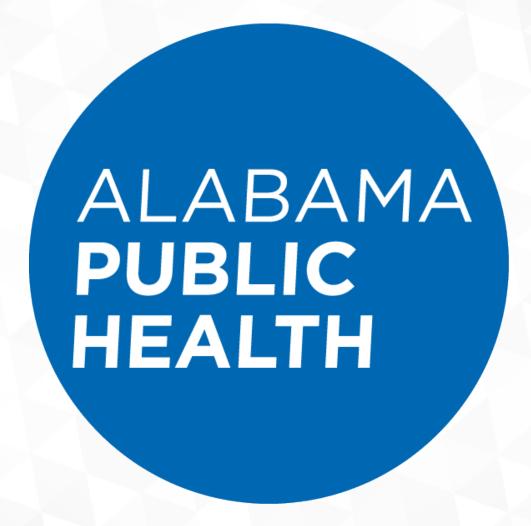
Life Safety Training Program



If your facility does not have the following code books, you need to get them asap:

 2012 NFPA 101 Life Safety Code Book – start in chapter 19 for existing building (more than likely) or chapter 18 for new building

If you are not sure which one your building is, contact us.

From chapter 19 or 18 you would then go to the chapter, section, and/or paragraph chapter 19 or 18 sends you to.

Example:19.2.4.1 sends you to 7.4.1.1 –

The first number is the chapter

The second number is the section

The third number is the subsection

The fourth number is the statement

2. 2012 NFPA 99 Health Care Facilities Code Book - per CFR 483.90 only the following chapters 1-6, 9-11, 14 and 15 apply to a healthcare facility.

TIPS TO HELP YOU HAVE A GOOD SURVEY

- 1. Always carry a pen/pencil and a writing pad during the survey
- 2. Pay attention to the surveyor
- 3. Delegate or put on hold your normal duties until the survey is over, unless it is an emergency
- 4. Have "paper work" ready (not on computer)
- 5. Have keys ready for EVERY DOOR
- 6. Always check behind outside contractors and verify invoice is correct before they leave

If you get an Immediate Jeopardy(IJ) or a Subquality Quality Care (SQC) tag from the Health Team, you must be incompliance with BOTH the Health Team and with Life Safety by the Health Team's date of compliance, not to go into Denial of Payment for New Admissions (DPNA).

Candy Easterling

Supervisor Life Safety Code Section Alabama Department of Public Health

334-206-5763 Direct 334-206-5890 Fax Candy.Easterling@adph.state.al.us

ADPH Staff

General Office Number: 334 206-5177

Life Safety:

Dale Hamilton – Surveyor Reggie Smith - Surveyor Emily Ashe - Administrative

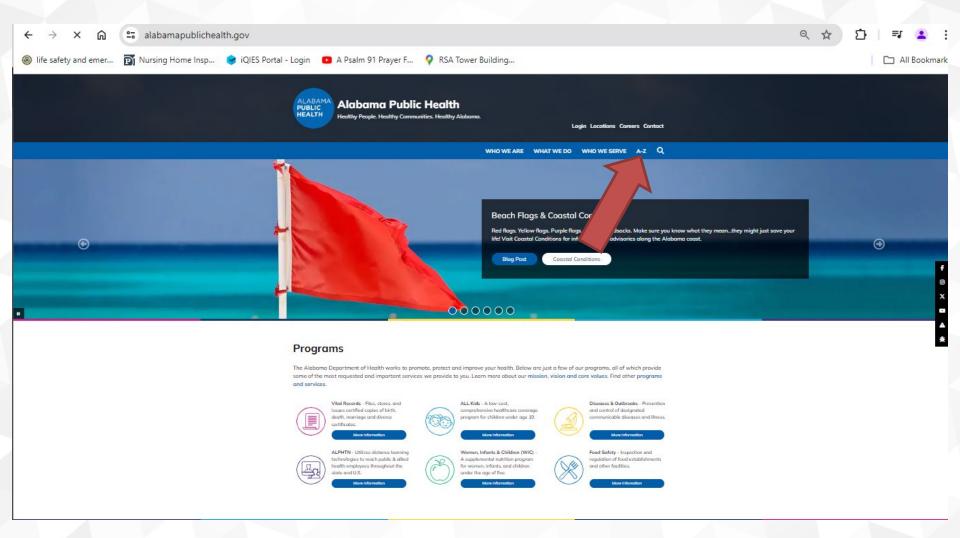
Email:

lifesafety@adph.state.al.us

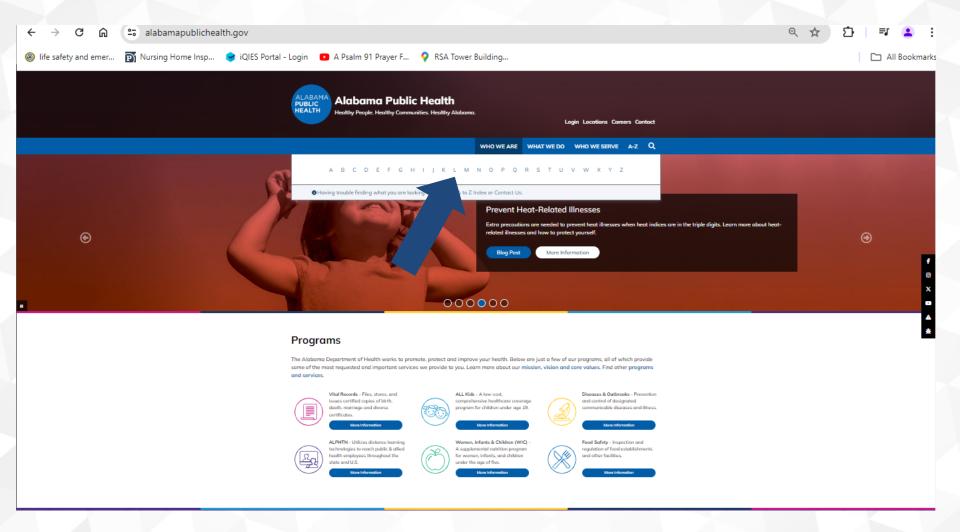
Website:

alabamapublichealth.gov

Go to: <u>alabamapublichealth.gov/facilitiesmanagement</u>

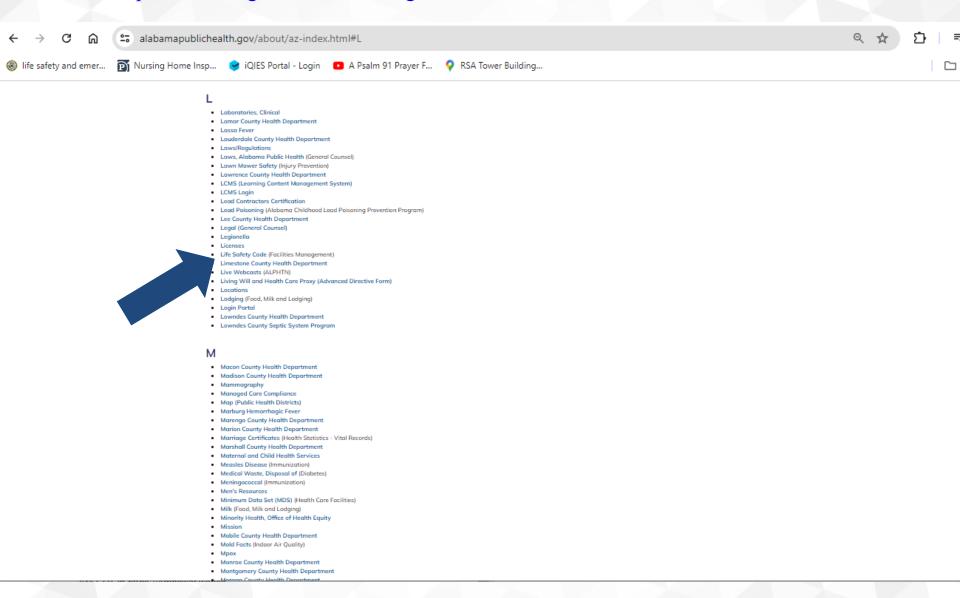


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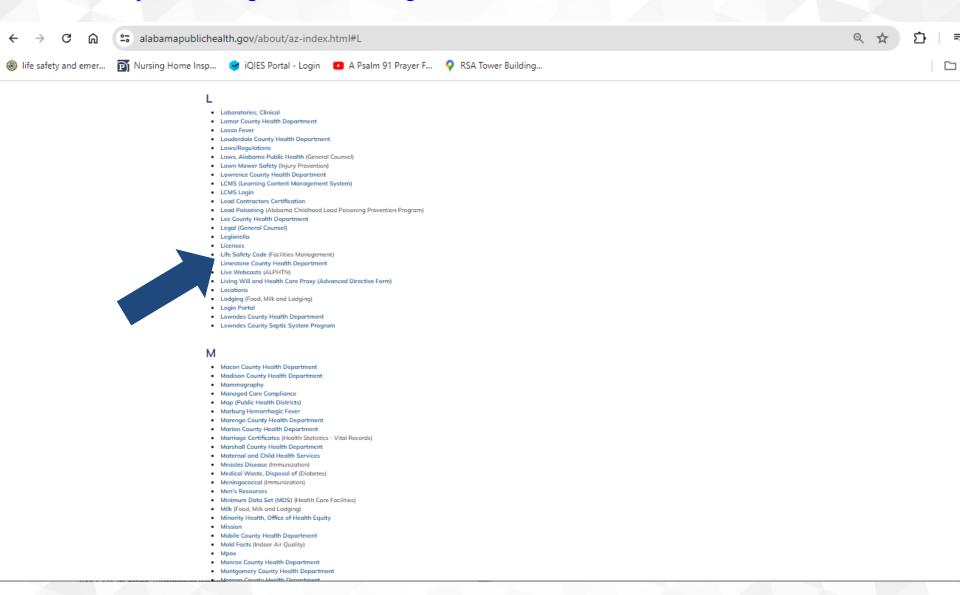
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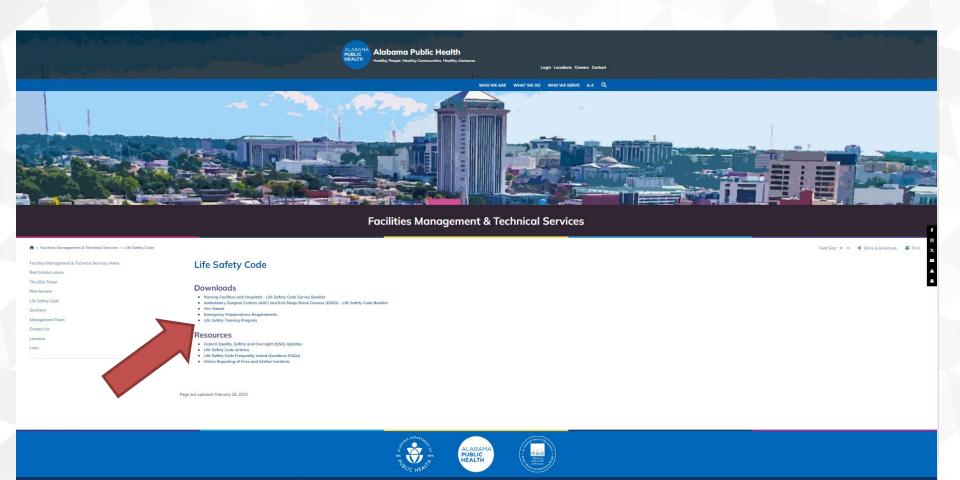
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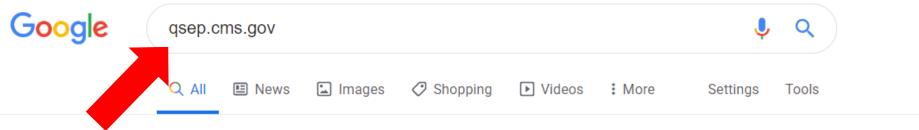


11 08/27/2024

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alabamapublichealth.gov/facilitiesmanagement





About 14,400 results (0.85 seconds)

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The Quality, Safety & Education Portal (**QSEP**) provides the full curriculum of surveyor training and guidance on health care facility regulations. **QSEP** is an ...

Training Catalog

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What would you like to do next? Return to Home Page. CMS ...

QSEP News

QSEP News. Posted January 6, 2020. Welcome to QSEP. As ...

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Frequently Asked Questions

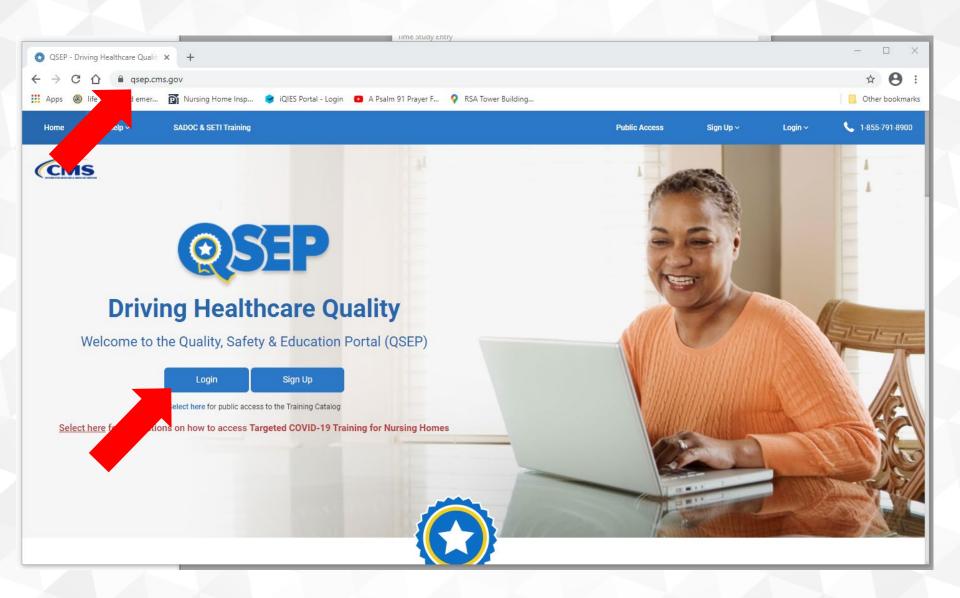
Frequently Asked Questions. Topics. Select a Topic.

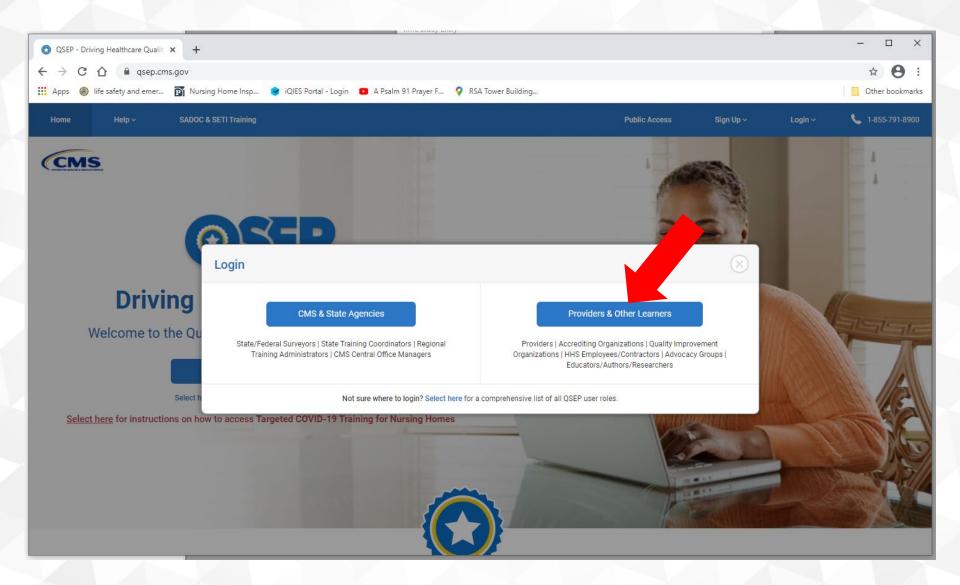
User Manual

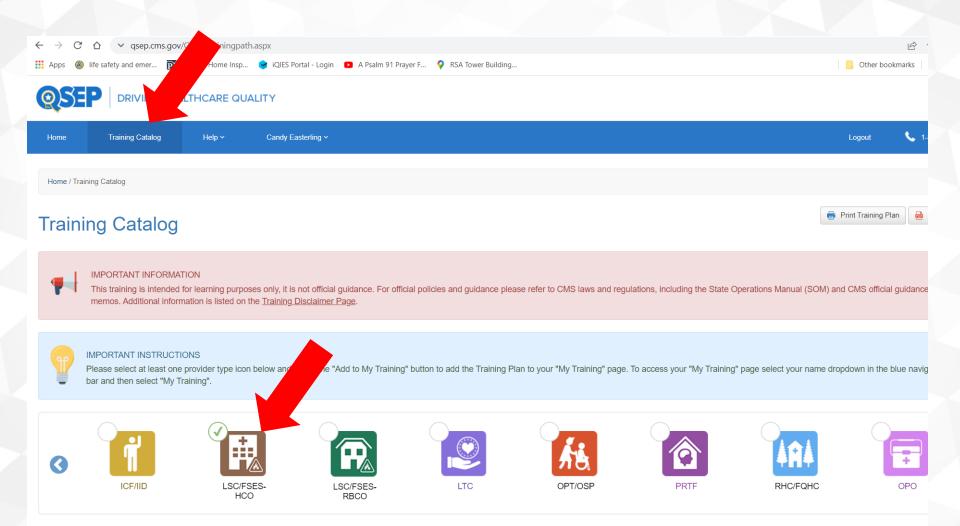
Select "User Manual" at the top of any QSEP page to access the ...

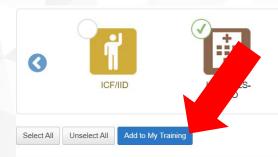
Training Menu

Fundamentals of Patient Safety in Hospitals - Training Menu. The ...





















Life Safety Code - Fire Safety Evaluation System for Health Care Occupancies (LSC/FSES-HCO)

Search LSC/FSES-HCO		Training Plan - Terms and I
Name	Duration	CEUs
Prerequisite Training (mandatory)		
Obtain Certified Fire Inspector I (CFI-1) certificate through the National Fire Protection Association (NFPA) certification program.	Variable	
Orientation to Life Safety Code	4 hrs.	
Principles of Documentation for Life Safety Code	1 hr.	
Basic Life Safety Code: The Survey Process Training	6 hrs.	0.60
Read State Operations Manual:		

Basics Training (mandatory)	
Basic Life Safety Code (BLSC) Training	
National Fire Protection Association (NFPA) 99 Health Care Facilities Code Training	
mergency Preparedness Basic Training	17 hrs.
nmediate Jeopardy Basic Training	8 hrs.
QIES Training	TBD
Iniversal Infection Prevention and Control	28 hrs.
ire Safety Evaluation System (FSES) for Residential Board and Care Occupancies (RBCO) Online Training RECENTLY ADDED	24 hrs.
ire Safety Evaluation System/Health Care Training	24 hrs.
tate Agency Surveyor Field Experience:	
Observation and participation of at least two LSC surveys with a preceptor, including return demonstration of tasks	Variab
After successful completion of one LSC conditions of participation survey with a preceptor, the new surveyor must complete one additional supervised LSC survey as a lead surveyor	Variabl

On documentation, we usually go back 12 months from the date of the survey.

The survey is from the time we enter your building until the time we leave.

No information will be reviewed after we leave your facility.

The following Medicare/Medicaid (M & M) Statement must be on an E Tag, and on a K Tag for each building (if you have more than one building)

"This plan of correction constitutes a written allegation of substantial compliance with Federal Medicare and Medicaid requirements."

The following are some Life Safety K Tags, this does not include all of the Life Safety K Tags.

K221 Corridor Doors

The releasing mechanism for any latch shall be located as follows:

- (1) Not less than 34 in. above the finished floor for other than existing installations
- (2) Not more than 48 in. above the finished floor

2012 NFPA 101, 19.2.2.2.1, 7.2.1.5.10.1 (1) & (2)

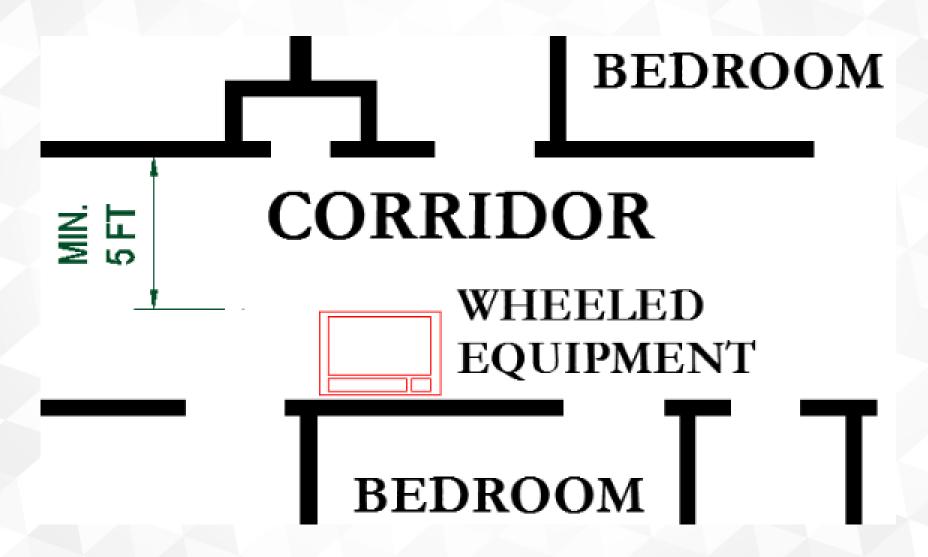


K232 Corridor Width 2012 NFPA 101, 19.2.3.4 (2) (4)

- (2) Where corridor width is at least 6'-0"
- (4) Projections into the required width shall be permitted for wheeled equipment, provided that **all** of the following conditions are met:
- (a) The wheeled equipment does not reduce the clear unobstructed corridor width to less than 60 in.
- (b) The health care occupancy fire safety plan and training program addresses the relocation of the wheeled equipment during a fire or similar emergency.
 - (c) The wheeled equipment is limited to the following:
 - i. Equipment in use and carts in use
 - ii. Medical emergency equipment not in use
 - iii. Patient lift and transport equipment



Wheeled Equipment in Corridors



Permissible Wheeled Equipment

Food Service Carts (In Use)

Housekeeping Carts (In Use)

Medication Carts (In Use)

Isolation Carts

Crash Carts

Wheeled Emergency Medical Equipment (not stored)

Portable Lift Equipment

Transport Equipment

Per S&C-10-18-LSC: "An item is considered "not in use" if it is left unattended or is not moved for more than 30 minutes". The equipment must have a permanent storage location, off of the corridor.

Not referring to "emergency medical equipment" in new wheeled equipment section.

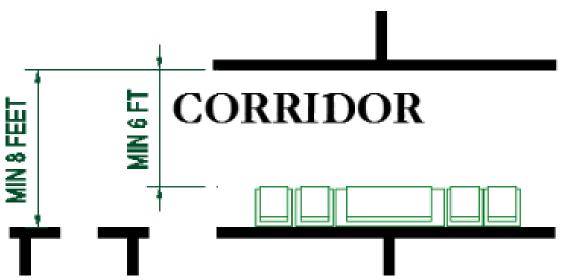
K232 Corridor Width 2012 NFPA 101, 19.2.3.4 (5)

(5) Where corridor width is at least 8'-0" – fixed furniture is allowed, provided **all** of the following conditions are met:

Fixed Furniture in Corridors

LSC 19.2.3.4(5) Summary of requirements:

- Securely attached to floor or wall
- On one side of the corridor
- Each grouping limited to 50 square feet
- Groupings at least 10 feet apart
- No obstruction of access to building and fire equip.



- •Corridors have smoke detection, or furniture in view from nurse station
- Sprinkler system in compartment

K291 Emergency Egress Lighting

Inside and Outside

- 30 seconds monthly
- If battery powered also 1.5 hours annually

2012 NFPA 101, 19.2.9.1, and 7.9.3

K293 Exit Signage

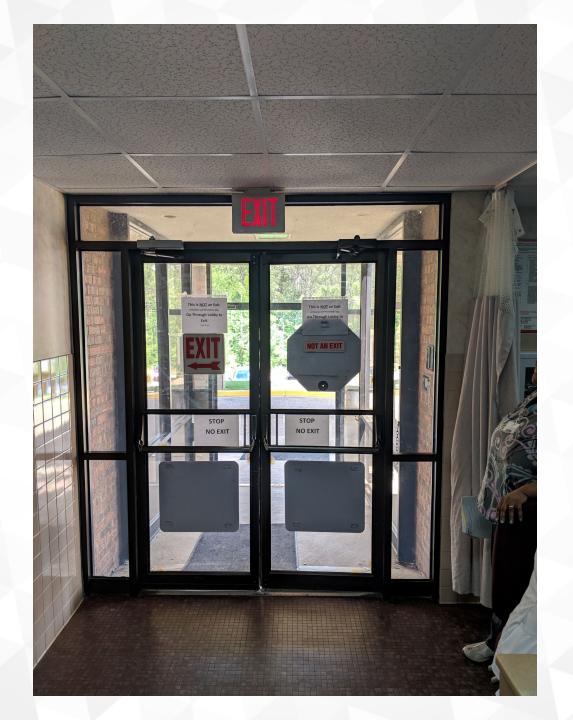
What we see:

- Directional exit signs not correct
- Exit signs not illuminated
- Exit sign is in place, but facility has put another sign-up stating "Not an Exit", "Stop No Exit"
- No monthly visual inspection

2012 NFPA 101, 7.10.2.1, 7.10.5.2.1, 7.10.1.3,







K321 Hazardous Areas

19.3.2.1.5

Hazardous areas shall include, but shall not be restricted to, the following:

- (1) Boiler and fuel-fired heater rooms
- (2) Central/bulk laundries larger than 100 ft² (9.3 m²)
- (3) Paint shops
- (4) Repair shops
- (5) Rooms with soiled linen in volume exceeding 64 gal (242 L)
- (6) Rooms with collected trash in volume exceeding 64 gal (242 L)
- (7) Rooms or spaces larger than 50 ft² (4.6 m²), including repair shops, used for storage of combustible supplies and equipment in quantities deemed hazardous by the authority having jurisdiction (8) Laboratories employing flammable or combustible materials in quantities less than those that would be considered a severe hazard

K321 Hazardous Areas

- The walls and ceiling in an hazardous room with automatic sprinkler protection shall restrict the movement of smoke
- Doors shall be self-closing and positive latching
- Cannot prop self-closing doors open

2012 NFPA 101, 19.3.2.1.2, 19.3.2.1.3, and CFR 483.90(a)(1)(ii)



K321 Hazardous Areas



Inspect self-closing devices to make sure all parts are there and working

New Enforcement

K324 – Appliance requiring protection is returned to design location

2011 NFPA 96, 12.1.2.2, 12.1.2.3, and 12.1.2.3.1

An approved method **shall** be provided that will ensure that the cooking appliances requiring protection are returned to approved design locations.

What deficiencies we see:

- Facility not conducting/documenting monthly inspections of the automatic wet chemical extinguishing system under the kitchen hood
- Not conducting the semiannual kitchen hood exhaust system inspection/cleaning by an outside company

2009 NFPA 17A, 7.2.1 & 7.2.2 2011 NFPA 96, 11.4, Table 11.4 & 11.6 This fire extinguisher tag is for the monthly inspection of the automatic wet chemical extinguishing system under the kitchen hood. See next two slides for what you shall be checking



At a minimum, this monthly "quick check" or inspection shall include verification of the following:

- (1) The extinguishing system is in it's proper location
- (2) The manual actuators are unobstructed
- (3) The tamper indicators and seals are intact
- (4) The maintenance tag or certificate is in place
- (5) No obvious physical damage or condition exists that might prevent operation
- (6) The pressure gauge(s), if provided, shall be inspected physically or electronically to ensure it is in the operable range

2009 NFPA 17A, 7.2.2

- (7) The nozzle blowoff caps, where provided, are intact and undamaged
- (8) Neither the protected equipment nor the hazard has not been replaced, modified, or relocated

2009 NFPA 17A, 7.2.2

At least semiannually, maintenance shall be conducted (by an outside company on the automatic suppression system for the kitchen hood) in accordance with the manufacturer's listed installation and maintenance manual.

2009 NFPA 17A, 7.3.3

- Grease filters shall be arranged so that all exhaust air passes through the grease filters.
- Grease filters shall be equipped with a grease drip tray beneath their lower edges.
- The addition of obstructions to spray patterns from the cooking appliance nozzle(s) such as baffle plates, shelves, or any modification shall not be permitted.

2011 NFPA 96, 6.2.3.3, 6.2.4.1, and 10.2.7.3

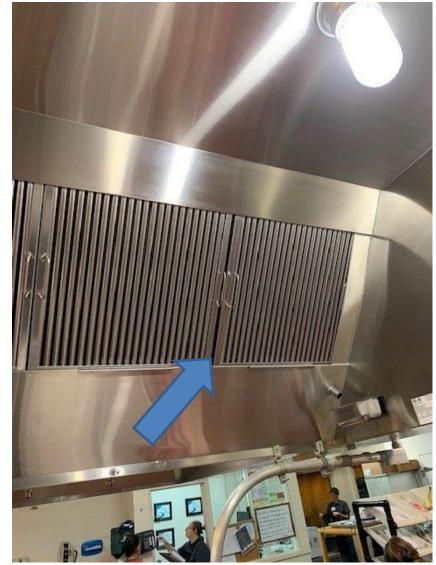
The nozzles are directed at the shelf and will not extinguish any fire



Grease filters shall be arranged so that all exhaust air passes through the grease filters. No gaps between filters







These filters were put in going in the wrong direction: horizontally instead of vertically



The grease drip tray metal container was installed wrong and the far right nozzle blowoff cap is not protecting the nozzle



K325 Alcohol-Based Hand Rub Dispensers

2012 NFPA 101, 19.3.2.6

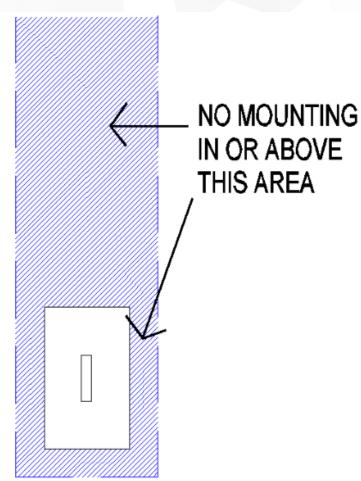
- (5) Can have up to 10 gallons in use within a smoke compartment
 - One dispenser within a room is not included in this limitation
- (7) More than 5 gallons stored in a smoke compartment shall comply with NFPA 30.

Most ABHR solution has a flash point of 63 degrees and would be a Class IB Liquid.

K325 Alcohol-Based Hand Rub Dispensers Locations

LSC 19.3.2.6

- (1) In corridors at least 6 feet wide.
- (4) At least 48 inches apart horizontally
- (9) Mounted over carpet only in sprinklered smoke compartments
- (8) 1" Horizontally mounting distance from an ignition source, including:
 - Light switch
 - Electrical receptacle1" Vertically from bottomNever above



1" CLEAR AT SIDES AND BOTTOM



K325 Storage of Alcohol- Based Hand Rub Solution

- Not permitted to be stored in basements (9.3.6)
- Not more than 10 gallons in each "control area" without a storage cabinet (9.5 – 9.6.2.2)
- At least one portable fire extinguisher having a capability of not less than 40:B shall be located outside of, but not more than 10' from, the door opening into a liquid storage area (9.10.2.2)

2012 NFPA 30, Chapter 9

9.7 Control Areas.

9.7.1 For the purpose of this code, a control area shall be a space within a building where quantities of liquids that do not exceed the maximum quantities allowed by Table 9.6.1 or Table 9.6.2.1 are stored.

9.7.2 Control areas shall be separated from each other by fire. barriers in accordance with Table 9.7.2, [5000:34.2.5.1.1]

Table 9.7.2 Design and Number of Control Areas

Floor Level	Maximum Allowable Quantity per Control Area (percent)*	Number of Control Areas per Floor	Fire Resistance Rating for Fire Barriers (hr)†
Above grade			
plane	ь.	1	2
>9	5 5	9	9 .
7-9		2	9
4-6	12.5	2	
3	50	2	. 1
2	75	3	1
1	100	4	1
Below grade			
plane			
1	75	3	1
2	50	2	1
Lower than 2	NA.	NA	NA.

NA: Not allowed.

*Percentages represent the maximum allowable quantities per control area shown in Table 9.6.1, with all of the increases permitted in the footnotes of that table.

[†]Fire barriers are required to include floors and walls, as necessary, to provide a complete separation from other control areas.

[5000: Table 34.2.5.1.1]

2012 NFPA 30, Chapter 9

9.9 Construction Requirements.

9.9.1 Storage areas shall be constructed to meet the fire resistance ratings specified in Table 9.9.1. Construction assemblies shall comply with the test specifications given in ASTM E 119. Standard Test Methods for Fire Tests of Building Construction and Materials.

Table 9.9.1 Fire Resistance Ratings for Liquid Storage Areas

	Fire Resistance Rating (hr)		
Type of Storage Area	Interior Walls*, Crilings, Intermediate Floors	Roofs	Exterior Walls
Liquid storage room Floor area $\leq 150 \text{ ft}^2$ 1 Floor area $> 150 \text{ ft}^2$. 2		=	=
but ≤ 500 ft* Liquid warehouse ^{b,c}	a ' 4d'		2e, 4f

For SI units, 1 ft2 = 0.09 m2.

*Between liquid storage areas and any adjacent areas not dedicated to liquid storage.

K345 Fire Alarm System Testing & Maintenance



New Enforcement K345 – Visual Inspection of Smoke Detectors

2010 NFPA 72, Table 14.3.1.9(h)

Semiannually (between annual inspections) the facility shall do a visual inspection of all smoke detectors

Document

K345 Fire Alarm System Testing & Maintenance

What deficiencies we see:

 No annual inspection conducted within the past 12 months

2010 NFPA 72, 10.18.3.1, and Table 14.4.5

 More than two visual notification appliances in the corridor in any field of view not flashing in synchronization 2010 NFPA 72, 18.5.4.4.7



K345 Fire Alarm System Testing & Maintenance

What deficiencies we see:

- Magnetic exit doors failed to release under: activation of the fire alarm system and/or loss of primary power to the fire alarm system 2010 NFPA 72, 21.9
- No sensitivity test for the smoke detectors conducted within the past 2 years 2010 NFPA 72, 14.4.5.3.2

K345 Fire Alarm Systems Testing & Maintenance

Magnetic Locking Devices





Delayed

08/27/2024 Full Time 62

Smoke detector sensitivity testing machine, unless you have a smart fire alarm panel – then shall print off at least every two years



New Enforcement K351 – Antifreeze Systems

2010 NFPA 13, 7.6.1.4

Where antifreeze systems are remote from the system riser, a placard shall be mounted on the system riser that indicates the number and location of all remote antifreeze systems supplied by that riser.

New Enforcement K351 – Antifreeze Systems

2011 NFPA 25, 5.3.4, and TIA 11-4

2010 NFPA 13, 3.4.1, 7.6.1.5, 7.6.2, and TIA 10-2

A placard **shall** be placed on the antifreeze system main valve that indicates the manufacture type and brand of the antifreeze solution, and the volume of the antifreeze solution used in the system.

Antifreeze Placard

ANTI-FREEZE SYSTEM The sprinkler system in this building is made up of one or more systems containing an anti-freeze solution for protection against freezing.				
Type of Anti-Freeze:				
Manufacturer:				
Trade Name or Brand:				
Solution Concentration:	%			
System Volume:	gallons			
Protected to:	degrees (F/C)			
Location:				

K351 Sprinkler System Installation

- Where quick-response sprinklers are installed, all sprinklers within a compartment shall be quickresponse unless otherwise permitted in <u>8.3.3.3</u>.
- When existing light hazard systems (this would be nursing facilities) are converted to use quickresponse or residential sprinklers, all sprinklers in a compartmented space shall be changed.

2010 NFPA 13, 8.3.3.2, 8.3.3.3, and 8.3.3.4





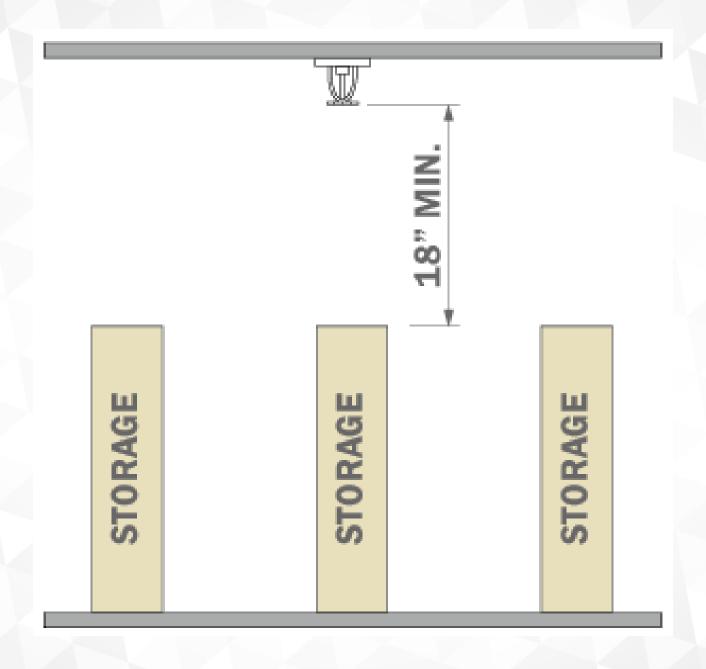
Get to Know Your Sprinklers

qrfs.com/blog or tweet @QuickResponseFS

K351 Sprinkler System Installation

- Clearance between the deflector and the top of storage shall be 18" or greater
- Plates, escutcheons, or other devices used to cover the annular space around a sprinkler shall be metallic or shall be listed for use around a sprinkler

2010 NFPA 13, 8.5.6.1, and 6.2.7.1











Escutcheons: Recessed, Flat And Adjustable

New Enforcement K353 – Antifreeze Systems

2011 NFPA 25, 5.3.4, and TIA 11-4

2010 NFPA 13, 3.4.1, 7.6.1.5, 7.6.2, and TIA 10-2

As of September 30, 2022, facilities with antifreeze systems **shall** be using a premixed antifreeze solution prepared by the manufacturer.

K353 Sprinkler Systems – Maintenance and Testing

From 2011 NFPA 25

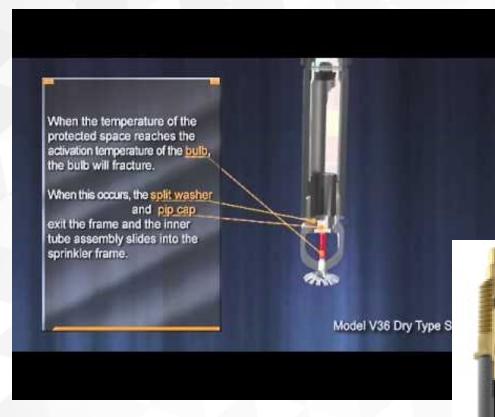
Table 5.1.1.2 Summary of Sprinkler System Inspection, Testing, and Maintenance

Item	Frequency	Reference	
Inspection	This about the area the su	5.2.4.2, 5.2.4.3,	
Gauges (dry, preaction, and deluge	Weekly/monthly	5.2.4.4	
systems)		Table 13.1	
Control valves	Quarterly	5.2.5	
Waterflow alarm devices	Quarterly	5.2.5	
Valve supervisory alarm devices	Quarterly	5.2.5	
Supervisory signal devices (except valve supervisory switches)	Quarterry		
Gauges (wet pipe systems)	Monthly	5.2.4.1	
Hydraulic nameplate	Quarterly	5.2.6	
ſ	Annually (prior to	4.1.1.1	
Buildings	freezing weather)		
Hanger/seismic bracing	Annually	5.2.3	
	Annually	5.2.2	
Pipe and fittings Sprinklers	Annually	5.2.1	
	Annually	5.2.1.4	
Spare sprinklers	Annually	5.2.6.1	
Information sign		Table 13.1	
Fire department connections		Table 13.1	
Valves (all types) Obstruction, internal inspection of piping	5 years	14.2	

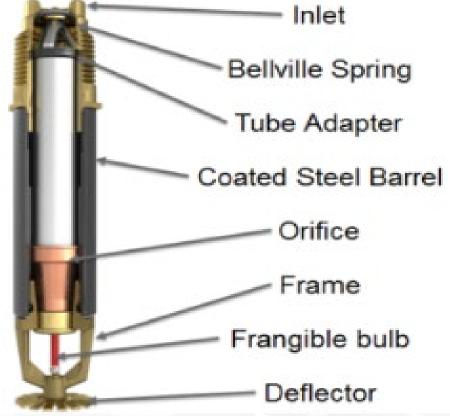
K353 Sprinkler Systems – Maintenance and Testing

- Dry-type sprinkler heads that have been installed for 10 years shall be replaced, or a sampling sent for testing. Retest after next 10 years. New this code adoption.
- Quick Response sprinkler heads that have been installed for 20 years shall be replaced, or a sampling sent for testing. Retest after next 10 years. Was exception #2 under 2-3.1.1 in 2000 edition.

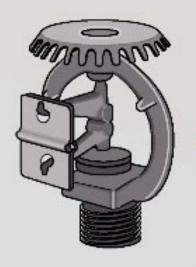
2011 NFPA 25, 5.3.1.1.1.6, and 5.3.1.1.1.3



Dry-type Sprinkler Head



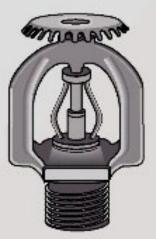
RELEASING MECHANISMS



Fusible Link (Standard)







Chemical Pellet

Fusible Link (Quick Response)



K.KEDHEESWARAN M.Arch

37

K353 Sprinkler Systems – Maintenance and Testing

- Standard Response sprinkler heads that have been installed for 50 years shall be replaced, or a sampling sent for testing. Retest after next 10 years.
- The sample needed for testing per individual sprinkler sample (type) not less than four sprinklers or 1%, whichever is greater

2011 NFPA 25, 5.3.1.1.1, and 5.3.1.2







K353 Sprinkler System – Maintenance and Testing

Have all documentation ready for the Life Safety Surveyor.



Issue Date: March 29, 2019

Reference Number: 46587 Total Number of Sprinklers Received: 4

(4) sprinklers were submitted consisting of the following characteristics:									
Manufacturer:	VIKING	Releasing Mechanism Type:	Glass Bulb						
Model:	М	Sprinkler Orientation:	Horizontal Sidewall (HSW)						
Sprinkler Type:	Extended Coverage-Light Hazard (ECLH)	Special Sprinkler Features:	None						
Water Seal Configuration:	Teflon - Belleville Spring	Response Type:	Quick						

	TEST SUMMARY TABLE 1									
Sprinkler Number	Location of Sprinkler in System	Room Environment	Temperature Rating, °F			Sprinkler Condition	Releasing Mechanism Response Time, sec.	Operation Classification		
150542-1	Room 32	Dwelling Unit	155	1990	5.6	Dusty	10.47	Normal		
150543-2	Room 51	Dwelling Unit	155	1987	5.6	Dusty	12.52	Normal		
150544-3	Room 58	Dwelling Unit	155	1990	5.6	Dusty	12.24	Normal		
150545-4	Room 26	Dwelling Unit	155	1989	5.6	Dusty	15.65	Nomal		

Sprinkler Condition: Please refer to the Standard for Inspection and Maintenance of Water-Based Fire Protection Systems, NFPA 25 for requirements and information related to determining when sprinklers are to be replaced. The Authority Having Jurisdiction (AHJ) should be consulted to determine when sprinklers need to be replaced due to their condition. The referenced sprinkler condition is UL's visual observation of the received sample sprinkler.

Operation Classification:

 $\underline{\textbf{Normal}}$ - Sprinkler operation was within the applicable time frame for the sprinkler type and temperature rating.



Issue Date: January 29, 2018

Reference Number: 38613

Total Number of Sprinklers Received: 5

(4) sprinkle	(4) sprinklers were submitted consisting of the following characteristics:							
Manufacturer:	3,7,-1							
Model:	Н	Sprinkler Orientation:	Pendent (P)					
Sprinkler Type:	Standard Spray (SS)	Special Sprinkler Features:	None					
Water Seal Configuration:	Teflon - Belleville Spring	Response Type:	Quick					

	TEST SUMMARY TABLE 2									
Sprinkler Number	Location of Sprinkler in System	Room Environment	Temperature Rating, °F			Sprinkler Condition	Releasing Mechanism Response Time, sec.	Operation Classification		
98176-1	West Wing Hallway	Other	155	1993	5,6	Dusty	9.21	Normal		
98177-2	West Wing Hallway	Other	155	1993	5.6	Dusty	9.77	Normal		
98178-3	East Wing Hallway	Other	155	1993	5.6	Dusty	10.15	Normal		
98179-4	East Wing Hallway	Other	155	1993	5.6	Dusty	10,29	Normal		

Sprinkler Condition: Please refer to the Standard for Inspection and Maintenance of Water-Based Fire Protection Systems, NFPA 25 for requirements and information related to determining when sprinklers are to be replaced. The Authority Having Jurisdiction (AHJ) should be consulted to determine when sprinklers need to be replaced due to their condition. The referenced sprinkler condition is UL's visual observation of the received sample sprinkler.

Operation Classification:

<u>Normal</u> - Sprinkler operation was within the applicable time frame for the sprinkler type and temperature rating.



Issue Date: January 6, 2020

Reference Number: 52377 Total Number of Sprinklers Received: 8

(1) sprinkler was submitted consisting of the following characteristics:					
Manufacturer:	STAR	Releasing Mechanism Type:	Glass Bulb		
Model:	SG	Sprinkler Orientation:	Pendent (P)		
Sprinkler Type:	Standard Spray (SS)	Special Sprinkler Features:	None		
Water Seal Configuration:	Teflon - Belleville Spring	Response Type:	Standard		

	TEST SUMMARY TABLE 3							
Sprinkler Number	Location of Sprinkler in System	Room Environment	Temperature Rating, °F				Releasing Mechanism Response Time, sec.	
192042-1	Outside Rm. 1	Hallway/Walkway	155	1995	<5.6	Clean	35.01	Normal

Sprinkler Condition: Please refer to the *Standard for Inspection and Maintenance of Water-Based Fire Protection Systems, NFPA 25* for requirements and information related to determining when sprinklers are to be replaced. The Authority Having Jurisdiction (AHJ) should be consulted to determine when sprinklers need to be replaced due to their condition. The referenced sprinkler condition is UL's visual observation of the received sample sprinkler.

Operation Classification:

<u>Normal</u> - Sprinkler operation was within the applicable time frame for the sprinkler type and temperature rating.



Issue Date: November 21, 2019

Reference Number: 51410 Total Number of Sprinklers Received: 6

(6) sprinklers were submitted consisting of the following characteristics:						
Manufacturer:	GRINNELL	Releasing Mechanism Type:	Glass Bulb			
Model:	A	Sprinkler Orientation:	Pendent (P)			
Sprinkler Type:	Standard Spray (SS)	Special Sprinkler Features:	None			
Water Seal Configuration:	Teflon - Belleville Spring	Response Type:	Quick			

	TEST SUMMARY TABLE 1										
Sprinkler Number	Location of Sprinkler in System	Room Environment	Temperature Rating, °F	Year Marking	Nominal K-Factor	Sprinkler Condition	Releasing Mechanism Response Time, sec.	Operation Classification			
185595-1	Hospital	Hospital	155	1996	5.6	Lightly corroded or loaded	10.96	Nomal			
185596-2	Hospital	Hospital	155	1997	5.6	Dusty	12.08	Normal			
185597-3	Hospital	Hospital	155	1996	5.6	Dusty	11.12	Normal			
185598-4	Hallway	Hallway/Walkway	155	1996	5.6	Dusty	11.36	Normal			
185599-5	Hallway	Hallway/Walkway	155	1997	5.6	Dusty	10.83	Normal			
185600-6	Hallway	Hallway/Walkway	155	1996	5.6	Physical damage - deflector	1	Abnormal - Visual No Test			

Optimition: Clease refer to the Standard for Inspection and Maintenance of Water-Based Fire Protection Systems, NFPA 25 for requirements and information related to determining when sprinklers are to be replaced. The Authority Having Jurisdiction (AHJ) should be consulted to determine when sprinklers need to be replaced due to their condition. The referenced sprinkler condition is UL's visual observation of the received sample sprinkler.

Operation Classification:

<u>Normal</u> - Sprinkler operation was within the applicable time frame for the sprinkler type and temperature rating.

<u>Abnormal - Visual No Test</u> - Based upon the "Sprinkler Condition" observed during the visual examination, the operation test was not conducted on the sample.

08/27/2024 Page 2 of 2





Reference Number: 34209 Total Number of Sprinklers Received: 4

(4) sprinklers were submitted consisting of the following characteristics:						
Manufacturer:	GLOBE	Releasing Mechanism Type:	Glass Bulb			
Model:	JN	Sprinkler Orientation:	Pendent (P)			
Sprinkler Type:	Standard Spray (SS)	Special Sprinkler Features:	None			
Water Seal Configuration:	Gasket O-Ring	Response Type:	Quick			

	TEST SUMMARY TABLE 1									
Sprinkler Number	Location of Sprinkler in System	Room Environment	Temperature Rating, °F		Nominal K-Factor	Sprinkler Condition	Releasing Mechanism Response Time, sec.	Operation Classification		
68854-1	Nursing Home, Dining Area	Other	155	1997	5.6	Slightly corroded or loaded	12.26	Normal		
68855-2	Nursing Home, Lobby Entrance	Other	155	1997	5.6	Slightly corroded or loaded	15.55	Normal		
68856-3	Nursing Home, Hailway #1 @ Room #3	Other	155	1997	5.6	Slightly corroded or loaded	10.37	Normat		
68857-4	Nursing Home, Hallway #2, Near Exit	Other	155	1997	5.6	Slightly comoded or loaded	11.52	Abnormal - No Waterflow		

Sprinkler Condition: Please refer to the *Standard for Inspection and Maintenance of Water-Based Fire Protection Systems, NFPA 25* for requirements and information related to determining when sprinklers are to be replaced. The Authority Having Jurisdiction (AHJ) should be consulted to determine when sprinklers need to be replaced due to their condition. The referenced sprinkler condition is UL's visual observation of the received sample sprinkler.

Operation Classification:

 $\underline{\textbf{Normal}} \ \textbf{-} \ \textbf{Sprinkler} \ \textbf{operation} \ \textbf{was} \ \textbf{within} \ \textbf{the applicable} \ \textbf{time} \ \textbf{frame} \ \textbf{for the sprinkler} \ \textbf{type} \ \textbf{and} \ \textbf{temperature} \ \textbf{rating}.$

Abnormal - No Waterflow - The release mechanism (heat responsive element) operated, but the sprinkler water seal assembly did not release at the applied test water pressure of 7 psig to allow discharge of water.

Sprinkler Head Loading

- Coated with dust Could insulate the thermal element, thus reducing the heat transferring to it and affecting the release time.
- Any amount of loading can have some impact on the thermal sensitivity of a sprinkler.
- Clean sprinklers with compressed air or a vacuum provided the equipment does not touch the sprinkler or replace the sprinkler.

Sprinkler Head Loading



K353 Sprinkler Systems – Maintenance and Testing

5.2.4.1 Gauges on wet pipe sprinkler systems shall be inspected monthly to ensure that they are in good condition and normal water supply pressure is being maintained.

5.2.4.2 Gauges on dry, preaction, and deluge systems shall be inspected weekly to ensure that normal air and water pressures are being maintained.

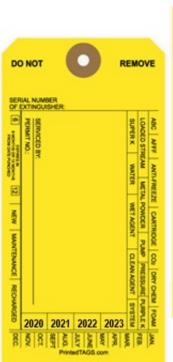
2011 NFPA 25



K355 Portable Fire Extinguishers

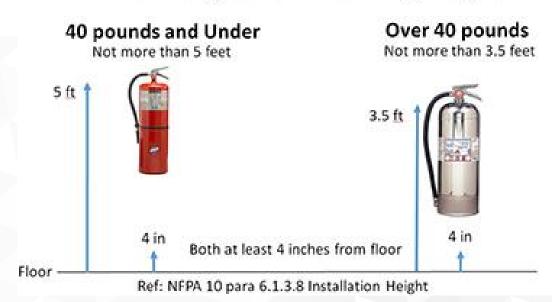
- Fire extinguishers shall be subjected to maintenance at intervals of not more than 1 year
- Fire extinguishers shall be inspected at a minimum of 30-day intervals
- Fire extinguishers having a gross weight not exceeding 40 lb. shall be installed so the top of the fire extinguisher is not more than 5 ft above the floor
- In no case shall the clearance between the bottom of the hand portable fire extinguisher and the floor be less than 4 in

2010 NFPA 10, 7.3.1.1.1, 7.2.1.2, 6.1.3.8.1, and 6.1.3.8.3





Fire Extinguisher Mounting Height







Corridors shall be separated from all other areas, unless otherwise permitted:

- (1) Smoke compartments protected throughout by an <u>approved supervised automatic sprinkler</u> <u>system</u> shall be permitted to have spaces that are unlimited in size and open to the corridor, provided that **all** of the following criteria are met: Items (a) thru (d) in code book
- (2) Smoke compartments protected throughout by an approved supervised automatic sprinkler

- (2) (continued) <u>system</u> waiting areas shall be permitted provided that **all** of the following criteria are met: Items (a) thru (c) in code book
- (3) This requirement shall not apply to spaces for nurses' stations.
- (4) Gift shops not exceeding 500 sq. ft. shall be permitted to be open to the corridor or lobby, provided that **one** of the following criteria is met: Items (a) or (b) in code book

- (5) Limited care facilities
- (6) Cooking facilities in accordance with 19.3.2.5.3 shall be permitted to be open to the corridor
- (7) Spaces other than patient sleeping rooms, treatment rooms, and hazardous areas, shall be permitted to be open to the corridor and unlimited in area, provided that **all** of the following criteria are met: Items (a) thru (c) in code book

(8) Waiting areas shall be permitted to be open to the corridor, provided that all of the following criteria are met: Items (a) thru (c) in code book (9) Group meeting or multipurpose therapeutic spaces, that are under continuous supervision by facility staff shall be permitted to be open to the corridor, provided that all of the following criteria are met: Items (a) thru (d) in code book



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K363 Corridor Doors

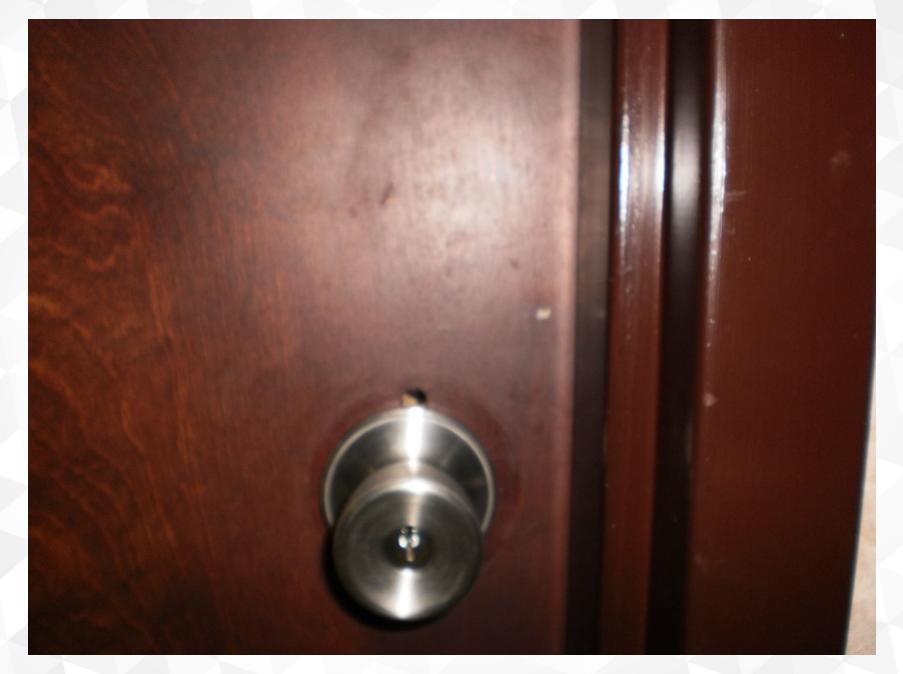
Shall resist the passage of smoke

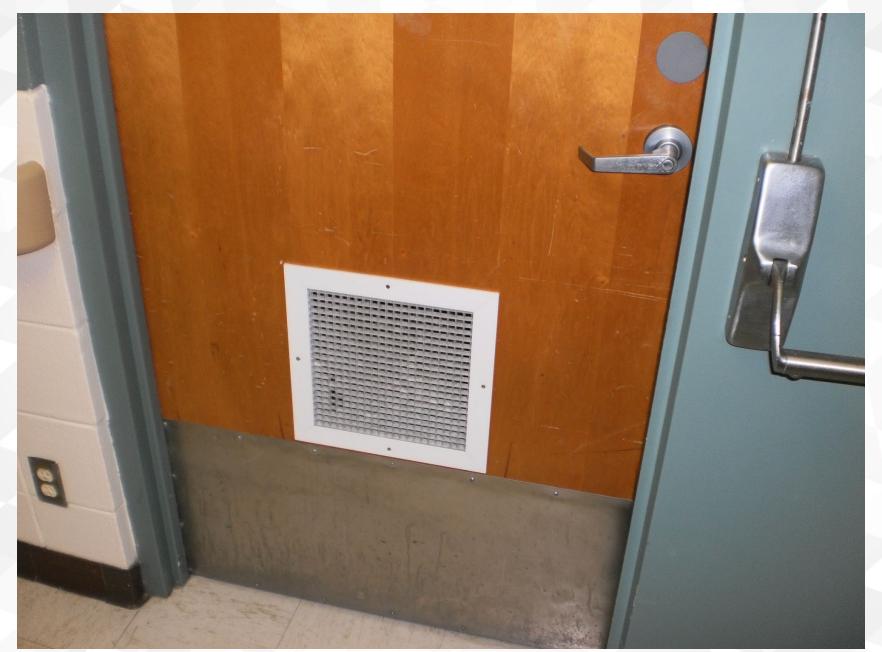
No impediment to closing

Must be provided with positive latching hardware

No roller latches

2012 NFPA 101, 19.3.6.3.1, 19.3.6.3.10, CFR 482.41 (b) (ii)





K363 Corridor Doors





Corridor Doors CFR 482.41 (b) (ii) Positive Latching Hardware Must be Provided



Positive Latching Hardware Shall be Provided for Double Doors on the Corridor



Manual Latching Hardware is not Permitted on either leaf of Double Doors on the Corridor



Positive Latching Hardware Must be Working





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Positive Latching Hardware Must be Provided

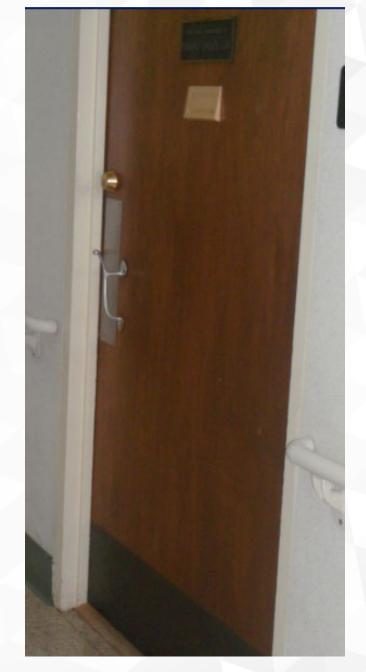


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K363 Corridor Doors

The gap between the face of the door and the doorstop does not exceed ½" in a smoke compartment that is fully sprinklered

S&C-07-18

DEPARTMENT OF HEALTH & HUMAN SERVICES Centers for Medicare & Medicaid Services 7500 Security Boulevard, Mail Stop S2-12-25 Baltimore, Maryland 21244-1850



Center for Medicaid and State Operations/Survey and Certification Group

Ref: S&C-07-18

DATE: April 20, 2007

TO: State Survey Agency Directors

State Fire Authorities

FROM: Director

Survey and Certification Group

SUBJECT: Multiple Providers - Hospitals, Ambulatory Surgical Centers, Nursing Homes,

Religious Non-Medical Health Care Institutions, Programs of All-Inclusive Care for

the Elderly (PACE) Facilities, Critical Access Hospitals, Intermediate Care

Facilities for the Mentally Retarded - Permitted Gaps in Corridor Doors and Doors

in Smoke Barriers

Memorandum Summary

- In a smoke compartment that is **not fully sprinklered**, a gap between the face of a corridor door and the door stop should not exceed ¹/₄**-inch**, provided that the door latch mechanism is functioning.
- In a smoke compartment that is fully sprinklered, a gap between the face of a corridor door and the door stop should not exceed ½-inch, provided that the door latch mechanism is functioning.

Corridor Doors

Smoke Resistance

Doors and frames protecting corridor openings shall be constructed to resist the passage of smoke.

Binding on Frame



Gaps to Frame



K363 Corridor Doors

2012 NFPA 101, 19.3.6.3.10

Doors shall not be held open by devices other than those that release when the door is pushed or pulled.

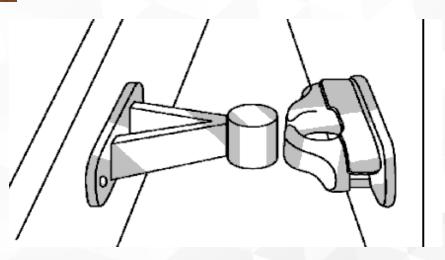
Doors should not be blocked open by furniture, door stops, chocks, tie-backs, drop-down or plunger-type devices, or other devices that necessitate manual unlatching or releasing action to close.

Hold-Open Devices Approved









Hold-Open Devices NOT Approved



K372 Subdivision of Building Spaces

Smoke Barrier Construction

Shall have a minimum ½-hour fire resistance rating and shall restrict the movement of smoke.

Almost all of the smoke barriers in LTC facilities are one hour fire rated and must be maintained as such.

2012 NFPA 101, 19.3.7.3, and 8.5

K372 Subdivision of Building Spaces

- Smoke Barrier Construction

- Seal any and all penetrations
- Use the correct Brand and Product to seal any penetrations. Keep container, even if it is empty for product information
- Use product per manufacturer's recommendations
- No orange or yellow foam (without documentation on the fire rating of the product)











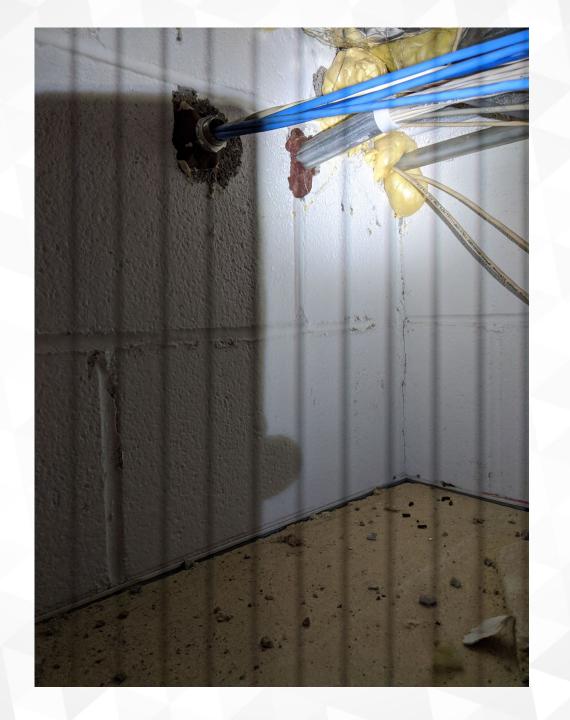
Mineral Wool



Backer Rod











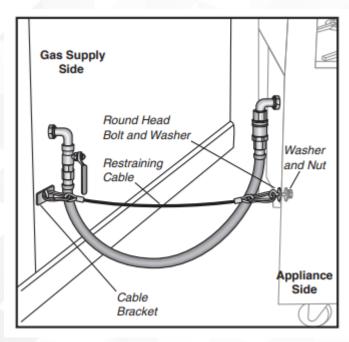
New Enforcement

K511 – Limiting movement of gas fueled appliances with casters

2012 NFPA 54, 9.6.1.1, 9.6.1.2, and 10.12.6

Movement of gas fueled appliances with casters **shall** be limited by a restraining device installed in accordance with the connector and appliance manufacturer's installation instructions, to prevent strain on the gas connection.

Restraining device for gas fueled appliances with casters





K521 HVAC

Each damper shall be tested and inspected one year after installation. The test and inspection frequency shall then be every 4 years. Know if you have dampers and where they are located.

Each damper shall be provided with access for inspection and service of the damper's working parts.

2010 NFPA 105, 6.5.2, & 6 2010 NFPA 80, 19.4.1, 19.4.1.1, & 19.2.3







K531 Elevators

- Fire Fighters Service/Recall on existing elevator(s) monthly, if they travel 25 ft. or more.
- Phase I key and smoke detector recall
- Phase II emergency in car key operation, machine room and elevator lobby smoke detectors

2012 NFPA 101, 19.5.3, 9.4.3.2, and 9.4.6.2

K531 Elevators



K531 Elevators



K711 Evacuation and Relocation Plan

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 (New 2012)
- (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

K711 Evacuation and Relocation Plan

Any required aisle, corridor, or ramp shall be not less than 48 in. in clear width where serving as means of egress from patient sleeping rooms, unless otherwise permitted by one of the following:

(2) Where corridor width is at least 6 ft, noncontinuous projections not more than 6 in. from the corridor wall, above the handrail height, shall be permitted.

Per ADA not more than 4in.

(4) Projections into the required width shall be permitted for wheeled equipment, provided that **all** of the following conditions are met:

2012 NFPA 101, 19.7.2.2 (8), and 19.2.3.4 (2), (4)

K711 Evacuation and Relocation Plan

- (a) The wheeled equipment does not reduce the clear unobstructed corridor width to less than 60 in
- (b) The health care occupancy fire safety plan and training program address the relocation of the wheeled equipment during a fire or similar emergency.
- (c) The wheeled equipment is limited to the following:
 - i. Equipment in use and carts in use
 - ii. Medical emergency equipment not in use
 - iii. Patient lift and transport equipment

2012 NFPA 101, 19.7.2.2 (8), and 19.2.3.4 (2), (4)

K712 Fire Drills

•"Drills shall be held at expected and unexpected times and under varying conditions to simulate the unusual conditions that can occur in an actual emergency"

•"If the drill is always held in the same way at the same time, it loses much of it's value."

•Drills should be held at varying times.

2012 NFPA 101, 19.1.1.1.3, 4.7.4

K712 Fire Drills

•"quarterly on each shift" – includes weekends

• "familiarize facility personnel (nurses, interns, maintenance engineers, and administrative staff) with the signals and emergency action required under varied conditions" – arrange for **all** employees to participate

2012 NFPA 101, 19.7.1

FIRE DRILL LOG

Log date and time Fire Drills occurred. Disaster Drills cannot count as Fire Drills.

Quarters	First Shift	Second Shift	Third Shift
	Date:	Date:	Date:
1	Time:	Time:	Time:
Jan – Feb - Mar	By:	By:	By:
	Date:	Date:	Date:
2	Time:	Time:	Time:
Apr – May - June	By:	By:	By:
	Date:	Date:	Date:
3	Time:	Time:	Time:
Jul – Aug - Sept	Ву:	By:	By:
4	Date:	Date:	Date:
	Time:	Time:	Time:
Oct – Nov - Dec	By:	By:	By:

K712 Fire Drills

Baylor/Weekend only staff separate drills

2012 NFPA 101, 19.7.1

K712 Fire Drills

FIRE DRILLS

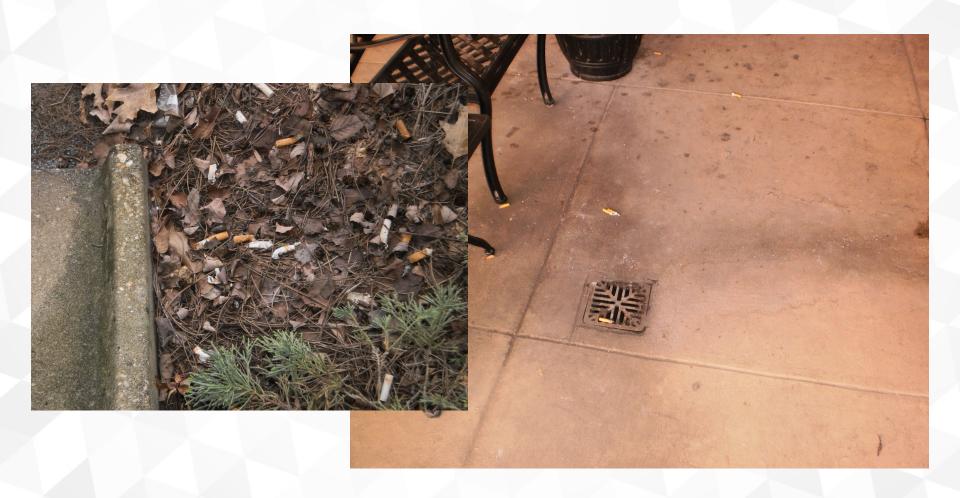
	MONDA	Y THROUGH F	RIDAY	SATURDAY	& SUNDAY
	DAY	EVENING	NIGHT	DAY	NIGHT
rte _r	Date:	Date:	Date:	Date:	Date:
¹ st Quarter	Time:	Time:	Time:	Time:	Time:
181	Ву:	Ву:	Ву:	Ву:	By:
1ter	Date:	Date:	Date:	Date:	Date:
² nd Quarter	Time:	Time:	Time:	Time:	Time:
2,00	Ву:	Ву:	Ву:	Ву:	Ву:
arte	Date:	Date:	Date:	Date:	Date:
3rd Quarter	Time:	Time:	Time:	Time:	Time:
<i>ზ</i>	Ву:	Ву:	Ву:	Ву:	Ву:
70		Date	Date:	Date:	Date:
nen	Date:	Date:			
4th Quarter	Time:	Time:	Time:	Time:	Time:
4	Ву:	Ву:	Ву:	Ву:	Ву:

Reporting of Fires to ADPH

- Nursing home rules within 24 hours
- Go to <u>alabamapublichealth.gov</u>, click on the "A to Z Index" in the top left corner, click on "L", click on "<u>Life Safety Code</u>", under "Resources" click on <u>"Online</u> Reporting of Fires and Similar Incidents"

 Report Fire Watches to this email: lifesafety@adph.state.al.us

K741 Smoking Regulations



K741 Smoking Regulations



K741 Smoking Regulations



K761 Maintenance, Inspection & Testing - Doors

- > Implementation was January 1, 2018
- > 45 Minute Fire Rated or higher
- Online course for in house inspector Not Required

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 17-38-LSC

DATE: July 28, 2017

TO: State Survey Agency Directors

FROM: Director

Survey and Certification Group

SUBJECT: Fire and Smoke Door Annual Testing Requirements in Health Care Occupancies

Memorandum Summary

- In health care occupancies, fire door assemblies are required to be annually inspected and tested in accordance with the 2010 National Fire Protection Association (NFPA) 80.
- In health care occupancies, non-rated doors assemblies including corridor doors to patient care rooms and smoke barrier doors are not subject to the annual inspection and testing requirements of either NFPA 80 or NFPA 105.
- Non-rated doors should be routinely inspected as part of the facility maintenance program.
- Full compliance with the annual fire door assembly inspection and testing in accordance with 2010 NFPA 80 is required by January 1, 2018.
- Life Safety Code (LSC) deficiencies associated with the annual inspection and testing of fire doors should be cited under K211 – Means of Egress - General.

Background

The Centers for Medicare & Medicaid Services (CMS) adopted the 2012 edition of the NFPA LSC, which includes requirements for the maintenance, inspection, and testing of fire doors and smoke doors in certain certified health care facilities.

The 2012 LSC added new provisions under Section 7.2.1.15 – Inspection of Door Openings for the annual inspection and testing of certain fire doors and smoke doors assemblies in accordance with the 2010 editions of NFPA 80 – Standard for Fire Doors and Other Opening Protectives, and NFPA 105 – Standard for Smoke Door Assemblies and Other Opening Protectives.

The new LSC provisions under sections 7.2.1.15.1 and 7.2.1.15.2 require certain fire door and smoke door assemblies to be inspected and tested annually in accordance with the NFPA 80 and NFPA 105. However, section 7.2.1.15.1 states that these requirements only apply where required by Chapters 11 through 43. Therefore, as the LSC health care occupancy chapters (i.e., Chapters 18, 19, 20, 21) do not directly reference section 7.2.1.15, these new annual inspection and testing requirement do not apply to health care occupancies.

K761 Maintenance, Inspection & Testing - Doors

Fire doors assemblies are inspected and tested annually in accordance with NFPA 80, Standard for Fire Doors and Other Opening Protectives.

Individuals performing the door inspections and testing possess knowledge, training or experience that demonstrates ability.

Written records of inspection and testing are maintained and are available for review.

Per survey book: 2012 101, 19.7.6, 8.3.3.1, and 4.6.12 2010 NFPA 80, 5.2, and 5.2.3

K914 Electrical Systems – Maintenance and Testing

Receptacles **not** listed as hospital-grade, <u>at patient bed</u> <u>locations</u> and in locations where deep sedation or general anesthesia is administered, shall be tested at intervals not exceeding 12 months.

(1) The physical integrity of each receptacle shall be confirmed by visual inspection.

2012 NFPA 99, 6.3.4.1.3, 6.3.3.2.1, 6.3.3.2.2, 6.3.3.2.3, and 6.3.3.2.4

K914 Electrical Systems – Maintenance and Testing

- (2) The continuity of the grounding circuit in each electrical receptacle shall be verified.
- (3) Correct polarity of the hot and neutral connections in each electrical receptacle shall be confirmed.
- (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).

2012 NFPA 99, 6.3.4.1.3, 6.3.3.2.1, 6.3.3.2.2, 6.3.3.2.3, and 6.3.3.2.4

Use a device like this to check items 2 – 4 on previous slide



K918 - New Enforcement Generator Remote Manual Stop Station

All level 1 generators shall have a remote manual stop station

2010 NFPA 110, 5.6.5.6 and 5.6.5.6.1 1988 NFPA 110, 3-5.5.5 and earlier

K918 - New Enforcement Generator Remote Manual Stop Station

2010 NFPA 110, 5.6.5.6

All installations **shall** have a remote manual stop station <u>of</u> a type to prevent inadvertent or unintentional operation <u>located</u> outside the room housing the prime mover, where so installed, or <u>elsewhere on the premises</u> where the prime mover is located outside the building.

2010 NFPA 110, 5.6.5.6.1

The remote manual stop station shall be labeled.

Manual Emergency Stop Station

Sealing capabili	ty	IP65 oil-resistant models	
Function Si	e Small (30 dia.)	Medium (40 dia.)	Large (60 dia.)
Push-pull		A22E-MP	A22E-LP
Push-lock, turn-reset	A22E-S	A22E-M	A22E-L
Push-lock, key-reset (push-lock, turn-reset)	A22E-SK	A22E-MK	

Lighted

Sealing capa	bility	IP65
Function 5	Size	Medium (40 dia.)
Push-lock, turn-reset		A22EL-M

Cover to prevent unintentional or inadvertent operation



New Enforcement K918 – Maintenance of Generators

2010 NFPA 110

8.3.7.1 Maintenance of lead-acid batteries **shall** include the monthly testing and recording of electrolyte specific gravity. Battery conductance testing shall be permitted in lieu of the testing of specific gravity when applicable or warranted (maintenance free batteries).

Electrolyte Tester



Conductance Tester



K918 Diesel Generators

2010 NFPA 110

8.3.8 A fuel quality test shall be performed at least annually using tests approved by ASTM standards.



OWER PROTECH

Fuel Analysis Report

North America: +1-800-437-4474



Account Information	Component Information	Sample Information
Account Numbe Company Name Contact: Address. Phone Number:	Unit ID: 56526 DF Eng. Serial#: RG6090L071130 Fuel Type: DIESEL FUEL Manufacturer: JOHN DEERE Model: 6090 Application: POWER GENERATION Tank Capacity:	Tracking Number: 00006272307 Lab Number: I-237748 Lab Location: Indianapolis Data Analyst: RAM Sampled: 18-Jul-2017 Received: 21-Jul-2017 Completed: 28-Jul-2017
Filter Information Filter Change: No Filter Type: FULLFLOW Micron Rating: 0	Miscellaneous Information Gen Spec/KW: 2274435 Eqp Mfr/Mdi: KONFER 2758E07IE Asset Loc.: 22036 Work Order #: 576335	2011-017
Comments TEST RESULTS are within NO	RMAL PARAMETERS for this product. Your note was	

Test Method	Test Name	Result	Min	Max	Results	2 27		
ASTM D7220	Suffur (ppm)	11.9		Hax	Elemental Analysis mod, ASTM D5185	Result	Min	Ma
ASTM D2709	Water and Sediment (%)	0		1	Iron (ppm)			+
ASTM D6304C	Water by Karl Fischer (%)				Chromium (ppm)			-
ASTM D6304C	Water by Karl Fischer (ppm)			-	Nickel (ppm)	7		+
Manufacturer	Aerobic Bacteria (Counts)				Aluminum (ppm)			-
lanufacturer	Bacteria (Counts)	0			Copper (ppm)			+
danufacturer	Fungi (Counts)	Negative			Lead (ppm)			-
lanufacturer	Maid (Counts)	0			Tin (ppm)		-	+
nod. ASTM D6468	Thermal Stablity (%)		-	-	Cadmium (ppm)			-
od. ASTM D445	Viscosity 40°C (cSt)	2.53		-	Silver (ppm)			-
od. ASTM D445	Viscosity 100 °C (cSt)	1		-	Vanadium (ppm)			-
IOO. ASTM DE64	Acid Number (mg KOH/g)				Silicon (ppm)			-
STM D7689	Cloud Point (°C)	-12	- 00 -		Sodium (ppm)			
TM D7346	Pour Point (°C)	-24	-		Potassium (ppm)		5	-
TM D6371	Cold Filter Plug Point (°C)		-		Titanium (ppm)			
TM D3828	Closed Cup Flash Point (°C)	63	-		Molybdenum (ppm)	7		-
TM D86	Distillation Initial Boiling Point (*C)	169.4	-		Antimony (ppm)	-		-
TM D86	Distillation 10% Recovered (°C)	203.7	-		Manganese (ppm)			
TM D86	Distillation 50% Recovered (*C)	262.9			Lithium (ppm)			
TM D86	Distillation 90% Recovered (°C)	327.8			Boron (ppm)			
M 0867	Distillation Final Boiling Point	356.8			Magnesium (ppm)			
M D976	Cetane Index	48.8			Calcium (ppm)			
M D4052	API Gravity	36.5			Barium (ppm)	-		
M D4052	Density (g/mL)	30.3	-		Phasphorus (ppm)	-		
	Specific Gravity				Zinc (ppm)			
M D4868	BTU Per Gallon (BTU/gal)	-	_	-+1	Particle Count (particles/ml)	Result	Min	Mari
	BTU Per Pound (BTU/lb)		-		ISO Cleanliness Code	1.1	1	Max
	Lubricity (µm)				> 4µm	1:1	11	11
	Copper Corrosion	1A	-		> 6um			
	Ash Content (mass %)	-	_	-	> 10µm			
	Carbon Residue (%)		-		> 14µm			
D7371 9	& Biodiesel - FAME (%)				> 21µm			
					> 38µm	-	-	
					> 70µm			
					> 100µm	-	-	4.5
	Result	Min	M	ax	- Toopin	1		

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Missing fluid or component information limits the evaluation. No warranty is expressed or implied.

Page 1 of 1

Step

K918

K918 Diesel Generators

2010 NFPA 110

- **8.4.2** Diesel generator sets in service shall be exercised at least once monthly, for a minimum of 30 minutes, using one of the following methods:
- (1) Loading that maintains the minimum exhaust gas temperatures as recommended by the manufacturer
- (2) Under operating temperature conditions and at not less than 30 percent of the EPS nameplate kW rating

K918 Diesel Generators

2010 NFPA 110

8.4.2.3 Diesel-powered EPS installations that do not meet the requirements of 8.4.2 shall be exercised monthly with the available EPSS load and shall be exercised annually with supplemental loads at not less than 50 percent of the EPS nameplate kW rating for 30 continuous minutes and at not less than 75 percent of the EPS nameplate kW rating for 1 continuous hour for a total test duration of not less than 1.5 continuous hours.

Date		_T81 _Technic	ian	_ Senai	Number	·		<u></u>	-
	Tank Maria			retor E	etina				
Voltage Power Facto	208	Amna	rana	THEOR P	acmy.	Dhace	er.		
Power Facto	or Rating			Appro	x Ambier	nt Temp Dur	ina Te	st .	
Fuel	Diesel	X Ne	atural Ga	8	Pro	opane		Basolina	
. 7.	1.	LTAGE		CURRE					
Hourmeter	L1-L2 1	2-L3- L3-1	.1 L1	L2		OUTP! Kilowatt			Temp.
940.3.	033 3	33. 23	·				60	55	1199
920,4			1219	219	219	80	60	30	100
970,7	234.10		1 218			80.	60	434	187
901	230 2	34.233		219		80	60	48	187
971.3	254 2	34 234		019	219	80	60	49	188
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	N -11 1	FITHE	- NA.	PET		MA	LE	al	ek_

\$2.5 hours of

POWER PRO-TECH

SERVICES

National Operations Center

220 Turner Blvd. Ball Ground, GA 30107 PH: (800) 437-4474 FAX: (770) 704-0464

Corporate Office

377 Maitland Ave. Suite 1010 Altamonte Springs, FL 32701 PH: (800) 437-4474 FAX: (770) 704-0464

Mid-South Regional Office

561 Owens Circle Hueytown, AL 35023 PH: (205) 744-7572 FAX: (205) 744-7579

TOLL FREE: 1-800-437-4474 www.PowerProTech.com

CUSTOME	R LOCATION:								CUSTO	MER ID:				PT WO #;			_
DA	TA TAG INFO:	KVA	288	VOLT	480	PHASE			•			ien	DATE OF	SERVICE:			
ENG	SINE MODEL:		3306					HERTZ	60 .	. KW	230	. @	0.8	PF		3.50.7.50.7	
					SERIAL:	91	NR0087	9	GEN.	MODEL:		SR4		SERIAL:	4	5YR00661	
TIME	AMBIENT	V	OLTS (A/	c)	6.4	AMPS			POWER		% LOAD	PREC	WATER	FUEL	EXHAUST		ENGINE
	TEMP (*F)	А-В	в-с	A-C	Α	В	С	HERTZ	FACTOR	KW			TEMP (OUT *F)	PRES.	TEMP	HOURS	SPEED
10:45 AM	84	481	481	481	0	0	. 0	60.10	0.80	. 0	0%	85	129	(PSI) N/A	(*F)		(RPM)
10:45 AM	84	483	483	483	129	129	129	60.10	0.80	86	37%	66	175	-	294	497.0	1,803
11:00 AM	84	483	483	483	128	128	128	60.10	0.80	86	37%	59		N/A	516	497.0	1,805
11:15 AM	84	483	483	483	128	128	128	60.10	0.80	86	37%	57	180	N/A	632	498.0	1,805
11:15 AM	84	483	483	483	172	172	172	60.00	0.80	115	50%		182	N/A	623	498.0	1,801
11:30 AM	86	483	483	483	172	172	173	60.00	0.80	115	50%	56	184	N/A	657	498.0	1,800
11:45 AM	86	483	483	483	172	172	172	60.00	0.80			56	188	N/A	690	498.0	1,800
11:45 AM	86	484	484	484	205	205	203	60.00	0.80	115	50%	55	190	N/A	682	498.0	1,800
12:00 PM	88	484	484	484	205	205	204	60.20	0.80	137	60%	52	194	N/A	703	499.0	1,800
12:15 PM	88	484	484	484	205	205	204	60.20		137	60%	52	200	N/A	730	499.0	1,803
12:15 PM	88	485	485	485	265	265	266		0.80	137	60%	52	198	·N/A	723	499.0	1,804
12:30 PM	88	485	485	485	265	266	266	60.10	0.80	178	77%	51	202	N/A	745	499.0	1,802
12:45 PM	88	485	485	485	265	-	-	60.10	0.80	178	78%	49	210	N/A	750	500.0	1,800
1:00 PM	88	481	481	481		266	266	60.00	0.80	178	78%	46	218	N/A	759	500.0	1,800
		401	401	481	0	0	0	60.10	0.80	0	0%	62	174	N/A	362	500.0	1,799
			;														
TEST WIT	NESSED B1.								TEST	PERFORM	MED BY-						
						***************************************			,	010	01.						
					-									-			

DOES NOT MEET CODE

#053 P.004/0



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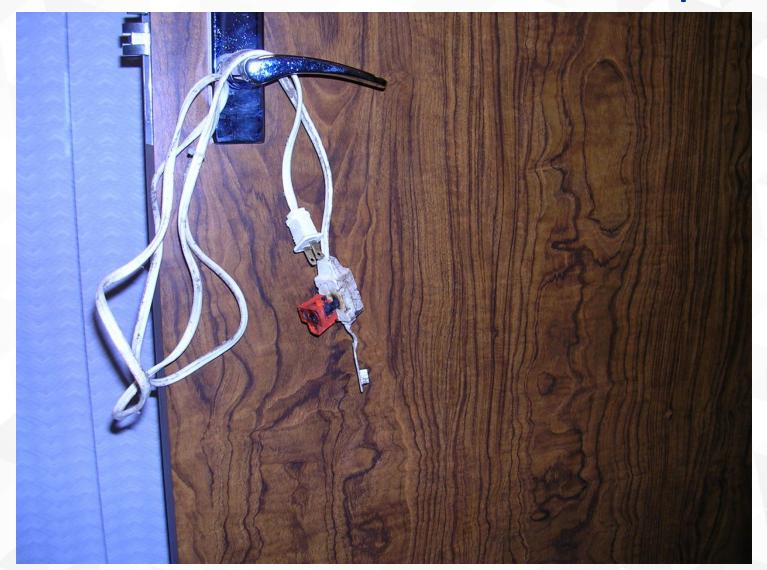
DA	ER LOCATION: TA TAG INFO: GINE MODEL:	KVA	3306	VOLT	480 SERIAL:	PHASE	3 NR0087	HERTZ	60	OMER ID: KW N MODEL:	230	gen @	0.8	PPT WO # F SERVICE PF			
TIME	AMBIENT	V	OLTS (A/	'C)	AMPS			Ī	1	THODEL:		SR4		SERIAL:	6YR00661		
	TEMP (*F)	А-В	В-С	A-C	Α	8	С	HERTZ	POWER FACTOR	кw	% LOAD	OIL PRES.	WATER TEMP	FUEL PRES.	EXHAUST TEMP	ENGINE	ENGINE
11:00 AM	76	482	482	482	0	0	0	60.10			LOAD	(PSI)	(OUT *F)	(PSI)	(*F)	HOURS	SPEED
11:00 AM	76	482	482	482	105	104	104	60.10	0.80	0	0%	90	114	N/A	153	F02.0	(RPM)
11:15 AM	76	482	482	482	104	104	104	60.10	0.80	70	30%	72	176	N/A	426	502.0	1,804
11:30 AM	76	483	482	483	105	104		60.10	0.80	69	30%	61	175	N/A	528	502.0	1,805
11:30 AM	76	484	484	484	178	178	104	60.10	0.80	70	30%	61	175	N/A	543	503.0	1,805
11:45 AM	76	484	484	484	178		177	60.10	0.80	119	52%	60	177	N/A	562	503.0	1,805
12:00 PM	76	484	484	484	178	178	178	60.10	0.80	119	52%	59	178	N/A		503.0	1,804
12:00 PM	76	485	486	485	261	178	178	60.10	0.80	119	52%	58	180	N/A	596	503.0	1,805
12:15 PM	77	485	486	485	261	261	262	60.10	0.80	176	76%	55	188	N/A	649	503.0	1,804
12:30 PM	77	485	486	486		261	262	60.10	0.80	176	76%	53	194	N/A	702	503.0	1,804
12:45 PM	77	485	486	486	261	261	262	60.10	0.80	176	76%	53	193		748	504.0	1,804
1:00 PM	77	485	486		261	262	262	60.10	0.80	176	76%	53	194	N/A	760	504.0	1,805
1:00 PM	77	482	482	486	261	261	262	60.10	0.80	176	76%	52		N/A	760	504.0	1,805
		482	482	482	0	0	0	60.10	0.80			62	194	N/A	769	504.0	1,805
										#REF!		02	173	N/A	482	504.0	1,802
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		_															
TEST WITI	NESSED BY:					-			TEST	PERFORM	ED BY:						
							V	NE	ETS	Co	NE	-			-		

K920 Power Cords & Extensions

Extension cords are for temporary uses only and shall not be used as a substitute for fixed wiring.

All States Letter 22-99 2011 NFPA 70, 400.8(1)

K920 Extension Cords and Adapters



In Resident Rooms Patient Care Related Electrical Equipment (PCREE) should be plugged into a wall outlet, but under unreasonable hardships CMS is allowing facilities to use Special Purpose Power Taps (SPRPT) listed as UL 1363A or 60601-1.

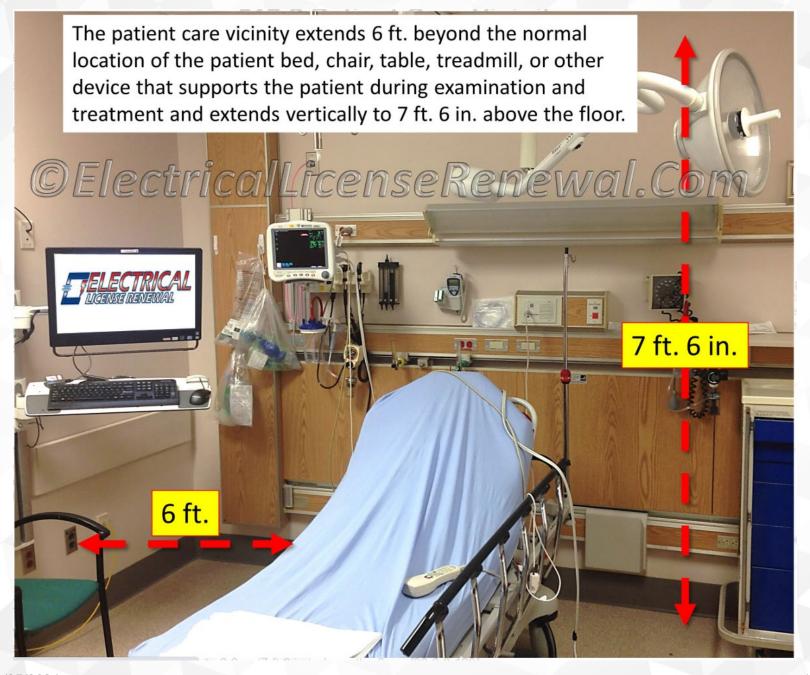
S&C Letter: 14-46-LSC 2012 NFPA 99 (*Health Care Facilities Code*), 10.2.3.6, and 10.2.4

S&C: 14-46-LSC

- 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.
- In addition, the exception no longer requires a power strip to be an integral component of a manufacturer tested equipment assembly.

S&C: 14-46-LSC

- "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.
- Power strips may *not* be used in a patient care vicinity to power non-patient care-related electrical equipment (e.g. personal electronics).



S&C: 14-46-LSC

- Power strips providing power to patient carerelated electrical equipment must be Specialpurpose Relocatable Power Taps (SPRPT) listed as UL 1363A or 60601-1.
- Power strips providing power to non-patient care-related electrical equipment must be Relocatable Power Taps (RPT) listed as UL 1363.
- These two are not interchangeable

In Resident Rooms power strips **may** be used outside of the of the patient care vicinity for non-patient-care-related electrical equipment (such as personal electronics).

S&C Letter: 14-46-LSC 2012 NFPA 99, 10.2.3.6, and 10.2.4

K920 Power Cords & Extensions

 Cannot mix PCREE and nonPCREE on the same power strip

No "daisy chaining"

S&C Letter: 14-46-LSC 2012 NFPA 99, 10.2.3.6, and 10.2.4

K921 Patient Care Related Electrical Equipment (PCREE) Testing and Maintenance

The facility shall contract with an outside company per the facility's policies and protocols.

OR

The facility shall establish policies and protocols for the type of test and intervals of testing for patient care—related electrical equipment for in house testing maintenance.

K921 PCREE – Testing and Maintenance

The manufacturer of the appliance shall furnish documents containing at least a technical description, instructions for use, and a means of contacting the manufacturer.

The documents specified in <u>10.5.3.1</u> shall include the following, where applicable:

- (1) Illustrations that show the location of controls
- (2) Explanation of the function of each control
- (3) Illustrations of proper connection to the patient or other equipment, or both

2012 NFPA 99, 10.5.3.1, and 10.5.3.1.1

- (4) Step-by-step procedures for testing and proper use of the appliance
- (5) Safety considerations in use and servicing of the appliance
- (6) Precautions to be taken if the appliance is used on a patient simultaneously with other electric appliances
- (7) Schematics, wiring diagrams, mechanical layouts, parts lists, and other pertinent data for the appliance
- (8) Instructions for cleaning, disinfection, or sterilization

2012 NFPA 99, 10.5.3.1, and 10.5.3.1.1

- (9) Utility supply requirements (electrical, gas, ventilation, heating, cooling, and so forth)
- (10) Explanation of figures, symbols, and abbreviations on the appliance
- (11) Technical performance specifications
- (12) Instructions for unpacking, inspection, installation, adjustment, and alignment
- (13) Preventive and corrective maintenance and repair procedures

2012 NFPA 99, 10.5.3.1, and 10.5.3.1.1

Service manuals, instructions, and procedures provided by the manufacturer shall be considered in the development of a program for maintenance of equipment.

A permanent file of instruction and maintenance manuals shall be maintained and be accessible.

The file of manuals shall be in the custody of the engineering group responsible for the maintenance of the appliance

2012 NFPA 99, 10.5.3.1.2, 10.5.6.1.1, and 10.5.6.1.2

Duplicate instruction and maintenance manuals shall be available to the user.

Any safety labels and condensed operating instructions on an appliance shall be maintained in legible condition.

A record shall be maintained of the tests required by this chapter and associated repairs or modifications.

2012 NFPA 99, 10.5.6.1.3, 10.5.6.1.4, and 10.5.6.2.1

At a minimum, the record shall contain all of the following:

- (1) Date
- (2) Unique identification of the equipment tested
- (3) Indication of which items have met or have failed to meet the performance requirements of 10.5.6.2

A log of test results and repairs shall be maintained and kept for a period of time in accordance with a health care facility's record retention policy.

2012 NFPA 99, 10.5.6.2.2, and 10.5.6.3

Personnel concerned for the application or maintenance of electric appliances shall be trained on the risks associated with their use.

The health care facilities shall provide programs of continuing education for its personnel.

2012 NFPA 99, 10.5.8.1, and 10.5.8.1.1

Remember! If It's Not Documented. It Didn't Happen!

Emergency Preparedness E-Tags

Code of Federal Regulations (CFR)

Nursing homes: 42 CFR 483.73

ADPH Surveys:

- Nursing homes evaluated by Technical Services
- All other facility types evaluated by Medicare Other Unit

Emergency Preparedness E-Tags

E0001	E0022	E0033
E0004	E0023	E0034
E0006	E0024	E0035
E0007	E0025	E0036
E0009	E0026	E0037
E0013	E0029	E0039
E0015	E0030	E0041
E0018	E0031	E0042
E0020	E0032	

E0004 Emergency Preparedness Documentation:

The emergency preparedness plan must be reviewed, and updated at least annually.

E0006 Emergency Preparedness Documentation:

Shall include a documented, facility-based and community-based risk assessment, utilizing an all-hazards approach.

483.73 (a) (1-2)

E0009 Emergency Preparedness Documentation:

Include a process for cooperation and collaboration with local, tribal, regional, State, and Federal emergency preparedness officials (such as EMA and/or their Coalition) and must be **reviewed** and **updated** at least **annually**.

E0013 Emergency Preparedness Documentation:

The facility shall provide:

Policies and procedures based on the risk assessment and the communication plan

483.73 (b)

E0015 Emergency Preparedness Documentation:

- Alternate sources of energy to maintain the following:
 - Temperatures to protect patient health and safety and for the safe and sanitary storage of provisions
 - Emergency Lighting
 - Fire detection, extinguishing, and alarm systems
 - Sewage and waste disposal

E0025 Arrangements with other Facilities

Develop arrangements with other facilities and providers to receive patients in the event of limitations or cessation of operations to maintain the continuity of services to facility patients.

Reviewed and updated annually by BOTH FACILITIES

42 CFR 483.73 (b) (7)

E0030 Names and Contact Information for

Staff
Entities providing services under arrangement
Resident's physicians
Other facilities

Volunteers

Reviewed and updated annually

42 CFR 483.73 (b) (7)

E0036 Emergency Prep Training and Testing

Develop and maintain emergency preparedness training and testing program that is based on the risk assessment (E0006), policies and procedures (E0013), and the communication plan.

42 CFR 483.73 (d)

E0037 Emergency Prep Training Program

Initial training in emergency preparedness policies and procedures to all new staff, individuals providing services under arrangement, and volunteers, consistent with their expected role; then annually.

Maintain documentation of training

Staff can demonstrate knowledge of emergency procedures.

42 CFR 483.73 (d) (1)

(iii) Analyze the response to and maintain documentation of drills, tabletop exercises, and emergency events, and revise as needed.

After Action Report (AAR):

- Staff feedback
- Description of who did what and just more details
- Report on responses to emergency good and bad
- How to improve
- Sign-in Sheet

42 CFR 483.73 (d) (2)

Participate in a full-scale community-based exercise or an individual, facility-based exercise.

If the facility experiences an actual natural or man-made emergency that requires activation of the emergency plan, the facility is exempt from engaging in the next community-based or individual, facility-based full-scale exercise for up to 1 year following the event, does not include any exercises of choice.

42 CFR 483.73 (d) (2)

While facilities may claim the exemption if operating under an activated emergency plan, CMS encourages facilities to conduct full-scale or individual facility-based exercises in order to ensure facilities are fully prepared to respond to all emergencies, should they arise.

> Exemptions do not accumulate or carry over to following full-scale exercises. For example, if a facility was required by their testing cycle to conduct a fullscale exercise in 2022, but is operating under their activated emergency plan in January 2022 for COVID-19 response and faces a winter storm/wildfire, etc. and activates additional protocols under its plan, the exemption for a full-scale exercise will apply to their full-scale exemption in 2022. It would not carry over because the facility was faced with two separate emergency activations.

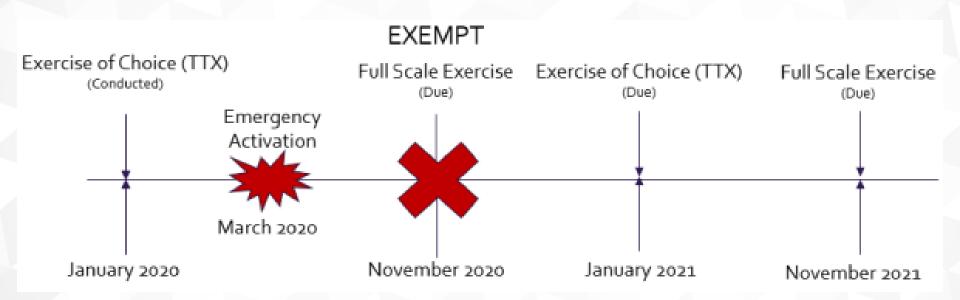
Conduct an additional exercise of the facility's choice, such as: a second full-scale exercise that is community-based or individual, facility-based, an individual-facility-based functional exercise, a tabletop exercise, workshop, or a mock disaster drill.

42 CFR 483.73 (d) (2)

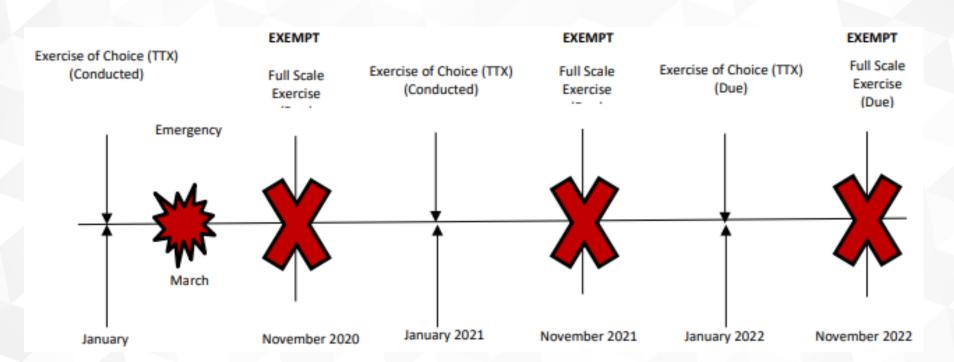
Scenario #1.



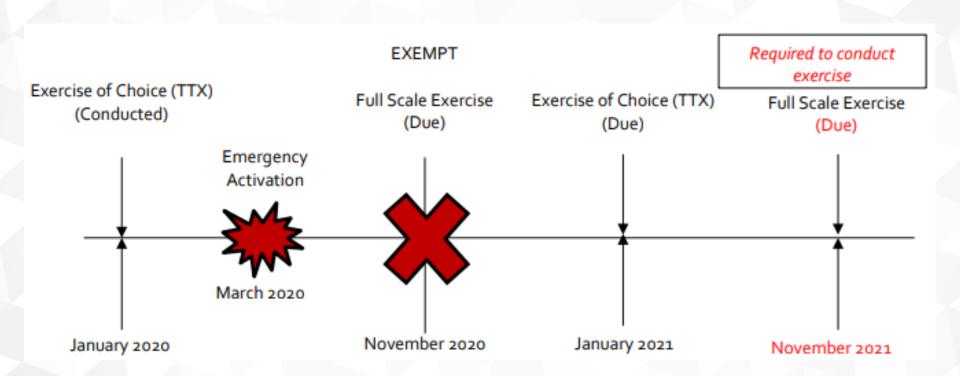
Scenario #2.



Scenario #3.



Scenario #4.



IS YOUR LOCAL FIRE DEPARTMENT/MARSHAL ON BOARD?

- Defend in Place
- Horizontal Evacuation
- Where Fire Alarm Panel and Automatic Sprinkler Riser is located
- Windows are not required to operate per NFPA Code and Centers for Medicare and Medicaid

IS YOUR LOCAL FIRE DEPARTMENT/MARSHAL ON BOARD?

How to get into your facility in an emergency – codes, keys, knox box, etc.

How to be Deficiency Free

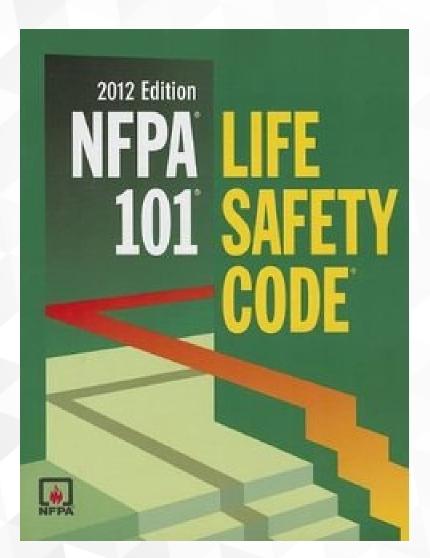
CMS has asked that the State Agency work to reduce repeat deficiencies in facilities.

How can this be accomplished?

Facility staff must be better educated, trained and must be more diligent in following through

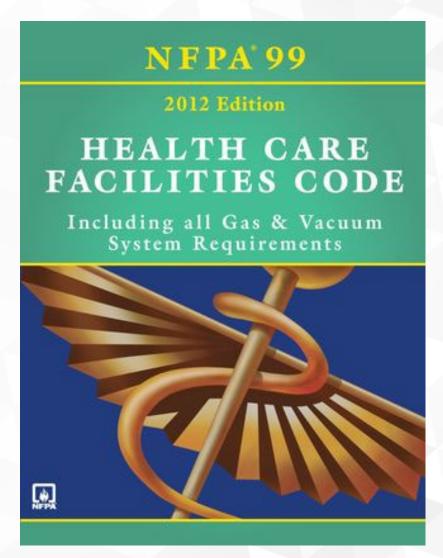
210

Essential 2012 NFPA Code



catalog.nfpa.org

Essential 2012 NFPA Code



catalog.nfpa.org

212

NFPA Standards

catalog.nfpa.org

2010 NFPA 10, Fire Extinguishers
2009 NFPA 17A, Wet Extinguishing
2011 NFPA 25, Sprinkler Testing
2010 NFPA 80, Fire Doors
2010 NFPA 110, Emergency Power

