Office of the State Fire Marshal

Education Facility Handbook

Office of the State Fire Marshal
800 SW Jackson, Suite 104
Topeka, KS 66612
785-296-3401

INTRODUCTION

The Office of the State Fire Marshal has long had the responsibility to reduce the potential impact of fire and explosion hazards where people live, work, and congregate (other than one and two family dwellings). More specifically, the Fire Prevention Division focuses on facilities posing distinct fire hazards and those places where the potential loss of life from fire is very high; including structures where the very young and very old live and congregate.

To ensure a reasonable level of fire and life safety, the basic requirement for educational facilities is compliance with the International Fire Code, 2006 Edition.

We have standardized inspection checklists and provide continuous training for our personnel to provide quality inspection and reasonable enforcement and to ensure a level playing field among facilities across the state. We will work with facilities on compliance; however, we believe we must insist on minimum requirements to ensure continuation of safe installations, practices, and procedures.

This booklet is developed for educational facilities in the State of Kansas as an informational guideline only. The Office of the State Fire Marshal has reproduced parts of the following National Fire Protection Association Codes for information and educational purposes for this booklet only: NFPA 72, 2007 edition; NFPA 25, 2008 edition; NFPA 110, 2006 edition; and NFPA 96, 2008 edition.

REQUIREMENTS

Classroom Locations

- Basement Classrooms
  - Basement exiting shall provide access to 2 remote exits from all areas in the basement used for education purpose
  - At least one exit shall lead directly to the exterior without entering the upper floor or upper floor corridor, except when previously approved and documented by OSFMO.

- The International Fire Code does not have restriction on the placement of classrooms/age of children located within a building. However, the Office of the State Fire Marshal will continue to require compliance with floor restrictions for children in the 2nd grade and lower, unless the building is equipped with a full sprinkler system. The floor restrictions are as follows:

  - Preschool, Kindergarten and 1st Grade Classrooms
    - Shall not be located more than 5 feet vertical above or below the story of exit discharge

  - 2nd Grade Classrooms
    - Cannot be located above the second story of exit discharge

Construction / Renovations

- A code footprint should be submitted to, and approved by OSFMO before the work begins on any major renovations, alterations, or modernizations. See http://www.KSFM.ks.gov/plans-review-code-footprint/

- "Major" means the modification of more than 50 percent, or more than 4,500 square feet, of the smoke compartment.

- "Minor" means the modification of less than 50 percent, or less than 4,500 square feet, of the smoke compartment.

- The replacement of a system, such as a fire alarm system, would be "major" for that system only. Thus, that system would have to meet the requirements for new construction, not the entire building itself. However, if more than one system is renovated, altered or modernized then the entire building may be required to meet the new construction standards.

- When an entire floor is gutted, the renovation of that floor should be considered "major" and must meet the regulatory requirements for new construction. If corridor walls or partition walls between rooms are removed in their entirety (to make additional space or to reconfigure rooms), the replacement wall must meet new requirements.

- Cosmetic changes such as painting and wallpapering would not constitute a "major" renovation or alteration regardless of the size of the affected area.

Corridor Walls / Fire Walls / Smoke Walls

- In non-sprinklered corridors, corridors walls shall have a fire resistance rating of 1 hour.
- In existing buildings, corridor walls shall provide a barrier to resist the passage of smoke.
- In new buildings, corridors protected by a supervised sprinkler system, the corridor walls are not required to be fire rated or smoke resistant.
- In corridors where each instruction room has at least one door directly to the exterior, the corridor walls are not required to be fire rated or smoke resistant.
- Ensure continuity of smoke barriers/fire walls – Outside wall to outside wall or other smoke/fire barrier and from floor to roof/floor deck above.
- Seal all rated wall penetrations with rated materials**.** Penetrations of non-rated walls that are required to limit the transfer of smoke may be sealed with standard building materials that are non-combustible.
- Do not use expanding foams to seal rated wall penetrations.
- If there are damaged ceiling tiles, ensure the damaged ceiling tile is replaced with a new ceiling tile of the same rating.

Corridor Width / Means of Egress

- Monitor corridors serving as exit access to ensure that they are clear and unobstructed:
    - Unsecured items that may create a tripping hazard are not to be placed in the halls such as furniture and plants.
    - Student desks, utility carts, art supplies, etc. may not be stored in hallways.
    - Storage occurs when an item is left in place or not in use for over 30 minutes. If the appropriate staff is around and using something every 30 minutes the item is not considered to be stored.
    - Corridors serving a capacity of 100 or more, the minimum corridor width is 6ft (72 in.).
    - Any items in the corridor cannot reduce the minimum corridor width. Examples: vending machines and drinking fountains

Documentation Requirements

- The following documentation is required to be maintained and readily available for review by OSFM
    - Building diagram
    - Copy of any active waivers
    - Documentation showing the most recent and/or the last 12 months of inspection, testing, and maintenance for the following

DOCUMENTATION REVIEW		
Emergency Lights Monthly (30 sec) Annual (90 min)	**Fire Pump** Weekly Monthly Annual	**Smoke Detectors** Annual Sensitivity Testing
Exit Signs Monthly (30 sec) Annual (90 min)	**Flame Retardant Treatment** Documentation & Maintenance	**Miscellaneous** Boiler Certificate Elevator Maintenance
Fire Alarm Monthly Quarterly Semi-Annual Annual Batteries (4 yrs)	**Generator** Weekly Monthly Annual Load	**Facility Policies** Evacuation Plans Fire Procedures Fire Watch *Power strips/Extension Cords Smoking Policy
Fire Dampers Test and Lube (4 yrs)	**Hood Suppression** Bi-Annual Testing (last 2) Cleaning	
Fire Drills 1 x month during school yr Tornado Drills 3 x per school year	**Sprinkler System** Weekly (dry) Monthly (wet) Quarterly Annual 5 yr Internal Standpipe hydro test (5 yr)	* These policies are recommendations

Doors

- Inspect, repair, and maintain doors to ensure that:
    - Automatic or self closing devices are properly installed and functioning.
    - Smoke doors and doors opening into the corridor close properly and resist the passage of smoke.
    - Non-rated gaskets, such as weather stripping, are not an acceptable method to correct door gaps.
    - Doors close and latch into the frame (positive latching hardware).
    - Doors are unobstructed and not blocked in any manner. Hold-open devices that release when the door is pushed or pulled are permitted. Door stops, chocks, tie-backs or other devices that require manual unlatching or release are not permitted.
    - Door latches open with one motion.
    - Hazardous area doors are self closing (see also hazardous areas).
    - Smoke barrier doors that swing in the same direction may be required to have a coordinator to ensure doors close properly which allows one door to close first preventing the doors from hitting.
- Monitor doors with magnetic locks or delayed egress locks to ensure that:
    - Doors release appropriately.
    - No more than one delayed egress device in the path of travel.
    - Doors shall unlock upon activation of sprinkler system, smoke detection system, and upon building loss of power.
    - Doors may not relock if the fire alarm system is placed in silent mode. The doors shall not relock without the system being reset.
    - Doors with a delayed lock shall have a sign posted on the door and within 12 inches of the releasing device stating “PUSH UNTIL ALARM SOUNDS DOOR CAN BE OPENED IN 15 SEC”
    - Doors with a magnetic lock shall have a key pad or key lock at the door and the method of getting out of the building shall be automatically provided to all cognitively aware residents, visitors, and staff.

Electrical

- Inspect and monitor facility to ensure that power strips with surge protection are used appropriately.
    - No high current draw devices can be plugged into a power strip. No refrigerators may be plugged into power strips. Appliances that produce heat or are used for cooling cannot be plugged into a power strip.
    - Equipment such as televisions, DVD players, and clocks, may be plugged into a power strip with surge protection as long as the amperage capacity of the power strip is not exceeded.
    - Power strips are not allowed to be plugged into another power strip.
    - Power strips should be secured to prevent tripping.
- Maintain three foot clearance around all electrical panels.
- Ensure that all electrical equipment is in good repair and that all electrical cords and plugs have no frayed or exposed wires.
- Ensure that all electrical outlets, light switches, and junction boxes have appropriate cover plates.

Elevators & Dumbwaiters

- Subject elevators to routine and periodic inspections and tests as specified in *ASME/ANSI A17.1, Safety Code for Elevators and Escalators*. All elevators equipped with fire fighter service in accordance with 9.4.4 and 9.4.5 of *NFPA 101* are subjected to a monthly operation with a written record of the findings made and kept on the premises as required by *ASME/ANSI A17.1, Safety Code for Elevators and Escalators*.

Emergency Lighting

- Conduct a functional test on all battery operated emergency lighting system at 30-day intervals for not less than 30 seconds.

- Conduct an annual test on every required battery-powered emergency lighting system for not less than 1.5 hours.

- Ensure that equipment is fully operational for the duration of the test. Written records of visual inspections and tests shall be kept by the facility.

- Documentation shall include the location of each individual unit, date tested, initials of individuals conducting the test, and the test results.

- Monitor emergency lighting to ensure that the lighting is equipped with two sources of light either by having two fixtures or one light fixture with two light bulbs.

- Ensure that rooms over 1,000 square feet in area have illuminated exit signs and that the signs are on emergency power.

Exits

- Monitor facility to ensure that:

    - Exit doors are readily distinguishable from the adjacent construction or finishes such that the doors are easily recognizable as doors. Doors shall not be disguised to blend in with the interior.

    - Exit and directional signs display the correct egress pathway or direction of travel with continuous illumination and are also served by the emergency lighting system

    - Exit access is arranged so that exits are readily accessible at all times and that the means of egress is continuously maintained free of all obstructions or impediments to full instant use.

    - Ensure the entire means of egress is illuminated at minimum of one foot candle of illumination at floor level.

    - Exterior exit doors shall lead directly to the exit discharge or the public way

Emergency Lights/Exit Sign Testing Log

Requirements:	Monthly – 30 Sec Annual – 90 Min	Note: You must conduct a 30 second functional test every month regardless of if you conduct the 90 minutes annual test

Type: S – Exit Sign
L – Emergency lights

Unit location and type	Jan:	Feb:	Mar:	Apr:	May:	Jun:	Jul:	Aug:	Sep:	Oct:	Nov:	Dec:	Annual:	Comments

1.) Provide a date tested for each month
2.) Initial each unit tested
3.) Comments should include information regarding failure & replacement

Fire Alarm System

- Ensure that the fire alarm system is installed and maintained in accordance with *NFPA 72, National Fire Alarm Code, 1999 edition* and that maintenance records are available.

- A fire alarm panel must be installed in a supervised location.

- Annual fire alarm system test documentation must be complete, accurate and show test results for all initiating and supervisory devices. (See form below)

- Inspect the fire alarm system to determine if the sprinkler system is connected to the alarm system including water flow devices. Verify that activation of the sprinkler system causes the fire alarm to sound.

  - Verify that the fire alarm system transmits to the local fire department or central station.

  - Ensure that the fire alarm system is provided with an alternative power supply in accordance with NFPA 72 as defined in section 9.6.1 of NFPA 101.

  - Self monitoring fire alarm systems are still required to maintain and provide all required documentation of maintenance and testing.

  - Notify the local or state fire marshal and obtain any required permits before any changes are made to the system.

Inspection and Testing

Date	Time

Service Organization	**Property Name**
Name	Name
Address	Address
Representative	Owner Contact
License No	Telephone
Telephone	

Monitoring Entity	**Approving Agency**
Contact	Contact
Telephone	Telephone
Monitoring Acct No.	

Type Transmission		**Service**	
☐ McCulloh	☐ Reverse Priority	☐ Weekly	☐ Semiannual
☐ Multiplex	☐ RF	☐ Monthly	☐ Annual
☐ Digital	☐ Other:	☐ Quarterly	☐ Other:
Specify:		Specify:	

Conrol Unit Manufacturer	Model No.
Circuit styles	
Number of circuits	
Software Rev	
Last date system service	
Last date system revised	

Alarm- Initiating Devices and Circuit Information

Quantity	Circuit Style
	Manual Fire Alarm Box
	Ion Detector
	Photo Detector
	Duct Detector
	Heat Detector
	Waterflow Switches
	Supervisory Switches
	Other:

Alarm Notification Appliances and Circuit Information

Quantity	Circuit Style
	Bells
	Horns
	Chimes
	Strobes
	Speakers
	Other:
No. of alarm notification appliance circuits	
Are circuits monitored for integrity?	Yes No

Supervisory Signal-Inititating Devices and Circuit Information		
Quantity	Circuit Style	
		Building Temp
		Site Water Temp
		Site Water Level
		Fire Pump Power
		Fire Pump Running
		Fire Pump Auto Position
		Fire Pump or Pump Comtroller Trouble
		Fire Pump Running
		Generator in Auto Position
		Generator in Controller Position
		Switch Transfer
		Generator Engine Running
		Other:

Signaling Line Circuits		
Quantity and style (see NFPA 72. Table 3-6) of signaling circuits connected to system		
Quantity:		Style:

System Power Supplies		
a. Primary (Main)	Nominal Voltage	Amps:
Overcurrent Portection	Type	Amps:
Location of Primary Supply	Panelboard	
Disconnecting Means Location		
b. Secondary (Standby)		
Storage Battery:	Amp Hr Rating	
Calculated capacity to operate system, in hours		
Engine driven generator dedicated to fire alarm system		
Location of fuel storage		

Battery Type				
☐ Dry Cell	☐ Nickel-Cadmium	☐ Sealed lead-acid	☐ Lead-acid	☐ Other:

c. Emergency or standby system used as a backup to primary power supply, instead of using secondary power supply
Emergency system described in NFPA 70
Legally required standby described in NFPA 70
Optional standby system described in NFPA 70

Prior to Any Testing			
Notifications are made		**Who**	**Time**
Monitoring Entity	☐ Yes ☐ No		
Building Occupants	☐ Yes ☐ No		
Building Management	☐ Yes ☐ No		
Other	☐ Yes ☐ No		
AHJ (notified of any impairments)	☐ Yes ☐ No		

System Tests and Inspections

Type		Comments
Control Unit	☐ Visible ☐ Functional	
Interface Eq.	☐ Visible ☐ Functional	
Lamps/LED	☐ Visible ☐ Functional	
Fuses	☐ Visible ☐ Functional	
Primary Power Supply	☐ Visible ☐ Functional	
Trouble Signals	☐ Visible ☐ Functional	
Disconnect Switch	☐ Visible ☐ Functional	
Groud-Fault Monitoring	☐ Visible ☐ Functional	
Secondary Power		
Battery Condition	☐ Visible ☐ Functional	
Load Voltage	☐ Functional	
Discharge Test	☐ Functional	
Charger Test	☐ Functional	
Specific Gravity	☐ Functional	
Transient Suppressors	☐ Visible	
Remote Annunciators	☐ Visible ☐ Functional	
Notification Appliances		
Audible	☐ Visible ☐ Functional	
Visual	☐ Visible ☐ Functional	
Speakers	☐ Visible ☐ Functional	
Voice Clarity	☐ Functional	

Initiating and Supervisory Device Test and Inspections

Loc. & S/N	Device Type	Visual	Functional	Factory Setting	Meas. Setting	Pass	Fail
		☐	☐			☐	☐
		☐	☐			☐	☐
		☐	☐			☐	☐
		☐	☐			☐	☐

Comments:

Emergency Communication Equipment	Comments

Phone Set	☐ Visual	☐ Functional
Phone Jacks	☐ Visual	☐ Functional
Off-Hook Indicator	☐ Visual	☐ Functional
Amplifier(s)	☐ Visual	☐ Functional
Tone Generator(s)	☐ Visual	☐ Functional
Call-in Signal	☐ Visual	☐ Functional
System Performance	☐ Visual	☐ Functional

Interface Equipment			
Specify:	☐ Visual	☐ Device Operation	☐ Simulated Operation
Specify:	☐ Visual	☐ Device Operation	☐ Simulated Operation
Specify:	☐ Visual	☐ Device Operation	☐ Simulated Operation
Special Hazard Systems			
Specify:	☐ Visual	☐ Device Operation	☐ Simulated Operation
Specify:	☐ Visual	☐ Device Operation	☐ Simulated Operation
Specify:	☐ Visual	☐ Device Operation	☐ Simulated Operation

Special Procedures:

Comments:

Supervising Station Monitoring		**Time**	**Comments**
Alarm Signal	☐ Yes ☐ No		
Alarm Restoration	☐ Yes ☐ No		
Trouble Signal	☐ Yes ☐ No		
Supervisory Signal	☐ Yes ☐ No		
Supervisory Restoration	☐ Yes ☐ No		

Notification that Testing is Complete		**Who**	**Time**
Building Management	☐ Yes ☐ No		
Monitoring Agency	☐ Yes ☐ No		
Building Occupants	☐ Yes ☐ No		
Other	☐ Yes ☐ No		

The following did not operate correctly:

System restored Date: Time:

This testing was performed in accordance with applicable NFPA standards

Name of Inspector	
Signature	
Name of owner or representative	
Date	Time
Signature	

Fire Drills

- Ensure that the facility administration has a plan that has been distributed for the protection of all persons in the event of fire, for their evacuation to areas of refuge, and for their evacuation from the building when necessary. Establish a system to ensure that all employees are periodically instructed and kept informed with respect to their duties under the plan.

- Monitor fire drills to ensure that the drill includes the transmission of a fire alarm signal and simulation of emergency fire conditions. Document receipt or verification of call to remote monitoring company.

- Monitor fire drills to ensure that drills are held monthly, at unexpected times and under varying conditions. Use the fire drill matrix to help track timeframes and shifts.

Fire Drill Scheduling Matrix

1st Quarter	Shift: Time: Date:	Shift: Time: Date:	Shift: Time: Date:
2nd Quarter	Shift: Time: Date:	Shift: Time: Date:	Shift: Time: Date:
3rd Quarter	Shift: Time: Date:	Shift: Time: Date:	Shift: Time: Date:
4th Quarter	Shift: Time: Date:	Shift: Time: Date:	Shift: Time: Date:

- Maintain documentation concerning fire drills for the preceding 12 months that shows at least the following:
    - One drill per month. Varying conditions of drill. A drill conducted at mealtime is an example of a varying condition.
    - Differing days of the week.
    - Involvement of all departments.
    - Documented observations of staff response.
    - Record of equipment functioning such as the release of doors and alarms sounding.
    - Document the time the alarm monitoring company received the alarm.

Fire Extinguishers

- Inspect portable fire extinguishers when initially placed in service and at approximately 30-day intervals.

- Maintenance shall occur at intervals not to exceed 1 year, conducted by a firm certified by the State Fire Marshal in accordance with K.S.A. 31-133a.

- Change chemical for dry chemical fire extinguishers every six years.

- Conduct 12 year hydrostatic vessel test.

- Hydrostatically test CO2 portable fire extinguisher vessels every five years.

- Ensure that fire extinguishers having a gross weight not exceeding 40 lbs (18.14 kg) are not installed so that the top of the fire extinguisher is not more than 5 feet above the floor.

- Ensure that fire extinguishers having a gross weight greater than 40 lbs (18.14 kg) shall be installed so that the top of the fire extinguisher is not more that 3.5 feet above the floor. In no case shall the clearance between the bottom of the fire extinguisher and the floor be less than 4 inches.

Fire Safety Plan

- Develop a written fire safety plan that addresses all of the following components:
  - Use of alarms
  - Transmission of alarm to fire department
  - Response to alarms
  - Isolation of fire
  - Evacuation of immediate area
  - Evacuation of smoke compartment
  - Preparation of floors and building for evacuation
  - Extinguishment of fire

- Ensure that evacuation routes are clearly marked on the plan including alternative routes.

Fire Watch

- Where a required automatic sprinkler system **or** a required fire alarm system is out of service for more than four hours in a 24-hour period, the building shall be evacuated or an approved fire watch system be provided for all parties left unprotected by the shutdown until the sprinkler system or fire alarm system has been returned to service.

- A fire watch should at least involve one trained staff with no additional duties while conducting fire watch duties. These individuals are specially trained in fire prevention and in occupant and fire department notification, and understand the fire safety.

- Fire watch rounds shall be continuous. All areas shall be checked at least hourly.

- A written log or documentation of fire watch rounds should be kept and available for inspection. (See below)

- Fire watch policy must address**:**

    - Notification of the local fire department

    - Notification of the State Fire Marshal's office

    - All situations in which the sprinkler system could be out of service for more than four hours in a 24 hour period.

    - All situations in which the fire alarm system could be out of service for more than four hours in a 24 hour period.

Fire Watch Log

Facility Name: Address:

Date: Time Begin: Time End:

Reason: Designated Person :

RESPONSIBILITIES: The responsibilities of firewatch personnel include: performing constant patrols of the premises to keep watch for fires, report all fires to the 911 Dispatch Center, maintain a means of communication with the 911 Dispatch Center, record actions during firewatch.

INITIAL THE TIME AND LOCATION BEING OBSERVED
AT THE END OF EACH DAY FAX THIS TO THE KSFMO AT 785-296-0151
THANK YOU

Generators

- Inspect all generators weekly and exercise under load for 30 minutes per month. Ensure that the startup and or cool down times are not included in the 30 minute load test.
- Ensure that electrical power is transferred within 10 seconds of interruption of service.
- The monthly testing needs to be conducted by one of the following two methods:
    - Under operating temperature conditions or at not less than 30 percent of the EPS nameplate rating.
    - Loading that maintains the minimum exhaust gas temperatures as recommended by the manufacturer.
- Diesel-powered EPS installations that do not meet the above requirements shall be exercised monthly with the available EPS load and exercised annually with supplemental loads at 25 percent of nameplate rating for 30 minutes, followed by 50 percent of nameplate rating for 30 minutes, followed by 75 percent of nameplate rating for 60 minutes, for a total of 2 continuous hours.
- Maintain all records of inspections and running under load. (See below)
- Ensure that there is battery powered emergency lighting at generators located inside a facility. Battery powered emergency lighting is not required at generators located outside if a car can be pulled up to the generator and provide lighting from the car headlights.
- A remote generator annunciator panel shall be located in an attended area that is continuously staffed. If the panel is in an unattended location, a clearly identified audible and visible signal shall be provided in a constantly attended area. Access shall not be restricted to the annunciator panel.
- Emergency generator sets are required to have a minimum of a 90 minute fuel supply.
- Facility must have a contingency plan and a written agreement for the resupplying of fuel in an emergency situation.

														Month or Week	
														Operator	
														Start Tme	
														Stop Time	
														Elapsed Run Time	
														Oil Pressure/Temp	
														Fuel Oil Pressure	
														Jacket Water Temp	
														Battery Amperes	
														Amps	Phase 1
														Volts	Phase 1
														Amps	Phase 2
														Volts	Phase 2
														Amps	Phase 3
														Volts	Phase 3
														Frequency	
														Restoration of Service (sec)	
														Oil Level	**Weekly Checks**
														Coolant Level	**Weekly Checks**
														Fluid Level	**Weekly Checks**
														Belts	**Weekly Checks**
														Hoses	**Weekly Checks**
														Battery/Cables	**Weekly Checks**
														Exhaust	**Weekly Checks**
														Fuel Level	**Weekly Checks**
															Comments

Hazardous Areas

- A hazardous area is defined as an area of a structure or building that poses a degree of hazard greater than that normal to the general occupancy of the building or structure, such as areas used for the storage or use of combustibles or flammables; toxic, noxious or corrosive materials; or heat-producing appliances.

- For new construction, any hazardous area is required to have a one hour fire separation and to be completely sprinklered.

- For existing facilities, ensure that any hazardous area is separated by a one-hour fire construction or completely sprinklered.

- Hazardous room doors shall maintain a solid wood core door with automatic self closing device equipped with positive latching hardware that resists the passage of smoke.

- Monitor mechanical rooms to ensure that the rooms are clean and orderly and are not used for combustible storage.

- Ensure that there is a minimum of a 3 foot clearance around all electrical panels and heat producing equipment such as a gas furnace.

- Change in use of a room (i.e.class room to a storage room) can create a hazardous area.

- Hazardous areas include but are not limited to:

    - Boiler and fuel-fired heater rooms
    - Laundries greater than 100 square feet
    - Repair/Maintenance shops and paint shops
    - Laboratories employing flammable or combustible materials
    - Combustible storage rooms/spaces (over 100 square feet)
    - Trash collection rooms
    - Soiled linen rooms

Heating, Ventilation, Air Conditioning, & Cooling (HVAC)

- Ensure that all HVAC units are installed and maintained in accordance with *NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilation Systems*, 1999 Edition.

- Examine each fire, smoke or ceiling damper every two years to ensure that it is not rusted or blocked giving attention to hinges and other moving parts. At least every 4 years, fusible links (where applicable) shall be removed; all dampers shall be operated to verify that they fully close; the latch, if provided, shall be checked; and moving parts shall be lubricated as necessary.

Hood Suppression System/Cooking

- Inspect and maintain the hood suppression system in accordance with *NFPA* 96.
    - System shall be serviced at least every 6 months by a firm certified in Kansas
    - Fusible links shall be replaced annually
    - Entire exhaust system shall be inspected and cleaned (See below)
- Verify that fuel sources automatically shut-off when the extinguishing system is activated.
- Clearly mark and locate the extinguishing system activator in the path of egress from the kitchen.
- Verify that activation of the extinguishing system activates the facility fire alarm.
- Ensure that the hood suppression system is UL 300 compliant.
- A Class K fire extinguisher shall be provided.
- Train staff in the operation of any range hood extinguishing system.
- Monitor all cooking locations to limit or avoid creating grease laden vapors in accordance with NFPA 96.
- Cooking equipment shall be cleaned at frequent intervals to prevent build-up of grease and other materials.
- Filters shall be of the baffle type. Mesh filters are not allowed.
- Filters shall be installed vertically with no gaps.

Exhaust Cleaning Cycle (NFPA 96)
Solid fuel cooking .....Monthly
High volume cooking.....Quarterly
(24hr cooking, charbroiling, wok)
Moderate volume cooking .....Semiannually
Low volume cooking .....Annually
(churches, day camps, seasonal businesses)

Interior Finish, Furnishings, & Decorations

- Facilities are required to maintain documentation as to the flame and smoke spread ratings of all their interior finishes that have been replaced and or updated.
    - Corridor finishes must be Class C (existing buildings).
    - Interior finishes for non-corridor areas may be C if the building is fully sprinklered (existing buildings).
- Monitor facility to ensure that the means of egress is continuously maintained free of all obstructions or impediment 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.
- Monitor facility to ensure than no signs or decorations are attached to sprinkler heads or exit signs.
- Inspect curtains for flammability, review labels, or tags. Look for testing in accordance with NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.*
- Fabrics can be made flame resistant by chemical treatment. However, such treatments can be made ineffective by laundering, dry cleaning or water leaching. Maintain records to document that treated fabrics are maintained in accordance with the manufacturer's specification to retain flame resistance.
- Monitor facility to ensure that the facility does not have combustible decorations unless they are flame-retardant. Exception: Combustible decorations, such as photographs and paintings, in such limited quantities that a hazard of fire development or spread is not present.
- Monitor use of outdoor decorations that are placed near the building as these can create a hazard, e.g. hay bales. Consider alternative to mulch in outside bedding areas to reduce the risk of fire.
- Monitor facility to ensure that furnishings or decorations of an explosive or highly flammable character are not used. Examples of explosive or highly flammable decorations include live or cut Christmas trees and pine branches/roping/garland.

Laundry /Trash

- Ensure that waste containers are stored in rooms protected as a hazardous area.

Portable space heating devices

- Portable unvented fuel-fired heating equipment shall be prohibited.

- Portable, electric space heaters shall comply with the following:
  - Only listed and labeled portable, electric space heaters shall be used;
  - Shall be plugged directly into an approved receptacle;
  - Shall not be plugged into extension cords;
  - Shall not be operated within 3 feet of any combustible materials;
  - Shall be operated only in locations for which they are listed.

- If a facility is utilizing portable, electric space heaters, then the facility must maintain documentation/policies consistent with the 2006 IFC.

Smoke Detectors

- Maintain and calibrate smoke detector systems in accordance with *NFPA* 72.

- Test all smoke detectors at least annually to ensure that each detector is operative and produces the intended response.

- Check smoke detector sensitivity within one year of installation and every 2 years thereafter. Smoke detectors that have passed the initial one year test and two 2-year test cycles ……..

- Maintain records that indicate what testing of smoke detectors have been done over the past 12 months including records of automated sensitivity testing. After the second required sensitivity tests indicate that the detector has remained within its listed and marked sensitivity range the length of time between calibration tests shall be permitted to be extended to a maximum of 5 years.

- Smoke detectors must be located out of the direct airflow of a supply or return air vent.

- Ensure sensitivity tests reports have all required information pertaining to the ranges of the sensitivity of the smoke detectors and the time it took to activate.

Sprinkler System

- Inspect and maintain sprinkler system in accordance with *NFPA* 25. Retain maintenance records of the sprinkler system for the preceding 12 months and ensure availability for inspections.

- Monitor facility to ensure that there are no gaps in ceiling adjacent to sprinkler heads.

- Ensure that all storage is kept at least 18 inches below/away from sprinkler heads.

- Maintain a supply of at least two spare sprinkler heads for each type of sprinkler used in the facility. (Note- more than two sprinkler heads may be required depending on the number of heads used in a facility). Keep the sprinkler wrench with the spare sprinkler heads

- Ensure that the same type of sprinkler head is used throughout each compartment. (Note there are exceptions for special areas such as boiler rooms which may have higher than normal temperatures.)

- According to NFPA 13, a compartment is defined as a space completely enclosed by walls and a ceiling. The compartment enclosure is permitted to have openings to an adjoining space if the openings have a minimum lintel depth of 8 in. (203 mm) from the ceiling.

- Maintain sprinkler heads clean, dust free, and paint free.

Tornado Drills

- At least 3 drills during each school year

- Drills shall use a distinctly different alarm sound from that use for the fire alarm

- Refuge area location shall be posted by signage – at the building's main entrance, classrooms, and/or at the refuge area

- Drills shall be documented and publicly posted

Vertical Openings

- Ensure that stairways, elevator shafts, light and ventilation shafts and other vertical openings, including pneumatic rubbish and linen systems, that open directly onto any corridor is sealed by fire-resistive construction to prevent further use or is provided with a fire door assembly having a fire protection rating of one hour with self closing device and positive latching hardware.

- Monitor facility to ensure that the area under stairways is not used for storage, unless by special design.

- Ensure that all chutes are secure from accidental falls.

Waivers

Temporary Construction Waivers

- The purpose of a temporary construction waiver (TCW) is to allow a facility additional time to obtain bids, permits, architectural designs or plans, plan approval, construction time, etc.

- In order to qualify for a temporary construction waiver the correction period required **must be for more than 90 days from inspection exit date**.

- Documentation must be submitted to the District Office supporting the facility's TCW request such as construction bids, pricing quotes, and signed contracts.

- Facility must contact their District Office if they are unable to meet their original time frame for completion. A good faith effort must have been made in order for a facility to be granted an extension.

Continuing Waivers

- A continuing or annual waiver is for deficiencies that are structurally impossible or impracticable to correct and are an undue burden and financial hardship on a facility.

- To be eligible for a continuing waiver the following criteria must be met.

    - Must not adversely affect the safety & health of the students.

    - Must not adversely affect the safety & health of the staff.

    - Must be a financial hardship and undue burden on the facility.

    - Supporting documentation must be provided to support the claim of no adverse affect on students and staff, and that it would be a financial hardship to correct.

- Continuing waivers must be renewed from year to year along with all required supporting documentation.

- Waivered deficiencies will be cited at each survey.