2015 – 2018 IFC COMPARISON,
prepared by the Fire Marshals Association of Utah and presented and approved by:
the Utah State Fire Prevention Board

CHAPTER 1 SCOPE AND ADMINISTRATION

2015	2018	Description of Change and/or Recommendation
102.3 Change of use or occupancy. Changes shall not be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the *International Building Code.* Subject to the approval of the *fire code official*, the use or occupancy of an existing structure shall be allowed to be changed and the structure is allowed to be occupied for purposes in other groups without conforming to all of the requirements of this code and the *International Building Code* for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.	**102.3 Change of use or occupancy.** A change of occupancy shall not be made unless the use or occupancy is made to comply with the requirements of this code and the *International Existing Building Code.* **Exception:** Where approved by the *fire code official,* a change of occupancy shall be permitted without complying with the requirements of this code and the *International Existing Building Code,* provided that the new or proposed use or occupancy is less hazardous, based on life and fire risk, than the existing use or occupancy.	Changed the language in the charging paragraph and then provided an exception. The intent of the section has not changed.
102.5 Application of residential code. Where structures are designed and constructed in accordance with the *International Residential Code,* the provisions of this code shall apply as follows: 1. Construction and design provisions of this code pertaining to the exterior of the structure shall apply including , but not limited to, premises identification, fire apparatus access and water supplies. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 of this code shall apply. 2. Administrative, operational and maintenance provisions of this code shall apply.	**102.5 Application of residential code.** Where structures are designed and constructed in accordance with the *International Residential Code,* the provisions of this code shall apply as follows: 1. Construction and design provisions of this code pertaining to the exterior of the structure shall apply including , but not limited to, premises identification, fire apparatus access and water supplies. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 ~~of this code~~ shall apply. 2. Administrative, operational and maintenance provisions of this code shall apply.	State Amendment: IFC, Chapter 1, Section 102.5 is deleted and rewritten as follows: **102.5 Application of residential code.** If a structure is designed and constructed in accordance with the International Residential Code, the provisions of the code apply only as follows: 1. The construction and design provisions of this code apply only to premises identification fire apparatus access, fire hydrants and water supplies, and construction permits required by Section 105.7. 2. This code does not supercede the land use, subdivision, or development standards

		established by a local jurisdiction. 3. The administrative, operational, and maintenance provisions of the code apply.
102.9 matters not provided for. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, that are not specifically provided for by this code, shall be determined by the *fire code official.*	**102.9 matters not provided for.** Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, that are not specifically provided for by this code, shall be determined by the *fire code official.*	**State Amendment** **102.9 Matters not provided for**. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, that are not specifically provided for by this code, shall be determined by the *fire code official on an* emergency basis if: (a.) the facts known to the fire code official show that an immediate and significant danger to the public health, safety, or welfare exists; and (b.) the threat requires immediate action by the fire code official. In issuing its emergency order, the fire code official shall: (a.) limit the order to require only the action necessary to prevent or avoid the danger to the public health, safety, or welfare; and (b.) give immediate notice to the persons who are required to comply with the order, that includes a brief statement of the reasons for the fire code official's order. If the emergency order issued under this section will result in the continued infringement or impairment of any legal right or interest of any party, the party shall have a right to appeal the fire code official's order in accordance with

		IFC, Chapter 1, Section ~~108~~. 109
104.1 General. The *fire code official* is hereby authorized to enforce the provisions of this code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code.	**104.1 General.** The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarity the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code.	Added language for clarity, did not change the intent of the section.
104. 9 Alternative materials and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been *approved.* ~~The *fire code official* is authorized to approve an alternative material or method of construction~~ where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, ~~at least the~~ equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance,* durability and safety. Where the alternative material, design or method of construction is not approved, the *fire code official* shall respond in writing stating the reasons why the alternative was not approved.	**104.9 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved.* An alternative material, design or method of construction shall be approved where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of the prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety. Where the alternative material, design or method of construction is not approved, the *fire code official* shall respond in writing, stating the reasons why the alternative was not approved.	Language was changed to provide more clarity, did not change intent.
105.6.4 Carbon Dioxide systems used in beverage dispensing applications.		Section was moved to Table 104.6.8 under the section for operational permits for Compressed gases.
	105.6.8 Compressed gases. **Table 105.6.8 Permit amounts for compressed gases.**	Added Carbon dioxide systems and Carbon dioxide used in beverage dispensing to the table.
	105.6.36 Outdoor assembly event. An operational permit is required to conduct an *outdoor assembly event* where planned attendance exceeds 1,000 persons.	New operational permit requirement.
	105.6.38 Plant extraction systems. An operational permit is required to use plant extraction systems.	New operational permit requirement.
105.7.2 Battery systems. A permit is required to install	**105.7.2 Battery systems.** A construction permit is required	Eliminated the reference to 50

stationary storage battery systems having a liquid capacity of more than 50 gallons (189 L)	to install stationary storage battery systems regulated by Section 1206.2.	gallons and refers the user to a new section for Battery systems.
	105.7.3 Capacitor energy storage systems. A construction permit is required to install capacitor energy storage systems regulated by Section 1206.3	New construction permit requirement.
	105.7.10 Fuel cell power systems. A construction permit is required to install *stationary fuel cell power systems.*	New construction permit requirement.
	105.7.11 Gas detection systems. A construction permit is required for the installation of or modification to gas detection systems. Maintenance performed in accordance with this code is not considered a modification and shall not require a permit.	New construction permit requirement.
	105.7.14 High-piled combustible storage. A construction permit is required for the installation of or modification to a structure exceeding 500 square feet (46 m^2), including aisles, for high-piled combustible storage. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.	New construction permit requirement.
	105.6.17 Motor vehicle repair rooms and booths. A construction permit is required to install or modify a motor vehicle repair room or booth. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.	New construction permit requirement.
	105.7.18 Plant extraction system. A construction permit is required for installation of or modification to plant extraction systems. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.	New construction permit requirement.
	105.7.22 Special event structure. A single construction permit is required to erect and take down a *temporary special event structure.*	New construction permit requirement.
		Section relocated from the end of Chapter One to the section following

Section 113 FEES	Section 106 FEES	the Permit requirements.
106.3 Concealed work. It shall be the duty of the permit applicant to cause the work to remain ~~accessible and exposed~~ for inspection purposes. Where any installation subject to inspection prior to use is covered or concealed without having first been inspected, the *fire code official* shall have the authority to require that such work be ~~exposed~~ for inspection. Neither the *fire code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.	**107.3 Concealed work.** It shall be the duty of the permit applicant to cause the work to remain visible and able to be accessed for inspection purposes. Where any installation subject to inspection prior to use is covered or concealed without having first been inspected, the *fire code official* shall have the authority to require that such work be made visible and able to be accessed for inspection. Neither the *fire code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.	Section numbering change because of relocation of the FEES section. Language changed for clarity.
107.5 Rendering equipment inoperable. Portable or fixed fire-extinguishing systems or devices, and fire-warning systems, shall not be rendered inoperative ~~or inaccessible~~, except as necessary during emergencies, maintenance, repairs, *alterations,* drills or prescribed testing.	**108.5 Rendering equipment inoperable.** Portable or fixed fire-extinguishing systems or devices, and fire-warning systems, shall be provided with ready access and shall not be rendered inoperative, except as necessary during emergencies, maintenance, repairs, *alterations,* drills or prescribed testing.	Section number change. Language change, intent is the same.
		State amendment. - Renumbered A new Subsection is added as follows: **109.1.1 Application of residential code.** For development regulated by a local jurisdiction's land use authority, the fire code official's interpretation of this code is subject to the advisory opinion process described in Section 13-43-205 and to a land use appeal authority appointed under Section 10-9a 701 or 17-27a-701.
		State Amendment - Renumbered A new section is added as follows: **109.4 Notice of right to appeal.** At the time a fire code official makes an order, decision, or determination that relates to the application or interpretation of this chapter, the fire code official shall inform the person affected by the order, decision, or determination of the person's right to appeal under this

		section. Upon request, the fire code official shall provide a person affected by an order, decision, or determination that relates to the application or interpretation of this chapter a written notice that describes the person's right to appeal under this section.
		State Amendment - Renumbered 110.3, Notice of violation, is deleted and rewritten as follows: **110.3 Notice of violation.** If the fire code official determines that a building, premises, vehicle, storage facility, or outdoor area is in violation of this code or other pertinent laws or ordinances, the fire code official is authorized to prepare a written notice of violation that describes the conditions deemed unsafe and, absent immediate compliance, specifies a time for reinspection.
Chapter 2 Definitions		
	ACCESS (TO) That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door or similar obstruction [see also "Ready access (to)"].	New definition.
	AEROSOL CONTAINER. A metal can or plastic container up to a maximum size of 33.8 fluid ounces (1000 ml) or a glass bottle up to a maximum size of 4 fluid ounces (118 ml) designed and intended to dispense an aerosol.	Changed the language and gives maximum size limitations for plastic and glass containers.
	AEROSOL COOKING SPRAY PRODUCTS. Aerosol cooking spray products are those aerosol products designed to deliver a vegetable oil or a solid or nonflammable liquid to reduce sticking on cooking and baking surfaces, or to be applied to food, or both. These products have a chemical heat of combustion that is greater than 8600 Btu/lb. (20kJ/g) and contain no more than 18 percent by weight of flammable propellant.	New definition.

AEROSOL A product that is dispensed from an aerosol container by a propellant. Aerosol products shall be classified by means of the calculation of their chemical heats of combustion and shall be designated Level 1, Level 2 or Level 3. **Level 1 aerosol products.** Those with a total chemical heat of combustion that is less than or equal to 8,600 British thermal units per pound (Btu/lb) (20 kJ/g). **Level 2 aerosol products.** Those with a total chemical heat Of combustion that is greater than 8,600 Btu/lb (20 kJ/g), But less than or equal to 13,000 Btu/lb (30 kJ/g). **Level 3 aerosol products.** Those with a total chemical heat of combustion that is greater than 13,000 Btu/lb (30 kJ/g).	**AEROSOL PRODUCT.** A combination of a container, a propellant and a material that is dispensed. Aerosol products shall be classified by means of the calculation of their chemical heats of combustion and shall be designated Level 1, Level 2 or Level 3. **Level 1 aerosol products.** Those with a total chemical heat of combustion that is less than or equal to 8,600 British thermal units per pound (Btu/lb) (20 kJ/g). **Level 2 aerosol products.** Those with a total chemical heat Of combustion that is greater than 8,600 Btu/lb (20 kJ/g), But less than or equal to 13,000 Btu/lb (30 kJ/g). **Level 3 aerosol products.** Those with a total chemical heat of combustion that is greater than 13,000 Btu/lb (30 kJ/g).	Changed the name and expanded the definition.
ALCOHOL –BLENDED FUELS Flammable liquids consisting of 10-percent or greater, by volume, ethanol or other alcohols blended with gasoline.	**ALCOHOL-BLENDED FUELS** Flammable liquids consisting of greater than 10 percent, by volume, ethanol or other alcohols blended with gasoline.	Changed the language.
AMBULATORY CARE FACILITY . Buildings or portions thereof used to provide a medical, surgical, psychiatric, nursing or similar care on a less-than-24-hour basis to persons who are rendered incapable of self-preservation by the services provided.	**AMBULATORY CARE FACILITY .** Buildings or portions thereof used to provide a medical, surgical, psychiatric, nursing or similar care on a less-than-24-hour basis to persons who are rendered *incapable of self-preservation* by the services provided or staff has accepted responsibility for care recipients already incapable.	Add language to the end of the paragraph.
		Existing State Amendment – Add Definition AMBULATORY SURGICAL CENTER A building or portion of a building licensed by the Utah Department of Health where procedures are performed that may render patients incapable of self preservation where care is less than 24 hours. See Utah Administrative Code R432-13.
		Add new definition to mirror the changes to the IBC. In IFC, Section 202, the following definition is added: "ASSISTED LIVING FACILITY. See Residential Treatment and Support Assisted Living Facility,

		Type I Assisted Living Facility and Type II Assisted Living Facility."
ATTIC The space between the ceiling beams of the top story and the roof rafters.	**ATTIC** The space between the ceiling framing of the top *story* and the underside of the roof.	Changed language.
BATTERY SYSTEM, STATIONARY LEAD ACID. A system which consists of three interconnected subsystems. 1. A lead-acid battery. 2. A battery charger. 3. A collection of rectifiers, inverters, converters and Associated electrical equipment as required for a Particular application. **Lithium-ion battery.** A storage battery that consists of lithium ions embedded in a carbon graphite or nickel metal-oxide substrate. The electrolyte is a carbonate mixture or a gelled polymer. The lithium ions are the charge carriers of the battery. **Lithium metal polymer battery.** A storage battery that is comprised of nonaqueous liquid or polymerized electrolytes, which provide ionic conductivity between lithiated positive active material electrically separated from metallic lithium or lithiated negative active material. **Nickel cadmium (Ni-Cd) battery.** An alkaline storage battery in which the positive active material is nickel oxide, the negative contains cadmium and the electrolyte is potassium hydroxide. **Nonrecombinant battery.** A storage battery in which, under conditions of normal use, hydrogen and oxygen gases created by electrolysis are vented into the air outside of the battery. **Stationary storage battery.** A group of electrochemical cells interconnected to supply a nominal voltage of DC power to a suitably connected electrical load, designed for service in a permanent location. The number of cells connected in a series determines the nominal voltage rating of the battery. The size of the cells determines the discharge capacity of the entire battery. After discharge, it may be restored to a fully charged condition by an electric current flowing in a direction opposite to the flow of current when the battery is discharged. **Valve-regulated lead-acid (VRLA) battery.** A lead-acid	**BATTERY SYSTEM, STATIONARY STORAGE.** A rechargeable energy storage system consisting of electro-chemical storage batteries, battery charges, controls and associated electrical equipment designed to provide electrical power to a building. The system is typically used to provide standby or emergency power, an uninterruptable power supply, load shedding, load sharing or similar capabilities. **BATTERY TYPES.** **Flow battery.** A type of storage battery that includes chemical components dissolved in two different liquids. Ion exchange, which provides the flow of electrical current, occurs through the membrane while both liquids circulate in their respective spaces. **Lead-acid battery.** A storage battery that is comprised of lead electrodes immersed in sulphuric acid electrolyt. **Lithium-ion battery.** A storage battery with lithium ions serving as the charge carriers of the battery. The electrolyte is a polymer mixture of carbonates with an inorganic salt and can be in a liquid or a gelled polymer form. Lithiated metal oxide is typically a cathode and forms of carbon or graphite typically form the anode. **Nickel cadmium (Ni-Cd) battery.** An alkaline storage battery in which the positive active material is nickel oxide, the negative contains cadmium and the electrolyte is potassium hydroxide. **Preengineered stationary storage battery system.** An energy storage system consisting of batteries, a battery management system, components and modules that are produced in a factory, designed to comprise the system when assembled on the job site. **Prepackaged stationary storage battery system.** An energy storage system consisting of batteries, a battery management system, components and modules that is factory assembled and shipped as a complete unit for installation at the job site. **Sodium-beta storage battery.** A storage battery, also	Change definition name. Defines what a stationary storage system is. Added and deleted the type of battery systems. Added Flow battery and Lead-acid battery; Changed- Lithium-ion battery description (two descriptions into one) Removed Nonrecombiant battery; Removed Recombinant battery; Added Pre engineered stationary storage battery system Added – Sodium-beta storage battery Changed – Stationary storage battery –language is very concise – removed the language that describe the discharge capacity and recharging method.

battery consisting of sealed cells furnished with a valve that opens to vent the battery whenever the internal pressure of the battery exceeds the ambient pressure by a set amount. In VRLA batteries, the liquid electrolyte in the cells is immobilized in an absorptive glass mat (AGM cells or batteries) or by the addition of a gelling agent (gel cells or gelled batteries). **Vented (flooded) lead-acid battery.** A lead-acid battery consisting of cells that have electrodes immersed in liquid electrolyte. Flooded lead-acid batteries have a provision for the user to add water to the cell and are equipped with a flame-arresting vent which permits the escape of hydrogen and oxygen gas from the cell in a diffused manner such that a spark, or	referred to as a Na-beta battery or NBB, which uses a solid beta-alumina electrolyte membrane that selectively allows sodium ion transport between a positive electrode such as metal halide and a negative sodium electrode. **Stationary storage battery.** A group of electrochemical cells interconnected to supply a nominal voltage of DC power to a suitably connected electrical load, designed for service in a permanent location.	
BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy.	**BUILDING.** Any structure <u>utilized</u> or intended for supporting or sheltering any occupancy.	Change the language.
	CAPACITOR ARRAY. An arrangement of individual capacitor modules in close proximity to each other, mounted on storage racks or in cabinets or other enclosures.	New
	CAPACITOR ENERGY STORAGE SYSTEM. A stationary, rechargeable energy storage system consisting of capacitors, chargers, controls and associated electrical equipment designed to provide electrical power to a building or facility. The system is typically used to provide standby or emergency power, an uninterruptable power supply, load shedding, load sharing or similar capabilities. **Preengineered capacitor energy storage system.** A capacitor energy storage system consisting of capacitors, an energy management system, components and modules that are produced in a factory, designed to comprise the system when assembled on the job site. **Prepackaged capacitor energy storage system.** A capacitor energy storage system consisting of capacitors, an energy management system, components and modules that is factory assembled and then shipped as a complete unit for installation at the job site.	New
	CARBON DIOXIDE ENRICHMENT SYSTEM A system where carbon dioxide gas is intentionally introduced into an indoor environment, typically for the purpose of stimulating plant	New

	growth.	
	CARBON MONOXIDE ALARM. A single- or multiple-station alarm intended to detect carbon monoxide gas and alert occupants by a distinct audible signal. It incorporates a sensor, control components and an alarm notification appliance in a single unit.	New
	CARBON MONOXIDE DETECTOR A device with an integral sensor to detect carbon monoxide gas and transmit an alarm signal to a connected alarm control unit.	New
CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building. A change of occupancy shall include any change or occupancy classification, any change from one group to another group within an occupancy classification or any change in use within a group for a specific occupancy classification.	**CHANGE OF OCCUPANCY.** A change in the use of a building or a portion of a building that results in any of the following: 1. A change of occupancy classification. 2. A change from one group to another group within an occupancy classification. 3. Any change in use within a group for which there is a change in the application of the requirements of this code.	Language Change
	CHEMICAL FUME HOOD. A ventilated enclosure designed to contain and exhaust fumes, gases, vapors, mists and particulate matter generated within the hood.	New
COMMON PATH OF EGRESS TRAVEL. That portion of the *exit access* travel distance measured from the most remote point ~~within a story~~ to that point where the occupants have separate and distinct access to two *exits* or *exit access* doorways.	**COMMON PATH OF EGRESS TRAVEL.** That portion of *exit access* travel distance measured from the most remote point <u>of each room, area or space</u> to that point where the occupants have separate and distinct access to two *exits* or *exit access* doorways	Language Change
CONTINUOUS GAS DETECTION SYSTEM		Deleted
	DESOLVENTIZING. The act of removing a solvent from a material.	New
	ENERGY MANAGEMENT SYSTEMS. An electronic system that protects stationary storage batteries from operating outside their safe operating parameters, and generates an alarm and trouble signal for off normal conditions.	New
EXPLOSIVE. A chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, igniters ~~and display fireworks, 1.3G.~~	**EXPLOSIVE.** A chemical compound, mixture or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, igniters.	Changed – eliminated the words: and display fireworks 1.3g.

	FIRE RESISTANCE RATING	MOVED
	FIRE-RESISTANT JOINT SYSTEM	MOVED
Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507, ~~are not *explosive materials* for the purpose of this code.~~	**Fireworks, 1.4G.** Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion or <u>deflagration</u> that complies with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507.	Added the word deflagration to the definition and eliminated the words "are not explosive materials for the purpose of this code".
	~~FOSTER~~ <u>CHILD</u> CARE FACILITIES. Facilities that provide care to more than five children 2 ½ years of age or less.	Existing State Amendment: Changes the word "Foster" to "Child"
	FUEL CELL POWER SYSTEM, STATIONARY. A stationary energy generation system that converts the chemical energy of a fuel and oxidant to electric energy (DC or AC electricity) by an electrochemical process. **Field-fabricated fuel cell power system.** A *stationary fuel cell power system* that is assembled at the job site and is not a preengineered or prepackaged factory-assembled fuel cell power system. **Preengineered fuel cell power system.** A *stationary fuel cell power system* consisting of components and modules that are produced in a factory, and shipped to the job site for assembly. **Prepackaged fuel cell power system.** A *stationary fuel cell power system* that is factory assembled as a single, complete unit and shipped as a complete unit for installation at the job site.	New
	GAS DETECTION SYSTEM. A system or portion of a combination system that utilizes one or more stationary sensors to detect the presence of a specified gas at a specified concentration and initiate one or more responses required by this code, such as notifying a responsible person, activating an alarm signal, or activating or deactivating equipment. A self-contained gas detection and alarm device is not classified as a gas detection systems	New
GAS DETECTION SYSTEM, CONTINUOUS. See "Continuous gas detection system"		Deleted

	GLOVE BOX. A sealed enclosure in which items inside the box and handled exclusively using long gloves sealed to ports in the enclosure.	New
HIGH-PILED COMBUSTIBLE STORAGE		Moved to keep in alphabetical order- no change to text.
HIGH-PILED STORAGE AREA. An area within a building which is designated, intended, proposed or actually used for *high-piles combustible storage.*	**HIGH-PILED STORAGE AREA.** An area within a building which is designated, intended, proposed or actually used for *high-piled combustible storage,* <u>including operating aisles.</u>	Moved to keep in alphabetical order- added the words "including operating aisles".
HIGH-RISE BUILDING		Moved to keep in alphabetical order- no change to text.
	HIGHER EDUCATION LABORATORY. Laboratories in Group B occupancies used for educational purposes above the 12th grade. Storage, use and handling of chemicals in such laboratories shall be limited to purposes related to testing, analysis, teaching, research or developmental activities on a nonproduction basis.	New
HISTORIC BUILDINGS. Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.	**HISTORIC BUILDINGS.** Any building or structure that is one or more of the following: 1. Listed, or certified as eligible for listing by the state historic preservation officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places. 2. Designated as historic under an applicable state or local law. 3. Certified as a contributing resource within a national register, state designated or locally designated historic district.	Changed the description to clarify.
	HPM. See "Hazardous Production Material."	New
	INTEGRATED TESTING (FIRE PROTECTION AND LIFE SAFETY SYSTEM). A testing procedure to establish the operational status, interaction and coordination of two or more fire protection and safety systems.	New
JURISDICTION. The governmental unit that has adopted this code ~~under due legislative authority.~~	**JURISDICTION.** The governmental unit that has adopted this code.	Removed "under due legislative authority".
	LABORATORY SUITE. A fire-rated enclosed laboratory area that will provide one or more laboratory sp0aces, within a Group B educational occupancy, that are permitted to include ancillary uses such as offices, bathrooms and corridors that are contiguous with the laboratory area, and are constructed in accordance with Chapter 38.	New

LOW ENERGY POWER-OPERATED DOOR. Swinging door which opens automatically upon an action by a pedestrian such as pressing a push plate or waving a hand in front of a sensor. The door closes automatically, and operated with decreased forces and decreased speeds. See also "Power assisted door".	**LOW ENERGY POWER-OPERATED DOOR.** Swinging, <u>sliding or folding door</u> which opens automatically upon an action by a pedestrian such as pressing a push plate or waving a hand in front of a sensor. The door closes automatically, and operated with decreased forces and decreased speeds. See also "Power assisted door".	Added words "sliding or folding door."
MATERIAL SAFETY DATA SHEETS (MSDS)		Moved and renamed.
	MEMBRANE-PENETRATION FIRESTOP SYSTEM. An assemblage consisting of a fire-resistance-rated floor-ceiling, roof-ceiling or wall assembly, one or more penetrating items installed into or passing through the breach in one side of the assembly and the materials or devices, or both, installed to resist the spread of fire into the assembly for a prescribed period of time.	New
	MISCELLA. A mixture, in any proportion, of the extracted oil or fat and the extracting solvent.	New
	MOBILE FOOD PREPARATION VEHICLES. Vehicles that contain cooking equipment that produce smoke or grease-laden vapors for the purpose of preparing and serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.	New
	OCCUPANCY CLASSIFICATION. **Assembly Group A-3.** Group A-3 occupancy includes assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A, including, but not limited to: Amusement arcades Art galleries Bowling alleys Community halls Courtrooms Dance halls (not including food or drink consumption) Exhibition halls Funeral parlors <u>Greenhouses with public access for the conservation and exhibition of plants</u> Gymnasiums (without spectator seating) Indoor swimming pools (without spectator seating) Indoor tennis courts (without spectator seating)	Added "Greenhouses with public access for the conservation and exhibition of plants" to the list.

	Lecture halls Libraries Museums Places of religious worship Pool and billiard parlors Waiting areas in transportation terminals	
	Educational Group E, day care facilities. This group includes buildings and structures or portions thereof occupied by more than ~~five~~ four children older than 2 ½ years of age who receive educational, supervision, child care centers or personal care services for less than 24 hours per day.	Existing State Amendment. On line three change the word "five" to "four" and on line four after the word "supervision" and the words "child care centers."
	Educational Group E, ~~Five~~ Four or fewer children. A facility having ~~five~~ four or fewer children receiving such care shall be classified as part of the primary occupancy.	Existing State Amendment. On line one the word "five" is deleted and replaced with the word " four" in both places.
	Educational Group E, ~~Five~~ Four or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and having ~~five~~ four or fewer children receiving such care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code.*	Existing State Amendment. The word "five" is deleted and replaced with the word "four" in both places.
	Educational Group E, Child Day Care- Residential Certificate or a Family License. Areas used for child day care purposes with a Residential Certificate R430-50 or a Family License, as defined in Utah Administrative Code, R430-90, Licensed Family Care, may be located in a Group R-2 or R-3 occupancy as provided in Residential Group R-3, or shall comply with the International Residential Code in accordance with Section R101.2	Existing State Amendment. Creates a new section.
	Educational Group E, Child Care Centers. Areas used for Hourly Child Care Centers, as defined in Utah Administrative Code, R430-60, Child Care Center as defined in Utah Administrative Code, R430-100, or Out of School Time Programs, as defined in Utah Administrative Code, R430-70, may be classified as accessory occupancies.	Existing State Amendment. Creates a new section.
	Institutional Group I, Group I-1. Institutional Group I-1 occupancy shall include buildings, structures or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group I-1 shall be classified as one of the occupancy conditions indicated	Existing State Amendment. Adds the words "Type I" in front of "Assisted living facilities" on the list.

	below. This group shall include, but not be limited to, the following: Alcohol and drug centers Type I Assisted living facilities Congregate care facilities Group homes Halfway houses Residential board and care facilities Residential board and custodial care facilities Social rehabilitation facilities	
	Institutional Group I, Five or fewer persons receiving custodial care. A facility with five or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the *International Residential Code* ~~Provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or with Section P2904 of the *international Residential Code.*~~	Existing State Amendment. On line four after "International Residential Code" the rest of the section is deleted.
	Institutional Group I, Group I-2. Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than ~~five~~ three persons who are not capable of self-preservation. This group shall include, but not be limited to, the following: ~~Foster~~ Child care facilities Detoxification facilities Hospitals Nursing homes Psychiatric hospitals Intermediate nursing care facilities Skilled nursing care facilities Ambulatory surgical centers with five or more operating Rooms Type II assisted living facilities Type II assisted living facilities with five or fewer persons shall be classified as a Group R-4. Type II assisted living facilities with at least six and not more than 16 residents shall be classified as a Group I-1 facility.	Existing State Amendment. On line three delete the word "five" and insert the word "three". On line six the word "foster" is deleted and replaced with the word "child". On line 10, after the words "Psychiatric hospitals", add the following to the list: "both intermediate nursing care and skilled nursing care facilities, ambulatory surgical centers with five or more operating rooms, and Type II assisted living facilities. Type Ii assisted living facilities with five or fewer persons shall be classified as a Group R-4. Type II assisted living facilities with at least six and not more than 16 residents shall be classified as a Group I-1 facility.
	Institutional Group I, Group I-4, day care facilities. **Classification as Group E.** A child day care facility that provides care for more than ~~five~~ four but not more than 100 children ~~2 ½ years or less of age~~ Under the age of 2, where	Existing State Amendment. On line two delete the word "five" and replace it with the word "four". On line three delete the words "2 ½

	the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.	years or less of age" and replace with the words "under the age of two."
	Institutional Group I, **~~Five~~ Four or fewer occupants receiving care in a dwelling unit.** A facility such as the above within a *dwelling unit* and having ~~five~~ four or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code.*	Existing State Amendment. On lines one and two the word "five" is deleted and replaced with the word "four."
	Residential Group R-3. Residential Group R-3 and single family dwellings complying with the IRC occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including: Buildings that do not contain more than two *dwelling units* Care facilities that provide accommodations for five or Fewer persons receiving care *Congregate living facilities* (nontransient) with 16 or fewer occupants Boarding houses (nontransient) Convents Dormitories Fraternities and sororities Monasteries *Congregate living facilities (transient)* with 10 or fewer occupants *Boarding houses (transient)* *Lodging houses (transient)* with five or fewer *guest-rooms* and 10 or fewer occupants	Existing State Amendment. The words "and single family dwellings complying with the IRC" are added after the words "Residential occupancies."
	Residential Group R-3, Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling, other than child care, are permitted to comply with the *International Residential Code* ~~*provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the* International Residential Code~~.	Existing State Amendment. On live three after the word "dwelling" insert the words "other than child care."
		Existing State Amendment Residential Group R-3. A new section is added.

		Residential Group R-3 Child Care. Areas used for child care purposes may be located in a residential dwelling unit when all of the following conditions are met: 1. Compliance with Utah Administrative Code, R710-8, Day Care Rules, as enacted under the authority of the Utah Fire Prevention Board; 2. Use is approved by the Utah Department of Health under the authority of the Utah Code, Title 26, Chapter 39, Utah Child Care Licensing Act, and in any of the following categories: 1.1 Utah Administrative Code, R430-50, Residential Certificate Child Care; or 1.2 Utah Administrative Code, R430-90, Licensed Family Child Care; and 3. Compliance with all zoning regulations of the local regulator.
	Miscellaneous Group U. Communication equipment structures with a gross floor area of less than 1,500 square feet. (139 m^3)	
	Open-Air Assembly Seating. Seating served by means of egress that is not subject to smoke accumulation within or under a structure and is open to the atmosphere.	**New definition.**
	Opening Protective. A *fire door assembly*, fire shutter assembly, fire window assembly or glass-block assembly in a *fire-resistance-rated* wall or partition.	**New definition.**
	Outdoor Assembly Event. An outdoor gathering of persons for any purpose.	**New definition.**
Private Garage. A building or portion of a building in which	**Private Garage.** A building or portion of a building in which	**Changed language, added the**

motor vehicles used by the tenants of the building or buildings on the premises are stored or kept, without provisions for repairing or servicing such vehicles for profit.	motor vehicles used by the owner or tenants of the building or buildings on the premises are stored or kept, without provisions for repairing or servicing such vehicles for profit.	**word "owner."**
QUANTITY-DISTANCE (QD). ~~**Minimum separation distance (D_s).** The minimum separation distance between adjacent buildings occupied in conjunction with the manufacture, transportation, storage or use of *explosive materials* where one of the buildings contains *explosive materials* and the other building does not.~~		**Deleted the entire definition.**
	READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel, door or similar obstruction [see "Access (to)"].	**New definition**
RECORD DRAWINGS. Drawings ("as builts") that document the location of all devices, appliances, wiring, sequences, wiring methods and connections of the components of ~~a fire alarm system as installed~~.	**RECORD DRAWINGS.** Drawings ("as builts") that document the location of all devices, appliances, wiring, sequences, wiring methods and connections of the components of any fire protection system.	Existing State Amendment**.** RECORD DRAWINGS, is modified by: Deleting the words "a fire alarm system" and replacing them with "any fire protection system".
		Add new definition to mirror the changes to the IBC. In IFC, Section 202, the following definition is added: "RESIDENTIAL TREATMENT AND SUPPORT ASSISTED LIVING FACILITY. A residential treatment/support assisted living facility which creates a group living environment for four or more residents licensed by the Utah Department of Human Services, and provides a protected living arrangement for ambulatory, non-restrained persons who are capable of achieving mobility sufficient to exit the facility without the physical assistance of another person."

	SAFETY DATA SHEET (SDS). Information concerning a hazardous material which is prepared in accordance with the provisions DOL 29 CFR Part 1910.1200 or in accordance with the provisions of a federally approved state OSHA plan. A document titled as a Material Safety Data Sheet (MASA) is equivalent to an SES for the purposes of this code.	**This definition replaces the MATERIAL SAFETY DATA SHEET (MSDS) definition.**
SLEEPING UNIT. A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a *dwelling unit* are not sleeping units.	**SLEEPING UNIT.** A single unit providing rooms or spaces for one or more persons that includes permanent provisions for sleeping and can include provisions for living, eating and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not sleeping units.	**Language change for clarity. Does not change the intent.**
	SMOKE PARTITION. A wall assembly that extends from the top of the foundation or floor below to the underside of the floor or roof sheathing, deck or slab above or to the underside of the ceiling above where the ceiling membrane is constructed to limit the transfer of smoke.	**New definition.**
SMOKE-PROTECTED ASSEMBLY SEATING. Seating served by means of egress that is not subject to smoke accumulation within or under a structure.	**SMOKE-PROTECTED ASSEMBLY SEATING.** Seating served by means of egress that is not subject to smoke accumulation within or under a structure <u>for a specified design time by means of passive design or by mechanical ventilation.</u>	**Added language.**
	SPECIAL EXPERT. An individual who has demonstrated qualifications in a specific area, outside the practice of architecture or engineering, through education, training and experience.	**New definition.**
	STATIONARY BATTERY ARRAY. An arrangement of individual stationary storage batteries in close proximity to each other, mounted on storage racks or in modules, battery cabinets or other enclosures.	**New definition**
	SUBORDINATE (FIRE PROTECTION AND LIFE SAFETY SYSTEM). A system that is activated by another fire protection or life safety system. For example, where a fire alarm system activates a smoke removal or elevator recall system, the smoke removal or elevator recall system is considered to be "subordinate" to the fire alarm system.	**New definition**
~~**TEMPORARY STATE CANOPY.** A temporary ground-supported membrane-covered frame structure used to cover stage areas and support equipment in the production of outdoor entertainment events~~.	<u>**TEMPORARY SPECIAL EVENT STRUCTURE.** Any temporary ground-supported structure, platform, stage, stage scaffolding or rigging, canopy, tower supporting audio or visual effects equipment or similar structures not regulated</u>	**Definition deleted. New definition to replace it.**

	within the scope of the *International Building Code*.	
TENT. A structure, enclosure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects.	**TENT.** A structure, enclosure, umbrella structure or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported in any manner except by air or the contents it protects (see "Umbrella structure").	**Added words "umbrella structure" to the definition.**
		Add new definition to mirror the changes to the IBC. In IFC, Section 202, the following definitions are added: "TYPE I ASSISTED LIVING FACILITY. A residential facility licensed by the Utah Department of Health that provides a protected living arrangement, assistance with activities of daily living and social care to two or more ambulatory, non-restrained persons who are capable of mobility sufficient to exit the facility without the assistance of another person. Subcategories shall be: Limited Capacity, two to five residents; Small, six to sixteen residents; Large, over sixteen residents."
		Add new definition to mirror the changes to the IBC. In IFC, Section 202, the following definitions are added: "TYPE II ASSISTED LIVING FACILITY. A residential facility licensed by the Utah

		Department of Health that provides an array of coordinated supportive personal and health care services to two or more residents who are: A. Physically disabled but able to direct his or her own care; or B. Cognitively impaired or physically disabled but able to evacuate from the facility, or to a zone or area of safety, with the physical assistance of one person. Subcategories shall be: Limited Capacity, two to five residents; Small, six to sixteen residents; Large, over sixteen residents."
CHAPTER 3 **GENERAL REQUIREMENTS**		
	304.1.2 Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the *owner* or occupant of the premises. Vegetation clearance requirements in urban-wildland interface areas shall be in accordance with the *International Wildland-Urban Interface Code.*	Existing STATE AMENDMENT IFC, Chapter 3, Section 304.1.2, Vegetation, is amended as follows: Delete line six and replace it with: "the Utah Administrative Code, R652-122-200, Minimum Standards for Wildland Fire Ordinance.

	304.1.3.1 Spaces underneath grandstands and bleachers. Spaces underneath grandstands and bleachers shall not be occupied or utilized for purposes other than means of egress except where equipped with an automatic sprinkler system in accordance with Section 903.2.1.5.1, or separated with fire barriers and horizontal assemblies in accordance with Section 1029.1.1.1.	
304.3.3 Capacity exceeding 1.5 cubic yards. **Exceptions:** 1. Dumpsters or containers in areas protected by an *approved automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.	**304.3.3 Capacity exceeding 1.5 cubic yards.** **Exceptions:** 1. Dumpsters or containers that are placed inside buildings in areas protected by an *approved automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3. 3. Dumpsters or containers that are located adjacent to buildings where the exterior area is protected by an approved automatic sprinkler system.	Added language for clarity in first exception. Added third exception.
	309.2 Use in hazardous (classified) locations. Powered industrial trucks used in areas designated as hazardous (classified) locations in accordance with NFPA 70 shall be listed and labeled for use in the environment intended in accordance with NFPA 505.	New Section.
		Existing STATE AMENDMENT IFC Chapter 3, Section 310.8, Hazardous and Environmental Conditions, is deleted and rewritten as follows: When the fire code official determines that hazardous environmental conditions necessitate controlled use of any ignition source, including fireworks, lighters, matches, sky lanterns, and smoking materials, any of the following may occur: 1. If the hazardous environmental conditions exist in a municipality, the legislative body of the municipality may prohibit the ignition or use of an ignition source in mountainous,

		brush-covered or forest-covered areas or the wildland urban interface area, which means the line, area, or zone where structures or other human development meet or intermingle with underveloped wildland or land being used for an agricultural purpose. 2. Except as provided in paragraph 3, if the hazardous environmental conditions exist in an unincorporated area, the state forester may prohibit the ignition or use of an ignition source in all or part of the areas described in paragraph 1 that are within the unincorporated area, after consulting with the county fire code official who has jurisdiction over that area. 3. If the hazardous environmental conditions exist in a metro township created under Title 10, Chapter 2a, Part 4, Incorporation of Metro Townships and Unincorporated Islands in a County of the First Class, on and after May 12, 2015, the metro township legislative body may prohibit the ignition or use of an ignition source in all or part of the areas described in paragraph 1 that are within the township.
		Existing STATE AMENDMENT IFC, Chapter 3, Section 311.1.1 Abandoned Premises, is amended as follows: On line 10 delete the words “International Property

		Maintenance Code and the".
	311.2.2 Fire protection. **Exceptions:** 3. Where *approved* by the *fire code official,* fire alarm and sprinkler systems are permitted to be placed out of service in seasonally occupied buildings: that will not be heated; where fire protection systems will be exposed to freezing temperatures; where *fire areas* do not exceed 12,000 square feet (1115m^2); and that do not store motor vehicles or hazardous materials.	New exception.
		Existing STATE AMENDMENT IFC, Chapter 311.5, Placards, is amended as follows: On line three delete the word "shall" and replace it with the word "may".
314.4 Vehicle. Liquid- or gas-fueled vehicles, boats or other motorcraft shall not be located indoors except as follows: 1. Batteries are disconnected. 2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least). 3. Fuel tanks and fill openings are closed and sealed to prevent tampering. 4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.	**314.4 Vehicle.** Liquid-fueled or gas-fueled vehicles, boats or other motorcraft shall not be located indoors except as follows: 1. Batteries are disconnected except where the *fire code official* requires that the batteries remain connected to maintain safety features. 2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least). 3. Fuel tanks and fill openings are closed and sealed to prevent tampering. 4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.	Added additional language.
315.1 General. Storage shall be in accordance with Sections 315.2 through 315.~~5~~.	**315.1 General.** Storage shall be in accordance with Sections 315.2 through 315.6. Outdoor pallet storage shall be in accordance with Sections 315.2 and 315.7. **Exception:** Wood and wood composite pallets stored outdoors at pallet manufacturing and recycling facilities and complying with Section 2810.	New language adds material-specific requirements.
	315.3.1 Ceiling clearance. **Exceptions:** **1. The 2-foot (610 mm) ceiling clearance is not required for storage along walls in nonsprinklered areas of buildings.** **2. The 18-inch (457 mm) ceiling clearance is not required**	Existing STATE AMENDMENT IS **DELETED:** ~~IFC, Chapter 3, Section 315.2.1, Ceiling Clearance, is amended to~~

	for storage along walls in areas of buildings equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3.	~~add the following:~~ ~~Exception: Where storage is not directly below the sprinkler heads, storage is allowed to be placed to the ceiling on wall-mounted shelves that are protected by fire sprinkler heads in occupancies meeting classification as light or ordinary hazard.~~ The exceptions are now in the code .
	315.7 Outdoor pallet storage. Pallets stored outdoors shall comply with Sections 315.7 through 315.7.7. Pallets stored within a building shall be protected in accordance with Chapter 32.	New section and subsections that address Outdoor Pallet Storage including 4 new tables that dictate the separation distances of pallet piles.
	SECTION 319 **MOBILE FOOD PREPARATION VEHICLES**	New section that regulates mobile food preparation vehicles. The requirements are consisted with what the State has already put into action.
CHAPTER 4 **EMERGENCY PLANNING AND PREPAREDNESS**		
	403.6 Group F occupancies. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for buildings containing a Group F occupancy where any of the following conditions apply: 3. Group F pallet manufacturing and recycling facilities as required by Section 2810.	**Added an additional condition.**
		Existing STATE AMENDMENT IFC, Chapter 4, Section 403.10.2.1, College and university buildings, is deleted and replaced with the following: "403.10.2.1 College and university buildings and fraternity and sorority houses.

		(a) College and university buildings, including fraternity and sorority houses, shall prepare an approved fire safety and evacuation plan, in accordance with Section 404. (b) Group R-2 college and university buildings, including fraternity and sorority houses, shall comply with sections 403.10.2.1.1 and 403.10.2.1.2."
	403.11.5 Buildings with high-piled storage. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared for buildings with *high-piles combustible storage* in any of the following situations: 1. The *high-piles storage area* exceeds 500,000 square feet (46 450 m^2) for Class I-IV commodities. 2. The *high-piled storage area* exceeds 300,000 square feet (27 870m^2) for high-hazard commodities. 3. The *high-piled storage* is located in a Group H occupancy. 4. The *high-piled storage* is located in a Group F occupancy with an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge.* 5. The *high-piles storage* is located in a Grup M occupancy with an *occupant load* of 500 or more persons or more than 100 persons above or below the lowest *level of exit discharge.* *6.* Where required by the *fire code official* for other *high-piled storage areas.*	New section.
	403.12.2 Public safety plan for gatherings. 10. The need for a weather monitoring person.	Added a 10th item in the list of things to address for public gatherings.
403.12.3 Crowd managers for gatherings exceeding 1,000 people. Where facilities or events involve a gathering of more than ~~1,000~~ people, crowd managers shall be provided in accordance with Sections 403.12.3.1 through 403.12.3.3.	**403.12.3 Crowd managers.** Where facilities or events involve a gathering of more than 500 people, crowd managers shall be provided in accordance with Sections 403.12.3.1 through 403.12.3.3.	Reduced the threshold of people that triggers the requirements for crowd managers.
403.12.3.1 Number of crowd managers. The minimum number of crowd managers shall be established at a ratio of	**403.12.3.1 Number of crowd managers.** Not fewer than two trained crowd managers, and not fewer than one	Changed the language, added two more exceptions that

one crowd manager for every 250 persons. **Exception:** Where approved by the *fire code official,* the number of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an *approved automatic sprinkler system* or based upon the nature of the event.	trained crowd manager for each 250 persons or portion thereof, shall be provided for the gathering. **Exceptions:** 1. Outdoor events with fewer than 1,000 persons in attendance shall not required crowd managers. 2. Assembly occupancies used exclusively for religious worship with an occupant load not exceeding 1,000 shall not required crowd managers. 3. The number of crowd managers shall be reduced where, in the opinion of the fire code official, the fire protection provided by the facility and the nature of the event warrant a reduction.	address outdoor events vs the requirements for indoor events.
404.2.3 Lockdown plans. Where facilities develop a lockdown plan, it shall be in accordance with Sections 404.2.3.1 through 404.2.3.3.	**404.2.3 Lockdown plans.** Lockdown plans shall only be permitted where such plans are approved by the *fire code official* and are in compliance with Sections 404.2.3.1 and 404.2.3.2.	Requires the approval of the fire code official
404.2.3.1 Lockdown plan contents. Lockdown plans shall be *approved* by the *fire code official* and shall include the following: 1. Initiation. The plan shall include instructions for reporting an emergency that requires a lockdown. 2. Accountability, The plan shall include accountability procedures for staff to report the presence or absence of occupants. 3. Recall. The plan shall include a prearranged signal for returning to normal activity. 4. Communication and coordination. The plan shall include an approved means of two-way communication between a central locations and each secured area.	**404.2.3.1 Lockdown plan contents.** Lockdown plans shall include the following: 1. Identification of individuals authorized to issue a lockdown order. 2. Security measures used during normal operations, when the building is occupied, that could adversely affect egress or fire department operations. 3. A description of identified emergency and security threats addressed by the plan, including specific lockdown procedures to be implemented for each threat condition. 4. Means and methods of initiating a lockdown plan for each threat, including: 4.1 The means of notifying occupants of a lockdown event, which shall be distinct from the fire alarm signal. 4.2 Identification of each door or other access point that will be secured. 4.3 A description of the means or methods used to secure doors and other access points. 4.4 A description of how locking means and methods are in compliance with the requirements of this code for egress and accessibility. 5. Procedures for reporting to the fire department any lockdown condition affecting egress or fire department operations.	Added more items to the lockdown plan contents and provides more clarity.

	6. Procedures for determining and reporting the presence or absence of occupants to emergency response agencies during a lockdown. 7. Means for providing two-way communication between a central location and each area subject to being secured during a lockdown. 8. Identification of the prearranged signal for terminating the lockdown. 9. Identification of individuals authorized to issue a lockdown termination order. 10 Procedures for unlocking doors and verifying that the means of egress has been returned to normal operations upon termination of the lockdown. 11. Training procedures and frequency of lockdown plan drills.	
~~**404.2.3.2 Training frequency.** The training frequency shall be included in the lockdown plan. The lockdown drills shall not substitute for any of the fire and evacuation drills required in Section 405.2~~	**404.2.3.2 Drills.** Lockdown plan drills shall be conducted in accordance with the approved plan. Such drills shall not be substitute4d for fire and evacuation drills required by Section 405.2	The training frequency requirement is found in the lockdown plan section.
~~**404.2.3.3 Lockdown notification.** The method of notifying building occupants of a lockdown shall be included in the plan. The method of notification shall be separate and distinct from the fire alarm signal.~~		The lockdown notification requirements is found in the lockdown plan section.
CHAPTER 5 FIRE SERVICE FEATURES		
		STATE AMENDMENT – No change In IFC, Chapter 5, a new Section, 501.5, Access grade and fire flow, is added as follows: “An authority having jurisdiction over a structure built in accordance with the requirements of the International Residential Code as adopted in the State Construction Code, may require an automatic fire sprinkler system for the structure only by ordinance and only if any

		of the following conditions exist: (i) the structure: (A) is located in an urban-wildland interface area as provided in the Utah Wildland Urban Interface Code adopted as a construction code under the State Construction Code; and (B) does not meet the requirements described in Utah Code, Subsection 65A-8-203(4)(a) and Utah Administrative Code, R652-22-200, Minimum Standards for Wildland Fire Ordinance; (ii) the strcture is in an area where a public water distribution system with fire hydrants does not exist as required in Utah Administra-tive Code, R309-550-5, Water Main Design; (iii) the only fire apparatus access road has a grade greater than 10% for more than 500 continual feet; (iv) the total floor area of all floor levels within the exterior walls of the dwelling unit exceeds 10,000 square feet; or (v) the total floor area of all floor levels within the exterior walls of the dwelling unit is double the average of the total floor area of all floor levels of unsprinkled homes in the subdivision that are no larger than

		10,000 square feet.”
		Existing STATE AMENDMENT – No change Section 506 Key Boxes 506.1 Where required, is deleted and rewritten as follows: “Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official, after consultation with the building owner, may require a key box to be installed in an approved location. The key box shall contain keys to gain necessary access as required the fire code official. For each fire jurisdiction that has at least one building with a required key box, the fire jurisdiction shall adopt an ordinance, resolution, or other operating rule or policy that creates a process to ensure that each key to each key box is properly accounted for and secure.”
		Existing STATE AMENDMENT – No change IFC Chapter 5 a new Section 507.1.1, Isolated one- and two-family dwellinsgs, is added as follows: “Fire flow may be reduced for an isolated one-and two-family dwelling when the authority having jurisdiction over the dwelling determines that the

		development of a full fire flow requirement is impractical."
		Existing STATE AMENDMENT – No change In IFC, Chapter 5, a new Section 507.1.2, Pre-existing subdivision lots, is added as follows: "507.1.2 Pre-existing subdivision lots. The requirements for a pre-existing subdivision lot shall not exceed the requirements shall not exceed the fire flows described in Section 501.1."
508.1.3 Size The *fire command center* shall be not less than 200 square feet (19 m^2) in area with a minimum dimension of 10 feet (3048mm).	**508.1.3 Size.** The *fire command center* shall be not less than 0.015 percent of the total building area of the facility served or 200 square feet (19 m^2) in area, whichever is greater, with a minimum dimension of 0.7 times the square root of the room area of 10 feet (3048 mm), whichever is greater.	Modifies the required size of fire command centers.
SECTION 510 **EMERGENCY RESPONDER RADIO COVERAGE**	**Section 510** **EMERGENCY RESPONDER RADIO COVERAGE**	Existing STATE AMENDMENT – No change In IFC, Chapter 5, Section 510.1, Emergency Responder Radio Coverage in New Buildings is amended by adding: "When required by the fire code official," at the beginning of the first paragraph. The changes to this section adds clarity to the requirements already established. Added the requirement for the Emergency responder communication system to be monitored by the fire alarm system or provide an audible signal at a constantly attended location for loss of power and 6

		other listed items. Has requirements for design documents and for antenna density.
CHAPTER 6 **BUILDING SERVICES AND SYSTEMS**		
603.3.2.1 Quantity limits. One or more fuel oil storage tanks containing Class II or II *combustible liquid* shall be permitted in a building. The aggregate capacity of all such tanks shall not exceed 660 gallons (2498 L). **Exception:** The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (1 356 L) of class II or III liquid for storage in protected above-ground tanks complying with Section 5704.2.9.7, where all of the following conditions are met: 1. The entire 3,000-gallon (11 356 L) quantity shall be stored in protected above-ground tanks. 2. The 3,000-gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks. 3. The tanks shall be located in a room protected by an *automatic sprinkler system* complying with Section 903.3.1.1.	**603.3.2.1 Quantity limits.** One or more fuel oil storage tanks containing Class II or III *combustible liquid* shall be permitted in a building. The aggregate capacity of all tanks shall not <u>exceed the following</u>: 1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL80, UL 142 or UL 2085. 2. 1,320 gallons (4996 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142. 3. 3,000 gallons (11 356 L) where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7 and the room is protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1.	This section change adds an additional option for fuel storage up to 1,320 gallons in a sprinklered building when it is stored in a listed tank.
	603.3.2.5 Separation. Rooms containing fuel oil tanks for internal combustion engines shall be separated from the remainder of the building by *fire barriers, horizontal assemblies,* or both, with a minimum 1-hour fire resistance rating with 1-hour fire-protection-rated *opening protectives* constructed in accordance with the *International Building Code.* **Exception:** Rooms containing protected above ground tanks complying with Section 5704.2.9.7 shall not be required to be separated from surrounding areas. **603.3.2.6 Spill containment.** Tanks exceeding 55-gallon (208 L) capacity or an aggregate capacity of	New Sections This change is to identify the difference in application of portable versus nonportable fuel-fired appliances, correlate requirements within the sections for internal combustion engines, and allow another option for storage of liquid fuels for generators and fire pumps.

	1,000 gallons (3785 L that are not provided with integral secondary containment shall be provided with spill containment sized to contain a release from the largest tank.	
605.11 Solar photovoltaic power systems.		This section was moved to chapter 12, Energy Systems, in the 2018 edition.
	SECTION 607 COMMERCIAL KITCHEN HOODS **607.2 Where required.** **Exceptions.** 1. Factory-built commercial exhaust hoods that are listed and labeled in accordance with UL 710, and installed in accordance with Section 304.1 of the *International Mechanical Code,* shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4 and 507.5 of the *International Mechanical Code.* 2. Factory-built commercial cooking recirculating systems that are listed and labeled in accordance with UL 710B, and installed in accordance with Section 304.1 of the *International Mechanical Code*. Spaces in which such systems are located shall be considered to be kitchens and shall be ventilated in accordance with Table 403.3.1.1 of the I*nternational Mechanical Code.* For the purpose of determining the floor area required to be ventilated, each individual appliance shall be considered as occupying not less than 100 square feet (9.3 m^2) 3. Where cooking appliances are equipped with integral down-draft exhaust systems and such appliances and exhaust systems are listed and labeled for the application in accordance with NFPA 96, a hood shall not be required at or above them. 4. A Type I hood shall not be required for an electric cooking appliance where an approved testing	Section is renumbered. Three new exceptions were added, two which exempts factory-built commercial exhaust hoods from the requirements Chapter 5, and one that exempts cooking appliances equipped with integral down-drafts.

	agency provides documentation that the appliance effluent contains 5 mg/m^3 or less of grease when tested at an exhaust flow rate of 500 cfm (0.236 m^3/s) in accordance with UL 710B.	
	SECTION 608 COMMERCIAL KITCHEN COOKING OIL STORAGE **608.3 Non metallic storage tanks.**	Requires nonmetallic storage tanks to be UL listed for the purpose it is being used for.
CHAPTER 7 **FIRE AND SMOKE PROTECTION FEATURES – No significant changes**		
CHAPTER 8 **INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS**		
CHAPTER 9 **FIRE PROTECTION AND LIFE SAFETY SYSTEMS**		
901.1 Scope *The provisions of this chapter shall specify where fire protection systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all fire protection systems.*	**901.1 Scope** The provisions of this chapter shall specify where fire protection and life safety systems are required and shall apply to the design, installation, inspection, operation, testing and maintenance of all *fire protection systems.*	**Added language to clarify.**
	901.2 Construction documents. The *fire code official* shall have the authority to require *construction documents* and calculations for all *fire protection systems* and to require permits be issued for the installation, rehabilitation or notification of any *fire protection system. Construction documents* for *fire protection systems* shall be submitted for review and approval prior to system installation.	**Current State Amendment – Recommendation – Keep 901.2, Construction Documents, is amended to add the following at the end of the section:** The Code official has the authority to request record drawings ("as builts") to verify any modifications to the previously approved construction documents.
	901.4.6 Pump and riser room size.	**Current State Amendment – Deletes the entire section and replaces it with size specific requirements. Recommendation - Keep**
	901.4.6.1 Access. Automatic sprinkler system risers, fire pumps and controllers shall be provided with ready access. Where located in a fire pump room or automatic sprinkler	**New subsections**

	system riser room, the door shall be permitted to be locked provided that the key is available at all times. **901.4.6.2 Marking on access doors.** Access doors for automatic sprinkler system riser rooms and fire pump rooms shall be labeled with an approved sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum stroke of 3/8 inch. **901.4.6.3 Environment.** Automatic sprinkler system riser rooms and fire pump rooms shall be maintained at a temperature of not less than 40^0F. Heating units shall be permanently installed. **901.4.6.4 Lighting.** Permanently installed artificial illumination shall be provided in the automatic sprinkler system riser rooms and fire pump rooms.	
901.5 Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems private fire service mains and all other *fire protection systems* and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as *approved* by the *fire code official*. The *fire code official* shall be notified before any required acceptance testing.	**901.5 Installation acceptance testing.** Fire detection and alarm systems, emergency alarm systems, gas detection systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems private fire service mains and all other *fire protection systems* and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as *approved* by the *fire code official.* The *fire code official* shall be notified before any required acceptance testing.	**Added the two additional systems in the list of systems requiring acceptance testing.**
901.6 Inspection, testing and maintenance. Fire detection, alarm, and extinguishing systems, mechanical smoke exhaust systems, and smoke and heat vents shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired *fire protection systems* and equipment shall be inspected, tested and maintained or removed.	**901.6 Inspection, testing and maintenance.** Fire detection, and alarm systems, emergency alarm systems, gas detection systems, and extinguishing systems, mechanical smoke exhaust systems, and smoke and heat vents shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired *fire protection systems* and equipment shall be inspected, tested and maintained or removed.	**Added the two additional systems in the list of systems requiring inspection, testing, and maintenance.**
	Table 901.6.1 **Fire Protection System Maintenance Standards** Aerosol fire-extinguishing systems NFPA 2010	**Added one more type of system and the associated standard to the list.**
	901.6.2 Integrated testing. Where two or more fire protection or life safety systems are interconnected, the intended response of subordinate fire protection and life safety systems shall be verified when required testing of the initiating system is conducted. In addition, integrated	**New Section**

	testing shall be performed in accordance with Sections 901.6.2.1 and 901.6.2.2.	
	901.6.2.1 High-rise buildings. For high-rise buildings, integrated testing shall comply with NFPA4, with an integrated test performed prior to issuance of the certificate of occupancy and at intervals not exceeding 10 years, unless otherwise specified by an integrated system test plan prepared in accordance with NFPA 4. If and equipment failure is detected during integrated testing, a repeat of the integrated test shall not be required, except as necessary to verify operation of fire protection or life safety functions that are initiated by equipment that was repaired or replaced.	**New Subsection**
	901.6.2.2 Smoke control systems. Where a fire alarm system is integrated with a smoke control system as outlined in Section 909, integrated testing shall comply with NFPA 4, with an integrated test performed prior to issuance of the certificate of occupancy and at intervals not exceeding 10 years, unless otherwise specified by an integrated system test plan prepared in accordance with NFPA 4. If an equipment failure is detected during integrated testing, a repeat of the integrated test shall not be required, except as necessary to verify operation of fire protection or life safety functions that are initiated by equipment that was repaired or replaced.	**New Subsection**
901.8.2 Removal of existing occupant-use hose lines. The *fire code official* is authorized to permit the removal of existing occupant-use hose lines where both of the following conditions exist: ~~1. Installation is not required by this code or the *International Building Code.*~~ 2. The hose line would not be utilized by trained personnel Or the fire department. 3. The remaining outlets are compatible with local fire Department fittings.	**901.8.2 Removal of existing occupant-use hose lines.** The *fire code official* is authorized to permit the removal of existing occupant-use hose lines where both of the following conditions exist: 1. The hose line would not be utilized by trained personnel Or the fire department. 2. The remaining outlets are compatible with local fire Department fittings.	**Removed the item that contradicted the section.**
	Section 902 Definitions Gas Detection System.	**Added "Gas Detection System" as a defined term.**
903.2.1.1 Group A-1 An *automatic sprinkler system* shall be provided ~~*for fire areas*~~ containing Group A-1 occupancies	**903.2.1.1 Group A-1** An *automatic sprinkler system* shall be provided <u>throughout stories</u> containing Group A-1	**Clarifies the intent.**

~~and intervening floors of the building~~ where one of the following conditions exist:	occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exist:	
903.2.1.2 Group A-2 An *automatic sprinkler system* shall be provided ~~for *fire areas*~~ containing Group A-2 occupancies ~~and intervening floors of the building~~ where one of the following conditions exist:	**903.2.1.2 Group A-2** An *automatic sprinkler system* shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exist:	**Clarifies the intent.** **State amendment – Keep** Section 903.2.1.2 Group A-2 is amended to add the following: 4. An automatic fire sprinkler system shall be provided throughout Group A-2 occupancies where indoor pyrotechnics are used.
903.2.1.3 Group A-3 An *automatic sprinkler system* shall be provided ~~for *fire areas*~~ containing Group A-3 occupancies ~~and intervening floors of the building~~ where one of the following conditions exist:	**903.2.1.3 Group A-3** An *automatic sprinkler system* shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exist:	**Clarifies the intent.**
903.2.1.4 Group A-3 An *automatic sprinkler system* shall be provided ~~for *fire areas*~~ containing Group A-4 occupancies ~~and intervening floors of the building~~ where one of the following conditions exist:	**903.2.1.3 Group A-4** An *automatic sprinkler system* shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exist:	**Clarifies the intent.**
903.2.1.5 Group A-5. An *automatic sprinkler system* shall be provided for Group A-5 ~~occupancies in the following areas: concession stands, retail areas, press boxes and other~~ accessory use areas in excess of 1,000 square feet.	**903.2.1.5 Group A-5.** An *automatic sprinkler system* shall be provided for all enclosed Group A-5 accessory use areas in excess of 1,000 square feet.	**Clarities the intent.**
	903.2.1.5.1 Spaces under grandstands or bleachers. Enclosed spaces under *grandstands* or *bleachers* shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 where either of the following exists: 1. The enclosed area is 1,000 square feet or less and is not constructed in accordance with Section 1029.1.1.1 2. The enclosed area exceeds 1,000 square feet.	**This requirement was moved from section 1029.**

903.2.2 Ambulatory care facilities. An *automatic sprinkler system* shall be installed throughout the ~~entire floor~~ building containing an ambulatory care facility where either of the following conditions exist at any time: 1. Four or more care recipients are incapable of self-preservation, ~~whether rendered incapable by staff or staff has accepted the responsibility for care recipients already incapable.~~. 2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility. ~~In buildings where ambulatory care is provided on levels other than the level of exit discharge, an *automatic sprinkler system* shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest *level of exit discharge,* the *level of exit discharge,* including the level of exit discharge.~~	**903.2.2 Ambulatory care facilities.** An *automatic sprinkler system* shall be installed throughout the ~~entire floor~~ building containing an ambulatory care facility where either of the following conditions exist at any time: 1. Four or more care recipients are incapable of self-preservation. 2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility. ~~In buildings where ambulatory care is provided on levels other than the level of exit discharge, an *automatic sprinkler system* shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest *level of exit discharge,* the *level of exit discharge,* and all floors below the level of exit discharge.~~ **Exception:** Floors classified as an open parking garage are not required to be sprinklered.	**State Amendment – Keep** Section 903.2.2, Ambulatory Health Care Facilities, is amended as follows: On line two delete the words "entire floor" and replace with thw word "buildings" and delete the last paragraph.
903.2.3 Group E. An *automatic sprinkler system* shall be provided for Group E occupancies as follows: 1. Throughout all Group E *fire areas* greater than 12,000square feet in area. ~~2. Throughout every portion of educational buildings below the lowest *level of exit discharge* serving that portion of the building.~~ **Exception:** An *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area where every classroom throughout the building has not fewer than one exterior *exit* door at ground level.	**903.2.3 Group E.** An *automatic sprinkler system* shall be provided for Group E occupancies as follows: 1. Throughout all Group E *fire areas* greater than 12,000 square feet in area. 2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies. **Exception:** In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area. 3. The Group E fire area has an occupant load of 300 or more.	**New language – same intent. #3 is new.**
	903.2.4 Group F-1. An *automatic sprinkler system* shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exits. ~~2. A Group F-1 *fire area* is located more than three stories above grade plane.~~ **#2. A Group F-1 fire area is located more than three stories above the lowest level of fire department vehicle access.**	**State amendment – Keep** Section 903.2.4, Group F-1, Subsection 2, is deleted and rewritten as follows: "A group F-1 fire area is located more than three stories above the lowest level of fire department vehicle access."
	903.2.7 Group M. An *automatic sprinkler system* shall be	**State amendment – Keep**

	provided throughout buildings containing a Group M occupancy where one of the following conditions exits: ~~2. A Group M *fire area* is located more than three stories above grade plane~~. #2. A Group M fire area is located more than three stories above the lowest level of fire department vehicle access.	Section 903.2.7, Group M, Subsection 2, is deleted and rewritten as follows: "A Group M fire area is located more than three stories above the lowest level of fire department vehicle access."
	903.2.8, Group R, including all subsections, is deleted and rewritten as follows: **903.2.8 Group R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area. **Exception:** 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) constructed in accordance with the International Residential Code for one- and two-family dwellings. 2. Single story Group R-1 occupancies with fire areas not more than 2,000 square feet that contain no installed plumbing or heating, where no cooking occurs, and constructed of Type I-A, IB, or II-B construction. 3. Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided the building is equipped throughout with an approved fire alarm system that is interconnected and receives its primary power from the building wiring and a commercial power system.	**State amendment – Keep** Section 903.2.8 Group R, including all subsections, is deleted and rewritten as follows: An automatic sprinkler system installed in accordance with Section 903.3 shall be proved throughout all buildings with a Group R fire area. **Exception:** 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) constructed in accordance with the International Residential Code For one- and two-family dwellings. 2. Single story Group R-1 occupancies with fire areas not more than 2,000 square feet that contain no installed plumbing or heating, where no cooking occurs, and constructed of Type I-A, IB, or II-B construction. 3. Group R-4 fire areas not more than 4,500 gross square feet and not containing more than 16 residents, provided the building is equipped throughout with an approved fire alarm system that is

		interconnected and receives its primary power from the building wiring and a commercial power system.
	903.2.8.1 Group R-4 Condition 2. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4 Condition 2 occupancies. Attics shall be protected in accordance with Section 903.2.8.1.1 or 903.2.8.1.2	**State Amendment – Keep?**
	903.2.9 Group S-1. An *automatic sprinkler system* shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exits: ~~2. A group S-1 *fire area* exceeds 12,000 square feet~~. 2.A group S-1 fire area is located more than three stories above the lowest level of fire department vehicle access.	**State Amendment - Keep**
903.2.11.1.1 Opening dimensions and access. Openings shall have a minimum dimension of not less than 30 inches. Such openings shall be ~~accessible to~~ the fire department from the exterior and shall not be obstructed in a manner such that fire fighting or rescue cannot be accomplished from the exterior.	**903.2.11.1.1 Opening dimensions and access.** Openings shall have a minimum dimension of not less than 30 inches. *Access* to such openings shall be provided for the fire department from the exterior and shall not be obstructed in a manner such that fire fighting or rescue cannot be accomplished from the exterior.	**Language change – same intent.**
903.2.11.2 Rubbish and linen chutes. An *automatic sprinkler system* shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes shall have additional sprinkler heads installed at alternate floors and at the lowest intake. Where a rubbish chute extends through a building more than one floor below the lowest intake, the extension shall have sprinklers installed that are recessed from the drop area of the chute and protected from freezing in accordance with Section 903.3.1.1. Such sprinklers shall be installed at alternate floors beginning with the second level below the last intake and ending with the floor above the discharge. ~~Chute sprinklers shall be accessible for servicing.~~	**903.2.11.2 Rubbish and linen chutes.** An *automatic sprinkler system* shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes shall have additional sprinkler heads installed at alternate floors and at the lowest intake. Where a rubbish chute extends through a building more than one floor below the lowest intake, the extension shall have sprinklers installed that are recessed from the drop area of the chute and protected from freezing in accordance with Section 903.3.1.1. Such sprinklers shall be installed at alternate floors beginning with the second level below the last intake and ending with the floor above the discharge. *Access* to sprinklers in chutes shall be provided for servicing.	**Language change – same intent.**
	Table 903.2.11.6 **Additional Required Fire Suppression Systems** Existing Group A occupancies.	**Added item to the list.**
	903.3.1.1.2 Bathrooms. In Group R occupancies, …	**Removed "other than R-4. Requirement is now consistent**

		with all Group R occupancies.
	903.3.1.2.1 Balconies and decks. 2. Exterior balconies, decks and ground floor patios of dwelling units and sleeping units are constructed in accordance with Section 705.2.3.1, Exception 3 of the *IBC*.	**Added another condition that would require the balcony or deck to be sprinklerd.**
	~~**903.2.3.2 Group R-4, Condition 1.**~~	**State amendment deletes this section.**
	903.3.1.2.3 Attics. 2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick response intermediate temperature sprinkler shall be installed above the equipment. 3. Where located in a building of Type III, Type IV or Type V construction designed in accordance with Section 510.2 or 510.4 of the *International Building Code,* attics not required by Item I to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet above the lowest level of required fire department vehicle access: 3.1. Provide *automatic sprinkler system* protection. 3.2. Construct the attic using noncombustible materials. 3.3 Construct the attic using fire retardant-treated wood complying with Section 2303.2 of the IBC. 3.4 Fill the attic with noncombustible insulation. The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503. 4. Group R-4, Condition 2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following: 4.1 Provide *automatic sprinkler system* protection. 4.2 Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.	**Moved section from 903.2.38.2.3.** **Provides other options.** **Clarifies the method used to measure height.**

	4.3 Construct the attic using noncombustible materials. 4.4 Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the IBC 4.5 Fill the attic with noncombustible insulation.	
	903.3.3 Obstructed locations. Automatic sprinklers shall be installed with regard to obstructions that will delay activation or obstruct the water distribution pattern and shall be in accordance with the applicable *automatic sprinkler system* standard that is being used. Automatic sprinklers shall be installed in or under covered kiosks, displays, booths, concession stands or equipment that exceeds 4 feet in width. Not less than a 30foot clearance shall be maintained between automatic sprinklers and the top of piles of *combustible fibers.*	**Refers to the specific sprinkler standard.**
	903.3.5 Water supplies. Water suppli8es for *automatic sprinkler systems* shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the *International Plumbing Code* and as amended in Utah's State Construction Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the *fire code official.*	**State Amendment – Keep**
	903.5 Testing and maintenance. Sprinkler systems shall be tested and maintained in accordance with Section 901. 903.5.1 Tag and information. A tag shall be attached to the riser indicating the date the antifreeze solution was tested. The tag shall also indicate the type and concentration of antifreeze solution by volume with which the system is filled, the name of the contractor that tested the antifreeze solution, the contractor's license number, and a warning to test the concentration of the antifreeze solutions at yearly intervals.	**State Amendment - Keep**
	904.12 Commercial cooking systems	**State Amendment - Keep**
	904.13 Domestic cooking systems.	**Broke the sections up but didn't change the intent.**
	904.12.4 Special provisions for automatic sprinkler	**Specifies the type of valve.**

	systems. *Automatic sprinkler systems* protecting commercial type cooking equipment shall be supplied from a separate, indicating-type control valve that is identified. *Access* to the control valve shall be provided.	
	Standpipes **905.3.1 Height.** Class III standpipe systems shall be installed throughout buildings where any of the following conditions exists. 1. Four or more stories are above or below grade plane. Exceptions: 2. Class I standpipes are allowed in Group B and E occupancies. 6. Class I standpipes are allowed in buildings where occupant-use hose lines will not be utilized by trained personnel or the fire department.	
	905.3.9 Open parking garages. Open parking garages shall be equipped with an approved Class I manual standpipe system when fire department access is not provided for firefighting operations to within 150 feet of all portions of the open parking garage as measured from the approved fire department vehicle access. Class I manual standpipe shall be accessible throughout the parking garage such that all portions of the parking structure are protected within 150 feet of a hose connection. **Exception:** Open parking garages equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.	**State amendment – New Section Added.**
905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations: 1. In every required *interior exit stairway,* a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at ~~an intermediate~~ landing unless otherwise approved by the *fire code official.*	**905.4 Location of Class I standpipe hose connections.** Class I standpipe hose connections shall be provided in all of the following locations: 1. In every required *interior exit stairway,* a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at the main floor landing unless otherwise approved by the *fire code official.* **Exception:** A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet apart.	**Changes location of hose connection. Added exception.**
905.5 Location of Class II standpipe hose connections Class II standpipe hose connections shall be accessible and	**905.5 Location of Class II standpipe hose connections.** Class II standpipe hose connections shall be located so that all	**Change language – same intent**

shall be located so that all portions of the building are within 30 feet of a nozzle attached to 100 feet of hose.	portions of the building are within 30 feet of a nozzle attached to 100 feet of hose. Class II standpipe hose connections shall be located where they will have *ready access.*	
	905.8 Dry standpipes. Dry standpipes shall not be installed. **Exception:** Where subject to freezing and approved by the fire code official.	**State amendment.**
	~~**905.12 Existing buildings.**~~	**State amendment – Keep, change number.**
906.1 Portable fire extinguishers **2. Within 30 feet of commercial cooking equipment.**	**906.1 Portable fire extinguishers** 1. In new and existing Group A, B, D, F, H, I, M, R-1, R-2, R-4 and S occupancies. **Exceptions:** 2. In Group E occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each classroom is provided with a portable fire extinguisher having a minimum rating of 2-A:20-B:C. 2. Within 30 feet distance of travel from commercial coking equipment and from domestic cooking equipment in Group I-1; K-2, Condition 1; and R-2 college dormitory occupancies.	**New exception. Look at state amendment.** **Reworded and added the specific locations that #2 applies to.**
	906.4 Cooking equipment fires	**This section was moved to the fire extinguishing section from the commercial cooking section (904). The intent is the same.**
	906.5 Conspicuous location. Portable fire extinguishers shall be located in conspicuous locations where they will have *ready access* and be immediately available for use. These locations shall be along normal paths of travel, unless the *fire code official* determines that the hazard posed indicates the need for placement away from normal paths of travel.	**New term, same intent.**
	SECTION 907 FIRE ALARM AND DETECTION SYSTEMS	
907 1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following where applicable to the system being installed: List.	**907.1.2 Fire Alarm Shop drawings.** Shop drawings for fire alarm systems shall be prepared in accordance with NFPA 72 and submitted for review and approval prior to system installation.	**Intent is the same made the wording more concise and refers to the standard for the list of required items.**

	907.2 Where required-new buildings and structures. **Exception:** 2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the *fire code official* to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is open to the public.	**New term, same intent.**
	907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies where the occupant load due to the assembly occupancy is 300 or more, or where the Group A occupant load is more than 100 person above or below the *lowest level of exit discharge*.	**Add the requirement for a manual fire alarm system if the occupant load is more than 100 above or below the lowest level of exit discharge.**
	907.2.3 Group E.	**State amendment.**
907.2.6.1 Group I **Exceptions:** 1. Manual fire alarm boxes in *sleeping units* of Group I-1 and I-2 occupancies shall not be required at *exits* if located at all care providers' control stations or other constantly attended staff locations, provided such ~~stations~~ are visible and ~~continuously accessible~~ and ~~that~~ the distances of travel required in Section 907.4.2.1 are not exceeded.	**907.2.6.1 Group I** **Exceptions:** 1. Manual fire alarm boxes in *sleeping units* of Group I-1 and I-2 occupancies shall not be required at *exits* if located at all care providers' control stations or other constantly attended staff locations, provided that such manual fire alarm boxes are visible and provided with *ready access,* and the distances of travel required in Section 907.4.2.1 are not exceeded.	**Change language, same intent.**
907.2.6.3.3 Automatic smoke detection systems. An automatic smoke detection system shall be installed throughout resident housing areas, including *sleeping units* and contiguous day rooms, group activity spaces and other common spaces normally ~~accessible~~ to residents.	**907.2.6.3.3 Automatic smoke detection systems.** An automatic smoke detection system shall be installed throughout resident housing areas, including *sleeping units* and contiguous day rooms, group activity spaces and other common spaces normally open to residents.	**Word change, same intent.**
~~**907.2.10 Group R-4** Fire alarm systems and smoke alarms shall be installed in Group R-4 occupancies as required in Sections 907.2.10.1 through 907.2.10.3.~~ ~~**907.2.10.1 manual fire alarm systems.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-4 occupancies.~~ ~~**Exceptions:**~~ ~~1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual *sleeping units* and contiguous attic and crawl spaces to~~		**Deleted entire section to be consistent with the requirements for other Group R occupancies. The Section, as written, made the requirements for R-4 occupancies more restrictive than for a group R-1.**

~~those units are separated from each other and public or common areas by not less than 1-hour *fire partitions* and each individual *sleeping unit* has an *exit* directly to a *public way, egress court* or yard.~~ ~~2. Manual fire alarm boxes are not required throughout the building where all of the following conditions are met:~~ ~~2.1 The building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~ ~~2.2 The notification appliances will activate upon sprinkler water flow.~~ ~~2.3 Not fewer than one manual fire alarm box is installed at an *approved* location.~~ ~~3. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at *exits* where located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that the distances of travel required in Section 907.4.2.1 are not exceeded.~~ ~~**907.2.10.2 Automatic smoke detection system.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in *corridors,* waiting areas open to *corridors*, and *habitable spaces* other than *sleeping units* and kitchens.~~ ~~**Exceptions:**~~ ~~1. Smoke detection in *habitable spaces* is not required where the facility is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.~~ ~~2. An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a *means of egress* door opening directly to an *exit* or to an exterior *exit access* that leads directly to an exit.~~ ~~**907.2.10.3 Smoke alarms.** Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11~~.		
	907.2.12.3 Multiple-channel voice evacuation. In buildings with an occupied floor more than 120 feet above the lowest	**New section.**

	level of fire department vehicle access, voice evacuation systems for high-rise buildings shall be multiple-channel systems.	
907.2.20 Covered and open mall buildings. Where the total floor area exceeds 50,000 square feet within either a covered mall building or within the perimeter line of an open mall building, an emergency voice/alarm communication system shall be provided. Emergency voice/alarm communication systems serving a mall, required or otherwise, shall be ~~accessible to~~ the fire department. The system shall be provided in accordance with Section 907.5.2.2.	**907.2.20 Covered and open mall buildings.** Where the total floor area exceeds 50,000 square feet within either a covered mall building or within the perimeter line of an open mall building, an emergency voice/alarm communication system shall be provided. *Access* to emergency voice/alarm communication systems serving a mall, required or otherwise, shall be provided for the fire department. The system shall be provided in accordance with Section 907.5.2.2.	**Language change, same intent.**
907.2.22.2 Other airport traffic control towers. 7. Accessible utility shafts.	**907.2.21.2 Other airport traffic control towers.** 7. Utility shafts where access to smoke detectors can be provided.	**Clarifies intent. Number change.**
	907.2.23 Capacitor energy storage systems. An automatic smoke detection system shall be installed in areas containing capacitor energy storage systems as required by Section 1206.3.	**New section.**
907.3.2 ~~Delayed egress locks~~. Where ~~delayed egress locks~~ are installed on *means of egress* doors in accordance with Section 1010.1.9.7, an automatic smoke or heat detection system shall be installed as required by that section.	**907.3.2 Special locking systems.** Where special locking systems are installed on means of egress doors in accordance with Section 1010.1.9.7 or 1010.1.9.8, and automatic detection system shall be installed as required by the section.	**Changed the heading name, same requirement.**
907.4.2.1 Location. Manual fire alarm boxes shall be located not more than 5 feet from the entrance to each *exit*. In buildings not protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the ~~*exit access* travel distance~~ to the nearest box does not exceed 200 feet.	**907.4.2.1 Location**. Manual fire alarm boxes shall be located not more than 5 feet from the entrance to each *exit*. In buildings not protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the distance of travel to the nearest box does not exceed 200 feet.	**Language change, same intent.**
907.4.2.6 Unobstructed and unobscured. Manual fire alarm boxes shall be ~~accessible~~, unobstructed, unobscured and visible at all times.	**907.4.2.6 Unobstructed and unobscured.** Manual fire alarm boxes shall be provided with *ready access*, unobstructed, unobscured and visible at all times.	**Language change, same intent.**
907.5.1 Presignal feature. A presignal feature shall not be installed unless *approved* by the *fire code official* ~~and the~~ signal shall be annunciated at a constantly attended location *approved* by the ~~fire department~~, so that occupant notification can be activated in the event of fire or other	**907.5.1 Presignal feature.** A presignal feature shall not be installed unless *approved* by the *fire code official*. Where a presignal feature is provided, a signal shall be annunciated at a constantly attended location *approved* by the *fire code official*, so that occupant notification can be activated in the	**Language change, same intent.**

emergency.	event of fire or other emergency.	
907.5.2.1 Audible alarms. Exceptions: 3. Where provided, audible notification appliances located in each occupant evacuation elevator lobby in accordance with Section 3008.9.1 of the *International Building Code* shall be connected to a separate notification zone for manual paging only.	**907.5.2.1 Audible alarms.** Exceptions: 3. Where provided, audible notification appliances located in each enclosed occupant evacuation elevator lobby in accordance with Section 3008.9.1 of the *International Building Code* shall be connected to a separate notification zone for manual paging only.	**Added the word "enclosed", provides clarity.**
905.2.2.4 Emergency voice/alarm communication captions. Where stadiums, arenas and grandstands are required to caption audible public announcements in accordance with Section 1108.2.7.3 of the *International Building Code,* the emergency/voice alarm communication system shall be captioned. Prerecorded or live emergency captions shall be from an *approved* location constantly attended by personnel trained to respond to an emergency.	**905.2.2.4 Emergency voice/alarm communication captions.** Where stadiums, arenas and grandstands have 15,000 fixed seats or more and provide audible public announcements in accordance with Section 1108.2.7.3 of the *International Building Code,* the emergency/voice alarm communication system shall be captioned. Prerecorded or live emergency captions shall be from an *approved* location constantly attended by personnel trained to respond to an emergency.	**Language change, same intent.**
907.5.2.3.2 Group I-1 and R-1. ~~Group I-1 and R-1~~ *dwelling units* or *sleeping units* in accordance with Table 907.5.2.3.2 shall be provided with a visible alarm ~~notification appliance~~, activated by both the in-room smoke alarm and the building fire alarm sysatem.	**907.5.2.3.2 Group I-1 and R-1.** Habitable spaces in dwelling units and sleeping units in Group I-1 and R-1 occupancies in accordance with Table 907.5.2.3.2 shall be provided with visible alarm notification. Visible alarms shall be activated by the in-room smoke alarm and the building fire alarm system.	**Language change, same intent.**
907.5.2.3.3 Group R-2. In Group R-2 occupancies required by Section 907 to have a fire alarm system, ~~all~~ *dwelling units* and *sleeping units* shall be provided with the capability to support visible alarm notification appliances in accordance with Chapter ~~10~~ of ICC A117.1. Such capability shall ~~be permitted to include the potential for future interconnection of the building fire alarm system with the unit smoke alarms, replacement of audible appliances with combination audible/visible appliances, or future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.~~	**907.5.2.3.3 Group R-2.** In Group R-2 occupancies required by Section 907 to have a fire alarm system, each *story* that contains *dwelling units* and *sleeping units* shall be provided with the future capability to support visible alarm notification appliances in accordance with Chapter 11 of ICC A117.1. Such capability shall accommodate wired or wireless equipment. The future capability shall include one of the following: 1. The interconnection of the building fire alarm system with the unit smoke alarms. 2. The replacement of audible appliances with combination audible/visible appliances. 3. The future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.	**Reformated the chapter with an itemized list of requirements. Added the requirement to include wireless appliances. Refers to chapter 11 instead of chapter 10 of ICC A117.1**
907.8 Inspection, testing and maintenance. The	**907.8 Inspection, testing and maintenance.** The	**State Amendment - Keep**

maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with Sections 907.8.1 through 907.8.5 and NFPA 72. Records of inspection, testing and maintenance shall be maintained.	maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with Sections 907.8.1 through 907.8.5 and NFPA 72. Records of inspection, testing and maintenance shall be maintained. Increases in nuisance alarms shall require the fire alarm system to be tested for sensitivity. Fire alarm systems that continue after sensitivity testing with unwarranted nuisance alarms shall be replaced as directed by the AHJ.	
907.8.2 Testing. **Exception:** Devices or equipment that are inaccessible ~~for~~ safety considerations shall be tested during scheduled shutdowns where *approved* by the *fire code official,* but not less than every 18 months.	**907.8.2 Testing.** **Exception:** Devices or equipment that are inaccessible because of safety considerations shall be tested during scheduled shutdowns where *approved* by the *fire code official,* but not less than every 18 months.	**Language change – same intent.**
	907.10 Smoke alarm maintenance. Smoke alarms shall be tested and maintained in accordance with the manufacturer's instructions. Smoke alarms shall be replaced when they fail to respond to operability tests, or when they exceed 10 years from the date of manufacture, unless an earlier replacement is specified in the manufacturer's published instructions.	**New Section**
909.1 Scope and purpose. This section applies to mechanical or passive smoke control systems where they are required for new buildings or portions thereof by provisions of the *International Building Code* or this code. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat~~-venting~~ provisions found in Section 910. Mechanical smoke control systems shall not be considered exhaust systems under Chapter 5 of the *International Mechanical Code.*	**909.1 Scope and purpose.** This section applies to mechanical or passive smoke control systems where they are required for new buildings or portions thereof by provisions of the *International Building Code* or this code. The purpose of this section is to establish minimum requirements for the design, installation and acceptance testing of smoke control systems that are intended to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents, the timely restoration of operations or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke- and heat <u>removal</u> provisions found in Section 910. Mechanical smoke control systems shall not be considered exhaust systems under Chapter 5 of the *International Mechanical Code.*	**Language change – Same intent, provides clarity.**
909.5.3 Opening protection. **Exceptions:** 4. In Group I-2 and ambulatory care facilities where such	**909.5.3 Opening protection.** **Exceptions:** 4. In Group I-2 and ambulatory care facilities where such	**Same intent. Refers to number change in the IBC.**

doors are special-purpose horizontal sliding, accordion or folding door assemblies installed in accordance with Section 1010.1.4.3 and are automatic closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code.*	doors are special-purpose horizontal sliding, accordion or folding door assemblies installed in accordance with Section 1010.1.4.3 and are automatic closing by smoke detection in accordance with Section 716.2.6.6 of the *International Building Code.*	
909.5.3.1 Group I-1 Condition 2, Group I-2 and ambulatory care facilities. In Group I-1 Condition 2, Group I-2 and *ambulatory care facilities,* where doors are installed across a *corridor*, the doors shall be automatic closing by smoke detection in accordance with Section 716.5.9.3 of the *International Building Code* and shall have a vision panel with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested.	**909.5.3.1 Group I-1 Condition 2, Group I-2 and ambulatory care facilities.** In Group I-1 Condition 2, Group I-2 and *ambulatory care facilities,* where doors are installed across a *corridor*, the doors shall be automatic closing by smoke detection in accordance with Section 716.2.6.6 of the *International Building Code* and shall have a vision panel with fire-protection-rated glazing materials in fire-protection-rated frames, the area of which shall not exceed that tested.	**Same intent. Refers to number change in the IBC.**
909.6.1 Minimum pressure difference. The minimum pressure difference across a *smoke barrier* shall be 0.05-inch water gage in fully sprinklered buildings. In buildings ~~allowed~~ to be other than fully sprinklered, the smoke control system shall be designed to achieve pressure differences not less than two times the maximum calculated pressure difference produced by the design fire.	**909.6.1 Minimum pressure difference.** The minimum pressure difference across a *smoke barrier* used to separate smoke zones shall be not less than 0.05-inch water gage in fully sprinklered buildings. In buildings permitted to be other than fully sprinklered, the smoke control system shall be designed to achieve pressure differences not less than two times the maximum calculated pressure difference produced by the design fire.	**Language change – same intent.**
909.12.4 Automatic control. Where completely automatic control is required or used, the automatic-control sequences shall be initiated from an appropriately zoned *automatic sprinkler system* complying with Section 903.1.1, manual controls ~~that are readily accessible to~~ the fire department and any smoke detectors required by the engineering analysis.	**909.12.4 Automatic control.** Where completely automatic control is required or used, the automatic-control sequences shall be initiated from an appropriately zoned *automatic sprinkler system* complying with Section 903.1.1, manual controls provided with *ready* access for the fire department and any smoke detectors required by the engineering analysis.	**Language change – same intent.**
909.15 Control diagrams. Identical control diagrams showing all devices in the system and identifying their location and function shall be maintained current and kept on file with the *fire code official,* the fire department and in the *fire command center* in a format and manner *approved* by the ~~fire chief~~.	**909.15 Control diagrams.** Identical control diagrams showing all devices in the system and identifying their location and function shall be maintained current and kept on file with the *fire code official,* the fire department and in the *fire command center* in a format and manner *approved* by the *fire code official*.	**Language change, same intent.**
910.4.5 Manual control location. Manual controls shall be located ~~so as to be accessible to~~ the fire service from an exterior door of the building and ~~protected against interior fire exposure~~ by not less than 1-hour *fire barriers*	**910.4.5 Manual control location.** Manual controls shall be located where they are able to be accessed by the fire service from an exterior door of the building and separated from the remainder of the building by not less than 1-hour	**Language change, same intent.**

constructed in accordance with Section 707 of the *International Building Code* or *horizontal assemblies* constructed in accordance with Section 711 of the *International Building Code,* or both.	*fire barriers* constructed in accordance with Section 707 of the *International Building Code* or *horizontal assemblies* constructed in accordance with Section 711 of the *International Building Code,* or both.	
910.5 Maintenance. Smoke and heat vents and mechanical smoke removal systems shall be ~~maintained in an operative condition~~ in accordance with Section 910.5.1 or 910.4.2, respectively.	**910.5 Maintenance and testing.** Maintenance and testing of smoke and heat vents and mechanical smoke removal systems shall be in accordance with Sections 910.5.1 and 910.5.2. A written record of inspection, testing and maintenance that includes the date, identification of personnel involved, and any unsatisfactory result, corrective action taken and replaced parts shall be maintained on the premises.	**Language change, same intent, provides clarity.**
910.5.1 Smoke and heat vents. Smoke and heat vents shall be maintained in an operative condition in accordance with NFPA 204 ~~and Section 910.5.1.1.~~ **910.5.1.1 Fusible links**. ~~Fusible links for smoke and heat vents shall be replaced whenever~~ fused, damaged or painted.	**910.5.1 Smoke and heat vents.** Smoke and heat vents shall be maintained in an operative condition. Inspection, testing and maintenance shall be in accordance with NFPA 204 except as follows: 1. Mechanically operated smoke and heat vents shall be inspected annually and operationally tested not less than every 5 years. 2. "Gravity dropout smoke and heat vents shall be inspected annually. 3. Fused, damaged or painted fusible links shall be replaced.	**Language change, same intent, added the inspection frequency.**
910.5.2 Mechanical smoke removal systems. Mechanical smoke removal systems shall be maintained in accordance with the equipment manufacturer's maintenance instructions and Section 910.5.2.1 through 910.5.2.4. **910.5.2.1 Frequency**. Systems shall be operationally tested ~~not less than once per year. Testing shall include the operation of all system components, including control elements.~~ **910.5.2.2 Testing.** ~~Operational~~ testing ~~of the mechanical smoke removal system~~ shall include ~~all equipment such as fans, controls and~~ make-up air openings. **910.5.2.3 Schedule.** ~~A routine maintenance and operational testing program shall be initiated and~~ a written schedule for routine maintenance and operational testing shall be established. **910.5.2.4 Written record**. A written record of mechanical	**910.5.2 Mechanical smoke removal systems.** Mechanical smoke removal systems shall be maintained in accordance with NFPA 204 and the equipment manufacturer's maintenance instructions except as follows: 1. Systems shall be inspected and operationally tested annually. 2. Testing shall include the operation of all system components, controls and ancillary equipment, such as makeup air openings. 3. A written schedule for routine maintenance and operational testing shall be established and testing shall be conducted in accordance with the schedule.	**Language change, same intent, clarified the requirements, numbered the items but removed the subsection numbers for each paragraph.**

smoke exhaust system testing and maintenance shall be maintained on the premises. The written record shall include the date of the maintenance, identification of the servicing personnel and notification of any unsatisfactory condition and the corrective action taken, including parts replaced.		
912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections shall be *approved* by the ~~fire chief~~.	**912.2 Location.** With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections shall be *approved* by the *fire code official*.	**Language change, same intent.**
912.2.1 Visible location. Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise *approved* by the ~~fire chief~~.	**912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings, or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official*.	**Added language, same intent.**
	912.4 Access. **Exceptions:**	**Language change from ~~fire chief~~ to *fire code official.***
	912.4.2 Clear space around connections.	**Language change from ~~fire chief~~ to *fire code official.***
913.2.2 Circuits supplying fire pumps. Cables used for survivability of circuits supplying fire pumps shall be ~~*listed* in accordance with 2196. Electrical circuit protective systems shall be installed in accordance with their listing requirements.~~	**913.2.2 Circuits supplying fire pumps.** Cables used for survivability of circuits supplying fire pumps shall be protected using one of the following methods: 1. Cables used for survivability of required critical circuits shall be *listed* in accordance with UL 2196 and shall have a *fire-resistance rating* of not less than 1 hour. 2. Electrical circuit protective systems shall have a *fire-resistance rating* of not less than 1 hour. Electrical circuit protective systems shall be installed in accordance with their listing requirements. 3. Construction having a *fire-resistance rating* of not less than 1 hour.	**Language change in the charging sentence and lists the requirements numerically.**
914.2.3 Emergency voice/alarm communication system. Where the total floor area exceeds 50,000 square feet within either a covered mall building or within the perimeter line of an open mall building, an emergency voice/alarm communication system shall be provided. Emergency	**914.2.3 Emergency voice/alarm communication system.** Where the total floor area exceeds 50,000 square feet within either a covered mall building or within the perimeter line of an open mall building, an emergency voice/alarm communication system shall be provided. *Access* to	**Language change, same intent.**

voice/alarm communication systems serving a mall, required or otherwise, shall be ~~accessible to~~ the fire department. The system shall be provided in accordance with Section 907.5.2.2.	emergency voice/alarm communication systems serving a mall, required or otherwise, shall be provided for the fire department. The system shall be provided in accordance with Section 907.5.2.2.	
~~**914.8.6 Aircraft paint hangar fire suppression.** Aircraft paint hangars shall be provided with fire suppression as required by NFPA 409.~~		
914.9 Application of flammable finishes. An *automatic sprinkler system* or fire-extinguishing system shall be provided in all spray, ~~dip and immersing spaces and storage rooms~~, and shall be installed in accordance with Chapter 9.	**914.9 Application of flammable finishes.** An *automatic sprinkler system* or fire-extinguishing system shall be provided in all spray rooms and spray booths, and shall be installed in accordance with Chapter 9.	**The deleted items did not belong in this section.**
915.1.3 Forced-air furnaces. **Exception:** Carbon monoxide detection shall not be required in *dwelling units, sleeping units* and classrooms where carbon monoxide detection is provided in the first room or area served by each main duct leaving the furnace, and the carbon monoxide alarm signals are automatically transmitted to an approved location.	**915.1.3 Fuel-burning forced-air furnaces.** **Exception:** Carbon monoxide detection shall not be required in *dwelling units, sleeping units* and classrooms where a carbon monoxide detector is provided in the first room or area served by each main duct leaving the furnace, and the carbon monoxide alarm signals are automatically transmitted to an approved location.	**Added language to the heading to clarify the requirement. Changed the language in the exception, same intent.**
915.1.4 Fuel-burning appliances outside of dwelling units, sleeping units and classrooms. 2. Carbon monoxide detection shall not be required in *dwelling units, sleeping units* and classrooms where carbon monoxide ~~detection~~ is provided in one of the following locations:	**915.1.4 Fuel-burning appliances outside of dwelling units, sleeping units and classrooms.** 2. Carbon monoxide detection shall not be required in *dwelling units, sleeping units* and classrooms where a carbon monoxide detector is provided in one of the following locations:	**Language change, same intent.**
915.1.5 Private garages. 4. Where carbon monoxide ~~detection~~ is provided in an approved location between openings to a private garage and *dwelling units, sleeping units* or classrooms, ~~carbon monoxide detection shall not be required in the *dwelling units, sleeping units* or classrooms.~~	**915.1.5 Private garages.** 4. Where a carbon monoxide detector is provided in an approved location between openings to a private garage and *dwelling units, sleeping units* or classrooms.	**Removed redundant language, same intent.**
915.2.3 Group E occupancies. Carbon monoxide ~~detection~~ shall be installed in classrooms in Group E occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed by school personnel.	**915.2.3 Group E occupancies.** Carbon monoxide detectors shall be installed in classrooms in Group E occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed by school personnel.	**Language change, same intent.** **State Amendment**

915.3 ~~Detection equipment~~. Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5.	**915.3 Carbon monoxide detection.** Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5.	**Changed heading, same intent.**
	915.4.3 Locations. Carbon monoxide alarms shall only be installed in *dwelling units* and in *sleeping units.* They shall not be installed in locations where the code required carbon monoxide detectors to be used.	**New section.**
	915.6.1 Enclosed parking garages. Carbon monoxide and nitrogen dioxide detectors installed in enclosed parking garages in accordance with the *International Mechanical code,* Section 404.1 shall be maintained in accordance with the manufacturer's instructions and their listing. Detectors that become inoperable or begin producing end-of-life signals shall be replaced.	**New section**
	916 GAS DETECTION SYSTEMS	**New section** **Clarifies the requirements for gas detection systems and consolidates the information into one section.**
	917 MASS NOTIFICATION SYSTEMS	**New section** **Specific to college and university campuses.**
CHAPTER 10 **MEANS OF EGRESS**		

	1004.3 Multiple-function occupant load. Where an area under consideration contains multiple functions having different occupant load factors, the design occupant load for such area shall be based on the floor area of each function calculated independently.	New section
	1004.8 Concentrated business use areas. The occupant load factor for concentrated business use shall be applied to telephone call centers, trading floors, electronic data processing centers and similar business use areas with a higher density of occupants than would normally be expected in a typical business occupancy environment. Where approved by the code official, the occupant load for concentrated business use areas shall be the actual occupant load, but not less than one occupant per 50 square feet of gross occupiable floor space	**New section**
	1006.2.2.6 Groups R-3 and R-4. Where Group R-3 occupancies are permitted by Section 903.2 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the exit access travel distance for Group R-3 shall be not more than 125 feet (38 100 mm). Where Group R-4 occupancies are permitted by Section 903.2.8 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the exit access travel distance for Group R-4 shall be not more than 75 feet (22 860 mm).	**New section** The code considers every group R occupancy to be protected by a sprinkler system. This section does not permit spaces with one exit or exit access doorway for unsprinklered group R occupancies. Limits the travel distance in group R occupancies when a 13D system is installed.
1006.3 Egress from stories or occupied roofs. The *means of egress* system serving any story or occupied roof shall be provided with the number of *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. The path of egress travel to an *exit* shall not pass through more than one adjacent story. ~~Each story above the second story of a building shall have not less than one *interior* or *exterior exit stairway,* or interior or *exterior exit ramp.* Where three or more *exits* or access to *exits* are required, not less than 50 percent of the required *exits* shall be *interior* or *exterior exit stairways or ramps.*~~	**1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any *story* or occupied roof shall be provided with the number of separate and distinct *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. Where stairways serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required number of exits or access to exits serving that story. **1006.3.1 Adjacent story.** The path of egress travel to an exit shall not pass through more than one adjacent story. **Exception:** The path of egress travel to an *exit* shall be permitted to pass through more than one adjacent *story* in	**Rewritten for clarification.** **Added a new subsection.** Has expanded the exceptions for requiring an enclosed stairway from an occupied story or roof.

Exceptions: 1. ~~*Interior exit stairways* and *interior exit ramps* are not required in open parking garages where the *means of egress* serves only the open parking garage~~. 2. ~~*Interior exit stairways* and *interior exit ramps* are not required in outdoor facilities where all portions of the *means of egress* are essentially open to the outside~~.	any of the following: 1. In Group R-1, R-2 or R-3 occupancies, exit access stairways and ramps connecting four stories or fewer serving and contained within an individual dwelling unit or sleeping unit or live/work unit. 2. Exit access stairways serving and contained within a Group R-3 congregate residence or a Group R-4 facility. 3. Exit access stairways and ramps in open parking garages that serve only the parking garage. 4. Exit access stairways and ramps serving open-air assembly seating complying with the exit access travel distance requirements of Section 1029.7 5. Exit access stairways and ramps between the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, places of religious worship, auditoriums and sports facilities.	
1006.3.1 Egress based on occupant load. Each story and occupied roof shall have the minimum number of *exits,* or access to *exits,* as specified in Table 1006.3.~~1~~. A single *exit* or access to a single *exit* shall be permitted in accordance with Section 1006.3.~~2~~. The required number of *exits,* or *exit access stairways* or *ramps* providing access to *exits,* from any story or occupied roof shall be maintained until arrival at the *exit discharge* or a *public way.* TABLE 1006.3.~~1~~	**1006.3.2 Egress based on occupant load.** Each story and occupied roof shall have the minimum number of separate and distinct *exits,* or access to *exits,* as specified in Table 1006.3.2. A single *exit* or access to a single *exit* shall be permitted in accordance with Section 1006.3.3. The required number of *exits,* or *exit access stairways* or *ramps* providing access to *exits,* from any story or occupied roof shall be maintained until arrival at the *exit discharge* or a *public way.* TABLE 1006.3.2	**Add the words "separate and distinct".** **Number changes.**
1006.3.2 Single exits.	**1006.3.3 Single exits.**	New number, no change in intent.
1008.2.2 Exit discharge. In Group I-2 occupancies where two or more *exits* are required, on the exterior landings required by Section 1010.6.1, means of egress illumination levels for the *exit discharge* shall be provided such that failure of ~~any single lighting unit~~ shall not reduce the illumination level at the landing to less than 1 footcandle (11 lux).	**1008.2.2 Group I-2.** In Group I-2 occupancies where two or more *exits* are required, on the exterior landings required by Section 1010.6.1, means of egress illumination levels for the *exit discharge* shall be provided such that failure of a single lamp in a luminaire shall not reduce the illumination level at the landing to less than 1 footcandle (11 lux).	Change the title for clarity and clarifies that the evaluation of a loss of single lamp is only applicable to Group I-2 occupancies. The illumination level for egress illumination must be maintained at 0.2 fotcandle with the loss of one lamp and

		illumination of exterior landings at 1 footcandle.
	1008.2.3 Exit discharge. Illumination shall be provided along the path of travel for the exit discharge from each exit to the public way. **Exception:** Illumination shall not be required where the path of exit discharge meets both of the following requirements: 1. The path of exit discharge is illuminated from the exit to a safe dispersal area complying with Section 1028.5 2. A dispersal area shall be illuminated to a level not less than 1 footcandle (11 lux) at the walking surface.	New section, clarifies the intent for exit discharge illumination and provides options for the designer.
1008.3.5 Illumination level under emergency power. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded. In Group I-2 occupancies, failure of any single lighting unit shall not reduce the illumination level to less than 0.2 foot-candle (2.2 lux).	**1008.3.5 Illumination level under emergency power.** Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 footcandle (11 lux) and a minimum at any point of 0.1 footcandle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 footcandle (6 lux) average and a minimum at any point of 0.06 footcandle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded. In Group I-2 occupancies, failure of any single ~~lighting unit~~ lamp in a luminaire shall not reduce the illumination level to less than 0.2 foot-candle (2.2 lux).	Change in terminology and gives specifics for Group 1-2 occupancies.
1009 .1 Accessible means of egress required. *Accessible means of egress* shall comply with this section. Accessible spaces shall be provided with not less than one *accessible means of egress.* Where more than one *means of egress* is required by Section 1006.2 or 1006.3 from an accessible space, each accessible portion of the space shall be served by not less than two *accessible means of egress.* **Exceptions:** 1. ~~*Accessible means of egress* are not required to be provided in existing buildings.~~ 2. One *accessible means of egress* is required from an	**1009.1 Accessible means of egress required.** *Accessible means of egress* shall comply with this section. Accessible spaces shall be provided with not less than one *accessible means of egress.* Where more than one *means of egress* is required by Section 1006.2 or 1006.3 from ~~an~~ any accessible space, each accessible portion of the space shall be served by not less than two *accessible means of egress.* **Exceptions:** 1. One *accessible means of egress* is required from an accessible *mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.	Eliminated the first exception because existing buildings are address in the Existing Building Code.

accessible *mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5. 3. In assembly areas with ramped *aisles* or stepped *aisles*, one *accessible means of egress* is permitted where the common path of travel is accessible and meets the requirements in Section 1029.8.	2. In assembly areas with ramped *aisles* or stepped *aisles*, one *accessible means of egress* is permitted where the common path of travel is accessible and meets the requirements in Section 1029.8.	
1009.3 Stairways.	**1009.3 Stairways.**	This section was reorganized for clarity but the intent remains the same.
1009.4 Elevators.	**1009.4 Elevators.**	This section was reorganized for clarity but the intent remains the same.
1009.7.2 Separation	**1009.7.2 Separation** **Exception:** The fire-resistance rating and opening protectives are not required in the exterior wall where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.	This section has requirements for 1 hour rating of exterior walls separating the exterior area of assisted rescue from the interior of the building. The exception is new.
1009.8 Two-way communication.	**1009.8 Two-way communication.** **Exceptions:** 6. Two-way communication systems are not required in Group I-2 or I-3 facilities.	New exception is added.
1010.1.1 Size of Doors. **Exceptions:**	**1010.1.1 Size of Doors.** **Exceptions:** 12. The minimum clear opening width shall not apply to The doors for nonaccessible toilet stalls.	Terminology changes for clarity throughout the subsection but the intent and the measurements have remained the same. Exception #12 was added for consistency with the IPC.

	1010.1.4.4 Locking arrangements in educational occupancies. In Group E and Group B educational occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room, where all of the following conditions are met: 1. The door shall be capable of being unlocked from outside the room with a key or other approved means. 2. The door shall be openable from within the room in Accordance with Section 1010.1.9 3. Modifications shall not be made to listed panic hard-Ware, fire door hardware or door closers. **1010.1.4.4.1 Remote operation of locks.** Remote operation of locks complying with Section 1010.1.4.4 shall be permitted.	New section addressing more secure locking options for educational occupancies.
	1010.1.9.3 Monitored or recorded egress. Where electrical systems that monitor or record egress activity are incorporated, the locking system shall comply with Section 1010.1.9.7, 1010.1.9.8, 1010.1.9.9, 1010.1.9.10 or 1010.1.9.11, or shall be readily openable from the egress side without the use of a key or special knowledge or effort.	New section.
1010.1.9.3 Locks and latches.	**1010.1.9.4 Locks and latches.** 6. Doors serving roofs not intended to be occupied shall be permitted to be locked, preventing entry to the building from the roof.	Section was renumbered and a sixth item was added to the conditional list.
1010.1.9.5.1 Closet and bathroom doors in Group R04 occupancies. ~~In Group R-4 occupancies~~, closet doors that latch in the closed position shall be openable from inside the closet, ~~and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.~~	**1010.1.9.6.1 Closet doors.** Closet doors that latch in the closed position shall be openable from inside the closet.	Section was renumbered and modified to address closet doors only.
1010.1.9.6 Controlled egress doors in Groups I-1 and I-2.	**1010.1.9.7 Controlled egress doors in Groups I-1 and I-2.** 9. The secure area or unit with special egress locks shall be located at the level of exit discharge in Type V construction.	Section number changed. Existing State Amendment adds the ninth item to the list of requirements.

1010.1.9.7 Delayed egress. Delayed egress locking systems, shall be permitted to be installed on doors ~~serving any occupancy except A, E and H~~ in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907. The locking system shall be installed and operated in accordance with all of the following: 1. The delay electronics of the delayed egress locking system shall deactivate upon actuation of the *automatic sprinkler system* or automatic fire detection system, allowing immediate, free egress. 2. The delay electronics of the delayed egress locking system shall deactivate upon loss of power controlling the lock or lock mechanism, allowing immediate free egress. 3. The delayed egress locking system shall have the capability of being deactivated at the fire command center and other approved locations. 4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated, rearming the delay electronics shall be by manual means only. **Exception:** Where *approved,* a delay of not more than 30 seconds is permitted on a delayed egress door. 5. The egress path from any point shall not pass through more than one delayed egress locking system. **Exception:** In Group I-2 or I-3 occupancies, the egress path from any point in the building shall not pass through more than two delayed egress locking systems provided the combined delay does not exceed 30 seconds. 6. A sign shall be provided on the door and shall be located above and within 12 inches (305 mm) of the door exit hardware: 6.1 For doors that swing in the direction of egress, the	**1010.1.9.8 Delayed egress.** Delayed egress locking systems, shall be permitted to be installed on doors serving the following occupancies in buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved* automatic smoke or heat detection system installed in accordance with Section 907: 1. Group B, F, I, M, R, S and U occupancies. 2. Group E classrooms with an occupant load of less than 50. **Exception:** Delayed egress locking systems shall be permitted to be installed on exit or exit access doors, other than the main exit or exit access door, serving a courtroom in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. **1010.1.9.8.1 Delayed egress locking system.** 1. The delay electronics of the delayed egress locking system shall deactivate upon actuation of the *automatic sprinkler system* or automatic fire detection system, allowing immediate, free egress. 2. The delay electronics of the delayed egress locking system shall deactivate upon loss of power controlling the lock or lock mechanism, allowing immediate free egress. 3. The delayed egress locking system shall have the capability of being deactivated at the fire command center and other approved locations. 4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated, rearming the delay electronics shall be by manual means only. **Exception:** Where *approved,* a delay of not more than 30 seconds is permitted on a delayed egress door. 5. The egress path from any point shall not pass through more than one delayed egress locking system.	Section number changed. Specifies the occupancies that are allowed to have delayed egress locking systems. Added Group E classrooms with an occupant load of less than 50 to the list. Also added an exception which allows delayed egress locks for courtrooms. Created a subsection that lists the requirements for delayed egress locking systems and added the Exception for Group I-1 or I-2 occupancies. Keep existing Statewide amendment: 9. The secure area or unit with delayed egress locks shall be located at the level of exit discharge in Type V construction.

Sign shall read: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS. 6.2 For doors that swing in the opposite direction if egress, the sign shall read: PULL UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS. 6.3 The sign shall comply with the visual character requirements in ICC A117.1 **Exception**: Where *approved,* in Group I occupancies, the installation of a sign is not required where care recipients who, because of clinical needs, require restraint or containment as part of the function of the treatment area. 7. Emergency lighting shall be provided on the egress side of the door. 8. The delayed egress locking system units shall be *listed* in accordance with UL 294.	**Exception:** 1. In Group I-2 or I-3 occupancies, the egress path from any point in the building shall not pass through more than two delayed egress locking systems provided the combined delay does not exceed 30 seconds. 2. In Group I-1 or I-4 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided that the combined delay does not exceed 30 seconds and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. 6. A sign shall be provided on the door and shall be located above and within 12 inches (305 mm) of the door exit hardware: 6.1 For doors that swing in the direction of egress, the Sign shall read: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS. 6.2 For doors that swing in the opposite direction if egress, the sign shall read: PULL UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS. 6.3 The sign shall comply with the visual character requirements in ICC A117.1 **Exception**: Where *approved,* in Group I occupancies, the installation of a sign is not required where care recipients who, because of clinical needs, require restraint or containment as part of the function of the treatment area. 7. Emergency lighting shall be provided on the egress side of the door. 8. The delayed egress locking system units shall be *listed* in accordance with UL 294.	

1010.1.9.8 Sensor release of electrically locked egress doors.	**1010.1.9.9 Sensor release of electrically locked egress doors.**	Section renumbered. Language was changed the intent remains the same.
1010.1.9.9 Electromagnetically locked egress doors.	**1010.1.9.10 Door hardware release of electrically locked egress doors.**	Section renumbered. Title and language was changed the intent remains the same.
	1010.3.2 Security access turnstiles. Security access turnstiles that inhibit travel in the direction of egress utilizing a physical barrier shall be permitted to be considered as a component of the means of egress, provided that all of the following criteria are met: 1. The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 903.3.1.1. 2. Each security access turnstile lane configuration has a minimum clear passage width of 22 inches (559 mm). 3. Any security access turnstile lane configuration providing a clear passage width of less than 32 inches (810 mm) shall be credited with a maximum egress capacity of 50 persons. 4. Any security access turnstile lane configuration providing a clear passage width of 32 inches (810 mm) or more shall be credited with a maximum egress capacity as calculated in accordance with Section 1005. 5. Each secured physical barrier shall automatically retract or swing to an unobstructed open position in the direction of egress, under each of the following conditions: 5.1 Upon loss of power to the turnstile or any part of the access control system that secures the physical barrier. 5.2 Upon actuation of a clearly identified manual release device with ready access that results in direct interruption of power to each secured physical	New section.

	barrier, after which such barriers remain in the open position for not less than 30 seconds. The manual release device shall be positioned at one of the following locations: 5.2.1. On the egress side of each security access turnstile lane. 5.2.2 At an approved location where it can be actuated by an employee assigned to the area at all times that the building is occupied. 5.3 Upon actuation of the building fire alarm system, if provided, after which the physical barrier remains in the open position until the fire alarm system is manually reset. **Exception:** Actuation of a manual fire alarm box. 5.4 Upon actuation of the building automatic sprinkler or fire detection system, after which the physical barrier remains in the open position until the fire alarm system is manually reset.	
1010.3.2 Additional door. Where serving an *occupant load* greater than 300, each turnstile that is not portable shall have a side-hinged swinging door that conforms to Section 1010.1 within 50 feet (15 240 mm).	**1010.3.4 Additional door.** Where serving an *occupant load* greater than 300, each turnstile that is not portable shall have a side-hinged swinging door that conforms to Section 1010.1 within 50 feet (15 240 mm). **Exception:** A side-hinged swinging door is not required at security access turnstiles that comply with Section 1010.3.2	Section renumbered and the exception was added.
	1011.5.2 Riser height and tread depth.	Existing Statewide Amendment. 1011.5.2 Riser height and tread depth. Exception 3 is deleted and replaced with the following: 3. In Group R-3 occupancies, within dwelling units in Group R-2 occupancies, and in Group U occupancies that are accessory to a Group R-3 occupancy, or accessory to individual dwelling units in Group R-2 occupancies, the maximum riser height shall be 8 inches (203 mm) and the

		minimum tread depth shall be 9 inches (229 mm). The minimum winder tread depth at the walk line shall be 10 inches (254 mm), and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than 0.76 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 10 inches (254 mm).
1011.10 Spiral stairways. *Spiral stairways* are permitted to be used a s a component in the *means of egress* only within *swelling units* or from a space not more than 250 square feet (23 m^2) in area and serving not more than five occupants, or from technical production areas in accordance with Section 410.5 of the *International Building Code.* A *spiral stairway* shall have a ~~7 1/2-inch~~ (191 mm) minimum clear tread depth at a point 12 inches (305 mm) from the narrow edge. The risers shall be sufficient to provide a headroom of 78 inches (1981 mm) minimum, but riser height shall not be more than 9 ½ inches (241 mm). The minimum *stairway* clear width at and below the *handrail* shall be 26 inches (660 mm).	**1011.10 Spiral stairways.** *Spiral stairways* are permitted to be used a s a component in the *means of egress* only within *swelling units* or from a space not more than 250 square feet (23 m^2) in area and serving not more than five occupants, or from technical production areas in accordance with Section 410.5 of the *International Building Code.* A *spiral stairway* shall have a 6 3/4-inch (191 mm) minimum clear tread depth at a point 12 inches (305 mm) from the narrow edge. The risers shall be sufficient to provide a headroom of 78 inches (1981 mm) minimum, but riser height shall not be more than 9 ½ inches (241 mm). The minimum *stairway* clear width at and below the *handrail* shall be 26 inches (660 mm).	Reduced the clear tread depth from 7 ½-inches to 6 ¾-inches.
1011.11 Handrails.	**10111.11 Handrails.**	Existing Statewide Amendment. 5. In occupancies in Group R-3, as applicable in Section 1014 and in occupancies in Group U, which are accessory to an occupancy in Group R-3, applicable in Section 1014, handrails shall be provided on at least one side of stairways consisting of four or more risers.

1011.16 Ladders. Permanent ladders shall not serve as a part of the *means of egress* from occupied spaces within a building. Permanent ladders shall be permitted to provide access to the following areas: 1. Spaces frequented only by personnel for maintenance, repair or monitoring of equipment. 2. Nonoccupiable spaces accessed only by catwalks, crawl spaces, freight elevators or very narrow passageways. 3. Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands. 4. Elevated levels in Group U not open to the general public. 5. Nonoccupied roofs that are not required to have *stairway* access in accordance with Section 1011.12. 6. Ladders shall be constructed in accordance with Section 306.5 of the *International Mechanical Code.*	**1011.16 Ladders.** Permanent ladders shall not serve as a part of the *means of egress* from occupied spaces within a building. Permanent ladders shall be constructed in accordance with Section 306.5 of the *International Mechanical Code.* Permanent ladders shall be permitted to provide access to the following areas: 1. Spaces frequented only by personnel for maintenance, repair or monitoring of equipment. 2. Nonoccupiable spaces accessed only by catwalks, crawl spaces, freight elevators or very narrow passageways. 3. Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands. 4. Elevated levels in Group U not open to the general public. 5. Nonoccupied roofs that are not required to have *stairway* access in accordance with Section 1011.12. 6. Where permitted to access equipment and appliances in accordance with Section 306.5 of the *International Mechanical Code.*	Added the requirement to be in compliance with the Mechanical Code, to the body of the section. Added the specifics to the intent of #6.
1012.5.2 Headroom. The minimum headroom in all parts of the *means of egress ramp* shall be not less than 80 inches (2032 mm).	**1012.5.2 Headroom.** The minimum headroom in all parts of the *means of egress ramp* shall be not less than 80 inches 2032 mm) above the finished floor of the ramp run and any intermediate landings. The minimum clearance shall be maintained for the full width of the ramp and landing.	Adds more language for clarification.

1013.2 Floor-level exit signs in Group R-1. Where exit signs are required in Group R-1 occupancies by Section 1013.1, additional low-level exit signs shall be provided in all areas serving guest rooms in Group R-1 occupancies and shall comply with Section 1013.5 The bottom of the sign shall be not less than 10 inches (254 mm) nor more than ~~12~~ inches (305 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.	**1013.2 Floor-level exit signs in Group R-1.** Where exit signs are required in Group R-1 occupancies by Section 1013.1, additional low-level exit signs shall be provided in all areas serving guest rooms in Group R-1 occupancies and shall comply with Section 1013.5 The bottom of the sign shall be not less than 10 inches (254 mm) nor more than 18 inches (305 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.	Changed the maximum distance for the exit sign from the floor from 12 inched to 18 inches.
1013.5 Internally illuminated exit signs.	**1013.5 Internally illuminated exit signs.**	Existing Statewide Amendment. 1013.5, Internally illuminated exit signs, delete and rewrite the last sentence to read: Exit signs shall be illuminated at all times, including when the building is not fully occupied.

1013.6.3 Power source. Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604. **Exceptions:** 1. *Approved* exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system. 2. Gr~~oup I-2 Condition 2 exit sign illumination shall not be provided by unit equipment battery only~~.	**1013.6.3 Power source.** Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than 90 minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604. Group I-2, Condition 2 exit sign illumination shall not be provided by unit equipment batteries only. **Exceptions:** 1. *Approved* exit sign illumination means that provide continuous illumination independent of external power sources for a duration of not less than 90 minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.	Added the last sentence to the section, it was previously shown as exception #2.
1015.3 Height.	**1015.3 Height.** **Exceptions:** 6. In Group F occupancies where *exit access stairways* serve fewer than three stories and such *stairways* are not open to the public, and where the top of the *guard* also serves as a *handrail*, the top of the *guard* shall be not less than 34 inches 864 mm and not more than 38 inches 965 mm measured vertically from a line connecting the leading edges of the treads.	Added a sixth exception to the Guard Height requirements.

Table 1017.2 Exit Access Travel Distance	**Table 1017.2 Exit Access Travel Distance**	Allows 150 foot travel distance for an unsprinklered group I04 occupancy. Added footnote “e” which allows the same travel distances with a NFPA 13D sprinkler system in R-3 and R-4 occupancies as it would with a 13 system.
Interior Exit Stairways and Ramps **1023.1 Extension.**	**Interior Exit Stairways and Ramps** **1023.1 Extension.** **Exceptions:** 3. Separation between an *interior exit stairway* or *ramp* and the *exit passageway* extension shall not be required where the *interior exit stairway* and the *exit passageway* extension are pressurized in accordance with Section 909.20.5 of the *International Building Code.*	Added a third exception to the rating requirement.

Interior Exit Stairways and Ramps **1023.5 Penetrations.** Penetrations into or through *interior exit stairways* and *ramps* are prohibited except for equipment and ductwork necessary for independent ventilation or pressurization, ~~sprinkler piping, standpipes~~, electrical raceway for fire department communication systems and electrical raceway serving the *interior exit stairway* and *ramp* and terminating at a steel box not exceeding 16 square inches (0.010 m^2). Such penetrations shall be protected in accordance with Section 714 of the *International Building Code.* There shall not be penetrations or communication openings, whether protected or not, between adjacent *interior exit stairways* and *ramps*.	**Interior Exit Stairways and Ramps** **1023.5 Penetrations.** Penetrations into or through *interior exit stairways* and *ramps* are prohibited except for the following: 1. Equipment and ductwork necessary for independent ventilation or pressurization. 2. *Fire protection systems.* 3. Security systems. 4. Two-way communication systems. 5. Electrical raceway for fire department communication systems. 6. Electrical raceway serving the interior *exit stairway* and *ramp* and terminating at a steel box not exceeding 16 square inches (0.010 m^2). Such penetrations shall be protected in accordance with Section 714 of the *International Building Code.* There shall not be penetrations or communication openings, whether protected or not, between adjacent *interior exit stairways* and *ramps.*	Section was reformatted into a list as the allowed penetrations increase. Two items were added to the list.
Interior Exit Stairways and Ramps	**Interior Exit Stairways and Ramps** **1023.12 Standpipes.** Standpipes and standpipe hose connections shall be provided where required by Sections 905.3 and 905.4	New section added but the requirement is not new.

Exit Passageway **1024.6 Penetrations.** Penetrations into or through an *exit passageway* are prohibited except for equipment and ductwork necessary for independent pressurization, ~~sprinkler piping, standpipes~~, electrical raceway for fire department communication and electrical raceway serving the *exit passageway* and terminating at a steel box not exceeding 16 square inches (0.010 m^2). Such penetrations shall be protected in accordance with Section 714 of the *International Building Code*. There shall not be penetrations or communicating openings, whether protected or not, between adjacent *exit passageways.*	**Exit Passageway** **1024.6 Penetrations.** Penetrations into or through an *exit passageway* are prohibited except for the following: 1. Equipment and ductwork necessary for independent pressurization. 2. Fire protection systems. 3. Security systems. 4. Two-way communication systems. 5. Electrical raceway for fire department communication. 6. Electrical raceway serving the *exit passageway* and terminating at a steel box not exceeding 16 square inches (0.010 m^2). Such penetrations shall be protected in accordance with Section 714 of the *International Building Code.* There shall not be penetrations or communicating openings, whether protected or not between adjacent *exit passageways.*	Section was reformatted into a list as the allowed penetrations increase. Two items were added to the list.
Exit Passageway	**Exit Passageway** **1024.8 Standpipes.** Standpipes and standpipe hose connections shall be provided where required by Sections 905.3 and 905.4	New section added but the requirement is not new.
1025 LUMINOUS EGRESS PATH MARKINGS	**1025 LUMINOUS EGRESS PATH MARKINGS**	Existing Amendment, Section 1025, Luminous Egress Path Markings is deleted.
1026.4 Refuge area. The refuge area of a *horizontal exit* shall be a space occupied by the same tenant or a public area and each such refuge area shall be adequate to accommodate the original *occupant load* of the refuge area plus the *occupant load* anticipated from the adjoining compartment. The anticipated *occupant load* from the adjoining compartment shall be based on the capacity of the *horizontal exit* doors entering the refuge area.	**1026.4 Refuge area.** The refuge area of a *horizontal exit* shall be a space occupied by the same tenant or a public area and each such refuge area shall be adequate to accommodate the original *occupant load* of the refuge area plus the *occupant load* anticipated from the adjoining compartment. The anticipated *occupant load* from the adjoining compartment shall be based on the capacity of the *horizontal exit* doors entering the refuge area, or the total occupant load of the adjoining compartment, whichever is less.	The additional language makes it clear that whichever number is used to calculate the area, the occupant load cannot exceed the capacity of the horizontal exit.

1026.4.1 Capacity. The capacity of the refuge area shall be computed based on a net floor area allowance of 3 square feet (0.2787 m^2) for each occupant to be accommodated therein. ~~**Exceptions:** The net floor area allowable per occupant shall be a follows for the indicated occupancies:~~ ~~1. Six square feet (0.6 m^2) per occupant for occupancies in Group I-3.~~ ~~2. Fifteen square feet (1.4 m^2) per occupant for ambulatory occupancies in Group I-2.~~ ~~3. Thirty square feet (2.8 m^2) per occupant for non-ambulatory occupancies in Group I-2.~~	**1026.4.1 Capacity.** The capacity of the refuge area shall be computed based on a net floor area allowance of 3 square feet (0.2787 m^2) for each occupant to be accommodated therein. Where the horizontal exit also forms a smoke compartment, the capacity of the refuge area for Group I-1, I-2 and I-3 occupancies and Group B ambulatory care facilities shall comply with Sections 407.5.3m 408.6.2, 420.6.1 and 422.3.2 of the *International Building Code* as applicable.	This change relocated the exceptions into the body of the code and refers the user to the applicable sections in the IBC where the specific dimensions are found.
	1026.5 Standpipes. Standpipes and standpipe hose connections shall be provided where required by Sections 905.3 and 905.4	New section added but the requirement is not new.
1027.5 Location. *Exterior exit stairways* and *ramps* shall have a minimum fire separation distance of 10 feet (3048 mm) measured at right angles from the exterior edge of the stairway or ramps, including landings, to: 1. Adjacent lot lines. 2. Other portions of the building. 3. Other buildings on the same lot unless the adjacent building *exterior walls* and openings are protected in accordance with Section 705 of the *international Building Code* based on fire separation distance. For the purposes of this section, other portions of the building shall be treated as separate buildings.	**1027.5 Location.** *Exterior exit stairways* and *ramps* shall have a minimum fire separation distance of 10 feet (3048 mm) measured at right angles from the exterior edge of the stairway or ramps, including landings, to: 1. Adjacent lot lines. 2. Other portions of the building. 3. Other buildings on the same lot unless the adjacent building *exterior walls* and openings are protected in accordance with Section 705 of the *international Building Code* based on fire separation distance. For the purposes of this section, other portions of the building shall be treated as separate buildings. **Exception:** Exterior exit stairways and ramps serving individual dwelling units of Group R-3 shall have a fire separation distance of not less than 5 feet (1524 mm).	Added the exception that allows Group R-3 occupancies to have a separation distance of not less than 5 feet.
1027.6 Exterior exit stairway and ramp protection.	**1027.6 Exterior exit stairway and ramp protection.** **Exceptions:** 4. In Group R-3 occupancies not more than four stories in height, exterior exit stairways and ramps serving individual dwelling units are not required to be separated from the interior of the building where the exterior exit stairway or ramp discharges directly to grade.	Added a fourth exceptions to the separation requirements.

1028.4.1 Width or capacity. The required capacity of *egress courts* shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm), except as specified herein. *Egress courts* serving Group R-3 and U occupancies shall be not less than 36 inches (914 mm) in width. The required capacity and width of *egress courts* shall be unobstructed to a height of 7 feet (2134 mm). **Exception:** Encroachments complying with Section 1005.7. ~~Where an *egress court* exceeds the minimum required width and the width of such *egress court* is then reduced along the path of exit travel, the reduction in width shall be gradual. The transition in width shall be affected by a guard not less than 36 inches (914 mm) in height and shall not create an angle of more than 30 degrees (0.52 rad) with respect to the axis of the *egress court* along the path of egress travel. The width of the *egress court* shall not be less than the required capacity.~~	**1028.4.1 Width or capacity.** The required capacity of *egress courts* shall be determined as specified in Section 1005.1, but the minimum width shall be not less than 44 inches (1118 mm), except as specified herein. *Egress courts* serving Group R-3 and U occupancies shall be not less than 36 inches (914 mm) in width. The required capacity and width of *egress courts* shall be unobstructed to a height of 7 feet (2134 mm). The width of the *egress court* shall be not less than the required capacity. **Exception:** Encroachments complying with Section 1005.7.	Added a sentence and eliminated the paragraph which followed the exception.
1029.1.1.1 Spaces under grandstands and bleachers. Spaces under *grandstands* or *bleachers* shall be separated by *fire barriers* complying with Section 707 of the *International Building Code* and *horizontal assemblies* complying with Section 711 of the *International Building Code* with not less than 1-hour fire-resistance-rated construction.	**1029.1.1.1 Spaces under grandstands and bleachers.** Spaces under *grandstands* or *bleachers* shall be separated by *fire barriers* complying with Section 707 of the *International Building Code* and *horizontal assemblies* complying with Section 711 of the *International Building Code* with not less than 1-hour fire-resistance-rated construction. **Exceptions:** 1. Ticket booths less than 100 square feet (9 m^2) in area. 2. Toilet rooms. 3. Other accessory use areas 1,000 square feet (93 m^2) or less in area and equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.	Added three exceptions to the separation requirement for spaces under grandstands and bleachers.
1029.6 Capacity of aisle for assembly. The required capacity of *aisles* shall be not less than that determined in accordance with Section 1029.6.1 where *smoke-protected assembly seating* is not provided, with Section 1029.6.2 or 1029.6.3 where *smoke-protected assembly seating* is provided.	**1029.6 Capacity of aisle for assembly.** The required capacity of *aisles* shall be not less than that determined in accordance with Section 1029.6.1 where *smoke-protected assembly seating* is not provided, with Section 1029.6.2 where *smoke-protected assembly seating* is provided, and with Section 1029.6.3 where open-air assembly seating is provided.	Language change to coincide with the new term “open-air assembly seating”.

1029.6.3 ~~Outdoor smoke-protected~~ assembly seating.	**1029.6.3 Open-air assembly seating.**	Terminology change, same intent.
1029.7 Travel distance. ~~*Exits* and *aisles* shall be so located that the travel distance to an exit door shall be not greater than 200 feet (60 960 mm) measured along the line of travel in nonsprinklered buildings. Travel distance shall be not more than 250 feet (76 200 mm) in sprinklered buildings. Where *aisles* are provided for seating~~, the distance shall be measured along the *aisles* and *aisle accessways* without travel over or on the seats. **Exceptions:** 1. *Smoke-protected assembly seating:* The travel distance from each seat to the nearest entrance to a vomitory or concourse shall not exceed 200 feet (60 960 mm). The travel distance from the entrance to the vomitory or concourse to a *stairway, ramp* or walk on the exterior of the building shall not exceed 200 feet (60 960 mm). 2. Open-air seating: The travel distance from each seat to the building exterior shall not exceed 400 feet (122 m). The travel distance shall not be limited in facilities of Type I or II construction.	**1029.7 Travel distance.** The *exit access* travel distance shall comply with Section 1017. Where *aisles* are provided for seating, the distance shall be measured along the *aisles* and *aisle accessways* without travel over or on the seats. **Exceptions:** 1. In facilities with *smoke-protected assembly* seating the total *exit access* travel distance shall be not greater than 400 feet 122 m. That portion of the total permitted *exit access* travel distance from each seat to the nearest entrance to a vomitory or concourse shall not exceed 200 feet (60 960 mm). The portion of the total permitted *exit access* travel distance from the entrance to the vomitory or concourse to one of the following shall not exceed 200 feet (60 960 mm). 1.1. The closest riser of an *exit access stairway.* 1.2. The closest slope of an *exit access ramp.* 1.3. An exit. 2. In facilities with *open-air assembly seating* of Type, III, IV or V construction, the total exit access travel distance to one of the following shall not exceed 400 feet (122 m). 2.1. The closest riser of an *exit access stairway.* 2.2. The closest slope of an *exit access ramp.* 2.3. An exit. 3. In facilities with *open-air assembly seating* of Type I or II construction, the *exit access* travel distance shall not be limited.	The body of the section now refers the user to Section 1017. The numbering and the language in the exceptions have been change for clarity and continuity but the actual requirements remain the same.
1029.10 Transitions.	**1029.10 Transitions.**	Many of the subsections of 1029.10 indicate that changes have been made but the changes are the references to other sections that have been numerically changed. The requirements and dimensions

		remain the same.
	1029.11 Stepped aisles at vomitories. Stepped aisles that change direction at vomitories shall comply with Section 1029.11.1. Transitions between a stepped aisle above a vomitory and a stepped aisle to the side of a vomitory shall comply with Section 1029.11.2 **1029.11.1 Stepped aisles that change direction at vomitories.** Stepped *aisle* treads where the stepped aisle changes direction at a vomitory shall have a depth of not less than 11 inches (280 mm) or the stepped aisle tread depth, whichever is greater. The height of a stepped aisle tread above a transition at a vomitory shall comply with Section 1029.14.2.2. **1029.11.2 Stepped aisle transitions at the top of vomitories.** Transitions between the stepped *aisle* above a vomitory and stepped aisles to the side of a vomitory shall have a depth of not less than 11 inches (280 mm) or the stepped aisle tread depth, whichever is greater.	New Section.
TABLE 1029.~~12~~.2.1 **SMOKE-PROTECTED ASSEMBLY AISLE ACCESSWAYS**	**TABLE 1029.13.2.1** **SMOKE-PROTECTED OR OPEN-AIR ASSEMBLY AISLE ACCESSWAYS**	The section number was changed and the words "or Open-air" were added to the title of the table. The requirements remain the same.
1029.14 Seat stability.	**1029.15 Seat stability**	Existing Statewide amendment. Numbering change, Recommendation: Keep the amendment.
1010 EMERGENCY ESCAPE AND RESCUE **1030.1 General.** ~~In addition to the *means of egress* required by this chapter, provisions shall be made for *emergency escape and rescue openings* in Group R-2 occupancies in accordance with Tables 1006.3.2(1) and 1006.3.2(2) and Group R-3 occupancies. Basements and sleeping rooms below the fourth story above *grade plane* shall have at least one exterior *emergency escape and rescue opening* in~~	**1010 EMERGENCY ESCAPE AND RESCUE** **1030.1 General.** In addition to the *means of egress* required by this chapter, *emergency escape and rescue openings* shall be provided in the following occupancies: 1. Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables 1006.3.3(1) and 1006.3.3(2). 2. Group R-3 and R-4 occupancies.	New language for clarity and broke out the items and numbered them and added Group R-4 to the list. The requirements remain the same. Added a new exception.

~~accordance with this section. Where basements contain one or more sleeping rooms, *emergency escape and rescue openings* shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a *public way* or to a *yard* or *court* that opens to a *public way.*~~ ~~**Exceptions:**~~ 1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have *emergency escape and rescue openings.* 2. *Emergency escape and rescue openings* are not required from basements or sleeping rooms that have an *exit* door or *exit access* door that opens directly into a *public way* or to a *yard, court* or exterior exit balcony that opens to a *public way.* 3. Basements without *habitable spaces* and having not more than 200 square feet 18.6 m^2) in floor area shall not be required to have *emergency escape and rescue openings.*	*Basements* and sleeping rooms below the fourth story above *grade plane* shall have not fewer than one exterior *emergency escape and rescue opening* in accordance with this section. Where *basements* contain one or more sleeping rooms, *emergency escape and rescue openings* shall be required in each sleeping room, but shall not be required in adjoining areas of the *basement.* Such openings shall open directly into a *public way* or to a *yard* or *court* that opens to a *public way.* **Exceptions:** 1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have *emergency escape and rescue openings.* 2. *Emergency escape and rescue openings* are not required from basements or sleeping rooms that have an *exit* door or *exit access* door that opens directly into a *public way* or to a *yard, court* or exterior exit balcony that opens to a *public way.* 3. Basements without *habitable spaces* and having not more than 200 square feet 18.6 m^2) in floor area shall not be required to have *emergency escape and rescue openings.* 4. Within individual dwelling and sleeping units in Groups R-2 and R-3, where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, sleeping rooms in *basements* shall not be required to have emergency escape and rescue openings provided that eh *basement* has one of the following: 4.1 One means of egress and one emergency escape and rescue opening. 4.2 Two means of egress.	
	1030.1.1 Operational constraints and opening control devices. Emergency escape and rescue openings shall be operational from inside the room without the use of keys or tools. Window-opening control devices complying with ASTM F2090 shall be permitted for use on windows serving as a required emergency escape and rescue opening.	Subsection relocated for better continuity.

	1030.5 Bars, grilles, covers and screens. Bars, grilles, covers, screens or similar devices are permitted to be placed over *emergency escape and rescue openings,* bulkhead enclosures, or window wells that serve such openings, provided that he minimum net clear opening size complies with Sections 1030.1.1 through 1030.4.2 and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, covers, screens or similar devices are installed in existing buildings, they shall not reduce the net clear opening of the *emergency escape and rescue opening and smoke alarms* shall be installed in accordance with Section 907.2.10 regardless of the valuation of the alteration.	New section that consists of requirements that were found in other subsections of this chapter. It provides clarity and more continuity.
1031.2.1 Security devices and egress locks.	**1031.2.1 Security devices and egress locks.** Security devices affecting *means of egress* shall be subject to approval of the *fire code official.* Security devices and locking arrangements in the *means of egress* that restrict, control, or delay egress shall be installed and maintained as required by this chapter.	Existing Statewide Amendment. On line three, after the word "fire" add the words "and building".
	1031.2.2 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met: 1. The door shall be capable of being unlocked from outside the room with a key or other approved means. 2. The door shall be openable from within the room in accordance with Section 1010.1.9. 3. Modifications shall not be made to existing listed panic hardware, fire door hardware or door closers. 4. Modifications to fire door assemblies shall be in accordance with NFPA 80.	New Section.
1031.4 Exit signs. Exit signs shall be installed and maintained in accordance with Section 1013. Decorations, furnishings, equipment or adjacent signage that impairs the visibility of exit signs, creates confusion or prevents identification of the *exit* shall not be allowed.	**1031.4 Exit signs.** Exit signs shall be installed and maintained in accordance with the building code that was in effect at the time of construction and the applicable provisions in Section 1104. Decorations, furnishings, equipment or adjacent signage that impairs the visibility of	Added language that makes it clear that existing buildings are not required to meet the provisions of the current code.

	exit signs, crates confusion or prevents identification of the *exit* shall not be allowed.	
	1031.10 Emergency lighting equipment inspection and testing. Emergency lighting shall be maintained in accordance with Section 108 and shall be inspected and tested in accordance with Sections 1031.10.1 and 1031.10.2	New section.
	1031.10.1 Activation test. Emergency lighting equipment shall be tested monthly for a duration of not less than 30 seconds. The test shall be performed manually or by an automated self-testing and self-diagnostic routine. Where testing is performed by self-testing and self-diagnostics, a visual inspection of the emergency lighting equipment shall be conducted monthly to identify any equipment displaying a trouble indicator or that has become damaged or otherwise impaired.	New subsection.
	1031.10.2 Power test. Battery-powered emergency lighting equipment shall be tested annually by operating the equipment on battery power for not less than 90 minutes.	New subsection.
CHAPTER 11 **CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS**		
1103.1 Required Construction. Exceptions: 1. Where a change in fire-resistance rating has been approved in accordance with Section 803.6 of the *International Existing Building Code.*	**1103.1 Required Construction**. Exception: Exceptions: 1. Where a change in fire-resistance rating has been approved in accordance with Section 501.2 or 802.6 of the *International Existing Building Code.*	Exceptions: Reference to the Building Code Changed
	1103.2 Emergency responder radio coverage in existing buildings. Existing buildings other than Group R-3, that do not have approved radio coverage for	In IFC, Chapter 11, **Section 1103.2 Emergency Responder Radio Coverage in Existing Buildings,** is amended as follows: On line two after the title, the following is added: "When required by the fire code official". Eliminated R3 from requirement

		Clarifying Language
	1103.3 Existing elevators. In other than Group R-3,	Eliminated R3 from requirement.
	1103.3.1 Elevators, escalators and moving walks. Existing elevators, escalators and moving walks in Group I-2, Condition 2 occupancies and serving ambulatory care facilities shall comply with ASME A17.3.	Adds Ambulatory care facilities to the requirement.
	1103.5.1 Group A-2. Where alcoholic beverages are consumed in a Group A-2 occupancy having an occupant load of 300 or more, the fire area containing the Group A-2 occupancy shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1.INSTALLED].	Requires automatic sprinkler system in existing A-2 buildings where: 1. Alcohol is consumed 2. Occupant load over 300 3. State amendment: where indoor pyrotechnics are used.
1103.5.3 Group I-2 Condition 2. In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2 Condition 2 occupancy shall be equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1. The *automatic sprinkler system* shall be installed as established by the adopting ordinance.	**1103.5.3 Group I-2 Condition 2**.The *automatic sprinkler system* shall be installed as established by the adopting ordinance[DATE BY WHICH SPRINKLER SYSTEM MUST BE INSTALLED	
~~1103.6 Standpipes. Existing structures shall be equipped with standpipes installed in accordance with Section 905 where required in Sections 1103.6.1 and 1103.6.2. The fire code official is authorized to approve the installation of manual standpipe systems to achieve compliance with this section where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.~~	~~1103.6 Standpipes. Existing structures shall be equipped with standpipes installed in accordance with Section 905 where required in Sections 1103.6.1 and 1103.6.2. The fire code official is authorized to approve the installation of manual standpipe systems to achieve compliance with this section where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.~~	**1103.6** is deleted in State Amendment
		1103.7, Fire Alarm Systems. The following shall have an approved fire alarm system installed in accordance with Utah Administrative Code Section R710-4:

		1. a building with an occupant load of 300 or more persons that is owned or operated by the state; 2. a building with an occupant load of 300 or more persons that is owned or operated by an institution of higher education; and 3. a building with an occupant load of 50 or more persons that is owned or operated by a school district, private school, or charter school. Exception: the requirements of this section do not apply to a building designated as an Institutional Group I (as defined in IFC 202) occupancy." 1103.7.1 Group E, 1103.7.2 Group I-1, 1103.7.3 Group I-2, 1103.7.4 Group I-3, 1103.7.5 Group R-1, 1103.7.5.1 Group R-1 Hotel and Motel Manual Fire Alarm System, 1103.7.5.1.1 Group R-1 Hotel and Motel Automatic Smoke Detection System, 1103.7.5.2 Group R-1 Boarding and Rooming Houses Manual Fire Alarm System, 1103.7.5.2.1 Group R-1 Boarding and Rooming Houses Automatic Smoke Detection System, 1103.7.6 Group R-2 and 1103.7.7 Group R-4, are deleted.
1103.9 Carbon monoxide alarms. ~~Existing Group I-1, I-2, I-4 and R occupancies shall be equipped with carbon monoxide alarms in accordance with Section 915, except that the carbon monoxide alarms shall be allowed to be solely battery operated~~	**1103.9 Carbon monoxide alarms**. Carbon monoxide alarms shall be installed in existing dwelling units and sleeping units where those units include any of the conditions identified in Sections 915.1.2 through 915.1.6 The carbon	1103.9 Carbon Monoxide Detection. Existing Groups E, I-1, I-2, I-4, and R occupancies shall be equipped with carbon monoxide detection

	monoxide alarms shall be installed in the locations specified in Section 915.2 and the installation shall be in accordance with Section 915.4. Exceptions: 1. Carbon monoxide alarms are permitted to be solely battery operated where the code that was in effect at the time of construction did not require carbon monoxide detectors to be provided. 2. Carbon monoxide alarms are permitted to be solely battery operated in dwelling units that are not served from a commercial power source. 3. A carbon monoxide detection system in accordance with Section 915.5 shall be an acceptable alternative to carbon monoxide alarms.	in accordance with Section 915."
1104.5 Illumination emergency power. ~~9. Group R-4.~~ ~~Exception: Where each sleeping unit has direct access to the outside of the building at ground level.~~		Automatic emergency lighting is no longer required in existing R-4 occupancies.
1104.5.1 Emergency power duration and installation. Emergency power for *means of egress* illumination shall be provided in accordance with Section ~~604~~. In other than Group I-2, emergency power shall be provided for not less than 60 minutes for systems requiring emergency power. ~~In Group I-2, essential electrical systems shall comply with Sections 1105.5.1 and 1105.5.2.~~	**1104.5.1 Emergency power duration and installation**. Emergency power for *means of egress* illumination shall be provided in accordance with Section 1203. In other than Group I-2, emergency power shall be provided for not less than 60 minutes for systems requiring emergency power.	Eliminated Existing I-2 occupancies from 90 minutes of emergency power and meeting the requirements of NFPA 99.
1104.7 Size of doors. ~~In ambulatory care facilities, doors serving as means of egress from patient treatment rooms or patient sleeping rooms shall provide a clear width of not less than 32 inches (813 mm). In Group I-2, means of egress doors where used for the movement of beds shall provide a clear width not less than 411 /2 inches (1054 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal.~~ Exceptions: 1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in occupancies in Groups~~s~~ R-2 and R-3. 2. Door openings to storage closets less than 10 square feet (0.93 m2) in area shall	**1104.7 Size of doors**. Exceptions: 1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in occupancies in Group R-2 and R-3 units that are not required to be an Accessible Type A unit or Type B unit. 2. Door openings to storage closets less than 10 square feet (0.93 m2) in area shall 4. The maximum width of door leaves in power-operated doors that comply with Section 1010.1.4.2 shall not be limited. 5. Door openings within a *dwelling unit* shall have a minimum clear opening height of 78 inches (1981 mm). 6. In dwelling and sleeping units that are not required to be Accessible units, Type A units or Type B units, exterior door	Moves Strike-outs to the list of Exceptions. List of Exceptions reworded

~~4. Door openings within a *dwelling unit* shall be not less than 78 inches (1981 mm) in height.~~ ~~5. Exterior door openings in *dwelling units*, other than the required *exit* door, shall be not less than 76 inches (1930 mm) in height.~~ ~~6. *Exit access* doors serving a room not larger than 70 square feet (6.5 m2) shall be not less than 24 inches (610 mm) in door width.~~ ~~7. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.~~	openings, other than the required *exit* door, shall have a minimum clear opening height of 76 inches (1930 mm). 7. *Exit access* doors serving a room not larger than 70 square feet (6.5 m2) shall have a minimum door leaf width of 24 inches (610 mm). 8. The minimum clear opening width shall not apply to doors for non- accessible showers or sauna compartments. 9. The minimum clear opening width shall not apply to the doors for Non-accessible toilet stalls. 10. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor. 1104.7.1 Group I-2. In Group I-2 occupancies, means of egress doors where used for the movement of beds shall provide a minimum clear opening width of 411/2 inches (1054 mm). Doors serving as means of egress doors and not used for movement of beds shall provide a minimum clear opening width of 32 inches (813 mm). 1104.7.2 Ambulatory care. In ambulatory care facilities, doors serving as means of egress from patient treatment rooms shall provide a minimum clear opening width of 32 inches (813 mm).	without substinative changes.
1104.16.2 ~~Protection of openings~~ ~~Exception: In buildings equipped throughout with an *approved automatic sprinkler system*, opening protection is not required~~.	**1104.16.2** Exception: Opening protectives shall not be required in buildings equipped throughout with an *approved automatic sprinkler system.*	Language change only
1104.18 Dead end ~~corridors~~. Where more than one exit or exit access doorway is required, the *exit access* shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18. ~~In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall be in accordance with Section 1105.5.6.~~ Exception: A dead-end ~~passageway or~~ *corridor* shall not be limited in length where the length of the dead-end ~~passageway or~~ *corridor* is less than 2.5 times the least width of the dead-end ~~passageway or~~ *corridor*.	**1104.18 Dead ends** Where more than one exit or exit access doorway is required, the *exit access* shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18. Exceptions: 1. A dead-end *corridor* shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*. 2. In existing buildings, existing dead-end corridors shall be permitted to comply with lengths established in Section 805.6 of the International Existing Building Code. Any newly constructed dead-end corridors within an existing building	

	shall be limited to the lengths allowed by the International Building Code.	
TABLE 1104.18 COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy) a. ~~20 feet for common path serving 50 or more persons; 75 feet for common path serving less than 50 persons.~~ ~~d~~. See the *International Building Code* for special requirements on spacing of doors in aircraft hangars. ~~e~~. ~~In Group I-2,~~ separation of exit access doors within a care recipient sleeping room, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.5.~~7~~. ~~f~~. I~~n Group I-2,~~ in smoke compartments containing care recipient sleeping rooms and treatment rooms, dead-end corridors shall comply with Section 1105.5.~~6~~. ~~g~~. In Group I-2, Condition 2, care recipient sleeping rooms, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.6. ~~h~~. Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100	**TABLE 1104.18** COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy) a. c. See Section 412.7 of the *International Building Code* for special requirements on spacing of doors in aircraft hangars. d. Separation of exit access doors within a care recipient sleeping room, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.5.6. e. In smoke compartments containing care recipient sleeping rooms and treatment rooms, dead-end corridors shall comply with Section 1105.5.5. f. In Group I-2, Condition 2, care recipient sleeping rooms, or any suite that includes care recipient sleeping rooms, shall comply with Section 1105.6. g. Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100 feet. h. Where the building, or portion of the building, is limited to one story and the height from the finished floor to the bottom of the ceiling or roof slab or deck is 24 feet or more, the exit access travel distance is increased to 400 feet. i. For covered and open malls, the exit access travel distance is increased to 400 feet.	Takes I-2 occupancies only out of c. and d. and makes it applicable to all occupancies that have care recipients sleeping rooms. h. One story buildings with a floor to ceiling deck is more than 24 feet, the exit travel distance can be increased to 400 ft. i. Covered and open malls exit travel distance is increased to 400 ft.
	1104.23 Minimum aisle width. 4. Forty-two inches (1067 mm) for level or ramped *aisles* having seating on both sides. Exceptions: 1. Thirty-six inches (914 mm) where the *aisle* serves fewer than 50 seats. 2. Thirty inches (760 mm) where the aisle serves fewer than 15 seats and does not serve as part of an accessible route. 5. Thirty-six inches (914 mm) for level or ramped *aisles*	Exception to minimum aisle width of 30” where the aisle serves less than 15 people and not part of an accessible route.

	having seating on only one side. Exception: Thirty inches (760 mm) for catchment areas serving not more than 60 seats and not serving as part of an accessible route. 6. In Group I-2, where *aisles* are used for movement of	
	1105.5.2 Fire-resistance rating. Unless required elsewhere in this code, corridor walls are not required to have a fire resistance rating. Corridor walls that were installed as fire-resistance-rated assemblies in accordance with the applicable codes under which the building was constructed, remodeled or altered shall be maintained unless modified in accordance with the International Existing Building Code.	Corridor walls built as rated assemblies shall be maintained.
1105.56 Means of egress. In addition to the *means of egress* requirements in Section 1104, Group I-2 facilities shall meet the means of *egress* requirements in Sections 1105.56.1 through 1105.56.8. ~~1105.5.1 Exit signs and emergency illumination.~~ ~~The power system for exit signs and emergency illumination for the means of egress shall provide power for not less than 90 minutes and consist of storage batteries, unit equipment or an on-site generator.~~ ~~1105.5.2 Emergency power for operational needs.~~ ~~The essential electrical system shall be capable of supplying services in accordance with NFPA 99.~~		Reduces requirement for emergency illumination consistent with 1104.5
	1105.6.2 Group I-2 occupancies. In Group I-2, where a door serves as an opening protective in a fire barrier, smoke barrier or fire wall and where the door is equipped with a hold-open device, such door shall automatically close upon any of the following conditions: 1. Actuation of smoke detectors initiating the hold-open device. 2. Activation of the fire alarm system within the zone. 3. Activation of an automatic sprinkler system within the zone.	Requires doors serving as an opening in a protective fire barrier, smoke barrier or fire wall in I-2 occupancies to close upon activation of: 1. Smoke detectors 2. Fire alarm system within the zone 3. Sprinkler system within the zone.

1105.~~6~~.3 Opening protectives. Openings in smoke barriers shall be protected in accordance with Section 716 of the *International Building Code*. Opening protectives shall have a minimum fire- protection rating of 1/3 hour. Exception: ~~Existing wired glass vision panels in doors shall be permitted to remain.~~ ~~1.~~	**1105.7.3 Opening protectives**. Openings in smoke barriers shall be protected in accordance with Section 716 of the *International Building Code*. Opening protectives shall have a minimum fire- protection rating of 1/3 hour. Exception~~s~~:~~:~~ 1. Existing wired glass vision panels in doors shall be permitted to remain. 2. Existing nonlabeled protection plates shall be permitted to remain.	Exception 1 language change Exception 2 added for protections plates to remain.
~~**1105.8 Group I-2 automatic sprinkler system.**~~ ~~An *automatic sprinkler system* installed in accordance with Section 903.3.1.1 shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the *level of exit discharge*.~~	**1105.9 Group I-2 automatic sprinkler system**. An automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be provided throughout the floor containing the Group I-2 fire area. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, on all floors between the Group I-2 occupancy fire area and the level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.	Language change and adds floors below the level of exit discharge.
1105.~~9~~ Group I-2 automatic fire alarm system. An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2. Exception: Manual fire alarm boxes in patient sleeping areas shall not be required at *exits* if located at all nurses' control stations or other constantly attended staff locations, provided such ~~stations are visible and continuously accessible and that travel distances required in Section 907.5.2.1 are not exceeded~~	1105.10 Group I-2 automatic fire alarm system. An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2. Exception: Manual fire alarm boxes in patient sleeping areas shall not be required at *exits* if located at all nurses' control stations or other constantly attended staff locations, provided such that manual fire alarm boxes are visible, are provided with *ready access,* and travel distances required in Section 907.4.2.1 are not exceeded.	Eliminates nurse's stations from being visible and adds that manual fire alarm boxes are visible and have ready access.
CHAPTER 12 **ENERGY SYSTEMS**		
	The following is the chapter layout: **1201 General** **1202 Definitions** **1203 Emergency and Standby Power Systems** **1204 Solar Photovoltaic Power Systems**	This is a new chapter that is intended to address all systems used to generate or store electrical energy.

	1205 Stationary Fuel Cell Power Systems **1206 Electrical Energy Storage Systems**	
604 Emergency and Standby Power Systems	**1203 Emergency and Standby Power Systems**	Section was moved from Chapter 6 of the 2015 edition.
605.11 Solar photovoltaic power systems.	**1204 Solar Photovoltaic Power Systems**	Section was moved from Chapter 6 of the 2015 edition. Existing Statewide Amendment: IFC, Chapter 6, Section ~~605.11.1.2~~ 1204.2.1, Delete the section title and replace with: "**1204.2.1 Solar photovoltaic systems for Group R-3 and buildings constructed in accordance with IRC**." Section 1204 Solar photovoltaic systems for Group R-3, Exception 1 is deleted, exception 2 is renumbered to 1 and a second exceptions is added as follows: **Exceptions:** ~~1. These requirements shall not apply to structures designed and constructed in accordance with the *International Building Code*~~. 1. These requirements shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal or less. 2. Reduction in pathways and clear access width shall be permitted where shown that a rational approach has been used and that the reductions are

		warranted and approved by the Fire Code Official. **IFC, Chapter ~~6~~ 12, Section ~~605.11.1.3.1, Access~~, 1204.3.1 Perimeter pathways, and 1204.3.2 Interior pathways** is deleted and rewritten as follows: 1204.3.1 Perimeter pathways. There shall be a minimum three foot wide (914 mm) clear perimeter around the edges of the roof. The solar installation shall be designed to provide designated pathways. The pathways shall meet the following requirements: 1. The pathway shall be over areas capable of supporting the live load of the fire fighters accessing the roof. 2. The centerline axis pathways shall be provided in both axes of the roof. Centerline axis pathways shall run where the roof structure is capable of supporting the live load of fire fighters accessing the roof. 3. Smoke and heat vents required by Section 910.2.1 or 910.2.2 of this Code, shall be provided with a clear pathway width of not less than three feet (914 mm) to vents. 4. Access to roof area required by Section 504.3 or 1011.12 of this Code, shall be provided with a clear pathway width of not less than three feet (914 mm) around access opening and at least three

		feet (914 mm) clear pathway to parapet or roof edge. IFC, Chapter ~~6~~ 12, Section ~~605.11.1.3.3~~ 1204.3.3, Smoke ventilation, is deleted and rewritten as follows: ~~605.11.1.3.3~~ 1204.2.2 Smoke ventilation. The solar installation shall be designed to meet the following requirements: 1. Arrays shall be no greater than 150 feet (45 720 mm) by 150 feet (45 720 mm) in distance in either axis in order to create opportunities for fire department smoke ventilation operations. 2. Smoke ventilation options between array sections shall be one of the following: 2.1 A pathway six feet (1829 mm) or greater in widths. 2.2 A three foot (914 mm) or greater in width pathway and bordering roof skylights or smoke and heat vents when required by Section 910.2.1 or Section 910.2.2 of this Code. 2.3 Smoke and heat vents designed for remote operation using devices that can be connected to the vent by mechanical, electrical, or any other suitable means, shall be protected as necessary to remain operable for the design period. Controls for

		remote operation shall be located in a control panel, clearly identified and located in an approved location.
CHAPTERS 13 THROUGH 19 RESERVED		
CHAPTER 20 AVIATION FACILITES		
		Very few language changes that provides clarification – no change in intent.
CHAPTER 21 DRY CLEANING – No changes		
CHAPTER 22 COMBUSTIBLE DUST-PRODUCING OPERATIONS		
	2203.1 Owner responsibility. The owner or operator of a facility with operations that manufacture, process, blend, convey, repackage, generate or handle potentially combustible dust or combustible particulate solids shall be responsible for compliance with the provision of the code and NFPA 652.	New section.
	2203.2 Dust hazard analysis (DHA). The requirements of NFPA 652 apply to all new and existing facilities and operations with combustible dust hazard. Existing facilities shall have a dust hazard analysis (DHA) completed in accordance with Section 7.1.2 of NFPA 652. The fire code official shall be authorized to order a dust hazard analysis to occur sooner if a combustible dust hazard has been identified in a facility that has not previously performed an analysis.	New section.

	2204.1 Specific hazards standards. The industry- or commodity-specific codes and standards listed in Table 2204.1 shall be complied with based on the identification and evaluation of the specific fire and deflagration hazards that exist at a facility.	New section.
CHAPTER 23 **MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES**		
	2303.2.1 Height. The height of the emergency disconnect switch shall be not less than 42 inches (1067mm) and not more than 48 inches (1372 mm) measured vertically, from the floor level to the activating button.	New section
2305.1.1 Delivery vehicle location. Where liquid delivery to above-ground storage tanks is accomplished by positive-pressure operation, tank vehicles shall be positioned not less than 25 feet (7620mm) from tanks receiving Class I liquids and 15 feet (4572 mm) from tanks receiving Class II and IIIA liquids	**2305.1.1 Delivery vehicle location.** Where liquid delivery to above-ground storage tanks is accomplished by positive-pressure operation, tank vehicles shall be positioned not less than 25 feet (7620mm) from tanks receiving Class I liquids and 15 feet (4572 mm) from tanks receiving Class II and IIIA liquids**,** measured from the tank to the nearest unloading valve on the tank vehicle.	
	2306.7.3.1 Additional impact protection. The *fire code official* is authorized to require additional impact protection in accordance with Section 312 where dispensing devices are located in areas near parking areas, multiple dispensing devices, highway on-and off-ramps, and other areas where there is a higher potential for vehicle impacts.	New Section
2309.6 Defueling of hydrogen from fuel storage containers The discharge or defueling of hydrogen from fuel storage tanks for the purpose of maintenance, cylinder certification, calibration of dispensers or other activities shall be in accordance with Sections 2309.6.1 through 2309.6.1.2.4	**2309.6 Repairs, purging, defueling and discharge**. The repair, purging, defueling or discharge activities associated with hydrogen motor fuel supply systems and tanks and the installation of the systems shall be in accordance with Chapters 53 and 58 and NFPA 2. Exception: The fuel supply piping from the fuel storage tank to the engine compartment on a motor vehicle or forklift.	More in depth references. Chapter 53, 58 and NFPA 2.
2309.6.1 Methods of discharge The discharge of hydrogen from motor fuel storage tanks shall be accomplished through a closed transfer system in accordance with Section 2309.6.1.1 or an approved method	**2309.6.1 Documented Procedure.** A documented procedure that explains the logic sequence for defueling or discharging operations shall be maintained on site and shall be provided to the *fire code official* upon	Allows user to define discharging operations with approval of Fire Code Official.

of atmospheric venting in accordance with Section 2309.6.1.2 **2309.6.1.1 Closed transfer system**. Deletes 2309.6.1 thru 2309.6.3 Purging	request. The procedure shall include what actions the operator is required to take in the event of a low-pressure or high-pressure hydrogen release during discharging activity. Schematic design documents shall be maintained on site, illustrating the arrangement of piping, regulators and equipment settings. The schematic shall illustrate the piping and regulator arrangement and shall be shown in spatial relation to the location of the vehicle being defueled and, if applicable, to the compressor, storage vessels and emergency shutdown devices.	
~~2311.5 **Preparation of vehicles for repair**~~ ~~For vehicles powered by gaseous fuels, the fuel shutoff valves shall be closed prior to repairing any portion of the vehicle fuel system. Vehicles powered by gaseous fuels in which the fuel system has been damaged shall be inspected and evaluated for fuel system integrity prior to being brought into the repair garage.~~ ~~The inspection shall include testing of the entire fuel delivery system for leakage~~	2311.5 Vehicles powered by liquefied petroleum gas (LP-gas). Vehicles powered by LP-gas and the servicing of vehicles powered by LP-gas shall be in compliance with this chapter, Chapter 61 of this code and NFPA 58.	Simply lets Chapter 61 and NFPA 58 dictate process.
~~Exceptions:~~ ~~1. Repair garages where work is not performed on the fuel system and is limited to exchange of parts and maintenance not requiring open flame or welding on the CNG, LNG, hydrogen- or other lighter-than air-fueled motor vehicle.~~ ~~2. 2. Repair garages for hydrogen-fueled vehicles where work is not performed on the hydrogen storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the hydrogen fueled vehicle. During the work, the entire hydrogen fuel system shall contain a quantity that is less than 200 cubic feet (5.6 m3) of hydrogen.~~ ~~2311.7.1 Ventilation.~~ ~~Repair garages used for the repair of natural gas or hydrogen fueled vehicles shall be provided with an *approved* mechanical *ventilation system. The mechanical ventilation system shall be in accordance with the International Mechanical Code and Sections 2311.7.1.1 and 2311.7.1.2.*~~ ~~*Exception: Repair garages with natural ventilation when approved.*~~	2311.6 Vehicles powered by liquefied natural gas (LNG) and compressed natural gas (CNG). LNG vehicles and CNG vehicles shall comply with Sections 2311.6.1 and 2311.6.2, as applicable. 2311.6.1 Liquefied natural gas (LNG). LNG vehicle fuel system pressure shall be measured and recorded prior to entering the repair facility. The maximum allowable system pressure shall be not more than 170 psig (1172 kPa). Pressure greater than 170 psig (1172 kPa) shall be reduced by operating the vehicle or limited venting outdoors, as required. 2311.6.2 Compressed natural gas (CNG). CNG vehicle fuel system pressure and the ambient temperature shall be measured and recorded prior to entering the repair facility. Pressure greater than the indicated maximum pressure in accordance with Table 2311.6.2 shall be reduced by defueling the vehicle.	New section

~~*2311.7.1.1 Design.*~~ ~~*Indoor locations shall be ventilated utilizing air supply inlets and exhaust outlets arranged to provide uniform air movement to the extent practical. Inlets shall be uniformly arranged on exterior walls near floor level. Outlets shall be located at the high point of the room in exterior walls or the roof. Ventilation shall be by a continuous mechanical ventilation system or by a mechanical ventilation system activated by a continuously monitoring natural gas detection system or, for hydrogen, a continuously monitoring flammable gas detection system, each activating at a gas concentration of not more than 25percent of the lower flammable limit (LFL). In all cases, the system shall shut down the fueling system in the event of failure of the ventilation system. The ventilation rate shall be not less than 1 cubic foot per minute per 12 cubic feet [0.00139 m³ × (s · m³)] of room volume.*~~ ~~*2311.7.1.2 Operation.*~~ ~~*The mechanical ventilation system shall operate continuously.*~~ ~~*Exceptions:*~~ ~~*1. Mechanical ventilation systems that are interlocked with a gas detection system designed in accordance with Sections 2311.7.2 through 2311.7.2.3.*~~ ~~2. Mechanical ventilation systems in repair garages that are used only for repair of vehicles fueled by liquid fuels or odorized gases, such as CNG, where the ventilation system is electrically interlocked with the lightingcircuit.~~		
2311.6 Fire extinguishers Fire extinguishers shall be provided in accordance with Section 906 2311.6.1 Fire extinguishers Fire extinguishers shall be provided in accordance with Section 906	**2311.7** Fire extinguishers. Fire extinguishers shall be provided in accordance with Section 906.	No substantive change.
~~**2311.8**~~ ~~**Defueling equipment required at vehicle maintenance and repair facilities.**~~ ~~Facilities for repairing hydrogen fuel systems on hydrogen-fueled vehicles shall have equipment to defuel vehicle~~	Repair garages for vehicles fueled by lighter than-air fuels. The room, motor vehicle repair booth or motor vehicle repair space containing repair garage activities for the conversion or repair of vehicles that use CNG, LNG, hydrogen or other lighter-than-air motor fuels shall be in	

~~storage tanks. Where work must be performed on a vehicle's fuel storage tank for the purpose of maintenance, repair or cylinder certification, defueling and purging shall be conducted in accordance with Section 2309.6~~	accordance with Sections 2311.8 through 2311.8.11 in addition to the other requirements of Section 2311. Repair garages for the repair of vehicles that use hydrogen fuel shall be in accordance with this code and NFPA 2. Exceptions: 1. Repair garages where work is conducted only on vehicles that have been defueled and their systems purged with nitrogen gas, and where standard operating procedures to document and maintain the fueling status throughout repair operations are approved. 2. Repair garages where work is not performed on the fuel system and is limited to exchange of parts and maintenance not requiring open flame or welding on the CNG-, LNG-, hydrogen- or other lighter-than-air-fueled motor vehicle. 3. Repair garages for hydrogen-fueled vehicles where work is not performed on the hydrogen storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the hydrogen-fueled vehicle. During the work, the entire hydrogen fuel system shall contain less than 200 cubic feet (5.6 m^3) of hydrogen. 4. Repair garages for natural-gas-fueled vehicles where work is not being performed on the fuel storage tank, and is limited to the exchange of parts and maintenance not requiring open flame or welding on the natural-gas-fueled vehicle. During the work, the natural gas, in the vehicle fuel tank shall contain a pressure of not more than 250 psi at 70ºF (1724 kPa at 21ºC). 2311.8.1 Preparation of vehicles for repair. For vehicles powered by gaseous fuels, the fuel shutoff valves shall be closed prior to repairing any portion of the vehicle fuel system. Vehicles powered by gaseous fuels in which the fuel system has been damaged shall be inspected and evaluated for fuel system integrity prior to being brought into the repair garage. The inspection shall include testing of the entire fuel delivery system for leakage. 2311.8.2 Repair garages used for the repair of hydrogen-fueled vehicles. Repair garages used for the repair of hydrogen-fueled vehicles shall be provided with an *approved* exhaust ventilation system in accordance with the *International Mechanical Code* and Chapter 6 of NFPA 2.	

	2311.8.3 Motor vehicle repair rooms. Motor vehicle repair rooms shall be enclosed with not less than 1-hour fire barriers constructed in accordance with Section 707 of the *International Building Code*, or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both, with 1-hour rated opening protectives. 2311.8.4 Motor vehicle repair booths. The design and construction of motor vehicle repair booths shall be in accordance with Sections 2311.8.4.1 through 2311.8.4.4. 2311.8.9.1 System activation. Activation of the gas detection alarm shall result in all of the following: 1. Initiation of local audible and visual alarms in approved locations. 2. Deactivation of heating systems located in the repair garage. 3. Activation of the mechanical exhaust ventilation system, where the ventilation system is interlocked with gas detection. 2311.8.9.2 Failure of the gas detection system. Failure of the gas detection system shall automatically deactivate the heating system, activate the mechanical exhaust ventilation system where the system is interlocked with the gas detection system and cause a trouble signal to sound in an *approved* location. 2311.8.10 Classified electrical area. Areas within 18 inches (450 mm) of a ceiling within a motor vehicle repair room or motor vehicle repair booth shall be designed and installed in accordance with the requirements for Class I, Division 2 classified locations, as set forth in NFPA 70. Exceptions: 1. Rooms with exhaust ventilation of not less than 1 cubic foot per minute per square foot (0.3 m^3/min/m^2) of floor area, with suction taken from a point within 18 inches (450 mm) of the highest point in the ceiling in repair garages for vehicles that use CNG, liquefied natural gas (LNG) or other lighter-than-air motor fuels. 2. Rooms used for the repair of hydrogen-fueled vehicles that have an approved exhaust ventilation system in accordance with the *International*	

	Mechanical Code and NFPA 2. 2311.8.11 Defueling equipment required at vehicle maintenance and repair facilities. Facilities for repairing or replacing hydrogen fuel tanks on hydrogen-fueled vehicles shall have equipment to defuel vehicle storage tanks. Where work must be performed on a vehicle's fuel storage tank for the purpose of maintenance, repair or cylinder certification, defueling and purging shall be conducted in accordance with Section 2309.6 and NFPA 2.	
CHAPTER 24 **FLAMMABLE FINISHES**		
2403.2.1.3 Areas adjacent to spray booths. Electrical wiring and equipment located outside of, but within ~~**5 feet (1524 mm) horizontally and**~~ 3 feet (914 mm) ~~**vertically**~~ of openings in a spray booth or a spray room, shall be *approved* for Class I, Division 2 or Class II, Division 2 hazardous locations, whichever is applicable	**2403.2.1.3 Areas adjacent to spray booths.** Electrical wiring and equipment located outside of, but within 3 feet (914 mm) of openings in a spray booth or a spray room, shall be *approved* for Class I, Division 2 or Class II, Division 2 hazardous locations, whichever is applicable	Reduces horizontal from 5 to 3 ft.
2404.2 Location of spray-finishing operations. Spray-finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 and separated vertically and horizontally in accordance with the *International Building Code*. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth or spraying space *approved* for such use.	**2404.2 Location of spray-finishing operations.** Spray-finishing operations conducted in buildings used for Group A, E, I or R occupancies shall be located in a spray room protected with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 and separated vertically and horizontally from **the remainder of the building by *fire barrier* walls and horizontal assemblies with not less than a 1-hour *fire-resistance rating*** in accordance with the *International Building Code*. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth or **limited** spraying space *approved* for such use.	Clarification
	CHAPTER 25 **FRUIT AND CROP RIPENING –**No changes	
	CHAPTER 26 **FUMIGATION AND INSECTICIDAL FOGGING** No changes	

	CHAPTER 27 **SEMICONDUCTOR FABRICATION FACILITIES**	
		Limited language changes for clarity, did not change the intent.
	CHAPTER 28 **LUMBER YARDS AND AGRO-INDUSTRIAL, SOLID BIOMASS AND WOODWORKING FACILITES**	
	2810.1 General. The outside storage of wood pallets and wood composite pallets on the same site as a pallet manufacturing or recycling facility shall comply with Sections 2810.2 through 2810.11. 2810.2 Site plan. Each site shall maintain a current site plan that includes a general description of the property, the boundaries of the lot, the size and location of buildings, and all of the following: 1. Utilities. 2. Type of construction and presence of sprinkler protection for other buildings on the site. 3. Water supply sources for fire-fighting purposes. 4. Location of hazardous material storage areas. 5. Location of pallet storage. 6. Equipment protected with a dust collection system. 7. Fire apparatus access roads. 8. Designated smoking areas. 9. Location of fire alarm control panels. **2810.3 Fire prevention plan**. The owner or owner's authorized representative shall prepare an approved fire prevention plan that includes all of the following: 1. Frequency of walk-through inspections to verify compliance with the plan. 2. Hot work permit program in accordance with Chapter 35.	New section

	3. Preventive maintenance program for equipment associated with pallet activities. 4. Inspection, testing and maintenance of fire protection systems in accordance with Chapter 9. **2810.4 Fire safety and emergency evacuation plan**. The owner or owner's authorized representative shall prepare and train employees in an approved fire safety and emergency evacuation plan in accordance with Chapter 4. **2810.5 Security management plan**. The owner or owner's authorized representative shall prepare a security management plan based on a security risk assessment and shall make the plan and assessment available to the fire code official upon request. **2810.6 Clearance to property line**. Stacks of pallets shall not be stored within 0.75 times the stack height or 8 feet (2438 mm) of the property line, whichever is greater, or shall comply with Section 2810.11. **2810.7 Clearance to important buildings**. Stacks of pallets shall not be stored within 0.75 times the stack height of any important building on site, or shall comply with Section 2810.11. 2810.8 Height. Pallet stacks shall not exceed 20 feet (6096 mm) in height. **2810.9 Fire flow.** Fire-flow requirements for the site shall be determined by the fire code official. **2810.10 Portable fire extinguishers**. Portable fire extinguishers shall be provided within 75 feet (22 860 mm) of any pallet stack. **2810.11 Alternative approach**. Where approved by the fire code official, pallet stacks located closer to a property line or structure than as required by Sections 2810.6 and 2810.7 shall be provided with additional fire protection including, but not limited to, the following: 1. The storage yard areas and materials-handling equipment selection, design, and arrangement are based on an approved risk assessment. 2. Automatic fire detection that transmits an alarm to a supervising station in accordance with NFPA 72.	

	3. Fire apparatus access roads around all storage areas.	
CHAPTER 29 **MANUFACTURE OF ORGANIC COATINGS**		
		Limited terminology change, no change in intent.
CHAPTER 30 **INDUSTRIAL OVENS –** No Changes		
CHAPTER 31 **TENTS, TEMPORARY SPECIAL EVENT STRUCTURES AND OTHER MEMBRANE STRUCTURES**		
3101.1 Scope. Tents, temporary stage canopies and membrane structures shall comply with this chapter. The provisions of Section 3103 are applicable only to temporary tents and membrane structures. The provisions of Section 3104 are applicable to temporary and permanent tents and membrane structures. Other temporary structures shall comply with the *International Building Code*.	3101.1 Scope. Tents, temporary special event structures and membrane structures shall comply with this chapter. The provisions of Section 3103 are applicable only to temporary tents and membrane structures. The provisions of Sections 3104 and 3106 are applicable to temporary and permanent tents and membrane structures. The provisions of Section 3105 are applicable to temporary special event structures. The provisions of Section 3106 are applicable to outdoor assembly events. Other temporary structures shall comply with the *International Building Code*.	Title change. Adds safety requirements for outdoor assemblies including stages and other events. Comes as a result of disasters at some events. Conforms with mass gathering requirements of the health department.
	3103.3 Outdoor assembly event. For the purposes of this chapter, an outdoor assembly event shall include a circus, carnival, tent show, theater, skating rink, dance hall or other place of assembly in or under which persons gather for any purpose.	
	3103.3.1 Special amusement building. Tents and other membrane structures erected as a special amusement building shall be equipped with an automatic sprinkler system in accordance with Section 411.3 of the International Building Code.	New section

	3103.6 Construction documents. A detailed site and floor plan for tents or membrane structures with an *occupant load* of 50 or more shall be provided with each application for approval. The tent or membrane structure floor plan shall indicate details of the *means of egress* facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment. The construction documents shall include an analysis of structural stability.	
3103.9 ~~A~~nchorage required. Tents or membrane structures and their appurtenances shall be ~~adequately roped, braced~~ and ~~anchored~~ to withstand the elements of weather and prevent ~~against~~ collapsing. Documentation of structural stability shall be furnished to the *fire code official* ~~on request~~.	**3103.9 Structural stability and anchorage required**. Tents or membrane structures and their appurtenances shall be designed and installed to withstand the elements of weather and prevent collapsing. Documentation of structural stability shall be furnished to the *fire code official*.	Minor language changes.
3103.9.1 Tents and membrane structures ~~exceeding one~~ story. Tents and membrane structures exceeding one story shall be designed and constructed to comply with ~~Chapter 16~~ of the *International Building Code*.	**3103.9.2 Tents and membrane structures greater than 7,500 square feet.** Tents and membrane structures greater than 7,500 square feet (697 m^2) shall be designed and constructed to comply with Sections 1606 through 1609 of the International Building Code.	New language
	3103.9.3 Tents and membrane structures with an occupant load greater than 1,000. Tents and membrane structures with an occupant capacity greater than 1,000 persons shall be designed and constructed to comply with Sections 1606 through 1609 of the International Building Code.	New section
3104.4 Certification. An affidavit or affirmation shall be submitted to the *fire code official* and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit shall attest to all of the following information relative to the flame propagation performance criteria of the fabric: 1. Names and address of the *owners* of the tent or air-supported structure. 2. Date the fabric was last treated with flame-retardant solution.		

3. Trade name or kind of chemical used in treatment. 4. Name of person or firm treating the material. 5. Name of testing agency and test standard by which the fabric was tested.		
3104.5 thru 3104.20 Deleted		
	SECTION 3106 **OUTDOOR ASSEMBLY EVENTS** **3106.1 Scope.** Outdoor assembly events shall comply with this section. **3106.2 General.** Outdoor assembly events shall be in accordance with this section and Section 403.12. Temporary structures erected for outdoor assembly events shall comply with this chapter. **3106.2.1 Approval required**. Outdoor assembly events shall be *approved* by the *fire code official*. **3106.2.2 Permits.** An operational permit shall be required as set forth in Section 105.6. 3106.2.3 Access. An *approved* means of fire apparatus access shall be provided. **3106.2.3.1 Fire service features**. Unobstructed access to fire hydrants, drafting sources and other fire protection features shall be maintained at all times. **3106.3 Occupancy and means of egress**. The number and location of emergency egress and escape routes shall be *approved* by the *fire code official*. **3106.3.1 Occupant load.** The *fire code official* shall establish an *occupant load* for the event site.	3106 and 3107 new sections

	3106.3.2 Maintenance of emergency egress and escape routes. Emergency egress and escape routes shall be maintained at all times. **3106.4 Public safety for events**. Outdoor assembly events shall comply with Sections 3106.4.1 through 3106.4.7. **3106.4.1 Public safety plan for gatherings.** A public safety plan shall be prepared where required by Section 403.12.2. The public safety plan shall be submitted to the *fire code official* with the application for an operational permit as required by Section 3106.2.2. **3106.4.2 Weather monitoring person**. Where required by the *fire code official*, the event operator or agent shall designate one qualified individual to continuously monitor local weather reports, forecasts and conditions. Said person shall be responsible for initiating weather related event mitigation activities, ordering the suspension or cancellation of the outdoor assembly event and issuing the evacuation signal in accordance with the *approved* public safety plan. **3106.4.3 Crowd managers**. Where events involve a gathering of more than 1,000 people, trained crowd managers shall be provided in accordance with Section 403.12.3. **3106.4.4 Portable fire extinguishers**. *Approved* portable fire extinguishers complying with Section 906 shall be provided and placed in locations *approved* by the *fire code official*. **3106.4.5 Smoking.** Smoking shall be permitted only in designated areas. Other areas shall have *approved* "No Smoking" signs conspicuously posted and maintained in accordance with Section 310.	

	3106.4.6 Combustible vegetation. Combustible vegetation that could create a fire hazard shall be removed from the outdoor assembly event area. **3106.4.7 Combustible refuse**. Combustible refuse shall be kept in noncombustible containers with tight-fitting or self-closing lids. Combustible refuse shall be removed from the event site at regular intervals to prevent an unsafe accumulation within the event site. **3106.5 Cooking appliances or devices**. Outdoor assembly events with concession stands or booths using cooking appliances or devices shall comply with Sections 3106.5.1 through 3106.5.3. **3106.5.1 Separation from tents or structures.** Cooking appliances or devices that produce sparks or grease-laden vapors or flying embers (firebrands) shall not be used within 20 feet (6096 mm) of a tent or temporary structure. Exceptions: 1. Designated cooking tents not occupied by the public when a*pproved* by the *fire code official*. 2. *Tents* or structures where cooking appliances are protected with an automatic fire-extinguishing system in accordance with Section 904.12. **3106.5.2 Protection.** Cooking equipment using combustible oils or solids shall meet the following: 1. A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely. 2. The equipment shall be placed on a noncombustible surface. 3. An *approved* portable fire extinguisher for protection from cooking grease fires shall be provided at a location *approved* by the *fire code official*.	

	3106.5.3 Liquefied petroleum gas (LP-gas). The use of liquefied petroleum gas (LP-gas) shall be in accordance with Chapter 61. **3106.6 Electrical equipment and wiring**. Outdoor assembly events with concession stands or booths using electrical equipment and temporary wiring for electrical power or lighting shall comply with the applicable provisions of NFPA 70 and Sections 3106.6.1 through 3106.6.3. **3106.6.1 Outdoor use.** Electrical equipment and wiring shall be *listed* and *labeled* for outdoor use. **3106.6.2 Generators.** Generators shall be installed not less than 10 feet (3048 mm) from combustible materials, and shall be isolated from the public by physical guard, fence or enclosure installed not less than 3 feet (914 mm) away from the internal combustion power source. **3106.6.3 Portable fire extinguishers**. Each generator shall be provided with an *approved* portable fire extinguisher complying with Section 906. **SECTION 3107** **OPERATIONAL REQUIREMENTS** **3107.1 General.** Temporary and permanent *tents* and *membrane structures* shall comply with this section. **3107.2 Combustible materials**. Hay, straw, shavings or similar combustible materials shall not be located within any tent or membrane structure containing an assembly occupancy, except the materials necessary for the daily feeding and care of animals. Sawdust and shavings utilized for a public performance or exhibit shall not be prohibited provided that the sawdust and	

	shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time. **3107.3 Smoking.** Smoking shall not be permitted in *tents* or *membrane structures*. *Approved* "No Smoking" signs shall be conspicuously posted in accordance with Section 310. **3107.4 Open or exposed flame**. Open flame or other devices emitting flame, fire or heat or any flammable or *combustible liquids*, gas, charcoal or other cooking device or any other unapproved devices shall not be permitted inside or located within 20 feet (6096 mm) of the *tent* or *membrane structures* while open to the public unless *approved* by the *fire code official*. **3107.5 Fireworks.** Fireworks shall not be used within 100 feet (30 480 mm) of *tents* or *membrane structures*. **3107.6 Spot lighting.** Spot or effect lighting shall only be by electricity, and all combustible construction located within 6 feet (1829 mm) of such equipment shall be protected with *approved* noncombustible insulation not less than 9 1/4 inches (235 mm) thick. **3107.7 Safety film.** Motion pictures shall not be displayed in *tents* or *membrane structures* unless the motion picture film is safety film. **3107.8 Clearance**. There shall be a clearance of not less than 3 feet (914 mm) between the fabric envelope and all contents located inside *membrane structures*. **3107.9 Portable fire extinguishers**. *Approved* portable fire extinguishers complying with Section 906 shall be provided and placed in locations as required by *the fire code official*.	

	3107.10 Fire protection equipment. Fire hose lines, water supplies and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the *fire code official*. **3107.11 Occupant load factors**. The *occupant load* allowed in an assembly structure, or portion thereof, shall be determined in accordance with Chapter 10. **3107.12 Heating and cooking equipment**. Heating and cooking equipment shall be in accordance with Sections 3107.12.1 through 3107.12.7. **3107.12.1 Installation**. Heating or cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the *International Mechanical Code* and the *International Fuel Gas Code*, and shall be *approved* by the *fire code official*. **3107.12.2 Venting**. Gas, liquid and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified in the *International Fuel Gas Code* and the *International Mechanical Code*. Such vents shall be equipped with *approved* spark arresters where required. Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent. **3107.12.3 Location.** Cooking and heating equipment shall not be located within 10 feet (3048 mm) of *exits* or combustible materials. **3107.12.4 Operations.** Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other	

	similar devices that do not pose an ignition hazard, shall be *approved*. **3107.12.5 Cooking tents.** Tents with sidewalls or drops where cooking is performed shall be separated from other tents or membrane structures by not less than 20 feet (6096 mm). **3107.12.6 Outdoor cooking**. Outdoor cooking that produces sparks or grease-laden vapors shall not be performed within 20 feet (6096 mm) of a tent or membrane structure. **3107.12.7 Electrical heating and cooking equipment.** Electrical cooking and heating equipment shall comply with NFPA 70. **3107.13 LP-gas.** The storage, handling and use of LP-gas and LP-gas equipment shall be in accordance with Sections 3107.13.1 through 3107.13.3. **3107.13.1 General.** LP-gas equipment such as containers, tanks, piping, hoses, fittings, valves, tubing and other related components shall be *approved* and in accordance with Chapter 61 and with the *International Fuel Gas Code*. **3107.13.2 Location of containers.** LP-gas containers and tanks shall be located outside in accordance with Table 6104.3. Pressure relief devices shall be pointed away from the *tent* or *membrane structure*. **3107.13.3 Protection and security**. Portable LP-gas containers, tanks, piping, valves and fittings that are located outside and are being used to fuel equipment inside a tent or membrane structure shall be adequately protected to prevent tampering, damage by vehicles or other hazards and shall be located in an *approved* location. Portable LP-gas containers shall be secured to	

	prevent unauthorized movement. **3107.14 Flammable and combustible liquids.** The storage of flammable and *combustible liquids* and the use of flammable-liquid fueled equipment shall be in accordance with Sections 3107.14.1 through 3107.14.3. **3107.14.1 Use.** Flammable-liquid-fueled equipment shall not be used in *tents* or *membrane structures*. **3107.14.2 Flammable and combustible liquid storage.** Flammable and *combustible liquids* shall be stored outside in an *approved* manner not less than 50 feet (15 240 mm) from *tents* or *membrane structures*. Storage shall be in accordance with Chapter 57. **3107.14.3 Refueling.** Refueling shall be performed in an *approved* location not less than 20 feet (6096 mm) from *tents* or *membrane structures*. **3107.15 Display of motor vehicles**. Liquid- and gas-fueled vehicles and equipment used for display within *tents* or *membrane structures* shall be in accordance with Sections 3107.15.1 through 3107.15.5.3. **3107.15.1 Batteries**. Batteries shall be disconnected in an appropriate manner. **3107.15.2 Fuel.** Vehicles or equipment shall not be fueled or defueled within the tent or membrane structure. **3107.15.2.1 Quantity limit.** Fuel in the fuel tank shall not exceed one-quarter of the tank capacity or 5 gallons (19 L), whichever is less. **3107.15.2.2 Inspection.** Fuel systems shall be inspected for leaks.	

	3107.15.2.3 Closure. Fuel tank openings shall be locked and sealed to prevent the escape of vapors. **3107.15.3 Location.** The location of vehicles or equipment shall not obstruct *means of egress*. **3107.15.4 Places of assembly.** When a compressed natural gas (CNG) or liquefied petroleum gas (LP-gas) powered vehicle is parked inside a place of assembly, all the following conditions shall be met: 1. The quarter-turn shutoff valve or other shutoff valve on the outlet of the CNG or LP-gas container shall be closed and the engine shall be operated until it stops. Valves shall remain closed while the vehicle is indoors. 2. The hot lead of the battery shall be disconnected. 3. Dual-fuel vehicles equipped to operate on gasoline and CNG or LP-gas shall comply with this section and Sections 3107.15.1 through 3107.15.3 for gasoline-powered vehicles. **3107.15.5 Competitions and demonstrations.** Liquid and gas-fueled vehicles and equipment used for competition or demonstration within a tent or membrane structure shall comply with Sections 3107.15.5.1 through 3107.15.5.3. **3107.15.5.1 Fuel storage.** Fuel for vehicles or equipment shall be stored in *approved* containers in an *approved* location outside of the structure in accordance with Section 3107.14.2. **3107.15.5.2 Fueling**. Refueling shall be performed outside of the structure in accordance with Section 3107.14.3. **3107.15.5.3 Spills.** Fuel spills shall be cleaned up immediately.	

	3107.16 Separation of generators. Generators and other internal combustion power sources shall be separated from tents or membrane structures by not less than 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other *approved* means. **3107.17 Standby personnel.** Where, in the opinion of the *fire code official*, it is essential for public safety in a tent or membrane structure used as a place of assembly or any other use where people congregate, because of the number of persons, or the nature of the performance, exhibition, display, contest or activity, the *owner*, agent or lessee shall employ one or more qualified persons, as required and *approved*, to remain on duty during the times such places are open to the public, or when such activity is being conducted. **3107.17.1 Duties.** Before each performance or the start of such activity, standby personnel shall keep diligent watch for fires during the time such place is open to the public or such activity is being conducted and take prompt measures for extinguishment of fires that occur and assist in the evacuation of the public from the structure. **3107.17.2 Crowd managers**. There shall be trained crowd managers or trained crowd supervisors at a ratio of one crowd manager or supervisor for every 250 occupants, as *approved*. **3107.18 Combustible vegetation**. Combustible vegetation that could create a fire hazard shall be removed from the area occupied by a *tent* or *membrane structure*, and from areas within 30 feet (9144 mm) of such structures. **3107.19 Combustible waste material**. The floor surface inside *tents* or *membrane structures* and the grounds outside and within a 30-foot (9144 mm)	

	perimeter shall be kept free of combustible waste and other combustible materials that could create a fire hazard. Such waste shall be stored in *approved* containers and removed from the premises not less than once a day during the period the structure is occupied by the public.	
CHAPTER 32 **HIGH-PILED COMBUSTIBLE STORAGE**		
	3201.3.1 Approved construction documents. Following approval of the construction documents, a copy of the approved plans shall be maintained on the premises in an approved location.	New section
	3201.3.2 Approved storage layout. A floor plan, of legible size, shall be provided, mounted on a wall and protected from damage. The floor plan shall be mounted in an approved location and show the following: 1. Locations, dimensions and rack layout of high-piled storage areas. 2. Design storage height for each storage area. 3. Types of commodities. 4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement. 5. Aisle dimensions between each storage array. 6. For palletized and solid-piled storage, the maximum pile volume for each storage array. 7. Location and classification of commodities in accordance with Section 3203. 8. Location of required fire department access doors. 9. Location of valves controlling the water supply of ceiling and in-rack sprinklers.	New section
	Commodity Classifications have all been removed and redefined to match NFPA 13.	
	3203.10 Plastic pallets. The commodity classification determined in Section 3203.8 or 3203.9 shall be modified in accordance with Sections 3203.10.1 through 3203.10.3 where plastic pallets are used.	How plastic pallets can change commodity classification.

	Exception: The commodity classification is not modified where any of the following conditions occur: 1. Group A plastic commodities are stored on plastic pallets. 2. Sprinkler protection consists of sprinklers at the ceiling only, using sprinklers with a minimum K-factor of K-16.8 (240). 3. The plastic pallets are *listed* and *labeled* in accordance with Section 3206.4.1.1. **3203.10.1 Unreinforced plastic pallets.** For Class I through IV commodities, where unreinforced polypropylene or unreinforced high-density polyethylene plastic pallets are used, the commodity classification shall be increased one class. To be considered unreinforced plastic pallets, the pallets shall be marked with a permanent symbol indicating the pallet is unreinforced. **3203.10.2 Reinforced plastic pallets**. For Class I through IV commodities, where reinforced polypropylene or reinforced high-density polyethylene plastic pallets are used, the commodity classification shall be increased two classes except for Class IV commodities, which shall be increased to a high-hazard (Group A plastic, cartoned, unexpanded) commodity. **3203.10.3 Other pallets**. For Class I through IV commodities stored on plastic pallets other than polypropylene or high-density polyethylene plastic pallets, the commodity classification shall be increased two classes unless specific testing is conducted by a testing laboratory.	
3206.2 ~~Extent and~~ type of protection. Where required by Table 3206.2, fire detection systems, smoke and heat removal and automatic sprinkler design densities shall ~~extend the lesser of 15 feet (4572 mm) beyond the *high-piled storage area* or to a permanent partition. Where portions of *high-piled storage areas* have different fire protection requirements because of commodity, method of storage or storage height, the fire protection features required by Table 3206.2 within this area~~	**3206.2 Type of protection.** Where required by Table 3206.2, fire detection systems, smoke and heat removal and automatic sprinkler design densities shall **be provided to protect the *high-piled storage area*.**	Allows design based.

~~shall be based on the most restrictive design requirements.~~		
	3206.2.1 Extent of protection. The fire safety features required in Table 3206.2 shall extend to the lesser of 15 feet (4572mm) beyond the high-piled storage area or a full height wall. Where portions of high piled storage areas have different fire protection requirements because of commodity, method of storage or storage height, the fire protection features required by Table 3206.2 within this area shall be based on the most restrictive design requirements.	
3206.3 ~~Separation of~~ high-piled storage areas. ~~*High-piled storage areas* shall be separated from other portions of the building where required by Sections 3206.3.1 through 206.3.2.2.~~ **3206.3.~~1 Separation from other uses.~~** ~~Mixed occupancies shall be separated in accordance with the *International Building Code*.~~	**3206.3 high-piled storage areas.** For the application of Table 3206.2, the size of the *high-piled storage areas* shall be determined in accordance with Sections 3206.3.1 through 3206.3.2.1. **3206.3.1 Size of high-piled storage area.** The size of each *high-piled storage area* shall include the footprint of the actual high-piled storage racks, shelves or piles and the following aisles: 1. Interior aisles within the footprint of the storage area. 2. An aisle around the perimeter of the footprint with a minimum width as required in Section 3206.10.1 or the dimension to a wall or full height wall, whichever is less.	
3206.3.2.1 ~~Aggregate area.~~ ~~The aggregate of all *high-piled storage areas* within a building shall be used for the application of Table 3206.2 unless such areas are separated from each other by 1-hour *fire barriers* constructed in accordance with Section 707 the *International Building Code*. Openings in such *fire barriers* shall be protected by opening protectives having a 1-hour *fire protection rating*.~~	**3206.3.2 Multiple high-piled storage areas.** Where a building contains multiple *high-piled storage areas*, the aggregate of all *high-piled storage areas* shall be used for the application of Table 3206.2 unless the *high-piled storage areas* are separated in accordance with one of the following: *1. High-piled storage areas* separated by fire barriers with a minimum *fire resistance-rating* of 1 hour constructed in accordance with Section 707 of the *International Building Code*. 2. In buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, *high-piled storage areas* separated by 100 feet (30 480 mm) or	

	more. The area providing the separation shall not contain *high-piled combustible storage*. **3206.3.2.1 Multiple class high-piled storage areas.** *High-piled storage areas* classified as Class I through IV not separated from *high-piled storage areas* classified as high hazard shall utilize the aggregate of all *high-piled storage areas* as high hazard for the purposes of the application of Table 3206.2. Multiple class *high-piled storage areas* meeting the separation requirements in Section 3206.3.2 shall be considered as separated. The fire safety features in Table 3206.2 shall be extended beyond the higher-hazard storage area in accordance with Section 3206.2.1. 3206.3.2.2 Multiclass high-piled storage areas. *High-piled storage areas* classified as Class I through IV not separated from *high-piled storage areas* classified as high hazard shall utilize the aggregate of all *high-piled storage areas* as high hazard for the purposes of the application of Table 3206.2. To be considered as separated, 1-hour *fire barriers* shall be constructed in accordance with Section 707 of the *International Building Code*. Openings in such *fire barriers* shall be protected by opening protective having a 1-hour *fire protection rating*. Exception: As provided for in Section 3204.2.	
~~**3206.6.1 Access doors**. Where building access is required by Table 3206.2, fire department access doors shall be provided in accordance with this section. Access doors shall be accessible without the use of a ladder.~~ ~~**3206.6.1.1 Number of doors required**. Not less than one access door shall be provided in each 100 linear feet (30 480 mm), or fraction thereof, of the exterior walls that face required fire apparatus access roads. The required access doors shall be distributed such that the lineal~~ ~~distance between adjacent access doors does not exceed 100 feet (30 480 mm).~~ ~~Exception: The linear distance between adjacent access doors is allowed to exceed 100 feet~~ ~~(30 480 mm) in existing buildings where no change in occupancy is proposed. The number and distribution of~~		

~~access doors in existing buildings shall be approved.~~ ~~**3206.6.1.2 Door size and type.** Access doors shall be not less than 3 feet (914 mm) in width and 6 feet 8 inches (2032 mm) in height. Roll-up doors shall not be used unless *approved*.~~ ~~**3206.6.1.3 Locking devices.** Only *approved* locking~~		
	3206.7 Fire department access doors. .Where fire department access doors are required by Table 3206.2, fire department access doors shall be provided in accordance Sections 3206.7.1 through 3206.7.8. **3206.7.1 Exterior walls without fire department access doors.** Fire department access doors are not required in an exterior wall that does not face a fire apparatus access road provided that all of the following conditions occur: 1. The opposite exterior wall faces a fire apparatus access road. 2. The opposite exterior wall is provided with fire department access doors. 3. The entire interior surface of the exterior wall is less than 150 feet (45 720 mm) away from a fire department access door. 4. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. **3206.7.2 Where located.** Where exterior walls surrounding *high-piled storage areas* face fire apparatus access roads, such walls shall be provided with fire department access doors. **3206.7.3 Access to doors.** Fire department access doors shall be able to be accessed without the use of a ladder. **3206.7.4 Marking on fire department access doors.** Fire department access doors shall be labeled on the exterior side with the following sign or other *approved* sign: FIRE DEPARTMENT ACCESS DOOR DO NOT BLOCK The lettering shall be in a contrasting color to the background. Letters shall have a minimum height of 2 inches (51 mm) with a minimum stroke of 3/ 8 inch (10 mm). **3206.7.5 Number of doors required.** The required fire department access doors shall be	

	distributed such that the lineal distance between adjacent fire department access doors does not exceed 125 feet (38 100 mm) measured center to center. Exception: The linear distance between adjacent access doors shall not exceed 200 feet (60 960 mm) in existing buildings where change in occupancy is not proposed. **3206.7.6 Door size and type.** Fire department access doors shall be not less than 3 feet (914 mm) in width and 6 feet 8 inches (2032 mm) in height. Roll-up doors shall not be considered fire department access doors unless *approved*. **3206.7.7 Locking devices.** Locking devices on fire department access doors shall be *approved*. **3206.7.8 Key box.** Where fire department access doors are required, a key box shall be installed in accordance with Section 506.1. The key box shall contain keys or devices to allow for entry through the fire department access doors. **3206.8 Smoke and heat removal.** Where smoke and heat removal is required by Table 3206.2 it shall be provided in accordance with Section 910.	
3206.~~8~~ Fire department hose connections. Where *exit* passageways are required by the *International Building Code* for egress, a Class I standpipe system shall be provided in accordance with Section 905. ~~Exception: Where aisles are precluded by rack storage systems, alternate methods of access and protection are allowed when a*pproved*.~~		
3206.~~9~~.1.1 Sprinklered buildings. Aisles in sprinklered buildings shall be not less than 44 inches (1118 mm) wide. Aisles shall be not less than 96 inches (2438 mm) wide in *high-piled storage areas* exceeding 2,500 square feet (232 m^2) in area, that are accessible to the public and designated to contain high-hazard commodities.	**3206.10.1.1 Sprinklered buildings.** Aisles in sprinklered buildings shall be not less than 44 inches (1118 mm) wide. Aisles shall be not less than 96 inches (2438 mm) wide in *high-piled storage areas* exceeding 2,500 square feet (232 m^2) in area, that are accessible to the public and designated to contain high-	

~~Exception:~~ Aisles *high-piled storage areas* exceeding 2,500 square feet (232 m2) in area, that are ~~accessible~~ shall be not less than ~~96~~ inches (~~2438~~ mm) wide ~~in areas accessible to the public where mechanical stocking methods are used~~.	hazard commodities. Aisles shall be not less than 96 inches (2438 mm) wide in areas open to the public where mechanical stocking methods are used. Exceptions: 1. Aisles in *high-piled storage areas* exceeding 2,500 square feet (232 m2) in area, that are protected to the public and designated to contain high-hazard commodities, and that are protected by a sprinkler system designed for multiple-row racks of high-hazard commodities, shall be not less than 44 inches (1118 mm) wide. 2. Aisles that are in high-piled storage areas exceeding 2,500 square feet (232 m2) in area, not open to the public and protected by a sprinkler system designed for multiple-row racks, shall be not less than 24 inches (610 mm) wide.	
CHAPTER 33 **FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION** 3310.1 New Statewide Amendment (H.B. 305)		
3304.5 Fire watch. Where required by the *fire code official* for building demolition, or building construction ~~during working hours that is hazardous in nature, qualified personnel shall be provided to serve as an on-site fire watch. Fire watch personnel shall be provided with not less than one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.~~	3304.5 Fire watch. Where required by the *fire code official* or the prefire plan established in accordance with Section 3308.3, a fire watch shall be provided for building demolition and for building construction that is hazardous in nature, such as temporary heating or hot work. **3304.5.1 Fire watch during construction.** Where required by the *fire code official*, a fire watch shall be provided during nonworking hours for new construction that exceeds 40 feet (12 192 mm) in height above the lowest adjacent grade. **3304.5.2 Fire watch personnel**. Trained personnel shall be provided to serve as an on-site fire watch. Fire watch personnel shall be provided with not fewer than one approved means for notification of the fire department, and the sole duty of such personnel shall be to perform constant patrols and watch for the occurrence of fire. The combination of fire watch duties and site security duties is acceptable. Fire watch personnel shall be trained in the use of portable fire extinguishers. **3304.5.3 Fire watch location and records.**	More descriptive

	The fire watch shall include areas specified by the prefire plan established in accordance with Section 3308.3. The fire watch personnel shall keep a record of all time periods of duty, including a log entry each time the site was patrolled and each time a structure under construction was entered and inspected. The records and log entries shall be made available for review by the fire code official upon request.	
	3304.8 Cooking. Cooking shall be prohibited except in approved designated cooking areas. Signs with a minimum letter height of 3 inches (76 mm) and a minimum brush stroke of ½ inch (13mm) shall be posted in conspicuous locations in designated cooking areas and state: **DESIGNATED COOKING AREA COOKING OUTSIDE OF A DESIGNATED COOKING AREA IS PROHIBITED**	New section
3308.1 Program ~~superintendent.~~ The *owner* ~~shall designate a person to be the fire prevention program superintendent who shall be responsible for the fire prevention program and ensure that it is carried out through completion of the project. The fire prevention program superintendent shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided, the superintendent shall be responsible for the guard service.~~	**3308.1 Program development and maintenance.** The *owner* or *owner's* authorized agent shall be responsible for the development, implementation and maintenance of a written plan establishing a fire prevention program at the project site applicable throughout all phases of the construction, repair, *alteration* or demolition work. The plan shall address the requirements of this chapter and other applicable portions of this code, the duties of staff, and staff training requirements. The plan shall be made available for review by the *fire code official* upon request. **3308.2 Program superintendent**. The owner shall designate a person to be the fire prevention program superintendent who shall be responsible for the fire prevention program and ensure that it is carried out through completion of the project. The fire prevention program superintendent shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided in accordance with NFPA 241, the superintendent shall be responsible for the guard service.	
	3308.7.1 Smoke detectors and smoke alarms. Smoke detectors and smoke alarms located in an area where airborne construction dust is expected shall be covered to	New section

	prevent exposure to dust or shall be temporarily removed. Smoke detectors and alarms that were removed shall be replaced upon conclusion of dust-producing work. Smoke detectors and smoke alarms that were covered shall be inspected and cleaned, as necessary, upon conclusion of dust producing work	
3309.1 Emergency telephone. ~~Readily accessible~~ ~~e~~mergency telephone facilities shall be provided in an *approved* location at the construction site.	3309.1 Emergency telephone. Emergency telephone facilities with ready access shall be provided in an *approved* location at the construction site, or an approved equivalent means of communication shall be provided. The street address of the construction site and the emergency telephone number of the fire department shall be posted adjacent to the telephone. Alternatively, where an equivalent means of communication has been approved, the site address and fire department emergency telephone number shall be posted at the main entrance to the site, in guard shacks and in the construction site office.	Provides more detail
[BE] 3311.1 Stairways required. Where ~~a building has been constructed to a *building height* of 50 feet (15 240 mm) or four stories, or where an existing building exceeding 50 feet (15 240 mm) in *building height* is altered, not less than one temporary lighted *stairway* shall be provided unless one or more of the permanent *stairways* are erected as the construction progresses.~~	**[BE] 3311.1 Stairways required.** Where building construction exceeds 40 feet (12 192 mm) in height above the lowest level of fire department vehicle access, a temporary or permanent *stairway* shall be provided. As construction progresses, such stairway shall be extended to within one floor of the highest point of construction having secured decking or flooring.	Provides more detail
CHAPTER 34 **TIRE REBUILDING AND TIRE STORAGE** – No Change		
CHAPTER 35 **WELDING AND OTHER HOT WORK –** No Change		
CHAPTER 36 **MARINAS** – No Change		
CHAPTER 37 **COMBUSTIBLE FIBERS** – No Change		

CHAPTER 38 **HIGHER EDUCATION LABORATORIES**		
	3801.1 Scope. Higher education laboratories complying with the requirements of this chapter shall be permitted to exceed the maximum allowable quantities of hazardous materials in *control areas* set forth in Chapter 50 without requiring classification as a Group H occupancy. Except as specified in this chapter, such laboratories shall comply with all applicable provisions of this code and the *International Building Code*.	New Chapter
CHAPTER 39 **PROCESSING AND EXTRACTION FACILITIES**		
	3901.1 Scope. Plant processing or extraction facilities shall comply with this chapter and the *International Building Code*. The extraction process includes the act of extraction of the oils and fats by use of a solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella and solvent recovery. The use, storage, transfilling and handling of hazardous materials in these facilities shall comply with this chapter, other applicable provisions of this code and the *International Building Code*.	New Chapter
CHAPTERS 40 THROUGH 49 **RESERVED**		
CHAPTER 50 **HAZARDOUS MATERIALS-GENERAL PROVISIONS**		
5003.2.2.1 Design and construction. ~~6. Where gases or liquids having a hazard ranking of:~~ ~~Health Class 3 or 4~~ ~~Flammability Class 4~~ ~~Instability Class 3 or 4~~ ~~in accordance with NFPA 704 are carried in pressurized~~		

~~piping above 15 pounds per square inch gauge (psig) (103 kPa), an approved means of leak detection and emergency shutoff or excess flow control shall be provided.~~ ~~Where the piping originates from within a hazardous material storage room or area, the excess flow control shall be located within the storage room or area. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical.~~		
	5003.8.3.5.2 Flammable and combustible liquids. In Group M occupancy wholesale and retail sales uses, indoor storage of flammable and combustible liquids shall not exceed the maximum allowable quantities per control area as indicated in Table 5704.3.4.1, provided that the materials are displayed and stored in accordance with Chapter 57. **5003.8.3.5.3 Aerosols.** The maximum quantity of aerosol products in Group M occupancy retail display areas, storage areas adjacent to retail display areas and retail storage areas shall be in accordance with Chapter 51.	
	5005.1.12 Emergency isolation. Where gases or liquids having a hazard ranking of Health Class 3 or 4, Flammability Class 4 or Instability Class 3 or 4 in accordance with NFPA 704 are carried in pressurized piping above 15 pounds per square inch gauge (psig) (103 kPa), an approved means of leak detection and emergency shutoff or excess flow control shall be provided. Where the piping originates from within a hazardous material storage room or area, the excess flow control shall be located within the storage room or area. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical. Exceptions: 1. Piping for inlet connections designed to prevent backflow. 2. Piping for pressure relief devices.	
CHAPTER 51 **AEROSOLS**		

5103.2 Identification. Cartons shall be identified on not ~~less~~ than one side with the classification level of the aerosol products contained within the carton ~~as follows~~:	**5103.2 Identification.** Cartons or outer packaging shall be identified on not fewer than one exterior side with the classification level of the aerosol products contained within the carton.	
	5103.2.1 Aerosol products. Cartons or outer packaging containing aerosol products in metal containers or glass and plastic containers 4 fluid ounces. (118 ml) or less shall be clearly marked as follows: LEVEL_____AEROSOLS	New Section
	5103.2.2 Aerosol cooking spray products. Cartons or outer packaging containing aerosol cooking spray products in metal containers shall be clearly marked as follows: AEROSOL COOKING SPRAY	New Section
	5103.2.3 Plastic aerosol products. Cartons or outer packaging containing aerosol products in plastic containers greater than 4 fluid ounces (118 ml) shall be clearly marked as follows: PLASTIC AEROSOL 1 (or X)	New section
	5104.1.2 Plastic aerosol X products. Plastic aerosol X products are those products, in containers larger than 4 fluid ounces (118 ml),that do not meet the criteria provided in Section 5104.1.1. **5104.1.2.1 Storage, use or handling**. The storage, use or handling of plastic aerosol X products shall be prohibited.	New section
	5104.2.2 Aerosol cooking spray products. Storage of aerosol cooking spray products in A, B, E, F and R occupancies shall not be more than 1,000 pounds (454 kg) net weight. **5104.3.3 Aerosol cooking spray products.** Solid pile, palletized or rack storage of aerosol cooking spray products in a general purpose warehouse shall not be more than 2,500 pounds (1135 kg) net weight, unless protected in accordance with NFPA 30B. **5104.8 Storage of aerosol cooking spray products.**	New sections

	Aerosol cooking spray products shall be permitted to be stored in a general purpose warehouse. **5104.8.1 Mixed storage.** Where aerosol cooking spray products are mixed with other higher-hazard aerosol products, the provided isolation, storage height restrictions and protection shall be based on the highest-hazard aerosol product present. **5104.8.2 Storage conditions**. The storage and handling of aerosol cooking spray products shall comply with this chapter and NFPA 30B. **5106.2.2 Aerosol cooking spray storage and fire protection**. The storage and handling of *aerosol cooking spray products* shall comply with this chapter and NFPA 30B.	
CHAPTER 52 **RESERVED**		
CHAPTER 53 **COMPRESSED GASES**		
5306.2.2 One-hour interior room. Where an exterior wall cannot be provided for the room, ~~automatic sprinklers~~ shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour-rated shaft enclosure from the room to the exterior. *Approved* mechanical ventilation shall comply with the *International Mechanical Code* and be provided at a minimum rate of 1 ~~cubic foot per minute~~ per square foot [0.00508 $m^3/(s \cdot m^2)$] of the area of the room.	5306.2.2 One-hour interior room. Where an exterior wall cannot be provided for the room, a 1-hour interior room shall be a room or enclosure separated from the remainder of the building by *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both, with a *fire-resistance rating* of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be self-closing, smoke- and draft-control assemblies having a *fire protection rating* of not less than 1 hour. An *automatic sprinkler system* shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour-rated shaft enclosure from the room to the exterior. *Approved*	

	mechanical ventilation shall comply with the *International Mechanical Code* and be provided at a minimum rate of 1 cfm per square foot [0.00508 $m^3/(s \cdot m^2)$] of the area of the room.	
5306.2.3 Gas cabinets. Gas cabinets shall be constructed in accordance with Section 5003.8.6 and the following: The average velocity of ventilation at the face of access ports or windows shall be not less than 200 feet per minute (1.02 m/s) with not less than 150 feet per minute (0.76 m/s) at any point of the access port or window. 3. ~~They shall be internally sprinklered~~	**5306.2.3 Gas cabinets.** Gas cabinets shall be constructed in accordance with Section 5003.8.6 and shall comply with the following: 1. Exhausted to the exterior through dedicated exhaust duct system installed in accordance with Chapter 5 of the *International Mechanical Code*. 2. Supply and exhaust ducts shall be enclosed in a 1-hour *fire-resistance-rated* shaft enclosure from the cabinet to the exterior. The average velocity of ventilation at the face of access ports or windows shall be not less than 200 feet per minute (1.02 m/s) with not less than 150 feet per minute (0.76 m/s) at any point of the access port or window. Provided with an *automatic sprinkler system* internal to the cabinet	
CHAPTER 54 **CORROSIVE MATERIALS** – No Change		
CHAPTER 55 **CRYOGENIC FLUIDS**		
CHAPTER 56 **FIREWORKS**		

		Existing Statewide Amendment IFC, Chapter 56, Section 5601.1.3, Fireworks, Exception 4 is amended to add the following sentence at the end of the exception: The use of fireworks for display and retail sales is allowed as set forth in Utah Code, Title 53, Chapter 7, Utah Fire Prevention and Safety Act, Sections 53-7-220 through 53-7-225, Utah Code, Title 11, Chapter 3, County and Municipal Fireworks Act; Utah Administrative Code, R710-2; and the State Fire Code.
CHAPTER 57 **FLAMMABLE AND COMBUSTIBLE LIQUIDS**		
	SECTION 5707 **ON-DEMAND MOBILE FUELING OPERATIONS** **5707.1 General**. On-demand mobile fueling operations that dispense Class I, II and III liquids into the fuel tanks of motor vehicles shall comply with Sections 5707.1 through 5707.6.3. Exception: Fueling from an approved portable container in cases of an emergency or for personal use. **5707.1.1 Approval required.** Mobile fueling operations shall not be conducted without first obtaining a permit and approval from the fire code official. Mobile fueling operations shall occur only at approved locations. **5707.2 Mobile fueling vehicle.** An on-demand mobile fueling vehicle shall be one of the following: 1. A vehicle that has chassis-mounted tanks or containers where the aggregate cargo capacity does not exceed 1200 gallons (4592 L). A mobile fueling vehicle with a mounted	Multiple new sections **Existing Statewide Amendment** IFC, Chapter 57, Section 5701.4 Permits, is amended to add the following at the end of the section: The owner of an underground tank that is out of service for longer than one year, shall receive a Temporary Closure Notice from the Department of Environmental Quality and a copy shall be given to the AHJ.

	tank in excess of 110 gallons (415 L) shall comply with the requirements of Section 5706.6, Section 5707 and NFPA 385. 2. A vehicle that carries a maximum of 60 gallons (227 L) of motor fuel in metal safety cans listed in accordance with UL 30 or other approved metal containers, each not to exceed 5 gallons (19 L) in capacity. Containers shall be secured to the mobile fueling vehicle except when in use. The mobile fueling vehicle shall comply with all local, state and federal requirements. The mobile fueling vehicle and its equipment shall be maintained in good repair. **5707.3 Required documents.** Documents developed to comply with Sections 5707.3.1 through 5707.3.3 shall be updated as necessary by the owner of the mobile fueling operation and shall be maintained in compliance with Section 108.3. **5707.3.1 Safety and emergency response plan.** Mobile fueling operators shall have an approved written safety and emergency response plan that establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code. **5707.3.2 Training records.** Mobile fueling vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. Training records of operators shall be maintained. **5707.3.3 Site plan.** Where required by the fire code official, a site plan shall be developed for each location at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate: all buildings, structures, lot lines, property lines and appurtenances on site and their use or function; all uses adjacent to the lot lines of the site; fueling locations, the locations of all storm drain openings and adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be kept on the site property; and the scale of the site plan. **5707.4 Mobile fueling areas.** Mobile fueling shall not occur on public streets, public ways or inside buildings. Fueling on the roof level of parking	

	structures or other buildings is prohibited. **5707.4.1 Separation.** Mobile fueling shall not take place within 25 feet (7620 mm) of buildings, property lines or combustible storage. Exception: The fire code official shall be authorized to decrease the separation distance for dispensing from metal safety cans or other approved metal containers in accordance with Section 5707.2. Where dispensing operations occur within 15 feet (4572 mm) of a storm drain, an approved storm drain cover or an approved equivalent method that will prevent any fuel from reaching the drain shall be used. **5707.4.2 Sources of ignition**. Smoking, open flames and other sources of ignition shall be prohibited within 25 feet (7620 mm) of fuel dispensing activities. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the vehicle or the point of fueling shall be prominently posted on the mobile fueling vehicle. The engines of vehicles being fueled shall be shut off during fueling. **5707.5 Equipment.** Mobile fueling equipment shall comply with Sections 5707.5.1 through 5707.5.4. **5707.5.1 Dispensing hoses and nozzles.** Where equipped, the dispensing hose shall not exceed 50 feet (15 240 mm) in length. The dispensing nozzles and hoses shall be of an approved and listed type. **5707.5.2 Fuel limit**. Mobile fueling vehicles shall be equipped with a fuel limit switch set to a maximum of 30 gallons (116 L) and a nozzle or other approved device that, when activated, immediately causes flow of fuel from the mobile fueling vehicle to cease. **5707.5.3 Fire extinguisher.** An approved portable fire extinguisher complying with Section 906 with a minimum rating of 40-B:C shall be provided on the mobile fueling vehicle with signage clearly indicating its location. **5707.5.4 Spill kit.** Mobile fueling vehicles shall contain a minimum 5-gallon (19 L) spill kit of an approved type.	

	5707.6 Operations. Mobile fueling vehicles shall be constantly attended during fueling operations with brakes set and warning lights in operation. Mobile fueling vehicles shall not obstruct emergency vehicle access roads. **5707.6.1 Dispensing hose.** Where equipped, mobile fueling vehicles shall be positioned in a manner to preclude traffic from driving over the dispensing hose. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the mobile fueling vehicle. **5707.6.2 Drip control.** Operators shall place a drip pan or an absorbent pillow under the nozzle and each fuel fill opening prior to and during dispensing operations to catch drips. **5707.6.3 Spill reporting.** Spills shall be reported in accordance with Section 5003.3.1.	
		IFC, Chapter 57, Section 5706.1, General, is amended to add the following special operation: 8. Sites approved by the AHJ.
		IFC, Chapter 57, Section 5706.2 Storage and dispensing of flammable and combustible liquids on farms and construction sites, is amended to add the following: On line five after the words "borrow pits" add the words "ánd sites approved by the AHJ."
CHAPTER 58 **FLAMMABLE GASES AND FLAMMABLE CRYOGENIC FLUIDS**		

CHAPTER 59 **FLAMMABLE SOLIDS** – No Change		
CHAPTER 60 **HIGHLY TOXIC AND TOXIC MATERIALS**		
CHAPTER 61 **LIQUEFIED PETROLEUM GASES**		
		IFC, Chapter 61, Section 6101.2, Permits, is amended as follows: On line two, after the word "105.7" add "and the adopted LP Gas rules."
		IFC, Chapter 61, Section 6103.1, General, is deleted and rewritten as follows: LP Gas equipment shall be installed in accordance with NFPA 54, NFPA 58, the adopted LP Gas rules, and the International Fuel Gas Code, except as otherwise provided in this chapter.
CHAPTER 62 **ORGANIC PEROXIDES** – No Change		
CHAPTER 63 **OXIDIZERS, OXIDIZING GASES AND OXIDIZING CRYOGENIC FLUIDS** – No Change		

CHAPTER 64 **PYROPHORIC MATERIALS** – No Change		
CHAPTER 65 **PYROXYLIN (CELLULOSE NITRATE) PLASTICS** – No Change		
CHAPTER 66 **UNSTABLE (REACTIVE) MATERIALS** – No Change		
CHAPTER 67 **WATER-REACTIVE SOLIDS AND LIQUIDS** – No Change		
CHAPTERS 68 THROUGH 79 **RESERVED**		
CHAPTER 80 **REFERENCED STANDARDS**		
		Recommend deleting the Existing Statewide Amendment, it is referenced in this edition of the code. ~~IFC Chapter 80, Referenced Standards, is amended as follows:~~ ~~Under the heading NFPA – National Fire Protection Association add Standard reference:~~ ~~NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2011 edition.~~
