GENERAL CHECKLIST

Info Existing facilities

The rules and regulations adopted pursuant to this section shall allow facilities in service prior to the effective date of such rules and regulations, and not in strict conformity, therewith, to continue in service, so long as such facilities are not determined by the state fire marshal to constitute a distinct and clear hazard to life or property. See appeal provisions of K.S.A. 31-140 and amendments. (Checklist items attached are considered minimum safety features within a building.) **KSA. 31-133(c)**

BUILDING APPROVAL AND SAFETY

01	Fire protection
	changes in
	facilities

New buildings or changes in exiting, fire resistance, or handicapped accessibility, including modifications or additions, shall require that stamped and sealed plans from a licensed architect or engineer be submitted and reviewed by the appropriate authority having jurisdiction. Documentation indicating that the plans have been submitted and approved shall be available to the inspector. *KSA 31-150*

02 Building structural soundness

If a building shows severe or worsening settlement, severe cracking of exterior bearing walls, or roof deflection, a report shall be provided to KSFMO for review and determination of appropriate action. *KSA 31-133(a)*; 06-101/4.2.2

03 Dangerous conditions

Situations requiring immediate actions and building evacuation to mitigate an imminent danger to life or health of the building occupants that is not a normal component of the inspection, including a natural gas leak, atmospheric contaminant within the building, complete power failure, or similar emergencies. Inspector is required to contact the KSFM Chief of Fire Prevention Division for immediate guidance and determination of requirements and facility response. *KSA 31-133*

04 Exiting during construction

Buildings, or portions of buildings, shall be permitted to be occupied during construction, repair, alterations, or additions only where required means of egress and required fire protection features are in place and continuously maintained for the portion occupied or where alternative life safety measures acceptable to KSFMO are in place. *06-101/4.6.10.1*

EXITS – ACCESS AND USE

05 Number of exits

The number of means of egress from any story or portions thereof, other than for existing buildings as permitted elsewhere in LSC 101, shall be not less than three for occupant loads more than 500 but not more than 1000, and not less than four for occupant loads more than 1000. *06-101/7.4.1.2*

06 Exit signs

Exits, other than main exterior exit doors that obviously and clearly are identifiable as exits, shall be marked by an approved sign that is readily visible from any direction of exit access. Access to exits shall be marked by approved, readily visible signs in all cases where the exit or way to reach the exit is not readily apparent to the occupants. *06-101/7.10.1.2, 7.10.1.5.1*

07 Illumination of path of egress

Illumination of means of egress shall be continuous during the time that the conditions of occupancy require that the means of egress be available for use.

Automatic, motion sensor-type lighting switches shall be permitted within the means of egress, provided that the switch controllers are equipped for fail-safe operation, the illumination timers are set for a minimum 15-minute duration, and the motion sensor is activated by any occupant movement in the area served by the lighting units. *06-101/7.8.1.2, 7.8.1.2.2*

08 Exit access arrangement

Access to an exit shall not be through kitchens, storerooms, restrooms, workrooms, closets, bedrooms or similar spaces, or other rooms or spaces subject to locking.

06-101/7.5.2.1

09 Exit access and obstructions

Means of egress shall be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.

No obstruction by railings, barriers, or gates shall divide the means of egress into sections appurtenant to individual rooms, apartments, or other occupied spaces. Railings or other barriers can be installed to protect the path of travel against encroachment from furniture or other movable objects.

06-101/7.1.10.1, 7.1.10.2.2, 7.7

10 Exit visibility

No furnishings, decorations, or other objects shall obstruct exits, access thereto, egress there from, or visibility thereof. Mirrors shall not be placed on exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of egress. Exit access and exit doors shall be designed and arranged to be clearly recognizable. Hangings or draperies shall not be placed over exit doors or located so that they conceal or obscure any exit. **EXCEPTION:** Section 7.5.2.2.2. **06-101/7.1.10.2.1, 7.1.10.2.3, 7.5.2.2.1,**

7.5.2.2.2

11 Door swing

Doors required to be of the side-hinged or pivoted-swinging type shall swing in the direction of egress travel where serving a room or area with an occupant load of 50 or more. **EXCEPTION:** Doors in horizontal exits shall not be required to swing in the direction of egress travel for new horizontal exits or for existing horizontal exits doors in corridors not more than 6 ft wide.

06-101/7.2.1.4.2

12 Exit doors additional

Devices shall not be installed in connection with any door on which panic hardware or fire exit hardware is required where such devices prevent or are

	locks (with panic hardware)	intended to prevent the free use of the door for purposes of egress. EXCEPTION: delayed-egress locks and access-controlled egress doors in approved locations. <i>06-101/7.2.1.5.11, 7.2.1.6</i>
13	Exit door without panic hardware	Locks, if provided, shall not require the use of a key, a tool, or special knowledge or effort for operation from the egress side. EXCEPTION: Where otherwise provided for in specific occupancy chapters. <i>06-101/7.2.1.5.1</i> , <i>7.2.1.5.2</i> , <i>7.2.1.5.3</i>
14	Restricted exits	Any device or alarm installed to restrict the improper use of a means of egress shall be designed and installed so that it cannot, even in case of failure, impede or prevent emergency use of such means of egress. EXCEPTIONS: 1) Healthcare facilities (for clinical needs only); 2) detention facilities; and 3) section 7.2.1.6. <i>06-101/7.1.9, 18.2.2.2.4, 18.2.2.2.5, 19.2.2.2.4, 19.2.2.2.5</i>
15	Overhead rolling fire doors	Overhead rolling fire doors across corridors or exit paths shall be secured open to prevent operation. <i>06-101/7.1.10.1, 7.2.1.4.1.9</i>
16	Door landings	The elevation of the floor surfaces required by General Checklist 09 (7.2.1.3.1) shall be maintained on both sides of the doorway for a distance not less than the width of the widest leaf. <i>06-101/7.2.1.3.2</i>
17	Doors and elevation change	The elevation of the floor surfaces on both sides of a door shall not vary by more than 1/2 in. EXCEPTIONS: 1) In existing buildings, where the door discharges to the outside or to an exterior balcony or exterior exit access, the floor level outside the door shall be permitted to be one step lower than that of the inside, but shall be not more than 8 in. lower. 2) In existing buildings, a door at the top of a stair shall be permitted to open directly at a stair, provided that the door does not swing over the stair and that the door serves an area with an occupant load of fewer than 50 persons. <i>06-101/7.2.1.3.1, 7.2.1.3.5, 7.2.1.3.6</i>
EXITS	– EXTERIOR	
18	Exterior stair protection	Outside stairs shall be separated from the interior of the building by construction with the fire resistance rating required for enclosed stairs with fixed or self-closing opening protectives. EXCEPTIONS: Limited exceptions found in 7.2.2.6.3.1. <i>06-101/7.2.2.6.3.1</i>
19	Exterior stair support	Exterior stair support shall be either: a) structurally supported to the ground; or b) documentation of an inspection by an architect or engineer with structural background within the last 5 years assuring that the exit stairs will remain structurally sound when supported solely by a building wall. KSA 31-133(a); 06-101/7.2.8.6.2
20	Fire escape ladders not	New fire escape stairs, when approved, shall not incorporate ladders or access windows, regardless of occupancy classification or occupant load served.

permitted

Existing fire escape ladders are acceptable only if previously approved by the AHJ and to serve no more than 5 persons. *06-101/7.2.8.1.2.3, 7.2.8.6.2, Table 7.2.8.4.1(a)*

TESTING AND DOCUMENTATION

21 Testing documentation	All testing required by 06-101 of elevators, exit signs, fire protection system, smoke control systems, and smoke proof enclosures must be documented and will be subject to review. <i>06-101/9.4.6, 7.10.9, 9.8, 9.3.1, 7.2.3.13</i>
22 Monthly tests of emergency lighting and exit signs	Functional testing of required emergency lighting systems shall be conducted at 30-day intervals for not less than 30 seconds. Exit signs shall be visually inspected for operation at 30 day intervals. Written records of visual inspections and tests shall be kept by the owner for review. <i>06-101/7.10.9, 7.9.3.1, 7.9.3.1.1.</i>
23 Annual tests of emergency lighting and exit signs	Functional testing of required emergency lighting systems shall be conducted annually for not less than 1 1/2 hours if the emergency lighting system is battery powered. Written records of visual inspections and tests shall be kept by the owner for review. <i>06-101/7.9.3.1, 7.9.3.1.1</i>
24 Alternative emergency light testing	Computer-based, self-testing, or self-diagnostic battery-operated emergency lighting equipment shall be permitted if the testing schedule and documentation complies with 7.9.3.1.2 or 7.9.3.1.3. <i>06-101/7.9.3.1.2,</i> 7.9.3.1.3, 9.1.3
25 Emergency generator testing	When provided, written documentation shall be maintained of a) emergency generator weekly inspection, b) once a month load tests of at least 30 minute duration, c) exercising, and d) any repairs including date, personnel, notation of any unsatisfactory condition and the corrective action taken. EXCEPTION: This does not apply to portable generators. <i>05-110/8.3, 8.4</i>
26 Elevator testing	All elevators equipped with fire fighters' emergency operations shall have a documented monthly operation test. <i>06-101/9.4.6</i>
FIRE ALARM SYSTEMS	

27	Fire alarm maintained	Where required, a fire alarm or automatic detection system shall be operable and maintained at all times. NOTE: installed systems shall be maintained and operable at all times. 06-101/4.5.7
28	Power-on indicator	All primary and secondary power supplies to the alarm system shall be monitored for the presence of voltage at the point of connection to the system. For exceptions, see 07-72/4.4.7.3. Failure of either supply shall result in a trouble signal, which must be located in a constantly attended location. 07-72/4.4.7.3.1, 4.4.3.5.5
29	Shall be audible	Audible alarm notification appliances shall be distributed as to be effectively

		heard above the average ambient sound level that exists under normal conditions of occupancy. <i>06-101/9.6.3.7</i>	
30	Manual pull stations	Where fire alarm systems are required, manual pull stations shall be provided in the natural exit access path near each required exit from an area.	
		The operable part of each manual fire alarm box shall be not less than 3.5 ft and not more than 4.5 ft above floor level.	
		Manual fire alarm boxes shall be located within 5 ft of the exit doorway opening at each exit on each floor. <i>06-101/9.6.2.3; 07-72/5.13.4, 5.13.6</i>	
31	Fire alarm/detection system testing	Where required, a fire alarm or automatic detection system shall have an approved maintenance and testing program complying with the applicable requirements of NFPA 80 (National Electrical Code) and NFPA 72 (National Fire Alarm Code). NOTE: installed systems shall be maintained and operable at all times. <i>06-101/9.6.1.5, 07-72/Table 10.4.4</i>	
32	Sensitivity testing	Sensitivity testing of smoke detectors is required for detectors connected to fire alarm systems, and testing shall be done in accordance with NFPA 72: a) Sensitivity shall be checked within 1 year after installation; and b) Sensitivity shall be checked every alternate year thereafter. EXCEPTION: After the second required calibration test, if sensitivity tests indicate that the device 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 five years. NOTE: if detectors are added to the system, the timing of sensitivity testing starts over for that specific zone. 07-72/10.4.4.2, 10.4.4.2.1-10.4.4.2.6	
33	Fire Watch required	Where a required fire alarm system is out of service for less than four hours, an informal fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service. Where a required fire alarm system is out of service for more than 4 hours in a 24-hour period, KSFMO and the local jurisdiction shall be notified and the building shall be evacuated or an approved formal fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service. <i>06-101/9.6.1.6</i>	
SPRIN	SPRINKLER SYSTEMS		

Sprinkler Where required, an automatic sprinkler system shall be operable and maintained at all times. **NOTE:** installed systems shall be maintained and operable at all times *06-101/4.5.7, 9.7*Control valves Valves on connections to water supplies, sectional control and isolation valves,

and other valves in supply pipes to sprinklers and other fixed water-based fire suppression systems shall be supervised by one of the following methods: 1)

supervised

Central station, proprietary, or remote station signaling service, 2) Local signaling service that will cause the sounding of an audible signal at a constantly attended point, 3) valves locked in the correct position; 4) valves located within fenced enclosures under the control of the owner, sealed in the open position, and inspected weekly as part of an approved procedure.

07-13/8.16.1.1.2.1

Storage of all materials must be kept at least 18" below the deflector of the sprinkler head. See NFPA 13 for limited exceptions. 07-13/8.5.6.1

- 36 Storage in sprinkler-protected area
- 37 Storage by sprinkler risers

Storage of all materials shall not obstruct access to risers or other parts of the sprinkler system requiring inspection, testing, or maintenance, including risers. **08-25/4.1.1**, **9.7.5**

38 Quarterly testing

Where provided, an automatic sprinkler system shall have a quarterly inspection and test. The waterflow devices, valve supervisory devices, supervisory signal devices (except valve supervisory switches), hydraulic nameplate, and fire department connections shall be inspected quarterly. Documentation of inspections and testing will be maintained by the owner in a central location for all buildings and available for review. *08-25/Table 5.1*

39 Semiannual testing

Where provided, an automatic sprinkler system shall have a semi-annual test of valve supervisory devices and supervisory signal devices (except valve supervisory switches.) Documentation of inspections and testing will be maintained by the owner in a central location for all buildings and available for review. *08-25/Table 5.1*

40 Annual testing

Where provided, automatic sprinkler system shall have an annual inspection of buildings (prior to freezing weather), hanger/seismic bracing, pipes, fittings, sprinklers, and spare sprinklers, and an annual test of the main drain and antifreeze solution. Documentation of inspections and testing will be maintained by the owner in a central location for all buildings and available for review. *08-25/Table 5.1*

41 Internal sprinkler and pipe inspection

An inspection of piping and branch line conditions shall be conducted every 5 years by opening a flushing connection at the end of one main and by removing a sprinkler toward the end of one branch line for the purpose of inspecting for the presence of foreign organic and inorganic material. Alternative nondestructive examination methods shall be permitted. Tubercules or slime, if found, shall be tested for indications of microbiologically influenced corrosion (MIC). *08-25/14.2.1*, *14.2.1.1*, *14.2.1.2*

42 Other testing

Where provided, automatic sprinkler systems shall have testing, inspection, and maintenance of pipe obstructions, gauges, sprinklers, and valves every five years, or as specified in Table 5.1. Documentation of inspections and testing will be maintained by the owner in a central location for all buildings and available for review. *08-25/Table 5.1*

43 Fire Watch required

Where a required automatic sprinkler system is out of service for less than four hours, an informal fire watch shall be provided for all parties left unprotected by the shutdown until the fire alarm system has been returned to service.

Where a required automatic sprinkler system is out of service for more than 4 hours in a 24-hour period, KSFMO and the local jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the sprinkler system has been returned to service. *06-101/9.7.6.1*

STANDPIPE SYSTEMS

44 Standpipe systems maintained

Where provided, standpipe systems shall be maintained and operable at all times. **NOTE:** installed systems shall be maintained and operable at all times. **06-101/4.5.7**

45 Standpipe protection

Caps shall be in place on all hose outlets. *08-25/Table 6.2.2*

46 Hydrostatic testing

Manual standpipe systems and automatic-dry standpipe systems, including piping in the fire department connection, shall have a hydrostatic test meeting the requirements of 2008-25/6.3.2 every 5 years. Documentation shall be available for review. **EXCEPTION:** Manual wet standpipes that are part of a combined sprinkler/standpipe system shall not be required to be hydrostatically tested. *08-25/6.3.2, 6.3.2.2.1*

FIRE EXTINGUISHERS

47 Fire extinguishers (portable)

Portable fire extinguishers shall be located in light hazard occupancies. The number and location shall comply with NFPA 10, Chapter 6.

Portable fire extinguishers shall be maintained in a fully charged and operable condition and shall be kept in their designated places at all times when they are not being used.

Fire extinguishers having a gross weight not exceeding 40 lb shall be installed so that the top of the fire extinguisher is not more than 5 ft above the floor. Fire extinguishers having a gross weight greater than 40 lb shall be installed so that the top of the fire extinguisher is not more than 42 inches above the floor. In no case shall the clearance between the bottom of the fire extinguisher and the floor be less than 4 in. *07-10/6.1.2, 6.1.3.8*

48 Portable extinguishers maintenance

Facility shall maintain monthly and annual service documentation on portable fire extinguishers for review by KSFMO. *07-10/7.1.2.1, 7.2.1.2*

BUILDING SEPARATION

49 Protection of vertical openings

Penetrations for cables, cable trays, conduits, pipes, tubes, vents, wires, and similar items to accommodate electrical, mechanical, plumbing, and communications systems that pass through a wall, floor, or floor/ceiling assembly constructed as a smoke barrier, or through the ceiling membrane of the roof/ceiling of a smoke barrier assembly, shall be protected by a system or material capable of restricting the transfer of smoke. *06-101/8.5.6.3*

50 Exit enclosures

An exit enclosure shall provide a continuous protected path of travel to an exit discharge. *06-101/7.1.3.2.2*

51 Exit enclosure openings

Openings in exit enclosures shall be limited to doors from normally occupied spaces and corridors and doors for egress from the enclosure. Penetrations or communicating openings shall be limited. **06-101/7.1.3.2.1**

52 Storage and stairs

Enclosed, usable spaces within exit enclosures shall be prohibited, including under stairs. Open space within the exit enclosure shall not be used for any purpose that has the potential to interfere with egress. **EXCEPTION:** Enclosed, usable space shall be permitted under stairs, provided that the following criteria are met: 1) The space shall be separated from the stair enclosure by the same fire resistance as the exit enclosure, and 2) Entrance to the enclosed, usable space shall not be from within the stair enclosure. **06-101/7.2.2.5.3, 7.2.2.5.3.1, 7.2.2.5.3.2**

HAZARDOUS ROOMS

53 Hazardous rooms

Protection from any area having a degree of hazard greater than that normal to the general occupancy of the building or structure shall be provided by one of the following means: 1) Enclosing the area with a fire barrier without windows that has a 1-hour fire resistance rating in accordance with Section 8.3; 2) Protecting the area with automatic extinguishing systems in accordance with Section 9.7; 3) Applying both of the above where the hazard is severe or where otherwise specified by Chapter 12 through Chapter 42. This includes boiler/furnace rooms with total input rating greater than 200,000 Btu, trash rooms or chutes, storage rooms with combustible materials, workshops, rooms with kilns, laboratories, and combustible chemical storage. Doors to hazardous rooms shall be self- or automatic-closing. *06-101/1.4, 8.7.1.1*

54 Boiler certificate

A current boiler certificate, no more than 18 months beyond expiration date, shall be posted. This is required for all boilers, all water heaters with a water capacity of 85 gallons or greater, and all water heaters rated for more than 200,000 BTU's regardless of size. **KSA 44-924(b)**

KITCHENS AND HOOD SUPPRESSION SYSTEMS

55 Equipment shall Hoods, grease removal devices, fans, ducts, and other appurtenances shall be

	be cleaned	cleaned to remove combustible contaminants prior to surfaces becoming heavily contaminated with grease or oily sludge. <i>08-96/11.6</i>
56	Vented to outside	Equipment shall be vented to the outside through an approved exhaust hood system. EXCEPTION: outside venting is not required if cooking equipment is listed in accordance with UL 197. <i>08-96/4.1.1, 4.1.1.1, 7.1</i>
57	Filters	Baffle-type filters are required. Mesh-type filters are not allowed. 08-96/6.1.3
58	Suppression system	Cooking equipment that produces grease-laden vapors and that might be a source of ignition of grease in the hood, grease removal device, or duct shall be protected by fire-extinguishing equipment. <i>08-96/10.1.2</i>
59	UL 300 compliant	NEW BUILDING: Automatic fire-extinguishing systems shall comply with UL 300 or other equivalent standards and shall be installed in accordance with the requirements of the listing.
		EXISTING BUILDING: Automatic extinguishing systems that do not meet the UL 300 or equivalent standard must be replaced with a compliant system:1) at the existing system's 6-year hydrostatic test, or 2) when the system is discharged, or 3) when modifications are made to the system, or 4) by no later than July 1, 2014. <i>08-96/10.2.3</i> , <i>10.2.3.1</i> , <i>1.4.1</i> , <i>1.4.2</i> , <i>1.4.3</i>
60	Manual pulls accessible	A readily accessible means for manual activation shall be located between 42 inches and 48 inches above the floor, be accessible in the event of a fire, be located in a path of egress, and clearly identify the hazard protected. 08-96/10.5.1
61	Kitchen hood fire extinguisher	Fire extinguishers provided for the protection of cooking appliances that use combustible cooking media (vegetable or animal oils and fats) shall be listed and labeled for Class K fires. <i>06-10/5.5.5</i>
62	Automatic fuel shutoffs	Upon activation of any fire-extinguishing system for a cooking operation, all sources of fuel and electrical power that produce heat to all equipment requiring protection by that system shall automatically shut off. Any gas appliance not requiring protection but located under the same ventilating equipment shall also automatically shut off upon activation of any extinguishing system. <i>08-96/10.4.1</i> , <i>10.4.3</i>
63	System servicing	Fixed extinguishing systems protecting commercial cooking equipment shall be serviced by a firm licensed by KSFMO. Fusible links shall be replaced semi-annually. Documentation shall be maintained on-site. <i>KAR 22-10;</i> 08-96/11.2.1, 11.2.4, 11.2.8

COMPRESSED GASES AND FLAMMABLE LIQUIDS

64 Compressed gas Compressed gas cylinders shall be adequately secured with caps in place when

		•
	cylinders	not in use. Cylinders shall be stored away from heat sources. <i>KSA 31-133</i>
65	Gasoline- powered equipment	Gasoline-powered equipment storage is prohibited in boiler, fuel-fired equipment rooms and exitways. <i>08-30/6.5.1; KSA 31-133</i>
66	Flammable liquid storage	Flammable liquid storage is prohibited in boiler and fuel-fired equipment rooms and exitways. Flammable liquids shall be in containers approved for the use and marked with the material's name. Storage shall be in an approved flammable liquid storage cabinet when total quantities stored exceed 10 gallons. <i>08-30/9.3.3.1, 9.6.2; KSA 31-133</i>
INTE	RIOR FINISH	
67	Interior finish	Interior wall and ceiling finish materials in exit enclosures shall be Class A or Class B. Textile materials on walls or ceilings shall be Class A. Fire-retardant coatings shall be maintained to retain the effectiveness of the treatment under service conditions encountered in actual use. <i>06-101/7.1.4.1</i> , <i>10.2.4.1</i> , <i>10.3.6</i>
68	Combustible decorations	Bulletin boards, posters, and paper attached directly to the wall shall not exceed 20 percent of the aggregate wall area to which they are applied. EXCEPTION: Fully-sprinkled education occupancies. 10.2.5.3
ELECT	TRICITY AND OTHE	R HAZARDS
69	Electrical panels	Energized main electrical switches, breakers, fuses, or distribution panels shall be enclosed with no access obstructions within 3 feet. 08-70/110.26(A)(1) , 408.18
70	Electrical wiring	Wiring must comply with NFPA 70. Use of temporary wiring for non-temporary installations (greater than 90 days) is prohibited. If temporary wiring is used, it must be protected for such use. Flexible cords and cables shall be protected from accidental damage. Decorative lighting, including holiday lighting, must be listed. <i>08-70/590.3(B)</i> , <i>590.4(H)</i> , <i>590.5</i>