

SCHOOL/PRESCHOOL

IFC 2006

Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 and have occupant loads of less than 100, shall be classified as A-3occupancies

EXITS

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: NUMBER OF EXITS:

1015.1 TBL Two exits or exit access doorways from any space shall be provided when the occupant load is 50 or more than the values.

C: PANIC HARDWARE REQUIRED:

1008.1.9 Each door in a means of egress having an occupant load of 50 or more shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

D: PANIC HARDWARE OPERATION:

1008.1 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-pound force applied to the latch side of the door.

E: FLUSH OR SURFACE BOLTS:

1008.1.4 Manually operated flush bolts or surface bolts on exit doors are not permitted.

F: CONTINUOUS EXITS:

1008.1.8.4 Exits shall be continuous from the point of entry into the exit to the exit discharge.

G: EXTERIOR EXITS:

1018.2.2 Exterior exit doors shall lead directly to the exit discharge or the public way.

H: DOOR SWING:

1008.1.2 Exit doors shall swing in the direction of exit travel when serving an occupant load of 50 or more.

I: 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.

J-L: EXIT SIGNS:

1011.1 Exit signs are required in rooms or areas which require two or more exits. Main exterior exit door sign may be exempt. 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. Exit signs shall be internally or externally illuminated at all times.

M: EXIT OBSTRUCTIONS:

1003.6 Obstruction to exits shall not be placed in the required width and exits shall not be obstructed in any manner.

N-P: EGRESS WIDTH:

1003.6, 1008.1.1, 1017.2

The required capacity of mean of egress shall not be diminished (reduced) along the path of egress travel. Doorways shall not be less than 32 inches in clear width. In Group E occupancies with a corridor having a required capacity of 100 or more, the minimum corridor width is 72 inches.

Q: EMERGENCY LIGHTS:

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 power for a minimum of 90 minutes. Equipment shall be tested for 30 seconds monthly and 90 minutes annually.

R: ACCESS CONTROL DOOR LOCKS:

1008.1.3.4

Access-controlled entrance/egress doors are permitted. 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 should be a manual unlocking device (button) located 40-48 inches above the floor within 5 feet of the secured doors, with a sign that reads "PUSH TO EXIT." Activation of the fire alarm or automatic sprinklers shall unlock the doors. Entrance doors shall not be secured from the egress side during periods that the building is open to the general public.

FIRE PROTECTION SYSTEMS

A-H: FIRE EXTINGUISHER:

906.1 1x2A per 6000 sq. ft. in light hazard. 1x2A per 3000 sq. ft. in ordinary hazard. Group E with quick-response sprinklers, fire extinguishers required only in special-hazard areas. 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.

I-K: COMMERCIAL COOKING TESTING & MAINT:

906.1, 904.11.6 Portable fire extinguisher to be installed within 30 feet of commercial cooking equipment. Automatic fire extinguishing systems of commercial cooking equipment shall be serviced at least every 6 months and after activation of the system. Fusible link and automatic sprinkler heads with fusible links shall be replaced at least annually.

Records to be maintained.

L-M: SUPERVISED VALVES:

903.4, 903.2.2 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. An automatic sprinkler system shall be provided for every portion of educational buildings below the level of exit discharge.

N-O: SYSTEM MAINTENANCE RECORDS:

901.6 & TBL 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 & 111.

P: 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)

Q: COMMERCIAL COOKING EQUIPMENT:

904.11.1, 904.2.1 A manual actuation device shall be located at or near a means of egress from the cooking area, 42-48 inches above floor.

R: TYPE I HOODS & SUPPRESSION:

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

HOUSEKEEPING

A-F: COMBUSTIBLE MATERIAL STORAGE:

3404.3.4.2(3) , 315.2

Flammable and combustible liquid storage in Group E occupancies shall not exceed that necessary for demonstration, treatment, laboratory work, maintenance purposes and operation of equipment, and shall not exceed quantities set forth in Table 2703.1.1(1). 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. Storage shall be separated from heaters or heating devices. Storage shall be maintained 24in or more below the ceiling in non-sprinklered bldgs. or 18 inches below sprinkler deflectors in sprinklered bldgs. Attic, under-floor and concealed spaces used for the 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.

G: OILY RAGS:

304.3.1

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

J: 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.

K: GREASE LADEN VAPORS HOOD REQUIREMENT:

610.2

A Type 1 hood shall be installed at or above all commercial food cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors.

L: PERSONAL EFFECTS:

807.4.3.1

Clothing and personal effects shall not be stored in corridors and lobbies unless the corridors and lobbies are protected by a smoke detection and/or automatic sprinkler system.

M: UNVENTED HEATING:

603.4

Portable unvented fuel-fired heating equipment shall be prohibited.

N: FIRE DEPARTMENT CONNECTION:

508.5.4

Items shall not be placed or kept near fire hydrants, fire department inlets (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 of fire hydrants.

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 and shall not be affixed to structures, extended through walls, ceilings or floors. Cords shall not contain splices or damage. Extension cords shall only be plugged directly into an approved receptacle. Except for approved multi-plug extension cords, each extension cord shall serve only one appliance. The ampacity of the extension cord shall not be exceeded. Extension cords shall be grounded when serving grounded portable appliances.

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: MULTIPLEG 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.

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.

HAZARDOUS MATERIALS

B-C: HAZARDOUS MATERIALS 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. or 0.5 gallon. See how to separate. Shelf storage of flammable and combustible liquids shall be orderly.

D: 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.

E-F: FLAMMABLE LIQUID AND GAS STORAGE:

3404.3.4, 3503.1.1

Flammable and combustible liquids used for maintenance and the operation of equipment exceeding 10 gallons shall be stored in a liquid storage cabinet. Except for cylinders not exceeding 250 cubic feet each, used for maintenance purposes, patient care or operation of equipment, flammable gases shall not be stored or used in Group E occupancies.

FIRE PROTECTION

I: RATED DOORS BLOCKED OR WEDGED:

TBL 1017.1, 703.2 Fire doors and smoke barrier doors shall not be blocked. No door wedges or fold down feet in rated corridors.

A-E: RATED DOORS MAINTAINED:

703.2 Fire doors and smoke barrier doors 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-G: DECORATIONS:

805.1, 806.1.1 Curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall be flame resistant. Natural cut trees shall be prohibited in Group E occupancies unless protected by an automatic sprinkler system.

H: SELF OR AUTOMATIC CLOSING DOORS:

703.1 Openings through fire-resistance-rated assemblies shall be protected by self-closing or automatic-closing doors.

KANSAS STATUTES & 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, 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 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/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 & 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 drills 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 BARN (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 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 OSFM 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.