

## **Child Care**

### **IFC 2006**

Child care facility that provides supervision and personal care on less than a 24-hour basis for more than five children 2 ½ years of age or less.

Exception: A child day care facility that provides care for more than five but no more than 100, 2 ½ years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior can be classified as a Group E.

## Exits

### **A: Number of Exits:**

1015.1

A minimum of two exits required if over 10 occupant load.

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

1008.1.2

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

### **C: Door Locks Require Key:**

1008.1.8

Egress doors shall be openable 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 pools, 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: 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.

### **E-F: Exit Signs Illuminated:**

1011.1, 1011.2

Exit signs shall be internally or externally illuminated. Exit signs are not required in sleeping room areas in occupancies in Group I-3.

### **G: Exit Obstruction:**

1003.6

Obstructions shall not be placed in the required width of a means of egress. Exits shall not be obstructed in any manner.

### **H-I: Egress Door Width:**

1003.6, 1008.1.1

The required capacity of means of egress shall not be diminished (reduced) along the path of egress travel. Doorways shall not be less than 32" in clear width.

### **J: Panic Hardware Operation:**

1008.1.9, 1008.1.2

Where panic hardware is installed it shall unlatch with a maximum of 15 lbs. force applied to the panic bar. The door shall be set in motion when subjected to a 30 lb. pound force applied to the latch side of the door.

**K: Remote Exits:**

1015.2.1

When two exits are required from a room or space, they must be separated by 1/2 the diagonal of the room, or 1/3 the diagonal if sprinklered.

**L: Flush or Surface Bolts:**

1008.1.8.4

Manually operated flush bolts or surface bolts are not permitted.

Exception:

- 1) On doors not required for egress in individual dwelling units or sleeping units.
- 2) Where a pair of doors serves as a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.

**M: Emergency Lighting:**

1006.3

In the event of a power supply failure, an emergency system shall automatically illuminate all aisles and unenclosed egress stairways, corridors, exit enclosures, exit passageways, and exterior landings where two exits are required. Emergency power supply shall provide for a minimum of 90 minutes. Equipment shall be tested for 30 seconds monthly and 90 minutes annually.

**N-O: Exit Signs Required:**

1011.1, 1011.5.3

Exit signs are required in rooms or areas which require two or more exits. Exit signs shall be illuminated at all times.

**P-Q: Egress Corridor Width:**

1017.2

The minimum corridor width shall be not less than 44 inches.

**R: Exit Sign Distance:**

1011.1

Exit sign placement shall be such that no point in a corridor is more than 100 feet or the listed viewing distance, whichever is less, from the nearest visible exit sign.

**S: Egress Width (I3-Jail/Detention):**

1008.1.1

Door openings to resident sleeping rooms in occupancies in Group I-3 shall have a clear width of not less than 28 inches.

**T: Rated Corridors:**

Table 1017.1

I-4 must have a 1-hour rated corridor (Existing) or be fully sprinklered (New). I-3 are required to have a 1-hour rated corridor and be fully sprinklered.

**U: Door Locks and Latches (I3-Jail/Detention):**

1008.1.8.3

Locks and latches shall be permitted to prevent operation of doors where people are detained or restrained (Group I-3).

**V: Rescue Window (Existing Non-Sprinklered):**

06-101/17.2.11.1.1

Every room or space greater than 250 ft<sup>2</sup> and normally subject to client occupancy shall have not less than one outside window for emergency rescue that complies with the following:

- 1) Such windows shall be openable from the inside within the use of tools and shall provide a clear opening of not less than 20 in. in width, 24 in. in height, and 5.7 ft<sup>2</sup> in area.
- 2) The bottom of the opening shall be not more than 44 in. above the floor.
- 3) The clear opening shall allow a rectangular solid, with a width and height that provides not less than the required 5.7 ft<sup>2</sup> openings and a depth of not less than 20 in. to pass fully through the opening.

Exception: Where the room or space has a door leading directly to the outside of the building.

## Fire Protection Systems

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

903.2.5

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

### **B-G: Fire Extinguisher:**

Table 906.3 (1)

1x24 per 6000 sq. ft. in light hazard. 1x24 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 5 ft. > 40 lbs. – Not more than 3.5 ft. and not less than 4 in.

### **J and L: Cooking Equipment Maintained:**

08-96/11.2.1, 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.

### **K and M: Manual Activation Device:**

904.11.1, 904.11.2

The actuation of commercial cooking equipment fire suppression system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The automatic fire-extinguishing system for commercial cooking systems shall have a manual actuation device that shall be located at or near a means of egress from the cooking area, 42-48 inches above floor, 10 to 20 feet away.

### **N: Type I Hood and Suppression:**

904.2.1

Commercial kitchen (Type I) exhaust hood and duct systems shall be protected by an approved automatic fire-extinguishing system.

### **O: Fire Extinguisher Service:**

901.6.1

Fire extinguishers shall be serviced annually and shall have a current service tag attached. (NFPA 10).

### **P: 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.

**R and T: 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.

**S: Painted Sprinkler Heads:**

901.6

Painted sprinkler heads or cover plates are prohibited unless painted at the factory. They cannot be cleaned of paint. They must be replaced.

**U: Cooking Equipment Cleaned:**

904.11.6.3

Hoods, grease-removal devices, fans, and ducts shall be cleaned at intervals necessary to prevent the accumulation of grease. Cleaning shall be recorded, and records shall state the extent, time and date of cleaning.

**V: Fire Hydrants:**

508.5.5

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

**X: Class K Fire Extinguisher:**

904.11.5.2

When cooking includes 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.

**Y: Maintenance Responsibility:**

907.20.5

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

**Z: Fire Alarm System Required:**

907.3.1.2, 907.3.1.3, 907.3.1.4

Group I-1: A fire alarm system shall be installed.

Exception: Where each sleeping room has an exit door directly to an exterior egress balcony that leads directly to the exits in accordance with Section 1014.5, and the building is not more than three stories in height. Group I-2: A fire alarm system shall be installed in accordance with Section 907.2.6.2. Group I-3: A fire alarm system shall be installed in accordance with Section 907.2.6.3.

**ZA: 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.

**ZB: 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.

## Housekeeping

### **A-H: Combustible 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. Storage shall be maintained 2 feet or more below the ceiling in non-sprinklered areas of buildings and a minimum of 18 inches below sprinkler head deflectors in sprinklered areas of buildings. Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms. Outside storage of combustible material shall not be located within 10 feet of a property line. Combustible waste containers more than 40 gallons shall have lids and must be made of metal or approved combustible material. Attic, under-floor and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for 1-hour fire-resistive construction.

Exception: If the area is protected by an approved automatic sprinkler system.

### **J: Oily Rags:**

304.3.1

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: Unvented Heating:**

603.4

Portable unvented fuel-fired heating equipment shall be prohibited.

### **L: Grease Laden Vapor Hood Requirement:**

609.2

A Type I hood shall be installed at or above all commercial food cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors.

### **N: 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.

### **O: 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 or fire hydrants from being immediately discernible and from gaining immediate access to the fire protection equipment or fire hydrants.

**P: Hazardous Spaces:**

Table 508.2

Incidental use areas shall be separated or protected, or both, in accordance with Table 508.2, 1 hour or accessories 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 accessories Parking garage (Section 406.2) Paint shops, 2 hours and accessories Incinerator rooms.

## 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 environment or physical damage.

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

605.5

Extension cords shall not be a substitute for a 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 multi-plug 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:**

605.6

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.

Exception: Longer for construction, remodeling, repair or demolition of buildings. Temporary wiring attached to a structure shall be attached in an approved manner.

### **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.

**Power-Operated Doors Release:**

604.2.17

Power-operated sliding doors or power-operated locks for swinging doors in Group I-3 occupancies shall be operable by a manual release mechanism at the door, and either emergency power or a remote mechanical operating release shall be provided.

## Miscellaneous

### **E: Evacuation Plan:**

404.2

An approved fire safety and evacuation plan shall be prepared and maintained. The plan shall be reviewed or updated annually.

### **F: Evacuation Drill Frequency:**

408.6.1, Table 405.2

Emergency evacuation drills shall be conducted in Group I occupancies quarterly on each shift. All employees must participate.

## **Hazardous Materials**

### **A: Permit (NIC):**

105.6.16 #2

An operational permit is required to store, handle or use Class I liquids in excess of 5 gallons inside a building and 10 gallons outside.

### **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: Below Grade LPG Containers:**

3803.2.1.1

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

### **E: Flammable Liquid and 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.

### **I: No Smoking:**

2703.7.1

"No Smoking" signs shall be posted in areas where containing flammable or combustible hazardous materials are stored, dispensed or used.

## **Fire Protection**

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

703.2, 703.4, 703.2

Fire doors and smoke barrier door shall not be modified, blocked or obstructed or made inoperable. Swinging fire doors shall close and latch automatically. Horizontal and vertical sliding doors shall be inspected and tested annually. A written record shall be maintained and be available. Magnetic hold-open devices and automatic door closers on fire doors, where provided, shall be maintained. If fire doors are out of service the door shall remain in the closed position.

### **F and H-I: Decorations:**

806.1, 807.1

Curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall be flame resistant. Natural cut trees shall be prohibited. In Group I-3, combustible decorations are prohibited.

### **G: Rated Doors Blocked or Wedged:**

Table 1017.1, 703.2

In Group I-3 occupancies, openings through fire-resistance-rated assemblies shall be protected by self-closing or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly. Fire doors and smoke barrier doors shall not be blocked. No door wedges or fold down feet.

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

703.1

The required fire-resistance rating of fire-resistance-rated construction (including walls, fire stops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and fire-resistant join systems) shall be maintained. Such elements shall be properly repaired, restored or replaced when damaged, 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 smoke 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.

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

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 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.

## 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 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.

Exception: Regents schools and Washburn University in Topeka.

See Fire Fact 060, 061, 063, 064, 065.

### **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, a report shall be provided to OSFM for review and determination of appropriate action.

### **KS04: Exterior Stair Support:**

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 be 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/Relief Valve:**

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.

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 containment 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. 22-182(c)

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

**KS20: Tornado Drill Documentation (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 Barn (Group E):**

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

Bus Barns and distinct vehicle repair garage 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 Drill (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 KSFMO a) one-hour wood frame construction, fully sprinkled, and limited to 3,900 square feet 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.