SIGNIFICANT CHANGES TO THE CALIFORNIA FIRE CODE 2019 EDITION

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NOTE: This report is not intended to replace the book <u>Significant Changes to the California Fire Code, 2019 Edition</u>. SVABO members are encouraged to purchase the publication in preparation for the 2019 California Building Code as the publication offers additional information, insights and comments regarding the significance of the changes briefly identified in this report.

Legend:

California changes to the International Fire Code are *italicized*

Changes that appear in both the International Fire Code and the California Fire Code are shown in normal font

Portions of the International Fire Code that are not adopted by California are shown in strikeout

Section	Code Change	Significance	Remarks
PART 1 ADMI	INISTRATION AND DEFINITIONS – CHAPTERS 1 AND 2		
Chapter 1			
1.1.7.3.1	Clarifies that either the CRC or the CBC may be used for Detached one- and two-family dwellings, efficiency dwelling units, lodging houses, live/work units, townhouses with not more than 3 stories above the grad plane with separate means of egress, and their accessory structures.	Although this requirement has been in effect since 2016, there have been an issue: many jurisdictions and designers apply the most restrictive provisions of the CRC and the CBC for the same application.	
1.11.6	Clarifies that the Fire Code Official is not required to issue a Certificate of Occupancy for Group R-3 and U occupancies.	The responsibility for issuing a Certificaqte of Occupancy for Groups R-3 and U is by the Building Official.	
Chapter 2			
202	CARE SUITE has been redefined to include both I-2 and I-2.1.	Revised definition coordinates with other changes made to the CFC in Chapters 9 and 10.	

202		
202	COMMUNITY CARE FACILITY has been redefined to	Coordinates with other California Regulations.
	exclude Foster Family Agencies, Foster Family Homes,	In addition, this change moves these facilities to
	Small Family Homes and Noncustodial Adoption	typical R-3 occupancies, thereby removing the
	Agencies.	approval by the Fire Code Offiocial to clear the
		STD 850 form, which is no longer issued by
		Community Care licensing.
202	A definition for CONGREGATE LIVING HEALTH FACILITY	Coordinates with other California laws
	(CLHF) corresponding to Health and Safety Code Section	regarding the number of patient beds.
	1250 has been added.	
202	The definition of "FOSTER FAMILY HOME" has been	Coordinates with other California Regulations,
	removed and the definition of "Residential Group R-3"	specifically Title 22. this change moves several
	and "Residential Group R-3.1" has been revised.	occupancies such as Foster Family Agencies,
		Foster Family Homes, Small Family Homes and
		Noncustodial Adoption Agencies to typical R-3
		occupancies, thereby removing the approval by
		the Fire Code Official to clear the STD 850 form,
		which is no longer issued by Community Care
		licensing.
202	The definition of a NON-PATIENT CARE SUITE has been	This definition coordinates with requirements
	added.	for these types of suites in Chapter4 and other
		changes to Chapters 9 and 10.
202	New definition for OCCUPANCY CLASSIFICATION	Required for compliance with SB 221 of 2017
	RESIDENTIAL GROUP R-2.2 (CDCR ONLY) has been	which required the SFM, in consultation with
	added to coordinate with the Penal Code for Community	Dept of Corrections and Rehabilitation to
	Correctional Reentry Centers.	establish minimum standards for the
		prevention of fire and protection of life safety
		in any structure used or intended to be used as
		a community correctional reentry facility.
		Corresponding changes have also been made to
		Sections 1019.3 (stories with 1 exit), 1020.4
		(dead ends), 1030.1 (emergency escape and
		rescue openings), 804.3.3.2 (minimum critical
		radiant flux), 906.1 (portable fire extinguishers),
		907.2.9 (fire alarms), and 907.2.10.12 (smoke

		alarms)
PART 2 GENE	RAL SAFETY PROVISIONS – CHAPTERS 3 AND 4	
314.4	The change modifies existing requirements to clarify that the safety provisions for the indoor display of motor vehicles applies to both liquid- and gaseous-fueled vehicles. Gives the Fire Code Official authority to require batteries to be disconnected OR remain connected in order to maintain safety provisions.	Recognizes alternate fuels and advanced technology. Applies to situations such as a vehicle dealership, an automobile museum or a single vehicle displayed in a Mall.
315.3.1	Exceptions added that remove the clear height requirement above storage in sprinklered or non-sprinklered areas of buildings along the walls only.	Brings IBC requirements into conformance with NFPA 13. NOTE: these are general exceptions and have not been added to Chapter 32 piled high storage
315.1 315.7 105.6.29	Requirements for separation form buildings, property lines and limitations to contiguous areas of outdoor storage of wood pallets. Requires an operational permit for the storage of combustible pallets.	Combustible pallets have been the cause of severe fires: this revision provides the Fire Code Official a better tool to regulate their outdoor storage.
403.12.3 403.12.3.1	The threshold for crowd managers has been reduced from 1,000 to 500 people for certain events.	Exceptions allow exception for religious outdoor events, outdoor events with less than 1,000 persons and when the Fire Code Official thinks crowd managers are not necessary.
404.2.3 404.2.3.1 404.2.3.2 404.2.3.3	Updates and prescribes details for facility lockdowns.	Given the recent increase in school and workplace violence, this proposal is intended to address the various security means and methods proposed by teachers, parents and state legislators.
	LDING AND EQUIPMENT DESIGN FEATURES – CHAPTERS 5 1	
510	Requirements for emergency responder radio coverage have been revised to address industry and equipment enhancements with a new reference to NFPA 1221.	Emergency responder radio coverage is now required for 95% of the building. System is required to be monitored for malfunction.
603.1 603.3	Fuel oil storage allowances have been revised to clarify applicability to internal combustion engines such as emergency generators and fire pumps.	The intent is to identify the difference in application between portable and nonportable units.

	Fuel oil storage is increased to 1,320 gallons if the tank us listed UL 142 and the building is sprinklered.		
605.11, 608	Adoption of the 2018 IFC provisions relating to Solar Photovoltaic Power Systems and Stationary Storage Battery Systems are moved to Sections 1204 and 1206.	California amendments have been removed and the Model Code serves as California Code. See Sections 1204 and 1206.	
605.13 605.16 605.17	Adds requirements addressing safety concerns for lower flammability refrigerant gasses. The change addresses a new class of refrigerants with very low flammability characteristics (Group A2L)		
608.3	Adds listing and capacity requirements for non-metallic cooking oil storage.	Applies to fresh oil and used oil.	
804.3.3.1, 804.3.3.2, 804.3.3.3	Adds allowances for Class A or Class 1 floor coverings in patient care areas in Group I-3 prison care facilities.	Modifications and additions were necessary to meet the requirements for health care facilities while still maintaining a minimum level of fire safety in Group I-3 prison care facilities.	
807.1 807.2 807.5	The limitations on combustible decorative materials have been clarified as to where they apply.		
807.4	Artificial decorative vegetation is separated from natural vegetation (Section 806). Requirements added specific to artificial decorative vegetation.	Artificial decorative vegetation items that do not comply with NFPA 701 inb large quantities have been shown to generate massive amounts of heat when they burn. The change quantifies the previous term "limited quantities" of non- compliant artificial vegetation is limited: Wreaths – 50% of the door; garland – 30% of the wall; other items 36" tall.	
901.4.6.1 901.4.6.2 901.4.6.3 901.4.6.4	Additional requirements have been added for automatic sprinkler riser rooms and fire pump rooms.	Rooms are not required, but when provided they must be readily accessible at all time (but may be locked), Maintain 40 deg. F and provided with permanent lighting.	
901.6.2	Test criteria have been added to the code with a reference to NFPA 4 to ensure that where multiple fire protection systems or life safety systems are integrated, all the acceptance process and subsequent testing must	Makes sure that all life-safety and fire protection systems operate as an integrated system.	

	evaluate all of the integrated systems as a whole.		
901.8.2	Authorizes the code official to allow the removal of	Encourages evacuation of untrained occupants	
	occupant-use hose lines.	rather than stay and fight response to fire.	
903.2.1	Clarifies the requirements for fire sprinkler protection in		
	Group A occupancies.		
903.2.3	Provides occupant load threshold for automatic fire	Clarifies an occupant load threshold of 300	
	sprinkler systems in Group E occupancies.	persons regardless of the area served.	
903.2.16,	Modifications to update the Fire Code to match		
903.2.16.1,	regulations in the model code and to provide clarity for		
903.2.5.4,	Group L occupancies.		
907.2.28,			
907.2.28.1,			
907.6.4			
903.3.1.1.2	Removes fire sprinkler requirements from small (55 sf	Provides for consistency for all Group R	
	and less) bathrooms in Group R-4 occupancies.	occupancies.	
903.3.1.2.1	Correlates automatic sprinkler system requirements	Correlates IFC and IBC requirements.	
	with IBC Chapter 7 for exterior Group R balconies.		
903.3.1.2.3	Adds fire sprinkler (or alternate protection) to attics of	Change addresses concerns about fires in taller	
	Group R occupancies sprinklered NFPA 13R	residential buildings including podium	
		buildings. Section is generally modeled after	
		2015 IFC Section 903.2.8.3 for Group R-4,	
		Condition 2 buildings.	
903.3.3	The code now directs the user to the sprinkler design	Replaces vaguely worded "installed with due	
	standard to address obstructions.	regard to obstructions."	
904.12	Fire extinguishing systems for commercial cooking	Directs the user to the standard required.	
	equipment now required to comply with NFPA 96. Also		
	permits protection by a water mist system conforming		
	to NFPA 750.		
904.13	Requires automatic fire-extinguishing system to protect	Provides reference to UL Standard UL 300A	
	domestic cooking appliances in I-1, I-2 Condition 1 and	which is an appropriate standard for domestic	
	R-2 college dormitories.	cooking appliances (not UL 300 standard for	
		commercial cooking appliances).	
904.14	Aerosol fire-extinguishing systems are now recognizes	Fire suppression systems may be aerosol type	
Table	by the code as an alternative fire-extinguishing system		

901.6.1	and NFPA 2010 "Standard for Fixed Aerosol Fire- Extinguishing Systems" has been added to Chapter 20.		
905.3.1	Standpipe systems are now required in buildings four or more stories in height. In addition, a Class I standpipe is allowed in Groups B and E occupancies rather than Class III	Height in feet of 30 remains.	
905.3.10	Clarifies where standpipes are required in Group I-3 prisons.		
905.4	Standpipes serving open stairways may now be located in a breezeway or open corridor between two open stairs located not more than 75 feet apart. Standpipes are no longer required to be located at the intermediate landings and are now required on the main floor landings.	Change correlates with NFPA 14. Added cost for valves at intermediate landings no longer considered justified.	
905.11	Revision authorizes fire code official to require locking caps on dry standpipe hose connection outlets.	Will improve security by preventing items being stuffed into standpipes and making sure all standpipes are closed: where there are a series of standpipes, one open end can significantly reduce flow and pressure in the system.	
906.1	Permits schools to have additional options for portable fire extinguisher locations.	Option allows portable fire extinguishers inside of classrooms in lieu of centrally located or distributed fire extinguishers.	
907.1.2	Aligns requirements for fire alarm plans and documentation requirements with NFPA 72.	Removes IFC's prescriptive list of requirements and replaces with "prepared in accordance with NFPA 72.	
907.2.1	Fire alarms now required in Group A occupancies where there are 100 or more occupants on a level above or below the lowest level of exit discharge.	Adds to the locations where fire alarms are required.	
907.2.10 (Deleted)	Fire alarm systems are no longer required in Group R-4 occupancies.	Single- and multiple-station smoke alarms are still required in Group R-4 Occupancies.	
907.5.1, 907.5.2.2, 907.5.2.5	Correlates fire alarm provisions and modifications for care facilities.		
907.5.2.2.4	Large public venues (15,000 seats or more) are now	Correlates with the alarm and accessibility	

	required to provide real-time captions that are integrated into the emergency voice/alarm communication system.	requirements (Chapters 9 and 11) of the IBC.	
907.6.1.1	Modifications to only require Class A circuits for fire alarm "riser circuits" in high-rise buildings.	Class A circuits are no longer required other than for "riser circuits" in high-rise buildings.	
909.5.3 <i>,</i> 909.5.3.1	Clarifies door opening protectives for buildings required to have smoke control systems.		
910.5	Maintenance and testing frequencies for smoke and heat vents and mechanical smoke removal are specified in the code.	Insures that smoke and heat vents are tested on a regular schedule to ensure proper operation.	
915.2.3, 915.4.2	Adds requirements correlating with California Statute for carbon monoxide alarms and detectors in Group E occupancies.	Coerelates the CFC with California Education Code Section 32080 and clarifies that referenced standard UL 2034 is specific to residential carbon monoxide alarms and detectors only.	
916	Requirements for gas detection systems are clarified and consolidated in new Section 916.	Should make the code requirements clear and concise.	
Table 1004.5 1004.8	Table changed to 150 sf/occ for business areas, and 50 sf/occ for concentrated business uses when approved by the code official.	The method for calculating loading for business areas has been increased.	
1005.3.1	Clarifies the stairway minimum width for Group A Occupancies and eliminates a not needed California Amendment from 2001.		
1006.2.1	 Determination of cumulative occupant load for spaces with one exit has been modified: The number of exits from foyers, lobbies, vestibules and similar spaces need not be based on cumulative Occupant Loads for areas discharging through such spaces, but the capacity of the exits from such spaces shall be based on the applicable cumulative occupant load. Maximum occupant load for R-2, R-3 and R-4 occupancies with one exit has been increased 	Revised section 1006.2.1 correlates with Section 1004.2.1. Exceptions based on R occupancies without fire sprinklers have been eliminated as R occupancies are required to be fire sprinklered.	

	from 10 to 20.	
1006.2.1,	Modifications to means of egress relating to Group I-2	Section 1006.2.1 Exception 2 was amended to
Table	and I-2.1 care facilities.	clarify that 2 means of egress are required from
1006.2.1,		Group I-2 sleeping rooms > 1,000 sf and other
1008.3.2,		rooms > 2,500 sf
1020.1,		
1024.6		
1006.2.2.6	The allowances for single-exit Group R spaces have been	Number of exits from a lobby does not need to
1006.2.1	reformatted and the approach to accumulating loads	be based on cumulative occupant loads BUT the
1017.2	from adjacent spaces discharging through lobbies has	exit width does. Spaces with one exit for R-2, 3
	been clarified.	and 4 Occupancies increased from 10 to 20.
1006.3	The determination of egress requirements has been	A new section clearly states that in situations
1006.3.1	clarified where the occupants must travel to an adjacent	where occupants egress through an adjacent
	story to reach a complying exit or exits.	story , the additional occupant load is not
		considered when determining the required
		number of exits from the adjacent story.
1008.2.3	Introduces illumination requirements to the exit	Illumination of the entire exit discharge and
	discharge. Also recognizes safe dispersal areas.	safe dispersal area is now required.
1008.3.5	In group I-2 occupancies, the required exit illumination	Because of the possible critical nature of
1008.2.2	level of 0.2 footcandles must now be available upon the	moving patients in Group I-2 occupancies, the
	failure of a single lamp in a multi-lamp fixture.	code now recognizes that the failure of one
		lamp in multi lamp fixtures cannot jepordize
		patient safety.
1008.2.3	Illumination of the exit discharge can now terminate at a	Reduces the amount of light required for safe
	safe dispersal area.	exiting from a building.
1009.7.2	When the building is protected with an automatic fire	Section 1009.3.3, Exception 2 alows elimination
	sprinkler system, fire-rated exterior walls with fire-	of areas of refuge at stairways (and elevators if
	protected openings is no longer required between the	applicable). This change mirrors the sprinkler
	area of assisted rescue and the interior of the building.	allowances from inside the building.
1010.1.1	Provisions addressing limits to the width and height of	Brings consistency between IBC requirements
	door openings have been selectively reformatted and	and ICC A117.1
	revised to correlate with the technical accessibility	
	requirements of ICC A117.1	
1010.1.4.4	Guidance has been provided to allow for enhanced	Remote operation of locks now permitted

	security measures on educational classroom egress doors and yet still continue to comply with applicable means of egress requirements.	provided means of egress is maintained.
1010.1.9.8 1010.1.9.8.1	Delayed egress locks are now permitted on egress doors serving Group E classrooms with an occupant load of less than 50 and to secondary exits or exit access doors serving courtrooms.	Increases the allowed use of delayed egress locks.
1010.1.9.9 1010.9.1.10	Criteria for electrically locked egress doors has been clarified and correlated.	Section 1010.1.1.9 has been revised to exclude H occupancies and eliminate the long list of occupancies where it is allowed. It also clarifies the action required when a sensor detects an approaching occupant and to correlate with other code sections addressing types of locking systems.
1010.1.9.12	Previously limited to buildings 4 stories in height, stairways are permitted to be secured from the stairway side where there is a system to allow emergency personnel to simultaneously unlock all doors.	Increases the allowable use of securing stairway doors.
1010.1.10	Sensor release of electrically locked doors is now allowed on egress doors in Groups A and E. Also clarifies that panic hardware is only required on swinging doors.	Both these locking arrangements release the electric lock when power is lost.
1010.3	New conditions of use are now provided to the Building Official to evaluate security access turnstiles that are located in a manner to obstruct a means of egress.	Gives guidance to the Building Official.
1011.6	The method of determining the required width and depth of a stairway landing has been clarified.	The revised language specifies the minimum width and depth for all stairway landings. This modification now specified that a landing depth is 48" or the width of the stair, whichever is less and that the width must be at least as wide as the stair it serves.
1013.2	The permitted height of floor level exit signs has been raised to 18 inches maximum AFF.	Permits the installation of taller baseboards.
1015.6 1015.7	The prescriptive requirements addressing the installation of personnel fall arrest/restraint anchorage	Integrated requirements of the IFC with the IMC for fall protection.

	exception has been revised to reference ASSE Z 359.1		
1017.3	Additional language clarifies that the common path of	This is considered to be a clarification and does	
	egress travel limitations must be applied to each room	not change existing requirements.	
	or space on every story.		
1022.3.1	When a stairway and connecting exit passageway are	Eliminates the door between a pressurized	
	pressurized, there is no longer a requirement to	stairway and an adjoining exit passageway.	
	separate the two components.		
1023.5	Security system and two-way communication system	It was deemed that the small amount of	
1024.6	components are now specifically permitted to penetrate	penetrations required for these systems, when	
	the fire-resistance-rated enclosure of exit passage ways,	properly protected, would not unacceptably	
	interior exit stairways, and interior exit ramps.	compromise the occupants safety.	
1025.1	Lumunous path marking is no longer required in high-	Groups I-1 and I-2 have been removed because	
	rise buildings of Groups I-2, I-3 and I-4 occupancies.	emergency generators are regularly maintained	
		in these occupancies and staff is trained to	
		defend in place. I-4 was removed because it	
		was determined that this occupancy would	
		seldom occur in a high-rise occupancy.	
1026.4	The method of determining the refuge area of a	The capacity is now determined by the total	
1026.4.1	horizontal exit has been modified to allow a more	occupant load of the adjoining compartment or	
	appropriate determination of the occupant load	the door capacity, whichever is less.	
	assigned to the refuge area.		
1029.6	The various assembly seating methods have been	Open air seating is now essentially "smoke	
1029.6.3	clarified through the introduction of a new definition for	protected seating" and accrues the benefits	
1029.7	open-air assembly seating and an expanded definition	traditionally assigned to smoke protected	
1029.9.1	for smoke-protected assembly seating.	seating.	
1029.9.1	Minimum aisle widths in assembly occupancies have	No actual change, revisions for clarity and	
	been clarified and a reference to minimum widths for	consistency with other code sections.	
	accessible routes has ben added.		
1030.1	Occupancies where emergency escape and rescue	Emergency escape and rescue openings now	
	openings are required has been clarified and the	required in R-2 occupancies located in stories	
	minimum number required in a residential basement	with only one exit or exit access and Groups R-3	
	has been revised.	and R-4 occupancies. Basements are required	
		to have at least one.	
1030.1.1	Fall prevention devices are now allowed on emergency	Repeats a section from the IRC in the IFC for	

	excape and rescue openings provided that they comply with ASTM F2090.	clarity and coordination.
1031.2.2	Change provides guidance to allow enhanced security measures yet still meet egress requirements on existing classroom doors.	A high priority in many locations is the safety of occupants at schools and classrooms in the event of a threatening situation. These revisions provide guidance in the code which balances security with the need to also provide for free and immediate egress.
1031.4	This modification clarifies that exit signs in existing buildings shall be installed and maintained in accordance with the building code that was in effect at the time of construction and the applicable provisions of Section 1104	Previous code language had been interpreted to require changes to exit signage every time the requirements in the Fire Code were revised.
1031.10	Inspections and testing of emergency lighting have been relocated into Chapter 10 and revised to allow self-diagnostics.	Moves the requirements from Chapter 6 (general emergency and standby power requirements) to Chapter 10 (Means of Egress)
1103.5.1	A Section has been added to Chapter 11 requiring the retrofit of a fire sprinkler system in existing Group A-2 Occupancies where alcoholic beverages are consumed if their occupant load is 300 or more.	Requires retrofit in existing buildings.
1103.9	Carbon monoxide alarms are no longer required to be retroactively installed in Groups I-1, I-2, I-4 and R Occupancies The retroactive installation of carbon monoxide alarms is only required in sleeping rooms and dwelling units.	The revisions have changed from requiring in all buildings of an occupancy type to sleeping rooms and buildings with identified hazards such as an attached garage or fuel buring appliance. Battery alarms are permitted.
1104.16.2	Door and window openings within 10 feet of a fire escape must be protected 45 minutes unless the building is equipped with an automatic fire sprinkler system.	Correlates with the IEBC
1105.6.2	 Fire rated doors with hold-open devises in existing I-2 occupancies have 3 closing options: 1.Actuation of smoke detectors Actuation of the fire alarm system within the zone. Activation of the fire sprinkler system within the zone. 	Options are now provided for doors with hold- opens in fire barriers, fire partitions, smoke barriers and fire walls.

Chapter 12	New chapter added to the CFC at address all configurations of energy systems. Includes emergency power, standby power, fuel cell power and stationary battery storage system requirements from 2015 IFC Chapter 6 and new requirements.	Requirements have been brought together for the user's convenience.	
1204.5	Rapid shutdown of solar photovoltaic systems is required to reduce shock hazard to emergency responders. Required building signage requirements is included.	Helps protect emergency responders.	
1206.2	This revision removes battery storage system requirements from Section 608 to Section 1206.2 and includes battery technologies and required safety features.	Newer battery technology is included.	
	CIAL OCCUPANCIES – CHAPTERS 20 THROUGH 39	<u> </u>	
Chapter 22	Reference to new standard NFPA 652 "Standard on the Fundamentals of Combustible Dust," is added to provide guidance and criteria when evaluating combustible dust hazards.	NFPA 652 provides a process to conduct a dust hazard analysis and evaluate a facility to quantify the hazard and identify remedial actions and protections levels.	
2303.2.1	Height of emergency disconnect switches for fuel dispensing operations shall be not less than 42 inches nor more than 48 inches AFF to the activation button.	Adds switch height to requirements: Clearly identified Readily accessible >20 feet, <100 feet from outdoor dispensing operations.	
2306.7.3.1	Authorizes the Fire Code Official to require additional vehicle impact protection at fuel dispensing devices to protect outdoor vehicle dispensing facilities.	Provides authority but does not mandate additional protection.	
2309.6 2309.6.1	The requirements for repairing vehicles fueled by compressed or liquefied hydrogen gas have been updated to address current technologies and processes.	The technical language addressing repairs, purging, defueling, and methods of discharge is deleted and replaced with a reference to NFPA 2, Hydrogen Technologies Code.	
2311.6	The requirements for repairing vehicles fueled by compressed or liquefied natural gas have been updated to address current technologies and processes.		

2311.8	The requirements for repairing vehicles fueled by	The technical language addressing repairs,
	lighter-than-air compressed or liquefied compressed gas	purging, defueling, and methods of discharge is
	have been updated to address current technologies and	deleted and replaced with a reference to NFPA
	processes.	2, Hydrogen Technologies Code.
2403.2.1.3	The size of the area where classified electrical wiring and	Change correlates with changes to NFPA 70
	equipment around a spray booth has been reduced to 3	National Electrical Code and NFPA 33 "Standard
	feet.	for Spray Application Using Flammable or
		Combustible equipment.
2404.2	Requirements for spray booths and spray operations are	This change correlates the IFC and the IBC
2404.3.1	correlated between the IFC and the IBC: 1-hour	requirements.
914.9	separation is required between spray booths and spray	
	booths and the remainder of the building.	
2810	New Section adds criteria for outdoor pallet storage at	Allows minimum distances to be reduced based
	pallet manufacturing and recycling facilities. Includes	on providing additional fire protection features.
	size of separate piles, distance between piles, buildings	
	and property lines.	
Chapter 31	New definition for umbrella structures added, regulation	Umbrella structures now included under a
	of umbrella structures when they exceed 400 sf.	definition of a tent.
3103.3.1	Special amusement structures located in temporary	Just because a temporary amusement structure
	tents are now required to be protected with automatic	is located in a tent does not reduce or eliminate
	sprinkler systems.	the inherent hazards associated with these
		facilities. This change "closes a loophole"
3103.6	Temporary tents and membrane structures are required	Chapter 16 of the IBC has been coorelated for
3103.9	to provide construction documents to address their	temporary tents.
	structural integrity Larger tents (50 occupants or more)	
	have been added to the list of structures that must	
	comply.	
3104.2	The application of testing for flame spread of tent	The revisions apply the appropriate test
	membranes has been clarified.	methodology to the fabric material.
3105	The term "Temporary Stage Canopy" has been changed	This change will ensure that all temporary
105.6.47	to "Temporary special event structure" and the	structures not regulated by the IBC will be
105.7.22	requirements for temporary stage structures are	regulated by this chapter of the IFC and will be
	expanded to include all temporary structures greater	included in plan review and inspection
	than 400 sf when used at special events.	requirements.

3106	This new section adds requirements specific to out-door public gatherings and improves correlation of requirements in the IBC and IFC.	This section addresses recent outdoor assemblies where several fatal events related to outdoor public gatherings as a result of structural failure.
3107.13	Requirements for the use and separation of LP gas containers in and around tents and membrane structures have been revised.	
Chapter 32	The requirements of Chapter 32 High-piled combustible storage have been updated to correlate with the current NFPA 13 requirements and recent FM Global tests.	This chapter has not been updated since 2000 edition of the IFC.
3304.5 3308 3309.1	Criteria for requiring fire watch has been added to the IFC along with clarification to the functions and duties of the fire watch personnel.	The intent is to improve the affectiveness of fire prevention programs on active construction sites.
Chapter 38	New Chapter 38 Higher Education Laboratories has been added to the IFC. Correlating IBC Section 427 has been added.	Higher education laboratories present unique challenges for fire safety. This new chapter provides guidance.
Chapter 39	New Chapter 39 Processing and Extracting Facilities has been added to specifically regulate the process of extracting oils from plant materials.	New chapter establishes regulations for the extraction of oil from plant material using solvents as a medium.
PART 5 – HAZ	ARDOUS MATERIALS – CHAPTERS 50 THROUGH 67	· · · ·
Table 03.1.(1)	Consumer Fireworks: Addresses the explosive nature of Division 1.4G explosives and removes the 100% increase in quantity for sprinklers where these items are stored.	The combined changes address a number of hazards associated with consumer fireworks. Removes consumer fireworks as a special exception and consolidates the requirements into its own category.
5003.1.1(1) 503.11.1 6303.1.1.2	The maximum allowable quantity of Class 3 oxidizers is increased by approximately 10% in control areas and Groups M and S occupancies.	Change recognizes changes that have occurred in Class 3 Oxidizer packaging methods to align with international metric (SI) weight and volume capacities.
5003.8.3.4	The fire-resistance-rating of the floor of a control area in Type IV buildings is now allowed to be reduced to 1-hour if the building is fire sprinklered and does not exceed 3- stories in height.	Fire-rating for floors of Type IV buildings are now the same as Type IIIA and VA buildings.
5005.1.12	Requirements for leak detection and emergency shutoff	Wording has not changed, but the

	for high hazard gasses and liquids only apply when the	requirements have been relocated with the
	maximum allowable quantity per control area is	result that requirements for leak detection and
	exceeded.	emergency shutoff do not apply universally
5103.2	Limitations of aerosol products in plastic containers is	Packaging for aerosol products is limited to 33.8
5104.1.2	revised and the use of Plastic Aerosol X products is	Oz (1,000 ml) for plastic and metal containers
	prohibited in higher life hazard occupancies.	and 4 oz (118 ml) for glass containers under
		specified conditions.
5103.2.2,	Specific fire protection requirements have been added to	When initially developed, FM determined that
5104.2.2,	address aerosol cooking spray products.	aerosol products with a flash point off 500 df
5104.3.3,		could be ignored. Aerosol cooking sprays, with
5104.8,		a flash point of less than 500 df have been
5106.2.2		determined to pose hazards. This modification
		addresses those hazards.
5306.1	The requirements for construction and ventilation of	One-hour separation is required for medical gas
5306.2	interior medical gas rooms and cabinets are revised.	storage rooms and ventilation increased from
		24 square inches to 36 square inches. When the
		maximum allowable quantity of gas is in the
		control area is exceeded, the control area is
		classified as Group H.
5307.1	Requirements for liquefied CO ₂ in beverage dispensing	Requirements have been revised among others
5307.3	applications has been correlated with the requirements	is 2 detectors are required.
	for gas detection systems.	
5307.4	Carbon dioxide enrichment systems are now regulated	This is in response to the proliferation of indoor
	by the IFC when the system contains more than 100	marijuana cultivation facilities that use carbon
	pounds of CO_2 or when the refill connection is remote	dioxide enrichment to enhance plant growth.
	from the tank or vessel.	
5703.6.2.2	Below-grade or underground piping systems connected	Clarifies existing requirements.
	to a tank in an underground area: additional language	
	added to provide clarity to Section 5703.6.2.2.	
5707,	On-demand mobile fueling is allowed at approved	New regulations for mobile fueling have been
5801.1	locations and under the control of a permit issued by the	added to the IFC.
	fire department.	
6104.3	New footnote g specifies separations between above-	Above ground LP-gas containers with a water
	ground LP-gass containers and public ways.	capacity of 2,000 gallons or less shall be
	Biodina Li -gass containers and public ways.	capacity of 2,000 galloris of 1633 shall be

DEFEDENCED	STANDARDS AND APPENDICES A THROUGH N	separated from the public ways by a distance of not less than 5 feet. Containers with a water capacity greater than 2,000 gallons shall be separated from public ways in accordance with this table.	
NFPA 13	Requires a water flow test to be conducted within 6	This change will provide more accurate design	
section 23.2.1.1	months of plan review.	supply information for fire suppression systems and will correlate with many fire department current practices.	
NFPA 72-	Patient room smoke detectors in Group I-2 and R-2.1	Eliminates delaying of the alarm activation in	
2016 Section 23.8.1.2.1.1	occupancies shall not include a positive alarm sequence.	Group I-2 and R02.1 patient rooms.	
E102.1.7.1	This change revises the oxidizer classification of sodium- dichloro-s-triazinetrione (sodium dichloroisocyanurane anhydrous)	Changes the oxidizer classification for water and swimming pool treatment products from Class 3 to a lesser hazard Class 2.	
Chapter N	New chapter that provides specific regulation to address the hazards associated with large trade shows and exhibitions. Many of these regulations may be found elsewhere in the IFC but the appendix provides a single location for regulations dealing with these events.	New Chapter conveniently places all regulations for large trade shows in a single location.	