

## **Apartment Checklist**

**2006 IFC**

Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature.

## Exit

### **A: Temporary Egress:**

1001.2

It shall be unlawful to alter a building or structure in a manner that will reduce the number of exits or the capacity of the means of egress to less than required by this code.

### **B: Door Swing:**

1008.2

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons.

### **C: Door Locks Required Key:**

1008.1.8

Egress doors shall be operable from the egress side without the use of a key or special knowledge or effort.

Exceptions: Access doors or gates in barrier walls and fences protecting pool, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

### **D: Travel Distance:**

Table 1019.2

In a Group R-2 occupancy the maximum travel distance to an exit is 50 feet. In all other Group R occupancies, the maximum is 75 feet.

### **E: Continuous Exits:**

1019.3

Exits shall be continuous from the point of entry into the exit to the exit discharge.

### **F: Exterior Exits:**

1018.2

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

### **G: Normal Illumination:**

1006.1

The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

### **H-J: Exit Signs:**

1011.1, 1006.1

Exit signs are required in rooms or areas which require two or more exits. Main exterior exit door signs may be exempt. Exit signs are not required in individual sleeping units or dwelling units in Group R-1, R-2, or R-3. Exit sign placement shall be such that no point in an exit access corridor is more than 100 feet or the listed viewing distance, whichever is less, from the nearest visible exit sign. Exit signs shall be internally or externally illuminated at all times.

**K: Exit Obstructions:**

1003.6

Obstruction to exits shall not be placed in the required width and exits shall not be obstructed in any manner.

**L: Means of Egress:**

1003.6

The required capacity of means of egress shall not be diminished (reduced) along the path of egress travel.

**M: Egress Door Widths:**

1008.1.1

Doorways shall not be less than 32 inches in clear width. This does not apply to door openings that are not part of the required means of egress in Group R-2 and R-3 occupancies.

**N: Number of Exits:**

Table 1015.1

Two exits or exit access doorways from any space in Group R shall be provided if the occupant load of the space exceeds 10 persons.

**O: Access Control Door Locks:**

Table 1008.1.3.4

Access-controlled entrance egress doors are permitted within Group R-1 and R-2 occupancies. The system must be approved. The doors shall be arranged to unlock by a signal from or loss of power to the motion sensor. There shall be a manual unlocking device (button) located 40-48 inches above the floor and within 5 feet of the secured doors with a sign that reads: "Push To Exit." Activation of the fire alarm system or the automatic sprinklers shall unlock the doors.

**P: Sleeping Units (10 or Less):**

1008.1.8.3

Egress doors shall be readily operable from the egress side without the use of a key or special knowledge or effort. Doors from individual dwellings or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are operable from the inside without the use key or tool.

**Q: Emergency Lighting:**

1027.5

In the event of power supply failure, exit illumination shall be automatically provided from an emergency system except where the guestroom or living unit has direct access to the outside at grade level. Applicable to Group R-1, R-2, and R-4 occupancies only. Group R-3 is exempt. Emergency power supply shall provide power for a minimum of 90 minutes. Equipment shall be tested for 30 seconds monthly and 90 minutes annually.

## Fire Protection Systems

### **A: Sprinkler System Required:**

903.2.7

An automatic sprinkler system shall be provided throughout buildings with a Group R fire area.

### **B: F and L Fire Extinguishers:**

906.1

1x2A per 600 sq. ft. in light hazard. 1x2A per 3000 sq. ft. in ordinary hazard. Max travel distance to a fire extinguisher is 75 ft. Fire extinguishers shall be mounted, conspicuously located, unobstructed, and available for immediate use. If visual obstruction cannot be avoided, signs shall be provided. Height Requirements: <40lbs – Not more than 5ft >40lbs – Not more than 3.5ft and not less than 4in.

### **C: Travel Distance:**

Table 906.3 (1)

Maximum travel distance to a fire extinguisher is 75 feet.

### **D-H: Fire Extinguishers:**

906.5

Fire extinguishers shall be located in conspicuous locations where they will be readily accessible and immediately available for use. Portable fire extinguishers shall not be obstructed or obscured from view. In rooms or areas in which visual obstruction cannot be completely avoided, means shall be provided to indicate the location of extinguishers. Hand-held portable fire extinguishers, not housed in cabinets, shall be installed on hangers or brackets supplied. See Table 906.1 for additional required portable fire extinguishers. Fire extinguishers shall be serviced annually and shall have a current service tag attached. (NFPA 10)

### **I: Supervised Valves:**

903.4

All valves controlling the water supply and water-flow switches on all sprinkler systems shall be electronically supervised when system has 20 or more sprinkler heads.

### **J: Painted Sprinkler Heads:**

901.8

Painted sprinkler heads or cover plates are prohibited unless painted at the factory. They cannot be cleaned of paint. They must be replaced. (NFPA 13, 6.2.6.2.1)

### **K: Kitchen Fire Extinguisher (R1 Hotel/Motels):**

904.11

Group R-1 hotel kitchens must provide extinguishers and protection same as Group A-1 for commercial cooking areas.

**L: Fire Extinguishers:**

906.9

Portable fire extinguishers having a gross weight not exceeding 40 pounds shall be installed so that its top is not more than 5 feet above the floor. Extinguishers having a gross weight exceeding 40 pounds shall be installed so that its top is not more than 3.5 feet above the floor and the bottom not less than 4 inches above the floor.

**M: System Maintained:**

901.6, Table 901.6.1

Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Non-required fire protection systems and equipment shall be inspected, tested and maintained or removed. Records of all inspections, tests and maintenance shall be maintained on the premises for a minimum of 3 years. Fire protection systems shall be inspected, tested and maintained in accordance with the following; Portable fire extinguishers NFPA 10 Dry-chemical extinguishing systems NFPA 17, Wet-chemical extinguishing systems NFPA 17A, Water-based fire protection systems NFPA 25, Fire alarm systems NFPA 72, Commercial Cooking Equipment: NFPA 96, Emergency Standby Power: NFPA 110 and 111.

**N: Fire Hydrants:**

508.2

A 3-foot clear space shall be maintained around the circumference of fire hydrants.

**O: Smoke Alarms Required:**

907.3.2.1

Single- and multiple-station smoke alarms shall be installed in existing Group R occupancies.

**P-S: Fire Alarm System Required:**

907.3

A fire alarm system shall be installed in existing Group R hotel and motels more than three stories or with more than 20 guestrooms. A fire alarm system shall be installed in existing Group R-1 boarding and rooming houses. A fire alarm system shall be installed in existing Group R-2 apartment buildings with more than three stories or with more than 16 dwelling or sleeping units. See exceptions.

**T: Commercial Cooking Equipment:**

904.11.5

Commercial cooking equipment involving vegetable oil or animal fat shall be protected by a Class K rated portable fire extinguisher provided within 30-foot travel distance of commercial-type cooking equipment. Minimum 2.5-gallon or two 1.5-gallon Class K wet-chemical portable fire extinguisher.

**U: Class K-Fire Extinguishers:**

904.11.5.2

When cooking areas include deep fat fryers, listed Class K portable fire extinguishers shall be provided. 1-4 fryers require one 1.5-gallon Class K and 5-8 fryers require two 1.5-gallon Class K portable fire extinguishers.

**V: Maintenance Responsibility:**

907.20.5

The building owner shall be responsible for ensuring that the fire and life safety system are maintained in an operational condition at all times.

**W: Fire Watch:**

901.7

Where a required fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

**X: Generator Maintenance:**

604.3, 604.5

Emergency and standby power systems shall be maintained in accordance with NFPA 110 and NFPA 111 such that the system is capable of supplying service within the time specified for the type and duration required. Routine maintenance, inspection and operational testing shall be overseen by a properly instructed individual.

**Y: Cooking Equipment Maintained:**

904.11, 2008 (96) 11.2.4, 11.6.1

Automatic extinguishing systems of commercial cooking equipment shall be serviced at least every 6 months by properly trained, qualified, and certified person (s). Fusible links and automatic sprinkler heads with fusible links shall be replaced at least annually. Maintain records and show proof upon inspection, if the exhaust system is found to be contaminated with deposits from grease-laden vapors, the contaminated portions of the exhaust system shall be cleaned by a properly trained, qualified, and certified company or person (s) acceptable to the authority having jurisdiction.

## Housekeeping

### **A-E: Combustible Material Storage:**

315.2

Storage of combustible materials in buildings shall be maintained in a neat, orderly manner. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur.

Combustible material shall not be stored in exits or exit enclosures. Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms.

### **H: Unvented Heating:**

603.4

Portable unvented fuel-fired heating equipment shall be prohibited in Group R-1, R-2, R-3, and R-4 occupancies.

Exception: Listed and approved unvented fuel-fired heaters in one and two family dwellings.

### **I: Oily Rags:**

304.1

Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in listed disposal containers (self-closing lids). Contents shall be removed and disposed of daily.

### **K: Cooking Equipment Cleaned:**

904.11.6.3

Hoods, grease-removal devices, fans, ducts and other appurtenances shall be cleaned at intervals necessary to prevent the accumulation of grease. Cleanings shall be recorded.

### **L: Fire Department Connection:**

508.5.4

Items shall not be placed or kept near fire hydrants, fire department inlet connections (FDC) in a manner that would prevent such equipment of fire hydrants from being immediately discernible and from gaining immediate access to the fire protection equipment of fire hydrants.

### **M: Hazardous Spaces:**

Table 508.2

Incidental use areas shall be separated or protected, or both, in accordance with Table 508.2 – 1 hour or assembly Furnace room single piece > 400,000 BTU Boiler room Refrigerant machinery rooms Lab and vocational shops, in Group E Laundry rooms over 100 sq. ft. Storage rooms over 100 sq. ft. 2 hours; or 1 hour and assembly Parking garage (section 406.2) Paint shops 2 hours and assembly Incinerator room.

## Electrical

### **A-C: Power Strips:**

605.4

Re-locatable power taps shall be of the polarized or grounded type, equipped with overcurrent protection, and shall be listed. Re-locatable power taps shall be directly connected to a permanently installed receptacle. Re-locatable power taps shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.

### **D-J: Extension Cords:**

605.5

Extension cords shall not be a substitute for permanent wiring. Extension cords and flexible cords shall not be affixed to structures, or extended through walls, ceilings or floors. Extension cords shall be plugged directly into an approved receptacle, power tap, or multiplex adapter. Except for approved multi-plug extension cords, each extension cord shall serve only one portable appliance. Extension cords shall not contain splices or damage. Extension cords shall be grounded when serving grounded portable appliances. The capacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

### **K: Panel:**

605.3

A working space of not less than 30 inches in width, 36 inches in depth and 78 inches in height shall be provided in front of electrical service equipment (panel). Where electrical service equipment is wider than 30 inches, the working space shall not be less than the width of the equipment.

### **L: Junction Box:**

605.5

Open junction boxes and open wiring splices shall be prohibited. Approved covers shall be provided for all switch and outlet boxes.

### **M: Electrical Motors:**

605.8

Electrical motors shall be maintained free from excessive accumulations of oil, dirt, waste and debris.

### **N-O: Temporary Wiring:**

605.9

Temporary wiring for electrical power and lighting installations is allowed for a period not to exceed 90 days.

### **P: Multi-Plug Adapters:**

605.4

Multi-plug adapters, such as cube adapters, un-fused plug strips or any other device not complying with the International Code Council Electrical Administrative Provisions shall be prohibited.

## Miscellaneous

### **F-J: Evacuation Plan:**

404.2, 405.2

An approved fire safety and evacuation plan shall be prepared and maintained for Group R-1 buildings and Group R-2 college and university buildings. Employees in Group R-1 occupancies shall be trained in the fire emergency procedures described in the fire evacuation and fire safety plans. Training is annual. Emergency evacuation drills shall be held in Group R-1 occupancies quarterly on each shift by employees only. In Group R-1 occupancies, a diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each hotel, motel or dormitory sleeping unit.

### **K: Emergency Guide (R-2 Apartment/Dorm):**

408.9

In Group R-2 occupancies, each tenant shall be given a copy of the emergency guide prior to occupancy.

### **L: System Maintenance:**

907.20.5

The building owner shall be responsible for ensuring that the fire and life safety system are maintained in an operational condition at all times.

### **M: Evacuation:**

408.9

In Group R-4 occupancies, a fire safety and evacuation plan shall include special staff actions, including fire protection procedures for residents and shall be amended or revised upon admission of a resident with unusual needs.

## Hazardous Materials

### **B-C: Hazardous Material Storage:**

2703.9.8, 3404.3.3.5.3

Storage of incompatible materials shall be separated if in containers having a capacity over 5 lbs. of 0.5 gallon. Shelf storage of flammable and combustible liquids shall be orderly.

### **D: Cabinet Identification:**

27083.8.7.2

Hazardous materials storage cabinets shall be clearly identified in an approved manner with red letters on a contrasting background to read: "Hazardous – Keep Fire Away."

### **E: Flammable Liquid/Gas Storage:**

3404.3.4.4

Flammable and combustible liquids used for maintenance and the operation of equipment exceeding 10 gallons shall be stored in a liquid storage cabinet.

### **F: Below Grade LPG Storage:**

3803.2.1.1

Portable LP-gas containers shall not be used in a basement, pit or similar location where heavier-than-air gas might collect.

### **H: Hazardous Material Storage:**

3503.1

Except for cylinder not exceeding 250 cu. Ft. each, used for maintenance purposes, patient care or operation of equipment, flammable gases shall not be stored or used in Group R occupancies.

## Fire Protection

### **L: Vertical Shafts:**

IFC 704.1, Table 704.1

Interior vertical shafts, including but not limited to stairways, elevator hoist ways, service and utility shafts that connect two or more stories of a building shall be enclosed or protected as specified in Table 704.1. Group I Vertical openings connecting two or more stories 1-hour protection all, other than Group I Vertical openings are connecting three to five stories 1-hour protection or automatic sprinklers throughout all, other than Group I Vertical openings connecting more than five stories 1-hour protection.

### **A-E: Rated Doors Maintained:**

703.2, 703.4

Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable. Fire door assemblies shall not be modified. Swinging fire doors shall close from the full open position and latch automatically. The door closer shall exert enough force to close and latch the door from any partially open position. Horizontal and vertical sliding and rolling fire doors shall be inspected and tested annually to confirm proper operation and full closure. A written record shall be maintained and be available. When magnetic hold-open devices on fire doors are out of service the door shall remain in the closed position.

### **F-H Decorations:**

806.1, 807.1

Natural cut trees shall be prohibited in Group M occupancies unless protected by automatic sprinkler system. Natural cut trees shall be prohibited in Group R-1 and R-2 occupancies unless protected by an automatic sprinkler system. Curtains, draperies, hangings and other decorative materials shall be flame resistant or be noncombustible in Group R-1 and dormitories in Group R-2. Ask to see certificate of treatment.

### **I: Fire Doors Fusible Links:**

703.2

Fire door fusible links shall be replaced promptly whenever fused or damaged.

### **J: Fire-Resistance – Rated Construction:**

703.1

The required fire-resistance rating of fire-resistance-rated construction (including walls, fire stops, shaft enclosures, partition smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems) shall be maintained. Such elements shall be properly repaired, restored or replaced when damages, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoking and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

### **K: Interior Finish:**

803.1, 803.5, Table 803.3

Interior wall and ceiling finish shall have a flame spread index not greater than that specified for the group and location designated. Sprinklered- Class C: Exits passageways, corridors, and enclosed rooms and spaces, Non-sprinklered- Class B: Exits passageways and corridors, Class C: Enclosed rooms and spaces.

## Kansas Statutes and Regulations

### **KS01: Fire Protection Changes:**

K.S.A. 31-150

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.

### **KS02: Emergency Procedures:**

K.A.R. 22-18-2(c)

Tornado procedures shall be established by the administrator of each community college and university for all buildings, which designates tornado safety refuge areas. A notice of location of the tornado safety refuge area shall be posted in conspicuous location. Administrators shall provide copies of tornado plans to local or county preparedness director for approval.

### **KS03: Building Structural Soundness:**

K.S.A. 31-133(a)

If a building shows severe or worsening settlement, severe cracking of exterior bearing walls, or roof deflection, and a report shall be provided to OSFM for review and determination of appropriate action.

### **KS04: Exterior Stair Supports:**

K.S.A. 31-133(a)

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.

### **KS05: Below Grade LP Installation:**

K.S.A. 31-133(a)

Where LP gas appliances are located in below-grade installations where an accumulation of gas vapors is possible, the area or room shall be protected by an approved vapor removal system. If LP gas piping system has not been pressure tested within the last five years or since the installation of new LP gas appliances or changes to LP gas piping, NFPA 85 and NFPA 54 require that the system is pressure tested and documented by authorized LP gas dealer or marketer.

### **KS06: Boiler Certificate:**

K.S.A. 44-924(b)

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.

**KS07: System Service:**

K.A.R. 22-10

Fixed extinguishing systems protecting commercial cooking equipment shall be serviced by a firm licensed by OSFM. Fusible links shall be replaced yearly. Documentation shall be maintained on-site.

**KS08: PTR/Valve Relief:**

K.S.A. 44-924(b)

Pressure and temperature relief (PTR) valves on fuel fired hot water heaters shall appear operational and shall have piping which extends to within 6 inches of the ground. Piping shall not have bends and shall be of an appropriate material.

**KS09: Loose Combustible Storage:**

K.S.A. 31-133

Loose combustible storage is prohibited in boiler and furnace rooms and exit ways. Loose combustible storage includes pasteboard boxes, wooden furniture, and material packaged in combustible containers. It does not include bound books or paper bound in reams.

**KS10: Compressed Gas Cylinder:**

K.S.A. 31-133

Compressed gas cylinders shall be adequately secured with caps in place when not in use. Cylinders shall be stored away from heat sources.

**KS11: Gas Powered Equipment:**

K.S.A. 31-133

Gasoline powered equipment storage is prohibited in boiler, fuel-fired equipment rooms and exit ways.

**KS12: Flammable Liquid Storage:**

K.S.A. 31-133

Flammable liquid storage is prohibited in boiler and fuel fired equipment rooms and exit ways. 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 5 gallons.

**KS13: Dangerous Conditions:**

K.S.A. 31-133

Situations requiring immediate action 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 Chief of Fire Prevention Division for immediate guidance and determination of requirements and facility response.

**KS14: Fire Drill Frequency (Group E):**

K.A.R. 22-18-2(a)

Fire drills shall be conducted once each month that school is in session to simulate actual fire. If records indicate one or more months past due, a drill shall be conducted in the inspector's presence.

**KS15: Fire Drill and Disability (Group E):**

K.A.R. 22-18-2(a)

Fire drill procedures for occupants with disabilities shall exist in a written format and shall be maintained.

**KS16: Fire Drill Documentation (Group E):**

K.A.R. 22-18-2(a)

Fire drills shall be documented on a record provided by OSFM and publicly posted. Inspector shall verify owner information is complete on drill record.

**KS17: Tornado Drill Alarm (Group E):**

K.A.R. 22-18-2(c)

Tornado drills shall use a distinctly different alarm sound from that used for the fire alarm.

**KS18: Tornado Refuge Area (Group E):**

K.A.R. 22-18-2(c)

Tornado refuge area location shall be conspicuously posted, typically by signage at a building's main entrance bulletin board, classrooms, and/or signage at refuge area.

**KS19: Tornado Drill Documentation (Group E):**

K.A.R. 22-18-2(c)

Tornado drill shall be documented on record provided by OSFM and publicly posted.

**KS20: Escape Window (Group E):**

K.S.A. 31-150

Mobile classrooms require a remote, complying escape window or second exit door.

Exception: When each classroom has a door directly to the exterior.

**KS21: Bus Barns (Group E):**

K.S.A. 31-144(c)

Bus barns and district vehicle repair garages function independently of classrooms and require a 2 hour fire barrier with 1 ½ hour rated door assemblies between them and K-12 school areas, unless otherwise accepted by OSFM and documented in writing. (For auto-shop classrooms, see hazardous rooms.)

**KS22: Juvenile Detention Fire Drills (Group I):**

K.A.R. 22-15-7(q)

Quarterly fire drills for staff training are required and must be documented.

**KS23: Juvenile Detention Construction (Group I):**

K.A.R. 22-15-7(b) K.S.A. 31-136 (Equivalent construction types)

Approved construction shall be one of the following for single story buildings:

- 1) One hour non-combustible, or
- 2) When previously approved and documented in writing by the OSFM
  - a) one-hour wood frame construction, fully sprinkled, and limited 3,900 sq. ft. of detention space, or
  - b) heavy timber construction and fully sprinkled.

**KS24: Rolling Fire Doors:**

K.S.A. 31-133, 06

If a fire-rated door is not required at a location, the rolling door should be secured or removed. If a fire-rated door is required, the rolling door should be secured in place or removed completely, and then replaced with properly rated swinging doors. If the overhead doors cannot be immediately eliminated, the rolling doors shall be checked to insure they are being maintained properly and plans should be made to replace the doors.