS regulations in all health care facilities. 19.3.6.3, 18.3.6.3



# K38 EXIT ACCESS

Exit access is so arranged that exits are readily accessible at all times in accordance with 7.1, 18.2.1, 19.2.1



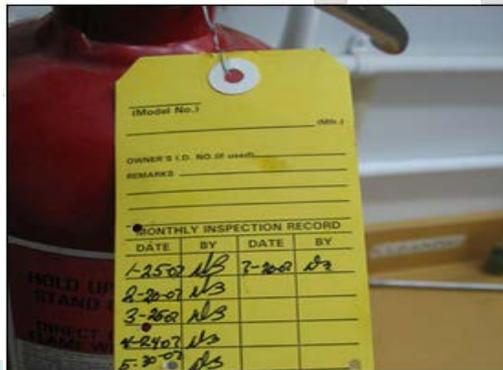
# K72 FURNISHING AND DECORATIONS

Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency. No furnishings, decorations, or other objects shall obstruct exits, access thereto, egress there from, or visibility thereof shall be in accordance with 7.1.10, 18.2.1, 19.2.1



# K64 PORTABLE FIRE EXTINGUISHERS

Portable fire extinguishers shall be installed, inspected, and maintained in all health care occupancies in accordance with 9.7.4.1, NFPA 10. 18.3.5.6, 19.3.5.6



MONTHLY INSPECTION RECORD			
DATE	BY	DATE	BY
1-25-07	AB	7-20-07	AB
2-20-07	AB		
3-25-07	AB		
4-20-07	AB		
5-20-07	AB		

OWNER'S I.D. NO. OF UNIT: \_\_\_\_\_  
REPAIRS: \_\_\_\_\_



# K144 GENERATORS INSPECTED/TESTED

Generators inspected weekly and exercised under load for 30 minutes per month and shall be in accordance with NFPA 99 and NFPA 110. 3-4.4.1 and 8-4.2 (NFPA 99), Chapter 6 (NFPA 110)

2021 GENERATOR LOG										FACILITY: CSC				
Start Time	Stop Time	Elapsed Run Time	Oil Pressure	Oil Temperature	Fuel Oil Pressure	Water Temp.	Battery Amperage	Phase 1		Phase 2		Phase 3		Frequency
								Volts	Amperage	Volts	Amperage	Volts	Amperage	
3265	3270		60	N/A	N/A	160	14	460	460	460	60			
3270	3276		60	N/A	N/A	160	14	460	460	460	60			
3276	3282		60	N/A	N/A	160	14	460	460	460	60			
3282	3288	05	60	N/A	N/A	160	14	460	460	460	60			
3288	3293		60	N/A	N/A	160	14	460	460	460	60			
3293	3317	1.45												
3317	3323		60	N/A	N/A	160	14	460	460	460	60			
3323	3367	30	62	N/A	N/A	160	14	460	460	460	60			
3367	3373		62	N/A	N/A	160	14	460	460	460	60			
3373	3378		62	N/A	N/A	160	14	460	460	460	60			
3378	3383	30	62	N/A	N/A	160	14	460	460	460	60			
3383	3389		62	N/A	N/A	160	14	460	460	460	60			
3389	3394		62	N/A	N/A	160	14	460	460	460	60			



# K69 COOKING EQUIPMENT

Cooking facilities shall be protected in accordance with 9.2.3.18.3.2.6, 19.3.2.6, NFPA 96



# K52 TESTING OF FIRE ALARM

A fire alarm system required for life safety shall be tested, and maintained in accordance with NFPA 70 National Electrical Code and NFPA 72 National Fire Alarm Code and records kept readily available. The system shall have an approved maintenance and testing program complying with applicable requirements of NFPA 70 and 72. 9.6.1.4, 9.6.1.7



FIRE ALARM AND EMERGENCY COMMUNICATION SYSTEM INSPECTION AND TESTING FORM	
<i>To be completed by the system inspector or tester at the time of the inspection or test. It shall be permitted to modify this form as needed to provide a more complete and/or clear record. Insert N/A in all unused lines. Attach additional sheets, data, or calculations as necessary to provide a complete record.</i>	
Date of this inspection or test: <u>12/22/2010</u>	Time of inspection or test: <u>8:00 AM</u>
<b>1. PROPERTY INFORMATION</b>	
Name of property: <u>Main Street Towers</u>	
Address: <u>12345 Main Street, Pleasantville, NY 01111</u>	
Description of property: <u>40-story high-rise building with an adjacent 1-story parking structure</u>	
Occupancy type: <u>B1</u>	
Name of property representative: <u>Mary Morris, Property Manager, Mary's Management Company</u>	
Address: <u>12345 Main Street, Pleasantville, NY 01111</u>	
Phone: <u>222/222-2222</u>	Fax: <u>333/333-3333</u> E-mail: <u>mm@mmc.com</u>
Authority having jurisdiction over this property: <u>Inspector Jack Jones, Pleasantville Fire Department</u>	
Phone: <u>444/444-4444</u>	Fax: <u>555/555-5555</u> E-mail: <u>jackjones@pfd.org</u>
<b>2. INSTALLATION, SERVICE, AND TESTING CONTRACTOR INFORMATION</b>	
Service and/or testing organization for this equipment: <u>Fred's Fine Fire Alarm Systems</u>	
Address: <u>789 Broad Street, Pleasantville, NY 01113</u>	
Phone: <u>888/888-8888</u>	Fax: <u>999/999-9999</u> E-mail: <u>fredfriendly@ffas.com</u>
Service technician or tester: <u>Fred Friendly</u>	
Qualifications of technician or tester: <u>NICET IV No 888888</u>	
A contract for test and inspection in accordance with NFPA standards is in effect as of: <u>6/11/2010</u>	
The contract expires: <u>6/11/2011</u> Contract number: <u>45678</u> Frequency of tests and inspections: <u>Quarterly</u>	
Monitoring organization for this equipment: <u>Manny's Monitoring</u>	
Address: <u>899 First Street, Pleasantville, NY 01114</u>	
Phone: <u>777/777-7777</u>	Fax: <u>777/777-7777</u> E-mail: <u>manny@mannys.com</u>
Entity to which alarms are retransmitted: <u>Pleasantville Fire Department</u> Phone: <u>444/444-4444</u>	
<b>3. TYPE OF SYSTEM OR SERVICE</b>	
<input type="checkbox"/> Fire alarm system (nonvoice)	
<input type="checkbox"/> Fire alarm with in-building fire emergency voice alarm communication system (EVACS)	
<input type="checkbox"/> Mass notification system (MNS)	
<input checked="" type="checkbox"/> Combination system, with the following components:	
<input checked="" type="checkbox"/> Fire alarm <input checked="" type="checkbox"/> EVACS <input checked="" type="checkbox"/> MNS <input checked="" type="checkbox"/> Two-way, in-building, emergency communication system	
<input type="checkbox"/> Other (specify): <u>N/A</u>	
© 2009 National Fire Protection Association	
NFPA 72 (p. 1 of 11)	

# K76 MEDICAL GAS SYSTEM

Medical gas storage and administration areas shall be protected in accordance with NFPA 99, Standard for Health Care Facilities.

Oxygen storage locations of greater than 3,000 cu. ft. are enclosed by a one-hour separation. Locations for supply systems of greater than 3,000 cu. ft. are vented to the outside. 4-3.1.1.2 (NFPA 99), 8.3.1.11.1 (NFPA 99), 18.3.2.4, 19.3.2.4



**FULL  
OXYGEN  
CYLINDERS  
READY FOR USE**



# K54 SMOKE DETECTOR MAINTENANCE

All required smoke detectors, including those activating door hold-open devices, are approved, maintained, inspected and tested in accordance with the manufacturer's specifications.

9.6.1.3



# K50 FIRE DRILLS

Fire drills include the transmission of a fire alarm signal and simulation of emergency fire conditions. Fire drills are held at unexpected times under varying conditions, at least quarterly on each shift. The staff is familiar with procedures and is aware that drills are part of established routine. Responsibility for planning and conducting drills is assigned only to competent persons who are qualified to exercise leadership. Where drills are conducted between 9:00 PM and 6:00 AM a coded announcement may be used instead of audible alarms. 18.7.1.2, 19.7.1.2

Fire Drill Record												
Shift	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7-3												
3-11												
11-7												



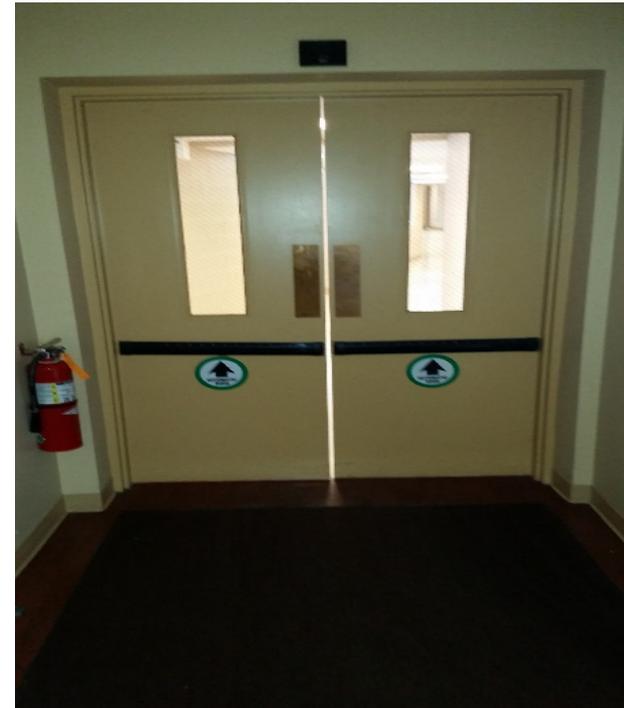
# K56 AUTOMATIC SPRINKLER SYSTEM

Where required by section 19.1.6, Health care facilities shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with section 9.7. Required sprinkler systems are equipped with water flow and tamper switches which are electrically interconnected to the building fire alarm. In Type I and II construction, alternative protection measures shall be permitted to be substituted for sprinkler protection in specific areas where State or local regulations prohibit sprinklers. 19.3.5, 19.3.5.1, NFPA 13



# K27 DOORS IN SMOKE BARRIERS

Doors in smoke barriers have at least a 20 minute fire protection rating or are at least 1¾ inch thick solid bonded core wood. Non-rated protective plates that do not exceed 48 inches from the bottom of the door are permitted. Horizontal sliding doors comply with 7.2.1.14. Doors shall be self-closing or automatic-closing in accordance with 19.2.2.2.6. Swinging doors are not required to swing with egress and positive latching is not required. 19.3.7.5, 19.3.7.6, 19.3.7.7



# K46 EMERGENCY LIGHTING

Emergency lighting of at least 1½ hour duration is provided in accordance with 7.9. 18.2.9.1, 19.2.9.1.



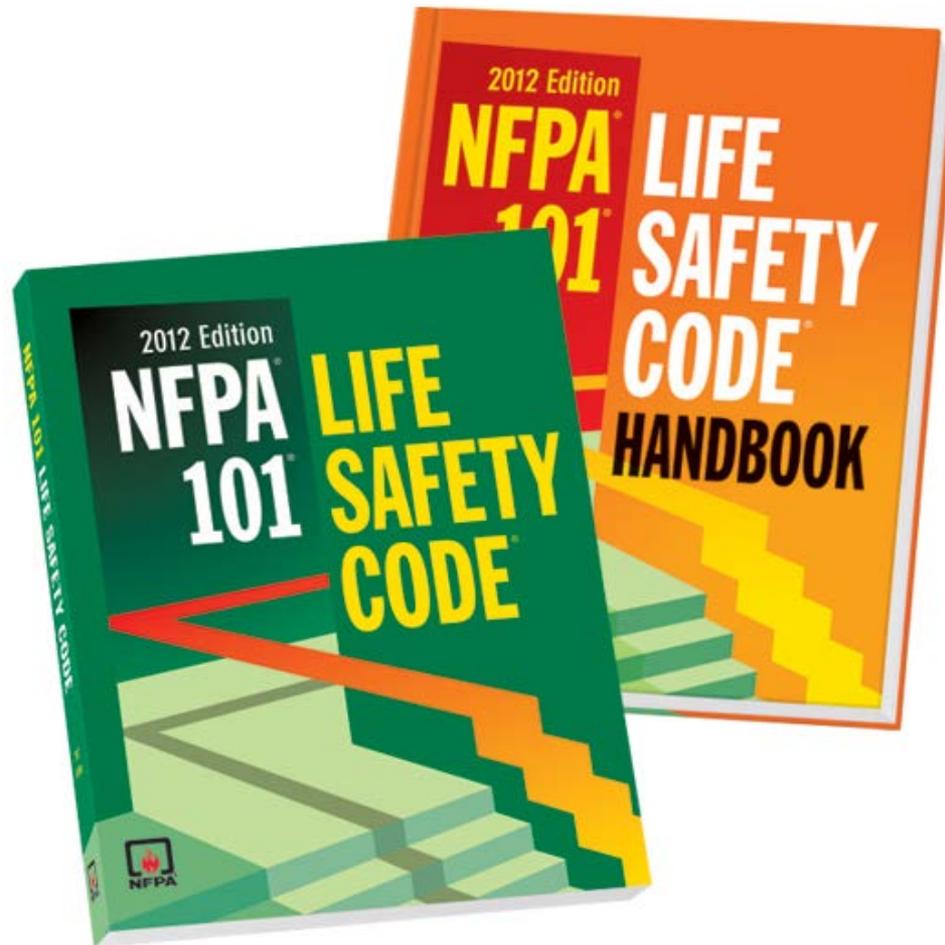


# Upcoming Changes to the Life Safety Code

With the adoption of the 2012 NFPA 101 by



# 2012 Life Safety Code Change Highlights



# Corridor Projections (18/19.2.3.4)

Non-continuous <6 inches that are above handrail height

Wheeled equipment

Maintains 60 inches clear

Fire safety plan addresses relocation in an emergency

Equipment limited to carts, emergency medical equipment and lift/transport equipment



# Corridor Projections cont.

## Seating

Corridor 8 foot minimum width

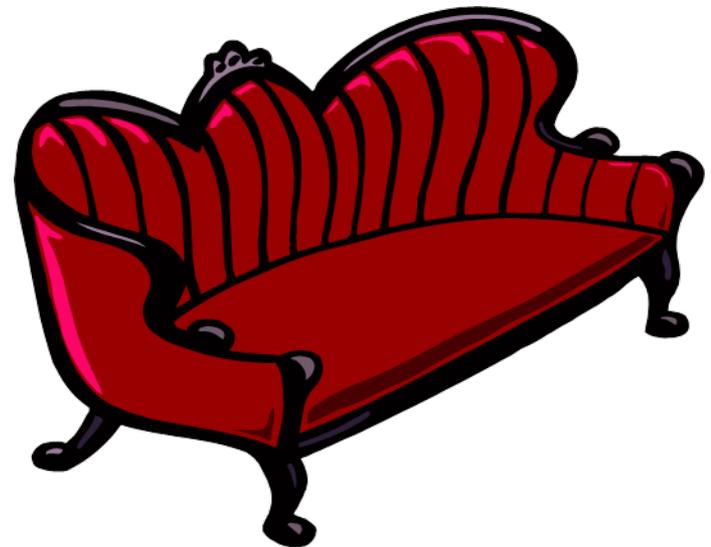
Fixed in place

Maintain 6 foot clear width

One side of corridor only

50 sq. ft. area maximums separated by 10 foot minimum

Smoke detection or direct visual supervision



# Hazard Areas (18/19.3.2.1)

Soiled linen with <64 gal. are not hazardous areas  
Converted Hazardous Areas (43.7.1.2)

Meet requirements for existing

Under 250 sq. ft.

Fully sprinklered building

Smoke resisting separation with self-closing door



# Cooking Facilities (18/19.3.2.5)

Serve maximum of 30 beds, single smoke compartment

Hood over cooking surfaces

Suppression system and fire extinguisher

No deep-fat frying

Disconnecting switch

Suppressed smoke compartment

Photoelectric smoke detectors (2) at 20 feet from hood

Not required if separated from corridor



# ABHR (18/19.3.2.6)

Aerosol limited to 18 oz.

One dispenser per room doesn't count toward total

Ignition source

Not above

Not within 1 inch horizontally

At least 1 inch below



# Fireplaces (18/19.5.2.3)

## Direct-Vent Gas Fireplaces

Not in a patient sleeping room

Smoke compartment fully sprinklered with quick response or residential sprinklers

Sealed glass front

Locked controls

Electrically supervised carbon monoxide detector in the room



# Fireplaces (18/19.5.2.3)

## Solid-Fuel Fireplaces

1 hour separation from patient sleeping areas

Enclosure “guaranteed” not to break up to 650F

Electrically supervised carbon monoxide detector in the room



# Decorations (18/19.7.5.6)

Now permitted to have “photographs, paintings, and other art” attached to walls, ceilings, or non-rated doors

No interference with door operation

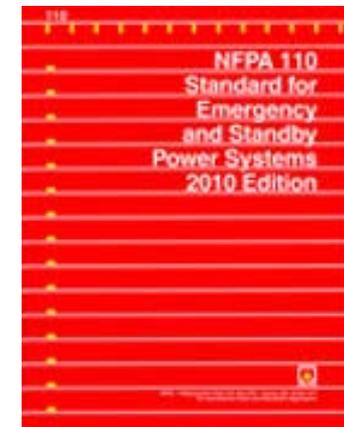
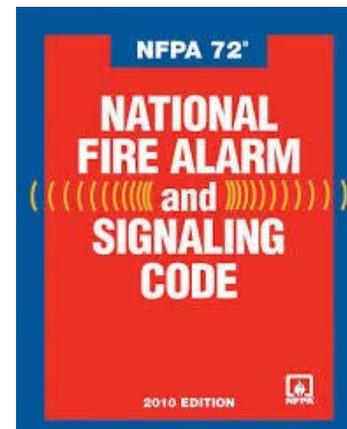
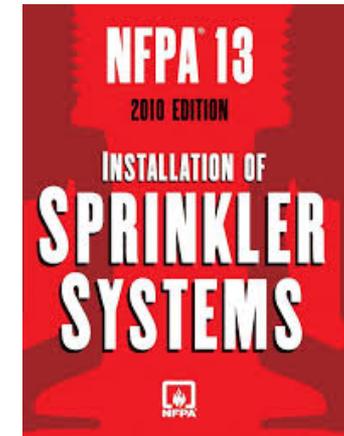
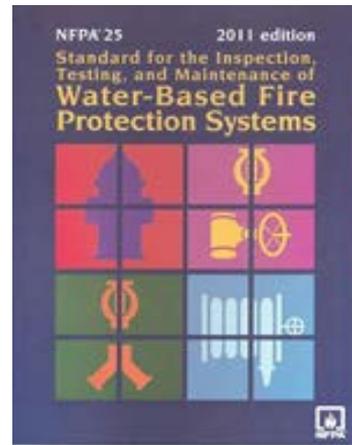
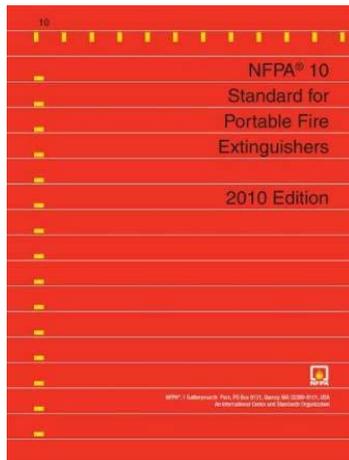
Not exceeding 20% of wall area for non-sprinklered

Not exceeding 30% for space with sprinklered smoke compartment

Not exceeding 50% for resident rooms (less than 4) with sprinklered smoke compartment

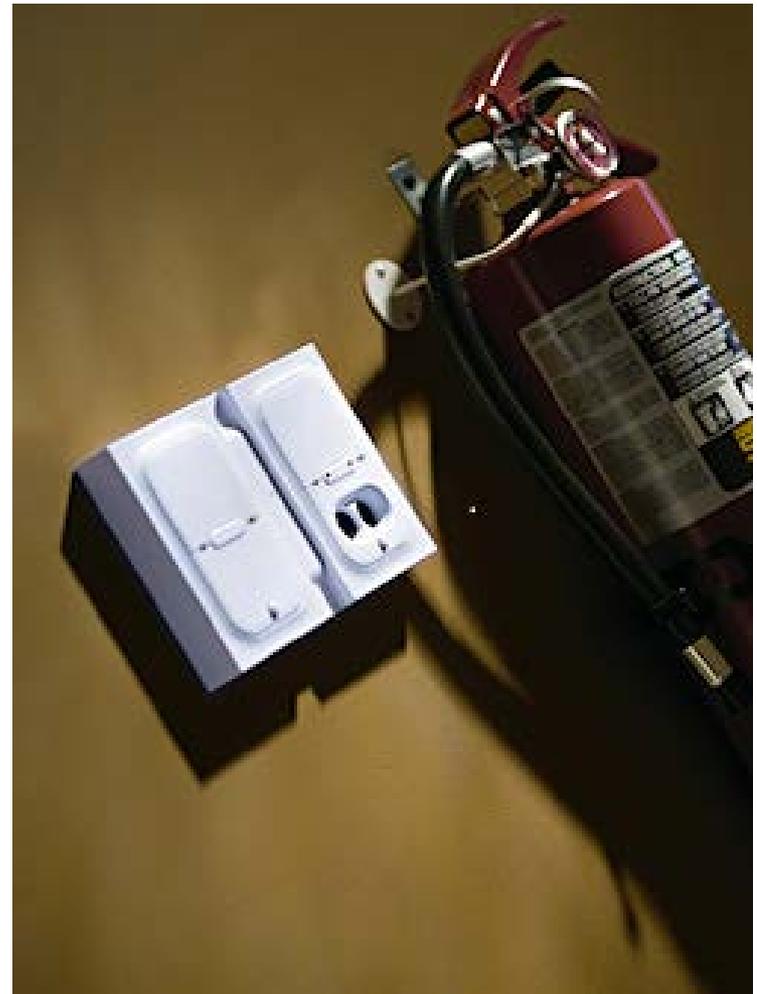


# Referenced Codes Changes



# NFPA 10 (2010)

Now permits electronic monitoring of fire extinguishers  
Takes the place of monthly inspections



# NFPA 13 (2010)

Canopies do not require sprinklers based on the following:

Non-combustible construction materials with no storage

2 feet width if combustibles are stored below

Non-combustible finishes with the concealed combustible space protected by sprinklers or:

Concealed space filled with non-combustible insulation

Concealed space is <160 cu. ft. and remaining attic is sprinklered

Canopies under 55 sq. ft.

8.15.7



# NFPA 25 (2011)

Sprinkler Impairments (15.5.2)

Limits changed to 10 hours within a 24-hour period



# NFPA 80 (2010)

Fire Damper Inspection (19.4)

1 year after installation

Every 4 years

Combination smoke/fire dampers with fusible links

NFPA 105 has same requirements



# NFPA 110 (2010)

Specific gravity tested monthly (8.3.7.1)

Option to use conductance testing of battery

Spark-ignited generator sets (8.4.2.4)

30 minute run time or water and oil temp stabilize

3 year load test (8.4.9)





## For More Information

Health Facilities Engineering Section  
Bureau of Community and Health Systems  
State of Michigan – LARA

John Hanes

Fire Safety Inspector – [hanesj@michigan.gov](mailto:hanesj@michigan.gov)

# Fire Safety Requirements for Holiday Decorations

December 8, 2015

Jeff Tody LARA/Bureau of Community  
Health Systems.

Originally developed by Jim Ellinbas BFS

# Learning Goals

- Review the CMS K-tags and code language related to holiday decorations
- Discuss options to provide for both holiday decorations and code compliance (One Vision clarifications)
- Discuss photos of decorations found during surveys

# Fire Safety K-72

- “Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency. No furnishings, decorations, or other objects shall obstruct exits, access thereto, egress there from, or visibility thereof shall be in accordance with 7.1.10”

# Fire Safety K-73

- “No furnishings or decorations of highly flammable character shall be used.  
18.7.5.2, 18.7.5.3, 18.7.5.4, 19.7.5.2,  
19.7.5.3, 19.7.5.4”

FURNISHINGS AND DECORATIONS					
K73	Combustible decorations shall be prohibited unless they are flame-retardant or in such limited quantity that hazard of fire development or spread is not present. 18.7.5.4, 19.7.5.4	X			

# Fire Safety K-73

- 18/19.7.5.2 – Upholstered furniture
- 18/19.7.5.3 – Mattresses
- 18/19.7.5.4 – “Combustible decorations shall be prohibited in any health care occupancy unless they are flame-retardant.
  - Exception: Combustible decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present.

# Fire Safety K-74

- “Draperies, curtains, including cubicle curtains, and other loosely hanging fabrics and films serving as furnishings or decorations in health care occupancies shall be in accordance with the provisions of 10.3.1...”

# One Vision

The following clarification is sought:

- Is it possible to have live cut trees and wreaths in a Michigan nursing home?
- Is there a way to create the smells and texture of live trees and wreaths and promote fire safety?
- Is there a way to enjoy the warm glow of holiday lighting and promote fire safety?
- Can real candles be used in Michigan nursing homes?
- Is there a way to create the smells and glow of candles throughout a nursing home and promote fire safety?
- What, if any, fire rating standards do holiday and other decorations (tinsel, garland, wall hangings) of any type need to have in Michigan nursing homes?

## Clarification of person-centered practices and approaches:

### 1. Is it possible to have live cut trees and wreaths in a Michigan nursing home?

Live cut Christmas trees are not allowed in Michigan nursing homes due to their combustibility when not consistently watered. Likewise, wreaths made of cut live evergreen branches are not allowed due to their inability to be watered and resulting combustibility. Once live plants are cut, they begin to dry out and quickly become highly flammable.

3

Rectangular Snip

### 2. Is there a way to create the smells and texture of live trees and wreaths and promote fire safety?

Two different approaches can be taken to create the sensations of live trees. First, artificial trees or wreaths properly labeled “fire resistant,” certified or identified by the manufacturer as “fire retardant” can be used. If the tree or wreath has a built-in electrical or lighting system, that electrical device should also carry the “UL” or the “Factory Mutual” approval marking (see sample markers in resource section below).

### 3. Is there a way to enjoy the warm glow of holiday lighting and promote fire safety?

Holiday lights can be safely used by following some simple guidelines. In general, lights should carry the “UL” or “Factory Mutual” approval marker (see sample markers in resource section below) and be in good repair and working order. Other guidelines include:

November 15 to January 15. If used in a resident room, they must be outside the resident care vicinity, 6 feet beyond the bed, and meet the UL 60601-1 (Tripp Lite is a manufacturer that meets this

#### **4. Can real candles be used in Michigan nursing homes?**

No. Real candles may not be lit or have their wicks in use in Michigan nursing homes due to the high risk of fire. Candles are the number one cause of fires in dwellings.

#### **5. Is there a way to create the smells and glow of candles throughout a nursing home and promote fire safety?**

Flameless battery operated candles that look and can smell like real candles are an acceptable fire prevention alternative. They can be used alone or can be inserted into a carved out scented candle, as the warmth of the battery will likely release the aroma in the scented candle wax. Flameless battery operated candles provide the warm glow of a real flame and can also be used for rituals and religious ceremonies. For example, a menorah celebration might use one new battery-operated candle per night to symbolize the lighting of the menorah.

**6. What, if any, fire rating do holiday decorations (tinsel, garland, wreaths, wall-style Christmas trees, wall hangings) of any type need to be used in Michigan nursing homes?**

In general, when using holiday decorations of any type special attention must be paid to:

- The material itself—most materials are acceptable if properly treated; however, some materials cannot be treated or used.
- The placement of the materials—doors, door latches, sprinkler heads, smoke detection devices, fire extinguishers and heat sources should be clear of decorations.

**Materials.** The materials used in Michigan nursing homes should be flame resistant or flame retardant and follow some basic guidelines:

- Untreated decorations can be sufficiently treated with a fire retardant spray. Spray product and instructions, including a log of the application process with a date and the person responsible; should be retained by the nursing home. It is important to note that applied fire retardant does not maintain its effectiveness when washed or often brushed up against, so as to wear off the coating. Nursing Homes should follow manufacturer's guidelines for re-application of the coating.
- Christmas cards and some paper products may be displayed on the walls along with photographs and paintings in limited quantities (see below).

**Location.** All decorations should be located away from heat and light sources and limited in quantity according to the following national fire safety guidelines:

- Not to exceed 20 percent of the wall, ceiling or door area within a room if the room is not sprinkled.
- Not to exceed 30 percent of the wall, ceiling or door area within a room if the room is sprinkled.

**Materials and location.** Although festive, doors or wall areas cannot be decorated with wrapping paper due to the high combustibility of wrapping paper.

Over-the-door hooks can be used provided they do not interfere with the closing and latching of the door. Items hung on the door should not exceed 20 percent of the door if room is not sprinkled and 30 percent if the room is sprinkled.

No decorations can be hung from any doorknob or sprinkler head.

Resources, tools and tips to better actualize resident preferences or needs within the intent of the regulatory standards:

- Sample UL marker and Factory Mutual approval markers (for all lighting and pre-wired artificial trees, wreaths and garlands).



- Artificial trees, wreaths, garlands and holiday decorations
  - Look for manufacturer labels that state the tree, wreath or garland is made from fire retardant, fire resistant or noncombustible material. Never purchase used or discounted artificial holiday decorations that do not have their original box and manufacturer fire safety statement.

- Artificial trees, wreaths, garlands and holiday decorations
  - Look for manufacturer labels that state the tree, wreath or garland is made from fire retardant, fire resistant or noncombustible material. Never purchase used or discounted artificial holiday decorations that do not have their original box and manufacturer fire safety statement.
  
- Fire retardant coating
  - Fire Retardant Coating should be listed by a nationally recognized independent testing laboratory such as UL or Factory Mutual.
  - <http://www.flamebustersofkansas.com/>
  
- Flameless candles
  - UL or Factory Mutual approved electric candles or battery powered flameless candles are available unscented or scented.
  
- Holiday scents
  - Bamboo diffuser used with essential oil of pine or vanilla. Maintain Material Safety Data Sheet (MSDS) information regarding essential oils in use.
  - Resources include: <http://www.natural-aromatherapy-benefits.com/> and [www.youngliving.com](http://www.youngliving.com)
  
- Surge protectors and relocatable power strips
  - Must meet UL 60601-1 requirements
  - Tripp Lite – <http://www.tripplite.com/en/lp/healthcare-medical-power-solutions/index.cfm>

# Observed Deficiencies





# Fire Safety K-72 & K-73







# Fire Safety K-73 & K-74





# Fire Safety K-73 & K-74



# Fire Safety K-72, K-73 & K-74







# Other Potential K-Tags

- Decorations that block the means of egress (K-38 and K-39)
- Decorations blocking fire extinguishers (K-64)
- Decorations hanging from sprinkler heads or piping (K-62)
- Improper electrical wiring or devices (K-147)

Questions?

Comments?

Complaints?