# Life Safety Codes

# LONG-TERM CARE SURVEY MANUAL PREPARED BY MU NHA CONSULTANT

#### **SECTION 2 - LIFE SAFETY CODES**

**Life Safety Codes** - This section can be used as a reference for possible K-tag citations and includes checklists for self-assessment.

<u>SECTION</u>	PAGE#
QIPMO Life Safety Code Systems in LTC Manual	3
K-Tags and Definitions	4-6
Life Safety Code Checklist	7-9
Fire Safety Survey 2012 Code (CMS-2786S)	10-26
S&C: 16-29-LSC Adoption of the 2012 NFPA 101/99	27-29
S&C: 14-46-LSC Categorical Waiver for Power Strips Use in Patient Care Areas	30-34
Fire Safety Information (provided by CMS for distribution to surveyors and Providers)	35-46

Please see the regulatory reference overview included in this manual for applicable NFPA codes. In addition to the mandatory references, existing nursing facilities must comply with NFPA 101 Chapter 19 Health Care Occupancies while new nursing facilities must comply with NFPA 101 Chapter 18 Health Care Occupancies.

# QIPMO Life Safety Code Systems in LTC Manual

The Life Safety Code is a compilation of fire safety requirements for new and existing buildings and is updated and published every three years by the National Fire Protection Association (NFPA), a private, nonprofit organization dedicated to reducing loss of life due to fire. The Medicare and Medicaid regulations have historically incorporated these requirements by reference.

On May 4, 2016, the Centers for Medicare and Medicaid Services (CMS) published final rules in the Federal Register adopting the 2012 edition of NFPA 101, Life Safety Code (LSC). This final rule amended the fire safety standards for certified facilities. Further, this final rule adopted the 2012 edition of the LSC and eliminated references to all earlier editions. These regulations were effective on July 5, 2016.

The objective of the code is to assure safety to life during fires and other emergencies. Adoption and use of the 2012 edition of the LSC is updated to the latest and best technology in fire protection. These requirements are designed to protect all residents and staff. The final rule allows other options for facilities to meet regulatory requirements when correction of a deficiency will create an undue burden or financial hardship such as the FSES (Fire Safety Evaluation System) or waivers.

This <u>Maintenance Manual</u> is intended for use by personnel of Missouri long term care facilities to maintain and improve life safety conditions for the benefit of residents and employees. This document is intended to provide information to facilities but is not necessarily fully inclusive of all details of LSC 2012 or other NFPA Standards. Determinations of compliance with Life Safety Code regulations are made at the time of survey.

Please see the regulatory reference overview included in this manual for applicable NFPA codes. In addition to the mandatory references, existing nursing facilities must comply with NFPA 101 Chapter 19 Health Care Occupancies while new nursing facilities must comply with NFPA 101 Chapter 18 Health Care Occupancies.

#### K-TAGS AND DEFINITION

- K100 General Requirements Other
- K111 Building Rehabilitation
- K112 Sprinkler Requirements for Major Rehabilitation
- K131 Multiple Occupancies Sections of Health Care Facilities
- K132 Multiple Occupancies Contiguous Non-Health Care Occupancies
- K133 Multiple Occupancies Construction Type
- K161 Building Construction Type and Height
- K162 Roofing Systems Involving Combustibles
- K163 Interior Nonbearing Wall Construction
- K200 Means of Egress Requirements Other
- K211 Means of Egress General
- **K221 Patient Sleeping Room Doors**
- **K222 Egress Doors**
- K223 Doors with Self-Closing Devices
- **K224 Horizontal-Sliding Doors**
- K225 Stairways and Smokeproof Enclosures
- **K226** Horizontal Exits
- **K227** Ramps and Other Exits
- K231 Means of Egress Capacity
- K232 Aisle, Corridor, or Ramp Width
- K233 Clear Width of Exit and Exit Access Doors
- K241 Number of Exits Story and Compartment
- K251 Dead-End Corridors and Common Path of Travel
- K252 Number of Exits Corridors
- K253 Number of Exits Patient Sleeping and Non-Sleeping Rooms
- **K254 Corridor Access**
- K255 Suite Separation, Hazardous Content, and Subdivision
- **K256 Sleeping Suites**
- **K257 Non-Sleeping Suites**
- **K261** Travel Distance to Exits
- K271 Discharge from Exits
- K281 Illumination of Means of Egress
- **K291** Emergency Lighting
- K292 Life Support Means of Egress
- K293 Exit Signage
- K300 Protection Other
- K311 Vertical Openings Enclosure
- K321 Hazardous Areas Enclosure
- **K322 Laboratories**
- K323 Anesthetizing Locations 4
- K324 Cooking Facilities
- K325 Alcohol Based Hand Rub Dispenser (ABHR)
- K331 Interior Wall and Ceiling Finish
- K332 Interior Floor Finish K341 Fire Alarm System Installation
- K342 Fire Alarm System Initiation
- K343 Fire Alarm Notification
- K344 Fire Alarm Control Functions
- K345 Fire Alarm System Testing and Maintenance

- K346 Fire Alarm Out of Service
- K347 Smoke Detection
- K351 Sprinkler System Installation
- K352 Sprinkler System Supervisory Signals
- K353 Sprinkler System Maintenance and Testing
- K354 Sprinkler System Out of Service
- K355 Portable Fire Extinguishers K361 Corridors Areas Open to Corridor
- K362 Corridors Construction of Walls
- K363 Corridor Doors
- K364 Corridor Openings
- K371 Subdivision of Building Spaces Smoke Compartments
- K372 Subdivision of Building Spaces Smoke Barrier Construction
- K374 Subdivision of Building Spaces Smoke Barrier Doors
- K373 Subdivision of Building Spaces Accumulation Space
- K379 Smoke Barrier Door Glazing
- K381 Sleeping Room Outside Windows and Doors
- K400 Special Provisions Other
- K421 High-Rise Buildings
- K500 Building Services Other
- K511 Utilities Gas and Electric
- K521 HVAC
- K522 HVAC Any Heating Device
- K523 HVAC Suspended Unit Heaters
- K524 HVAC Direct-Vent Gas Fireplaces
- K525 HVAC Solid Fuel-Burning Fireplaces
- **K531 Elevators**
- K532 Escalators, Dumbwaiters, and Moving Walks
- K541 Rubbish Chutes, Incinerators, and Laundry Chutes
- K700 Operating Features Other K711 Evacuation and Relocation Plan
- K712 Fire Drills
- K741 Smoking Regulations 5
- K751 Draperies, Curtains, and Loosely Hanging Fabrics
- K752 Upholstered Furniture and Mattresses
- K753 Combustible Decorations
- K754 Soiled Linen and Trash Containers
- K771 Engineer Smoke Control Systems
- K781 Portable Space Heaters
- K791 Construction, Repair, and Improvement Operations
- K900 Health Care Facilities Code Other
- K901 Fundamentals Building System Categories
- K902 Gas and Vacuum Piped Systems Other
- K903 Gas and Vacuum Piped Systems Categories
- K904 Gas and Vacuum Piped Systems Warning Systems
- K905 Gas and Vacuum Piped Systems Central Supply System Identification and Labeling
- K906 Gas and Vacuum Piped Systems Central Supply System Operation
- K907 Gas and Vacuum Piped Systems Maintenance Program
- K908 Gas and Vacuum Piped Systems Inspection and Testing Operations
- K909 Gas and Vacuum Piped Systems Information and Warning Signs
- K910 Gas and Vacuum Piped Systems Modifications
- K911 Electrical Systems Other
- K912 Electrical Systems Receptacles

- K913 Electrical Systems Wet Procedure Locations
- K914 Electrical Systems Maintenance and Testing
- K915 Electrical Systems Essential Electric System Categories
- K916 Electrical Systems Essential Electric System Alarm Annunciator
- K917 Electrical Systems Essential Electric System Receptacles
- K918 Electrical Systems Essential Electric System Maintenance and Testing
- K919 Electrical Equipment Other
- K920 Electrical Equipment Power Cords and Extension Cords
- K921 Electrical Equipment Testing and Maintenance Requirements
- K922 Gas Equipment Other
- K923 Gas Equipment Cylinder and Container Storage
- K924 Gas Equipment Testing and Maintenance Requirements
- K925 Gas Equipment Respiratory Therapy Sources of Ignition
- K926 Gas Equipment Qualifications and Training of Personnel
- K927 Gas Equipment Transfilling Cylinders
- K928 Gas Equipment Labeling Equipment and Cylinders
- K929 Gas Equipment Precautions for Handling Oxygen Cylinders and Manifolds
- K930 Gas Equipment Liquid Oxygen Equipment
- K931 Hyperbaric Facilities
- K932 Features of Fire Protection Other

# LIFE SAFETY CODE CHECK LIST

Mechanical Rooms	<ol> <li>High/low ventilation and combustion ductwork.</li> </ol>	
	2. All ceiling and wall penetration sealed with fire rated caulking.	
	3. Doors - Self-closing and latch automatically.	
	4. Not used for storage.	
	5. Ceiling installed completely.	
	6. Fire dampers installed at duct penetrations of walls.	
	7. No grills or vents in doors.	
	8. Separated with one-hour fire rated construction to roof deck.	
Kitchen	1. Doors - Self-closing and latch automatically.	
	2. Fusible links - On all doors held open.	
Laundry	1. Dryers enclosed.	
	2. High/low ventilation and combustion ductwork behind dryers.	
	3. Doors - Self-closing and latch automatically.	
Soiled Linen Rooms	1. Doors - Self-closing and latch automatically.	
	2. Soiled linen receptacle capacity greater than 32 gallons - room shall be	
	separated by one-hour fire rated construction, self-closing	
Overen Stevens	automatically- latching door, and sprinklered.  1. Vented to outside.	
Oxygen Storage		
	2. Storage greater than 3000 cubic feet Room separated by one-hour fire rated construction and self-closing automatically latching door.	
Storage Rooms	1. 50 to 100 square feet Separated by one-hour fire rated construction and	
<b>3</b>	self-	
	closing automatically latching door.	
	2. Greater than 100 square feet Separated by one-hour fire rated	<u>.                                    </u>
Patient Rooms	construction, self- closing automatically latching door, and sprinklered.  1. Window or outside door.	
Putient Rooms		
	Window and cubicle curtains flame retardant.     No furnishings and descriptions of highly flammable characters.	
	<ul><li>3. No furnishings and decorations of highly flammable character.</li><li>4. Corridor door closes and latches without impediment, gaps, and</li></ul>	
	against jamb.	
	5. No portable space heaters.	
	6. Class A or B flame spread rating.	
Corridors and Exit ways	1. Class A or B rating - Walls and ceiling.	
	2. Continuously maintained free of all obstructions or impediments.	
	3. Handrails secure and without damage.	
	4. No items on wall extending out beyond the handrail below seven feet.	
Stairways	1. One hour fire rated construction - Up to three stories.	
	Four stories or more - Two-hour fire rated construction.	
	2. All penetrations sealed.	L
	3. Self-closing automatically latching doors.	
	4. No storage.	
Exit Lights	1. Illuminated.	
	2. Signs located to show direction to exit from any point in a corridor - Two	
	directions.	

	3. Illuminated by emergency power within ten seconds of loss of normal power.	
Alcohol-based Hand Rub	1. The corridor is at least six feet wide.	
Alcohol-buseu Hullu Kub	The maximum individual fluid dispenser capacity shall be1.2 liters (2 liters)	
	in suites of rooms).	Ш
	3. The dispensers shall have a minimum spacing of four feet from each other.	
	4. Not more than ten gallons are used in a single smoke compartment outside a storage cabinet.	
	5. Dispensers are not installed over or adjacent to an ignition source.	
	6. If the floor is carpeted, the building is fully sprinklered.	
Smoking Regulations	1. Smoking shall be prohibited in any room, ward, or compartment where flammable liquids, combustible gases or oxygen is used or stored in any other hazardous location, and such area shall be posted with signs that read NO	
	SMOKING or shall be posted with the international symbol for no smoking.	
	2. Smoking by patients classified as not responsible shall be	
	prohibited, except when under direct supervision.	
	<ol><li>Ashtrays of noncombustible material and safe design shall be provided in all areas where smoking is permitted.</li></ol>	
	4. Metal containers with self-closing cover devices into which ashtrays can be emptied shall be available to all areas where smoking is permitted.	
Electrical	1. All switch and outlet covers installed. None damaged.	
	2. Panels installed on all electrical equipment.	
	3. Three-foot clearance on all four sides of main electrical panels.	
	4. Circuit breaker panels labeled.	
	5. Ground Fault Circuit Interrupters installed in all outlets - Within six feet of any sink, bathrooms, garages, electrical vehicle charging systems, elevators, wet areas (utility rooms-outlets serving counter tops, janitor closets, dish washing rooms), kitchen (outlets serving counter tops), roof tops, and outdoor outlets.	
Kitchen Range Hood Fire	1. Inspected monthly - Grease buildup on nozzles and ductwork.	Ш
Suppression System		
	2. Inspected annually - Licensed individual.	
	<ul><li>3. Eight-inch shield installed between fryer and stove - on tallest appliance</li><li>not required if fryer is sixteen inches from stove.</li></ul>	
Fire Extinguishers	<ol> <li>Inspect monthly - Proper location, not obstructed, operating instructions on nameplate facing outward, safety seal not broken, unit is full, obvious physical damage, pressure gauge reading in operable range - Document inspections.</li> </ol>	
	2. Annual inspection by licensed individual.	
Fire Alarm System	1. Annual inspection by licensed individual - Report available.	
	2. Semi-annually - Visual inspection of fire alarm components.	
Single Station Smoke Detectors	1. Inspect and test according to manufacturer's instructions; at least monthly.	
	2. Replace batteries according to manufacturer' instructions;	
	3. Document testing and maintenance;	
Sprinkler System	1. Annual inspection by a Licensed individual - Report available.	
, , , , , , , ,	2. Test tamper and flow switches quarterly - Document.	
	3. Storage eighteen inches below sprinkler head deflector.	

	4. Sprinkler heads free of lint and corrosion, pipes not used for clothes hangers.	
	5. Sprinkler heads not obstructed.	
Emergency Generator	1. Annual inspection by licensed individual - Report available.	
	2. Maintenance scheduled per manufacturer's requirement - Keep log.	
	3. Monthly recordings of battery electrolyte specific gravity - lead acid batteries- all others weekly recording of battery voltage.	
	4. Monthly load test (30%) for thirty minutes - Record time and voltage.	
	5. Switch to emergency power within ten seconds.	
	6. Outlets connected to emergency power identified by distinctive color unless total building on generator.	
Fire Drills	1. A drill for each shift during each quarter.	
	2. At unannounced times, not during shift change, not all on same day, 90% attendance.	
	3. Do not mix drills and in-services.	
	4. Document each drill with time, date, shift, procedures used, reactions of staff, and signatures of staff participating.	
Corridor, Fire, and Smoke Barrier walls	All penetrations are sealed with fire rated caulking or foam. Check behind service personnel. Maximum half-inch gap around penetrations.	
Exits	1. Doors open without impediment.	
	2. Discharge path smooth hard surface. Maximum half-inch elevation between surfaces. If higher, 20:1 ramp.	
	3. Dual bulb outside light fixture.	
In General	The facility shall be maintained according to all applicable codes.	
	Any renovations or alterations to the facility shall be submitted to OLTC for approval.	

2000 CODE

Form Approved OMB No. 0938-0242

FIRE		EY REPORT SHO re – Medicaid	RT FORM		1. (A) P	ROVIDER NUMBEF	1. (I	B) MEDICAID I.D.	NO.
Identifying information as sh	own in applicable	e records. Enter ch	anges, if any, alongside	e each item, g	giving	date of change			
2. NAME OF FACILITY	2		NSTRUCTION (BLDGS)	2. (B) ADDRI	ESS OF	FACILITY (STR	REET, CITY, STA	ATE, ZIP CODE	A. Fully Sprinklered (All required areas are sprinklered
		B. WING C. FLOOR							B. Partially Sprinklered (Not all required areas are sprinkler
	ŀ	(3							C. None (No sprinkler system) K0180
3. SURVEY FOR	4	4. DATE OF SURVEY		SHORT FOR	M		SURVEY UNDE		
■ MEDICARE ■ M	EDICAID	<b>(</b> 4		CHECK HER	E		5. <b>2</b> 000 E	XISTING	2000 NEW
5. SURVEY FOR CERTIFICATION OF									
1. PHOSPITAL		2. ? SKILLED	/NURSING FACILITY						
IF "2" OR "3" ABOVE IS MARKED, CI	HECK APPROPRIATE IT	TEM(S) BELOW				3. [۶] IF DISTINC	T PART OF HOSPITA	AL, IS HOSPITAL A	CCREDITED BY
1. PENTIRE FACILITY	2. ? DISTING	CT PART OF (SPECIFY)			_	JCAHO/A	AOA? a. ? YES		b. 🔁 NO
6. BED COMPOSITION									
a. TOTAL NO. OF BEDS IN THE FACILITY	b. NUMBER OF HOSE CERTIFIED FOR MI		c. NUMBER OF SKILLED BED MEDICARE	S CERTIFIED FO		IUMBER OF SKILLE OR MEDICAID	D BEDS CERTIFIED		R OF ICF BEDS ED FOR MEDICAID
I HAVE CONDUCTED A FIRE SAFETY	SCREENING USING TH	HE SHORT FORM:				FOR STATE AGEN			
A. ? The facility meets	all of the items on the	e form.			Α.	The facility ME	e 15 based upon: ipliance with allpr	ovisions	
B. ? The facility does n	ot meet all of the iten	ns on the form.					eptance of a Plan of		
C. ? A complete fire sa	fety survey is recomm	nended.					ommended waiver		
<u> </u>				1		? The facility DOI	ES NOT MEET THE		
SURVEYOR (Signature)		TITLE		OFFIC	E			DATE	
8. SURVEYOR I.D. NO									
kio Review Authority Official <i>(Sign</i> e	ature)								
. 5	•								

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-0242. The time required to complete this information collection is estimated to average 5 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to CMS,

Nam	e of Facility				2000 CODE
ID PREFIX		MET	NOT MET	N/A	REMARKS
	CORRIDOR WALLS AND DOORS	1	1		
K18	2000 EXISTING				
	Doors protecting corridor openings in other than required enclosures of vertical openings, exits, or hazardous areas shall be substantial doors, such as those constructed of 1³/4 inch solid-bonded core wood, or capable of resisting fire for at least 20 minutes. 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. Doors shall be provided with a means suitable for keeping the door closed. Dutch doors meeting 19.3.6.3.6 are permitted. 19.3.6.3 Roller latches are prohibited by CMS regulations in all health care facilities.				
	Show in REMARKS, details of doors, such as fire protection ratings, automatic closing devices, etc.				
	2000 New				
	Doors protecting corridor openings shall be constructed to resist the passage of smoke. Doors shall be provided with positive latching hardware. Dutch doors meeting 18.3.6.3.6 are permitted. Roller latches shall be prohibited. 18.3.6.3				
	Show in REMARKS, details of doors, such as fire protection ratings, automatic closing devices, etc.				
K22	Access to exits shall be marked by approved, readily visible signs in all cases where the exit or way to reach exit is not readily apparent to the occupants. 7.10.1.4				
	VERTICAL OPENINGS				
K20	2000 EXISTING				
	Stairways, elevator shafts, light and ventilation shafts, chutes, and other vertical openings between floors are enclosed with construction having a fire resistance rating of at least one hour. An atrium may be used in accordance with 8.2.5.6, 19.3.1.1.				
	If all vertical openings are properly enclosed with construction providing at least a two hour fire resistance rating, also check this box. 2				

Nam	e of Facility				2000 CODE
ID PREFIX		MET	NOT MET	N/A	REMARKS
	If enclosures are less than required, give a brief description and specific location in REMARKS.				
	2000 NEW				
	Stairways, elevator shafts, light and ventilation shafts, chutes, and other vertical openings between floors are enclosed with construction having a fire resistance rating of at least two hours connecting four stories or more. (One hour for single story building and sprinklered buildings up to three stories in height.)  18.3.1.1. An atrium may be used in accordance with 8.2.2.3.5.				
	If enclosures are less than required, give a brief description and specific location in REMARKS.				
	SMOKE COMPARTMENTATION AND CONTROL				
K23	2000 EXISTING				
	Smoke barriers shall be provided to form at least two smoke compartments on every sleeping room floor for more than 30 patients. 19.3.7.1, 19.3.7.2				
	Smoke barriers shall be provided to form at least two smoke compartments on every floor used by inpatients for sleeping or treatment, and on every floor with an occupant load of 50 or more persons, regardless of use. Smoke barriers shall also be provided on floors that are usable, but unoccupied. 18.3.7.1, 18.3.7.2				
K28	2000 EXISTING  Door openings in smoke barriers shall provide a minimum clear width of 32 inches (81 cm) for swinging or horizontal doors.  Vision panels are of fire-rated glazing or wired glass panels and steel frames. 19.3.7.5, 19.3.7.7				

ID PREFIX				ME	T NO MET	N/A	REMARKS
	2000 NEW  Door openings in smoke badoors shall provide a minir			rizontal			
	Provider Type	Swinging Doors	Horizontal Sliding				
	Hospitals and Nursing Facilities	41.5 inches (105 cm)	83 inches (211 cm)				
	Psychiatric Hospitals and Limited Care Facilities	32 inches (81 cm)	64 inches (163 cm)				
	Vision panels of fire-rated are provided for each door			rames			
		HAZARDOUS AR	EA				_
K29	2000 EXISTING						
	One hour fire rated construapproved automatic fire examples and/or 19.3.5.4 protects have automatic fire extinguishin separated from other space. Doors shall be self-closing field-applied protective playottom of the door are perfect and Fuel-Fired Heater Room c. Laundries (greater than 100 sq feed. Repair Shops and Paint Shops e. Laboratories (if classified a Severe f. Combustible Storage Rooms/Space g. Trash Collection Rooms  i. Soiled Linen Rooms  Describe the floor and zone deficient in REMARKS.	extinguishing syster azardous areas. W ag system option is uses by smoke resist and non-rated or utes that do not ex rmitted. 19.3.2.1  Autom ms t)  Hazard - see K31) es (over 50 sq feet)	n in accordance withen the approved used, the areas shing partitions and ceed 48 inches from	th 8.4.1 all be doors.			

ID PREFIX		MET	NO MET	N/A	REMARKS
	2000 NEW  Hazardous areas are protected in accordance with 8.4. The areas so be enclosed with a one hour fire-rated barrier, with a 3/4 hour fire-rated barrier, with a the selection of automatic closing in accordance with 8.4). Doors shall be selected or automatic closing in accordance with 7.2.1.8. 18.3.2.1	ated f-			
	Area  Automatic Sprinkler  a. Boiler and Fuel-Fired Heater Rooms  c. Laundries (greater than 100 sq feet)  d. Repair, Maintenance and Paint Shops  e. Laboratories (if classified a Severe Hazard - see K31)  f. Combustible Storage Rooms/Spaces (over 50 and less than 100 sq feet)  g. Trash Collection Rooms  i. Soiled Linen Rooms  m.Combustible Storage Rooms/Spaces (over 100 sq feet)  Describe the floor and zone locations of hazardous areas that are deficient in REMARKS.	A			
K30	Gift shops shall be protected as hazardous areas when used for storage or display of combustibles in quantities considered hazard Non-rated walls may separate gift shops that are not considered hazardous, have separate protected storage and that are complete sprinkled. Gift shops may be open to the corridor if they are not considered hazardous, have separate protected storage, are completely sprinklered and do not exceed 500 square efeet. 18.3.2 19.3.2.5  Area  L. Gift Shop storing hazardous quantities of combustibles  18.2.6, 19.2.6	ely			

Name of	f Facility		_	2000 CODE
21 21 21 21 21 21	Ono EXISTING Where Alcohol Based Hand Rub (ABHR) dispensers are installed: The corridor is at least 6 feet wide The maximum individual fluid dispenser capacity shall be 1.2 liters (2 liters in suites of rooms) The dispensers shall have a minimum spacing of 4 ft from each other Not more than 10 gallons are used in a single smoke compartment outside a storage cabinet. Dispensers are not installed over or adjacent to an ignition source. If the floor is carpeted, the building is fully sprinklered. 19.3.2.7, CFR 482.41, 483.70, 483.623			

ID		MET	NO	N/A	REMARKS
PREFIX		IVIEI	MET	IN/A	NLIVIANAS
K211	<ul> <li>2000 NEW</li> <li>Where Alcohol Based Hand Rub (ABHR) dispensers are installed:</li> <li>The corridor is at least 6 feet wide</li> <li>The maximum individual fluid dispenser capacity shall be <ul> <li>1.2 liters (2 liters in suites of rooms)</li> </ul> </li> <li>The dispensers shall have a minimum spacing of 4 ft from each other</li> <li>Not more than 10 gallons are used in a single smoke compartment outside a storage cabinet.</li> <li>Dispensers are not installed over or adjacent to an ignition source.</li> <li>If the floor is carpeted, the building is fully sprinklered. 18.3.2.7, CFR 482.41, 483.70, 483.623</li> </ul>				
	EXISTS AND EGRESS				
K38	Exit access is so arranged that exits are readily accessible at all times in accordance with 7.1. 18.2.1, 19.2.1				
K39	2000 EXISTING				
	Width of aisles or corridors (clear and unobstructed) serving as exit access shall be at least 4 feet. 19.2.3.3				
	2000 NEW				
	Width of aisles or corridors (clear and unobstructed) serving as exit access in hospitals and nursing homes shall be at least 8 feet. In limited care facility and psychiatric hospitals, width of aisles or corridors shall be at least 6 feet. 18.2.3.3, 18.2.3.4				
K40	2000 EXISTING				
	Exit access doors and exit doors used by health care occupants are of the swinging type and are at least 32 inches in clear width. 19.2.3.5				
	2000 NEW				
	Exit access doors and exit doors used by health care occupants are of the swinging type, with openings of at least 41.5 inches wide. Doors in exit stairway enclosures shall be no less than 32 inches in clear width. In ICFs/MR, doors are at least 32 inches wide. 18.2.3.5				

ID PREFIX		MET	NO MET	N/A
K43	Patient room doors are arranged such that the patients can open the door from inside without using a key.			
	Special door locking arrangements are permitted in health facilities. 18.2.2.2.4, 18.2.2.2.5			
	If door locking arrangement without delay egress is used indicate in REMARKS			
	18.2.2.2.2, 19.2.2.2.2			
	ILLUMINATION AND EMERGENCY POWER			
K45	Illumination of means of egress, including exit discharge, is arranged so that failure of any single lighting fixture (bulb) will not leave the area in darkness.  18.2.8, 19.2.8, 7.8			
K47	2000 EXISTING			
	Exit and directional signs are displayed in accordance with 7.10 with continuous illumination also served by the emergency lighting system. 19.2.10.1			
	(Indicate N/A in one story buildings with less than 30 occupants where the line of exit travel is obvious.)			
	2000 NEW			
	Exit and directional signs are displayed with continuous illumination also served by the emergency lighting, system in accordance with 7.10. 18.2.10.1			
K105	2000 NEW (INDICATE N/A FOR EXISTING)			
	Buildings equipped with or requiring the use of life support systems (electro-mechanical or inhalation anesthetics) have illumination of means of egress, emergency lighting equipment, exit, and directional signs supplied by the Life Safety Branch of the electrical system described in NFPA 99. 18.2.9.2., 18.2.10.2, 18.5.1.1, 18.5.1.2			
	(Indicate N/A if life support equipment is for emergency purposes only).			

ID PREFIX		MET	NO MET	N/A	REMARKS
	EMERGENCY PLAN AND FIRE DRILLS				
K48	There is a written plan for the protection of all patients and for their evacuation in the event of an emergency. 18.7.1.1, 19.7.1.1				
K50	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 ALARM SYSTEMS				
K51	2000 EXISTING				
	A fire alarm system with approved component, devices or equipment installed according to NFPA 72, National Fire Alarm Code to provide effective warning of fire in any part of the building. Activation of the complete fire alarm system shall be by manual fire alarm initiation, automatic detection or extinguishing system operation. Pull stations in patient sleeping areas, may be omitted provided that manual pull stations are within 200 ft of nurse's stations. Pull stations are located in the path of egress.  Electronic or written records of tests shall be available. A reliable second source of power must be provided. Fire alarm systems shall be in accordance with NFPA 72, and records of maintenance kept readily available. There shall be annunciation of the fire alarm system to an approved central station. 19.3.4, 9.6				

Nam	e of Facility		2000 CODE
	2000 NEW		
	A fire alarm system with approved component, devices or equipment installed according to NFPA 72, to provide effective warning of fire in any part of the building. Activation of the complete fire alarm system shall be by manual fire alarm initiation, automatic detection or extinguishing system operation. Pull stations are located in the path of egress. Electronic or written records of tests shall be available. A reliable second source of power must be provided. Fire alarm systems shall be maintained in accordance with NFPA72, and records of maintenance kept readily available. There shall be remote annunciation of the fire alarm system to an approved central station. 18.3.4, 9.6		

ID PREFIX		MET	NO MET	N/A	REMARKS
K52	A fire alarm system required for life safety shall be installed, tested, and maintained in accordance with NFPA 70 National Electrical Code and NFPA 72. The system shall have an approved maintenance and testing program complying with applicable requirement of NFPA 70 and 72. 9.6.1.4		WILI		
K155	Where a required fires alarm system is out of service for more than 4 hours in a 24-hour period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service. 9.6.1.8				
K53	2000 EXISTING (INDICATE N/A FOR HOSPITALS AND FULLY SPRINKLERED NURSING HOMES)  In an existing nursing home, not fully sprinklered, the resident sleeping rooms and public areas (dining rooms, activity rooms, resident meeting rooms, etc) are to be equipped with single station battery-operated smoke detectors. There will be a testing, maintenance and battery replacement program to ensure proper operation. CFR 483.70	1			
	2000 NEW (NURSING HOME AND EXISTING LIMITED CARE FACILITIES) An automatic smoke detection system is installed in all corridors. (As an alternative to the corridor smoke detection system on patient sleeping room floors, smoke detectors may be installed in each patient sleeping room and at smoke barrier or horizontal exit doors in the corridor.) Such detectors are electrically interconnected to the fire alarm system. 18.3.4.5.3				

ID PREFIX		MET	NO MET	N/A	REMARKS
K109	2000 EXISTING LIMITED CARE FACILITIES (INDICATE N/A FOR HOSPITALS OR NURSING HOMES)				
	An automatic smoke detection system is installed in all corridors, with detector spacing no further apart than 30 ft on center in accordance with NFPA 72. (As an alternative to the corridor smoke detection system on patient sleeping room floors, smoke detectors may be installed in each patient sleeping room and at smoke barrier or horizontal exit doors in the corridors.) Such detectors are electrically interconnected to the fire alarm system. 19.3.4.5.1				
	Smoke Detection System ☐ Corridors ☐ Rooms ☐ Bath				
	AUTOMATIC SPRINKLER SYSTEMS	1	I		
K56	2000 EXISTING 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. 19.3.5, NPFA 13				
	2000 NEW  When required by construction type, there is an automatic sprinkler system installed in accordance with NFPA13, Standard for the Installation of Sprinkler Systems, with approved components, device and equipment, to provide complete coverage of all portions of the facility. Systems are equipped with waterflow and tamper switches, which are connected to the fire alarm system. 18.3.5.				
	A. Date sprinkler system last checked and necessary maintenance provided.				
	B. Show who provided the service.				
					24

ID		MET	NO	N/A	ſ	
PREFIX	Mhana a sanita dauka sanita a satis da sanita da s		MET	,,,	ļ	
K154	Where a required automatic sprinkler system is out of service for more than 4 hours in a 24-hour period, the authority having				l	
	jurisdiction shall be notified, and the building shall be evacuated or				l	
	an approved fire watch system be provided for all parties left unprotected by the shutdown until the sprinkler system has been					
	returned to service. 9.7.6.1				l	
K62	Automatic sprinkler systems are continuously maintained					
	in reliable operating condition and are inspected and tested				l	
	periodically. 18.7.6, 19.7.6, 4.6.12, NFPA 13, NFPA 25, 9.7.5					
K64	Portable fire extinguishers shall be provided in all health care				l	
	occupancies in accordance with 9.7.4.1, NFPA 10. 18.3.5.6, 19.3.5.6				l	
	SMOKING REGULATIONS	1	1	1		
K66	Smoking regulations shall be adopted and shall include not less than the following provisions: 18.7.4, 19.7.4					
	■ (1) Smoking shall be prohibited in any room, ward, or compartment					
	where flammable liquids, combustible gases, or oxygen is used or stored in any other hazardous location, and such area shall be					
	posted with signs that read NO SMOKING or shall be posted with					
	the international symbol for no smoking.				l	
	■ (2) Smoking by patients classified as not responsible shall be					
	prohibited, except when under direct supervision.					
	(3) Ashtrays of noncombustible material and safe design shall be provided in all areas where smoking is permitted.					
	■ (4) Metal containers with self-closing cover devices into which					
	ashtrays can be emptied shall be readily available to all areas					
	where smoking is permitted.					
					l	

		1		I	
ID PREFIX		MET	NO MET	N/A	REMARKS
	BUILDING SERVICE EQUIPMENT				
K70	Portable space heating devices shall be prohibited in all health care occupancies. Except it shall be permitted to be used in non-sleeping staff and employee areas where the heating elements of such devices do not exceed 212°F (100°C).  18.7.8, 19.7.8				
	FURNISHINGS AND DECORATIONS		ı		
K72	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				
K74	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 provisions of 10.3.1 and NFPA 13 Standard for the Installation of Sprinkler Systems. Except shower curtains shall be in accordance with NFPA 701.  Newly introduced upholstered furniture shall meet the criteria specified when tested in accordance with the methods cited in 10.3.2 (2) and 10.3.1. 18.3.5.3 and NFPA 13				
	LABORATORIES				
K31	Laboratories employing quantities of flammable, combustible, or hazardous materials that are considered a severe hazard shall be protected in accordance with NFPA 99. (Laboratories that are not considered to be severe hazard shall meet the provision of K29.) Laboratories in Health Care occupancies and medical and dental offices shall be in accordance with NFPA 99, Standard for Health Care Facilities 10.5.1.				

ID PREFIX		MET	NO MET	N/A	REMARKS
K134	Emergency Shower: Where the eyes or body of any person can be exposed to injurious corrosive materials, suitable fixed facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use. Fixed eye baths designed and installed to avoid injurious water pressure shall be in accordance with NFPA 99, 10.6.		WILI		
K135	Flammable and combustible liquids shall be used from and stored in approved containers in accordance with NFPA 30, Flammable and Combustible Liquids Code, and NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals. Storage cabinets for flammable and combustible liquids shall be constructed in accordance with NFPA 30, Flammable and Combustible liquids Code NFPA 99, 4.3, 10.7.2.1.				
	MEDICAL GASES AND ANESTHETIZING AREAS				
K76	Medical gas storage and administration areas shall be protected in accordance with NFPA 99, Standard for Health Care Facilities.				
	<ul> <li>(a) Oxygen storage locations of greater than 3,000 cu.ft. are enclosed by a one-hour separation.</li> <li>(b) Locations for supply systems of greater than 3,000 cu.ft. are vented to the outside. NFPA 99, 4.3.1.1.2, 18.3.2.4, 19.3.2.4</li> </ul>				
K141	Non-smoking and no smoking signs in areas where oxygen is used or stored shall be in accordance with 18.3.2.4, 19.3.2.4, NFPA 99, 8.6.4.2				
K143	Transferring of oxygen shall be:  (a) separated from any portion of a facility wherein patients are housed, examined, or treated by a separation of a fire barrier of 1-hour fire-resistive construction; and				
	(b) the area that is mechanically ventilated, sprinklered, and has ceramic or concrete flooring; and				
	(c) in an area that is posted with signs indicating that transferring is occurring, and that smoking in the immediate area is not permitted in accordance with NFPA 99 and Compressed Gas Association. 8.6.2.5.2				

ID PREFIX		MET	NO MET	N/A	REMARKS
	ELECTRICAL				
K144	Generators inspected weekly and exercised under load for 30 minutes per month and shall be in accordance with NFPA 99, 3.4.4.1, NFPA 110, 8.4.2.				
K146	The nursing home/hospice with no life support equipment shall have an alternate source of power separate and independent from the normal source that will be effective for minimum of 1 <sup>1</sup> / <sub>2</sub> hour after loss of the normal source NFPA 99, 3.6				
K130	Miscellaneous				
	List in the REMARKS sections, any items that are not listed previously, but are deficient. This information, along with the applicable Life Safety Code or NFPA standard citation, should be included on Form CMS-2567.				
	NO 07000 (00 (07) EF 00 (0007				25

# FIRE SAFETY SURVEY REPORT CRUCIAL DATA EXTRACT

(TO BE USED WITH CMS-2786 FORMS)

PROVIDER NUMBER	FACILITY NAME		SUR	/EY DATE
			* K4	
* K4 MULTIPLE CONSTRUCTION	TOTAL NUMBER OF BUILDINGS		WII C F	UILDING B NG LOOR D APARTMENT UNIT
LSC FORM INDICATOR		COMPLETE IF ICF/MR	IS SURVEYED UNDER CHAPTER 2	1 SMALL
1 2786 A-67 EXISTING 2 A-67 NEW 3 B-73 EXISTING 4 B-73 NEW 5 F-81 EXISTING 6 F-81 NEW 7 C-SHORT 8 H-ASC 9 J, K, L 85-CHAPTER 21 (ICFs/MR ONLY) 10 P-85 EXISTING 11 P-85 NEW  *K7 SELECT NUMBER OF FORM  (Check if not applicable)		K8:  LARGE  K8:  APARTMENT HOUSE  K8:  ENTER E – SCORE HE	7 PROMPT 8 SLOW 9 IMPRACTICAL	
*K9: FACILITY MEETS LSC BASED ON: (CALLED A1. (COMP. WITH ALL PROVISIONS)  FACILITY DOES NOT MEET LSC:  B.	A2. (ACCEP	TABLE POC)  1180  A.  FULLY SPRINKLERED  Il required areas are sprinklered) (	A3. (WAIVERS)  B. PARTIALLY SPRINKLEF Not all required areas are sprink	
* MANDATORY				, , , , , , , , , , , , , , , , , ,
orm CMS-2786S (06/07) EF 06/2007				

26

DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Medicare & Medicaid Services 7500 Security Boulevard, Mail Stop C2-21-16 Baltimore, Maryland 21244-1850



# Center for Clinical Standards and Quality/Survey & Certification Group

Ref: S&C: 16-29-LSC

**DATE:** June 20, 2016

**TO:** State Survey Agency Directors

**FROM:** Director

Survey and Certification Group

**SUBJECT:** Adoption of the 2012 edition of the National Fire Protection Association (NFPA)

101 - Life Safety Code (LSC) and 2012 edition of the NFPA 99 - Health Care

Facilities Code (HCFC)

### **Memorandum Summary**

- The Centers for Medicare & Medicaid Services (CMS) has adopted by regulation the 2012 LSC and the 2012 HCFC. The regulation effective date is July 5, 2016.
- CMS will begin surveying for compliance with the 2012 LSC and HCFC on November 1, 2016.
- CMS will offer an online transitional training course for existing LSC surveyors to provide an update on the new requirements. The course will be available on September 2, 2016 via the CMS Surveyor Training Website.
- CMS will update the ASPEN program (i.e., the information system which tracks surveys) and CMS Fire Safety Forms (2786) prior to the November 1, 2016 survey start date.

#### **Background**

The purpose of this policy memorandum is to notify the State Agencies (SA) and Regional Offices (RO) that CMS has adopted by regulation the NFPA 2012 LSC and 2012 HCFC. This memorandum supersedes S&C 03-21. In addition, this policy memorandum is intended to notify the SAs and ROs on the status of associated training, survey forms, and ASPEN program.

#### Regulation

On May 4, 2016, CMS adopted the 2012 LSC and the 2012 HCFC by final rule. The final rule was published in the Federal Register (Vol. 81, No. 86), is entitled "Medicare and Medicaid Programs; Fire Safety Requirements for Certain Health Care Facilities", and is effective July 5, 2016. The final rule also adopted 2012 LSC Tentative Interim Amendments (TIA) 12–1, 12–2, 12–3, and 12–4, and 2012 HCFC TIA 12–2, 12–3, 12–4, 12–5 and 12–6.

The final rule eliminates all references to the previously adopted 2000 edition of the LSC, and requires providers and suppliers to comply with the 2012 LSC with certain modifications, and the 2012 HCFC excluding chapters 7, 8, 12, and 13 by the effective date of July 5, 2016.

Buildings constructed before July 5, 2016 can meet Existing Occupancy requirements. In addition, buildings that receive design approval or building permits for construction before July 5, 2016 can meet Existing Occupancy requirements. All other building construction must meet New Occupancy requirements.

The final rule includes requirements for Religious Non-Medical Health Care Institutions (RNHCI), Ambulatory Surgical Centers (ASC), Hospice, Program of All-Inclusive Care for the Elderly (PACE), Hospitals, Long Term Care, Intermediate Care Facilities for Individuals with Intellectual Disabilities (ICFs/IID), and Critical Access Hospitals (CAH).

The final rules continues to allow CMS to waive, for periods deemed appropriate, specific provisions of the Life Safety Code, which would result in an unreasonable hardship upon a facility, providing the waiver will not adversely affect the health and safety of the patients.

The final rule also continues to allow the ability of a State to request that its State fire safety requirements, imposed by State law, be used in lieu of the 2012 edition of the LSC and HCFC with CMS.

#### **Survey Process**

CMS will begin surveying facilities for compliance with the 2012 edition of the LSC and HCFC on November 1, 2016. In addition, this will allow CMS the opportunity to train existing surveyors, revise fire safety survey forms, and update the ASPEN program.

Surveyors will continue to use the current process, tags and forms until November 1, 2016. In instances where the survey process identified deficiencies that would be compliant under the 2012 LSC, a facility may verify compliance with the 2012 LSC as an acceptable plan of correction and the deficiency would not be cited.

The LSC shortened survey process, outlined in the CMS Survey and Certification letter (https://www.cms.gov/Medicare/Provider-Enrollment-and-

Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-13-22.pdf) will no longer be able to be used after October 31, 2016. CMS will analyze the data required to determine which facilities will be able to be surveyed using the shortened survey process. Any State that believes losing the shortened survey process for a period of time will cause it staffing and/or scheduling difficulty should contact their Regional Office immediately with their concerns. CMS will notify State Survey Agencies if the determination is made to use the LSC shortened survey process again.

**Training:** CMS will provide an online transition course for existing LSC surveyors. The transition course is intended to inform existing surveyors of the new regulatory requirements and instruct existing surveyors on how to apply the new Codes when surveying health care facilities.

#### Page 3 – State Survey Agency Directors

The transition course will be self-paced and will take approximately 20 hours to complete. It will begin with a pre-test and conclude with a post-test that will require a passing score of 85 percent. All existing SA surveyors that conduct LSC surveys are required to complete the transition course and obtain a passing score before conducting LSC surveys using the 2012 LSC and HCFC.

The transition course will address: the requirements of the adopted regulation and associated policy and procedures; changes that have occurred in the Health Care Occupancies, Ambulatory Health Care Occupancies, Residential Board and Care Occupancies, and Building Rehabilitation chapters of the LSC; changes that have occurred in the NFPA 99; and the K-tags associated with new CMS-2786 forms.

This course will be available to all existing LSC surveyors on September 2, 2016 via the CMS Surveyor Training Website.

The reoccurring 2012 Basic Life Safety Code, NFPA 99, FSES/Health Care, and FSES/Residential Board and Care courses for new LSC surveyors will also be updated, and information regarding these courses will be provided when course development is complete. All previous prerequisites and requirements for new LSC surveyors to attend these reoccurring courses will continue.

**ASPEN:** The ASPEN program will be updated with new regulation sets that correlate with the 2012 LSC and HCFC requirements and associated K-tags. **The ASPEN system will be updated prior to the November 1, 2016 survey start date.** 

If you have questions concerning this memorandum, please send them to <a href="mailto:SCG\_LifeSafetyCode@cms.hhs.gov">SCG\_LifeSafetyCode@cms.hhs.gov</a>. To view the Final Rule, 05042016 Fire Safety Requirements Final Rule please see <a href="https://www.federalregister.gov/articles/2016/05/04/2016-10043/medicare-and-medicaid-programs-fire-safety-requirements-for-certain-health-care-facilities">https://www.federalregister.gov/articles/2016/05/04/2016-10043/medicare-and-medicaid-programs-fire-safety-requirements-for-certain-health-care-facilities</a>

**Training:** Immediately. The information provided in this memorandum should be communicated with all survey and certification staff, their managers, and the State/Regional Office training coordinators within 30 days of this memorandum.

**Effective Date:** CMS will begin to survey all health care facilities referenced in this final rule for compliance with the 2012 editions of the LSC and HCFC on November 1, 2016.

/s/
David R. Wright
Acting Director

cc: Survey and Certification Regional Office Management

DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Medicare & Medicaid Services 7500 Security Boulevard, Mail Stop C2-21-16 Baltimore, Maryland 21244-1850



#### Center for Clinical Standards and Quality /Survey & Certification Group

Ref: S&C: 14-46-LSC

**DATE:** September 26, 2014

**TO:** State Survey Agency Directors

**FROM:** Director

Survey and Certification Group

**SUBJECT:** Categorical Waiver for Power Strips Use in Patient Care Areas

#### **Memorandum Summary**

- Categorical Waiver: CMS has determined that the 2000 edition of the National Fire Protection Association (NFPA) 101® Life Safety Code (LSC) contains provisions on the use of power strips in health care facilities that may result in unreasonable hardship for providers or suppliers. Further, an adequate alternative level of protection may be achieved by compliance with the 2012 edition of the LSC, which has extended allowances on the use of power strips in patient care areas.
  - o CMS is permitting a categorical waiver to allow for the use of power strips in existing and new health care facility patient care areas, if the provider/supplier is in compliance with all applicable 2012 LSC power strip requirements and with all other 2000 LSC electrical system and equipment provisions.
  - O Resident rooms in long-term care or other residential care facilities that do not use line-operated electrical appliances for diagnostic, therapeutic, or monitoring purposes are not subject to the more restrictive NFPA 99 requirements regarding the use of power strips in patient care areas/rooms. Resident rooms using line-operated patientcare-related electrical equipment in the patient care vicinity must comply with the NFPA 99 power strip requirement and may elect to utilize this categorical waiver.
- Individual waiver applications are not required: Providers and suppliers are expected to have written documentation that they have elected to use the waiver. A provider or supplier must notify the LSC survey team at the entrance conference that it has elected the use the waiver permitted under this guidance and that it meets the applicable waiver requirements. The survey team will review the information and confirm the facility meets the conditions for the waiver.

Various regulations governing certain certified providers and suppliers require compliance with the 2000 edition of the NFPA LSC. The LSC establishes minimum requirements for the design, operation, and maintenance of buildings and structures to protect individuals from fire and related hazards. The 1999 edition NFPA 99, *Health Care Facilities Code* is cross-referenced in

the 2000 LSC and, as a result, it contains requirements applicable to providers and suppliers who must meet the 2000 edition of the LSC under our regulations.

As allowed by the various regulations referencing the LSC, CMS may waive specific provisions of the 2000 edition of the LSC which, if rigidly applied, would result in unreasonable hardship upon a provider or supplier, but only if the waiver does not adversely affect the health and safety of patients. CMS has determined that the 1999 edition of the NFPA 99 contains provisions on the use of power strips in health care facilities that may result in unreasonable hardship for providers or suppliers, and for which an adequate alternative level of protection may be achieved by compliance with the 2012 edition of the LSC. Accordingly, CMS is making available a categorical waiver for providers and suppliers subject to the LSC requirements regarding the use of power strips in patient care areas.

#### **Categorical Waiver**

The increasing need for electrical equipment in health care facilities has resulted in a need for more electrical receptacles in areas where patients receive examination and treatment. As a result, the 1999 NFPA 99 requirements regarding the use of power strips in "patient care areas" has become outmoded and unduly burdensome to providers and suppliers.

The 1999 edition of NFPA 99 requires that there be sufficient receptacles located in all "patient care areas" in order to avoid the need for power strips. An exception is provided, but only in anesthetizing locations where power strips can be used if they are an integral component of portable patient-care-related equipment assemblies that are tested by the manufacturer, and if the integrity of the assembly is regularly verified and documented through an ongoing maintenance program.

By contrast, the 2012 edition of NFPA 99 has extended allowances for use of power strips in "patient care rooms," which replaces the term "patient care area". The requirement for there to be sufficient receptacles located in all patient care areas as to avoid the need for power strips has been removed, but the minimum number of receptacles in patient care rooms has been increased. The exception provided for power strips used an integral component of portable patient-care-related equipment assemblies that are tested by the manufacturer has been expanded beyond anesthetizing locations to all patient care rooms. In addition, the exception no longer requires a power strip to be an integral component of a manufacturer tested equipment assembly.

Accordingly, we are permitting a categorical waiver to allow for the use of power strips in existing and new health care facility patient care areas/rooms, if the provider/supplier complies with all applicable **2012** NFPA 99 power strip requirements and with all other 1999 NFPA 99 and 2000 LSC electrical system and equipment provisions.

#### Waiver Not Required for Certain Resident Rooms

Resident rooms in long-term care or other residential care facilities that do not use line-operated electrical appliances for diagnostic, therapeutic, or monitoring purposes are not subject to the more restrictive NFPA 99 requirements regarding the use of power strips in patient care

areas/rooms. In this setting, power strips may be used in the resident rooms in accordance with the standard precautions and Underwriter Laboratory (UL) listings as discussed below.

Resident rooms using line-operated patient-care-related electrical equipment in the patient care vicinity must comply with the NFPA 99 power strip requirement and may elect to utilize this categorical waiver.

#### Pertinent 2012 NFPA 99 Definitions:

- "Patient bed location" is defined in section 3.3.136 as the location of a patient sleeping bed, or the bed or procedure table of a critical care area.
- "Patient-care-related electrical equipment" is defined in section 3.3.137 as electrical equipment that is intended to be used for diagnostic, therapeutic, or monitoring purposes in the patient care vicinity;
- "Patient care room" is defined in section 3.3.138 as any room of a health care facility wherein patients are intended to be examined or treated. Note that this term replaces the term "patient care area" used in the 1999 NFPA 99, but the definition has not changed.
- "Patient care vicinity" is defined in section 3.3.139 as a space, within a location intended for the examination and treatment of patients (i.e., patient care room) extending 6 ft. beyond the normal location of the bed, chair, table, treadmill, or other device that supports the patient during examination and treatment and extends vertically 7 ft. 6 in. above the floor.

#### Requirements:

- Patient bed locations in new health care facilities, or in existing facilities that undergo renovation or a change in occupancy, shall be provided with the minimum number of receptacles as required by section 6.3.2.2.6.2.
- Power strips may be used in a patient care vicinity to power rack-, table-, pedestal-, or cart-mounted patient care-related electrical equipment assemblies, provided *all* of the following conditions are met, as required by section 10.2.3.6:
  - 1) The receptacles are permanently attached to the equipment assembly.
  - 2) The sum of the ampacity of all appliances connected to the receptacles shall not exceed 75 percent of the ampacity of the flexible cord supplying the receptacles.
  - 3) The ampacity of the flexible cord is suitable in accordance with the current edition of NFPA 70, National Electric Code.
  - 4) The electrical and mechanical integrity of the assembly is regularly verified and documented through an ongoing maintenance program.

- 5) Means are employed to ensure that additional devices or nonmedical equipment cannot be connected to the multiple outlet extension cord after leakage currents have been verified as safe.
- Power strips may *not* be used in a patient care vicinity to power non-patient care-related electrical equipment (e.g., personal electronics).
- Power strips *may* be used outside of the patient care vicinity for both patient care-related electrical equipment & non-patient-care-related electrical equipment.
- Power strips providing power to rack-, table-, pedestal-, or cart-mounted patient care-related electrical equipment assemblies are not required to be an integral component of manufacturer tested equipment. Power strips may be permanently attached to mounted equipment assemblies by personnel who are qualified to ensure compliance with section 10.2.3.6.
- Resident rooms in long-term care or other residential care facilities that do not use lineoperated patient-care-related electrical equipment are not subject to the more restrictive NFPA 99 requirements regarding the use of power strips in patient care areas/rooms.
- Resident rooms using line-operated patient-care-related electrical equipment in the patient
  care vicinity must comply with the NFPA 99 power strip requirement and may elect to utilize
  this categorical waiver.
- If power strips are used in any manner, precautions as required by the LSC and reference documents are required, including but not limited to: installing internal ground fault and over-current protection devices; preventing cords from becoming tripping hazards; connecting devices so that tension is not transmitted to joints or terminals; no "daisy chaining" power strips; using power strips that are adequate for the number and types of devices, and no overloading power strips with high load devices. In addition, the use of ground fault circuit interruption (GFCIs) may be required in locations near water sources to prevent electrocution.
- Power strips providing power to patient care-related electrical equipment must be Special-purpose Relocatable Power Taps (SPRPT) listed as UL 1363A or UL 60601-1.
- Power strips providing power to non- patient-care-related electrical equipment must be Relocatable Power Taps (RPT) listed as UL 1363.

#### **Waiver Process**

Providers and suppliers that want to take advantage of the categorical waiver identified above must formally elect to use the waiver and must document their election decision. If a provider/supplier conforms to the requirements identified for the 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 the categorical waiver and confirm it is meeting all applicable categorical waiver provisions. This will ensure an adequate level of protection is afforded. The waiver 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.

**Questions:** If you have questions regarding this memorandum please contact hospitalscg@cms.hhs.gov.

**Effective Date:** Immediately. This policy should be communicated with all survey and certification staff, their managers and the State/Regional Office training coordinators within 30 days of this memorandum.

/s/ Thomas E. Hamilton

cc: Survey and Certification Regional Office Management

Fire Safety information provided by CMS for distribution to surveyors and providers- May 23, 2018

### Fire in facilities – Sent on 4/7/17

There have been two fires in the Midwest recently where the fire occurred overnight in a locked area and staff did not have access to the room. As a result staff were unable to take appropriate action before things got out of control. There are many code references that cover this situation, for example: NFPA Standard: 2012 NFPA 101, 19.1.1.3.1 All health care facilities shall be designed, constructed, maintained, and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

If you have a locked room and none of your staff have keys, how can staff who know there is a fire situation gain access to the area to help fight the fire? Consider your kitchens, staff offices, boiler rooms, laundry rooms, etc. All areas must be maintained and operated to minimize the possibility of a fire.

Have you had a fire? Don't forget to notify your Fire Marshal and State Health Agency.

# Fire Watch Policies Sent 5/2017

Did you know that the outage time was increased for sprinkler outages from four hours to ten hours with the adoption of the 2012 Life Safety Code? (The time for fire alarm outages remained the same – four hours.) Does your plan call for a fire watch when there is a water outage? Does your plan say you don't have to do the fire watch if the systems are only down for routine testing and maintenance? If so, you should remove that statement as the fire watch is required for any type of outage. Does your sprinkler impairment plan meet the 2011 edition of NFPA 25? You can view the requirements for free online at NFPA.org. (Go to the 2011 edition of NFPA 25, chapter 15 Impairments.) Are the staff dedicated to the task? Are the rounds continuous? Do you notify your insurance company when the sprinkler system is out of service? Do you notify the local fire department, Fire Marshal and Health Department? Do you have accurate telephone numbers in the

policy or in your emergency numbers/calling tree? Don't forget to in-service staff when you change your policies. Make sure you have a documentation sheet prepared for the person doing fire watch to make it easier – every room, canopies, garages, basement, stairwells, attic spaces – anywhere there are sprinklers.

Don't forget to implement the plan when you have an outage. If your sprinkler system has been determined to be obstructed, that also requires a fire watch until the system is flushed or replaced. **Failure to implement the plan can be an Immediate Jeopardy.** 

# Are you ready for the NEW annual requirements due 7/5/2017? Sent 6/2017

There are a few new requirements under the 2012 edition of the Life Safety Code that are coming due on July 5<sup>th</sup>, 2017.

# <u>2010 edition of NFPA 80 - Standard for Fire Doors and Other Opening Protectives</u>

Requirements for all fire-rated door assemblies to be inspected and maintained by a qualified person:

- **3.3.95 Qualified Person.** A person who, by possession of a recognized degree, certificate, professional standing, or skill, and who, by knowledge, training, and experience, has demonstrated the ability to deal with the subject matter, the work, or the project.
- **5.2.3 Functional Testing. 5.2.3.1** Functional testing of fire door and window assemblies shall be performed by individuals with knowledge and understanding of the operating components of the type of door being subject to testing.

Is the door and frame free from holes and breaks in all surfaces? Are all the glazing, vision light frames and glazing beads intact and securely fastened?

Are the doors, hinges, frame, hardware and threshold secure, aligned and in working order with no visible signs of damage?

Are there any missing or broken parts?

Is the clearance from the door edge to the frame no more than 1/8 inch?

Is the door undercut no more than 3/4 inch?

Does the active door leaf completely closes when operated from the full open position?

Does the inactive leaf close before the active leaf when a coordinator is used?

Does the latching hardware operate and secure the door in the closed position?

Is the door assembly free from are auxiliary hardware items which could interfere with its operation?

Has the door been modified since it was originally installed?

If gasketing and edge seals are installed, have they been verified for integrity and operation?

# 2012 edition of NFPA 99 - Health Care Facilities Code

Requirements for receptacle, main and circuit breaker testing and maintenance:

# **6.3.3.2** Receptacle Testing in Patient Care Rooms

- **6.3.3.2.1** The physical integrity of each receptacle shall be confirmed by visual inspection.
- **6.3.3.2.2** The continuity of the grounding circuit in each electrical receptacle shall be verified.
- **6.3.3.2.3** Correct polarity of the hot and neutral connections in each electrical receptacle shall be confirmed.
- **6.3.3.2.4** The retention force of the grounding blade of each electrical receptacle (except locking-type receptacles) shall be not less than 115 g (4 oz).

# **6.3.4.1** Maintenance and Testing of Electrical System

- **6.3.4.1.1** Where hospital-grade receptacles are required at patient bed locations and in locations where deep sedation or general anesthesia is administered, testing shall be performed after initial installation, replacement, or servicing of the device.
- **6.3.4.1.2** Additional testing of receptacles in patient care rooms shall be performed at intervals defined by documented performance data.
- **6.3.4.1.3** Receptacles not listed as hospital-grade, at patient bed locations and in locations where deep sedation or general anesthesia is administered, shall be tested at intervals not exceeding

- **6.3.4.1.4** The LIM circuit shall be tested at intervals of not more than 1 month by actuating the LIM test switch (*see* 6.3.2.6.3.6). For a LIM circuit with automated self-test and self-calibration capabilities, this test shall be performed at intervals of not more than 12 months. Actuation of the test switch shall activate both visual and audible alarm indicators.
- **6.3.4.1.5** After any repair or renovation to an electrical distribution system, the LIM circuit shall be tested in accordance with 6.3.3.3.2.

### **6.4.4.1.2** Maintenance and Testing of Circuitry

**6.4.4.1.2.1\* Circuit Breakers.** Main and feeder circuit breakers shall be inspected annually, and a program for periodically exercising the components shall be established according to manufacturer's recommendations.

# 2012 edition of NFPA 99 - Health Care Facilities Code

This requires training of personnel who work with medical gases.

# 11.5.2.1 Qualification and Training of Personnel

- 11.5.2.1.1\* Personnel concerned with the application and maintenance of medical gases and others who handle medical gases and the cylinders that contain the medical gases shall be trained on the risks associated with their handling and use.
- **11.5.2.1.2** Health care facilities shall provide programs of continuing education for their personnel.
- **11.5.2.1.3** Continuing education programs shall include periodic review of safety guidelines and usage requirements for medical gases and their cylinders.
- **11.5.2.1.4** Equipment shall be serviced only by personnel trained in the maintenance and operation of the equipment.
- **11.5.2.1.5** If a bulk cryogenic system is present, the supplier shall provide annual training on its operation.

# Fire Alarm System Inspection, Testing and Maintenance (ITM) 7-2017

All devices connected to your fire alarm system need to have evidence that each individual device was tested. That means you also need an accurate inventory of every device, complete with a description as to where it is located. The test report

needs to list each and every individual device (<u>individually itemized</u>), a description of where it is located, and whether it passed or failed its test.

Get those fire alarm interface relays included in the fire alarm testing process and document each one individually, with a "Pass" or a "Fail" notation. Here is a list of the most common interface relays used in healthcare fire alarm systems:

- Magnetic hold-open devices
- Air handler shutdown
- Kitchen hood suppression system
- Elevator recall
- Magnetic locks
- Fire pump
- Smoke dampers
- Clean agent suppression systems
- Sprinkler dry pipe/pre-action systems
- Overhead rolling fire doors

If the company that completes the fire alarm ITM is different than the range hood and sprinkler company vendors, then provide a copy of that report to the fire alarm company and they can write in the comments section that these devices were tested by 'vendor' on 'date', and pass/fail.

Don't forget to keep a disposition of the devices that failed or had a comment regarding how the system is not to code with your semi-annual inspection and testing. That way we know corrections were made and you don't have to search for paperwork during a survey.

**A note about dampers:** Electric fire and smoke dampers must be tested annually with the fire alarm system. Fusible link dampers are required to be exercised and lubricated once every four years in LTC/once every six years in hospitals. Electric fire/smoke dampers are required to be tested annually with the fire alarm.

References: NFPA 72 National Fire Alarm and Signaling Code

# **Useful Websites** sent 8/2017

Would you like to read the new 2012 Life Safety Code K-tags? Go to:

https://www.cms.gov/Medicare/CMS-Forms/CMS-Forms/CMS-Forms-List.html

Enter 2786; then choose your form based on your occupancy type. LTC and hospitals use the Healthcare form, 2786R.

Would you like to view the NFPA codes referenced in the K-tags? Go to NFPA.org and sign up (it's free). Then go to the list of codes and standards. Choose free access:

http://www.nfpa.org/codes-and-standards/all-codes-and-standards/free-access

Choose your book and appropriate year (Here is a list to get you started):

NFPA 101, 2012 (LSC)

NFPA 25, 2011 (Sprinkler Systems)

NFPA 72, 2010 (Fire Alarms)

NFPA 99, 2012 (Health Care Facilities)

NFPA 110, 2010 (Generators)

NFPA 70, 2011 (Electrical)

Would you like to see the Life Safety Code survey and certification memos? Go to:

https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Policy-and-Memos-to-States-and-Regions.html

Enter LSC to filter out the other type of memos.

#### Fire and Smoke Door ITM – S&C Memo 17-38

The latest S&C memo is 17-38. This is in reference to fire door inspection, testing and maintenance. According to the memo, the new compliance date is 1/1/2018. (It was 7/5/2017). If you have a citation and are unable to complete the work timely, you may use the new compliance date in your Plan of Correction.

### Plan review Sent 9/2017

Are you planning on making changes to equipment in your facility? Examples might be a new fire alarm system, sprinkler system, boiler, elevator, generator, range hood, HVAC, locking devices, electrical work, lighting or walk-in refrigerator/freezer? Or perhaps you are thinking of doing some renovations such as adding/removing doors, walls, smoke barriers, wall coverings, ceilings, changes to locking devices (such as the timing of delayed egress), outdoor storage room, outdoor smoking area, canopy, or exits? Do you know the construction type of your facility? (This is important! If it is of non-combustible construction, you can't use wood studs during your renovation.) Have you run the proposed changes through your State Agency plan review team? If not, you might be making a change that does not comply with the Life Safety Code and/or Health Care regulations. Please send your information in just to make sure. Depending on your State Agency, you might need a code foot print, blue print, stamped/sealed documents from an architect or engineer, or specification sheets on your new finishes, fire stopping products, etc.

# Sprinkler Systems – Sent 10/2017

When it is required that all areas of a facility be completely sprinkler protected, make sure that you have coverage under that garage door. We frequently see these areas with a sprinkler above the door, but when the garage door is in the open position, that sprinkler pattern is blocked. You might need to add a side wall sprinkler to ensure full coverage under the garage door.

Do you have painted, loaded (other substances – kitchen grease, cigarette tar, bird nest) or corroded (green or rusty) sprinklers? These are required to be **replaced**, not cleaned – there is no such thing as a UL listed paint remover.

- **5.2.1.1** Sprinklers shall be inspected from the floor level annually.
- **5.2.1.1.1** Sprinklers shall not show signs of leakage; shall be free of corrosion, foreign materials, paint, and physical damage; and shall be installed in the correct orientation (e.g., upright, pendent, or sidewall).

- **5.2.1.1.2** Any sprinkler that shows signs of any of the following shall be replaced:
- (1) Leakage
- (2) Corrosion
- (3) Physical damage
- (4) Loss of fluid in the glass bulb heat responsive element
- (5) Loading
- (6) Painting unless painted by the sprinkler manufacturer
- **5.2.1.1.3** Any sprinkler that has been installed in the incorrect orientation shall be replaced.
- **5.2.1.1.4** Any sprinkler shall be replaced that has signs of leakage; is painted, other than by the sprinkler manufacturer, corroded, damaged, or loaded; or is in the improper orientation.
- **5.2.1.1.5** Glass bulb sprinklers shall be replaced if the bulbs have emptied.

Is your sprinkler system obstructed? You must then complete a flush of the system. If this is not possible and the system must be replaced — **don't forget to** implement a fire watch until the flush and/or replacement is completed.

- **4.1.9.1** Where an impairment to a water-based fire protection system occurs, the procedures outlined in Chapter 15 of this standard shall be followed, including the attachment of a tag to the impaired system.
- **4.1.9.2** Where a water-based fire protection system is returned to service following an impairment, the system shall be verified to be working properly by means of an appropriate inspection or test.

Don't forget to keep a disposition of the devices that failed or had a comment regarding how the system is not to code with your inspection and testing. That way everyone knows corrections were made and you don't have to search for paperwork during a survey.

**4.3.1** Records shall be made for all inspections, tests, and maintenance of the system and its components and shall be made available to the authority having jurisdiction upon request.

**4.3.2** Records shall indicate the procedure performed (e.g., inspection, test, or maintenance), the organization that performed the work, the results, and the date.

References: 2011 edition of NFPA 25 Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

# Fire plans Sent 12-2017

With all the scrutiny on emergency preparedness, take a fresh look at your fire plan. Do you have one complete plan or do you have multiple versions in your disaster manual? Do you have multiple 'sections' that are not incorporated into one complete plan? Make sure that everything is in <u>one</u> plan, so there are no conflicts and that the reader does not think they are done reading 'the' plan when in fact there are multiple editions/sections. Also make sure every manual in your facility has been updated.

Are the numbers in your plan or calling tree out of date? Or did you use a sister facility's plan that has different phone numbers for your area – Fire Marshal, Health Department and Fire Department?

Do you have an assignment for an evacuation point outside? If you used a sister facility's plan, is the evacuation point accurate for your facility? Have you shared this plan with the local fire department? They might want to set up command in that very spot.

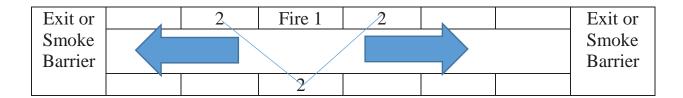
Do you have an assignment for who will be the designee to call 911? This is a new requirement to the 2012 Life Safety Code. This might be a redundant concept, but there is a good reason – what if the fire alarm did not transmit? Or, if it did transmit and the fire department is on the way, staff can now give them good information: (for example) yes, we have a real fire, it is this big, in this room, we used two fire extinguishers and it is not extinguished, we are evacuating to this

wing and we will meet you at the front door. Don't forget to have a backup for the night shift if your assignment is the receptionist and that is not a 24/7 position.

Does everyone know to pull a pull station for a fire no matter what? Old plans for 'major' and 'minor' fires are not current/acceptable.

Do you have a plan for the preparation and evacuation of a floor or wing?

Do you have a smoke compartment evacuation plan? Once staff determine the need to evacuate, start with residents in immediate surrounding area of fire, then the triangle of rooms around the room of fire origin (next to and across the hall from the room of origin), then the remaining rooms in the smoke compartment working away from the room of origin, trying not to cross the line of fire with the residents. Some residents may be evacuated outside while others may be evacuated beyond a set of smoke doors.



Do your evacuation and fire plans say to evacuate based on if the residents are ambulatory, use wheelchairs or are bedridden? After evacuation of the compartment of origin, and you find the need to evacuate further away, then it would be prudent to evacuate based on ambulation status (ambulatory, wheelchair, bedridden) since you can move faster. But it would not be fair to residents occupying the triangle of rooms around the room of fire origin to be last out because they are bedridden. If you have separate fire and evacuation plans, make sure they are consistent.

Keep this as simple as possible – if you have a smoke compartment plan from every smoke zone in your building, will staff be able to remember all of those

instructions? If they know the above information, they should be able to find the safe zone every time, no matter where they are in the building (*and* be able to articulate this to a surveyor).

Do you have cross-corridor doors? Examples might be at the entrance to a memory care unit or doors to a service hall. Cross-corridor doors are access control doors that are not smoke barrier doors. You need to evaluate your building and identify where all of your smoke/fire barriers are and if you have cross-corridor doors. Make sure staff know these are not part of the smoke compartment plan as they sometimes look like smoke barrier doors.

If you care for residents with specialized needs (such as ventilator or bariatric units), have a general plan in place and make sure staff know what to do. If the bed won't fit through the door, you need to have a plan in place for rescue. Always make sure you are adequately staffed for emergencies when you are providing care to special populations.

Does your plan or training materials cover all aspects of what your facility offers staff to fight a fire? Does it cover a bit about the construction, the fire alarm and sprinkler systems, the generator, the smoke barriers, identification of smoke doors, identification of cross—corridor doors that are not smoke barrier doors, all types of fire extinguishers in your facility — including the K or halon, the range hood, etc. It is important for all staff to know what equipment is in the kitchen. There was a recent IJ as a result of a fire where the night shift nursing staff were unable to extinguish the fire because they used the wrong type of extinguisher and didn't know about the range hood or how to activate it.

Do you have the required print copies at the security station or nurse's station? Don't just rely on the computer – it will be the first thing to go down in the event of an emergency.

Don't forget to in-service staff when you change your policies.

#### 19.7.2.1\* Protection of Patients.

**19.7.2.1.1** For health care occupancies, the proper protection of patients shall require the prompt and effective response of health care personnel.

# **19.7.2.1.2** The basic response required of staff shall include the following:

- (1) Removal of all occupants directly involved with the fire emergency
- (2) Transmission of an appropriate fire alarm signal to warn other building occupants and summon staff
- (3) Confinement of the effects of the fire by closing doors to isolate the fire area
- (4) Relocation of patients as detailed in the health care occupancy's fire safety plan

# **19.7.2.2 Fire Safety Plan.** A written health care occupancy fire safety plan shall provide for all of the following:

- (1) Use of alarms
- (2) Transmission of alarms to fire department
- (3) Emergency phone call to fire department
- (4) Response to alarms
- (5) Isolation of fire
- (6) Evacuation of immediate area
- (7) Evacuation of smoke compartment
- (8) Preparation of floors and building for evacuation
- (9) Extinguishment of fire