# **2022 California Fire Code Changes**

#### **SUMMARY**

The bulk of amendments regarding Energy Storage Systems (ESS) occur in Chapters 1, 2, 9, 12 and Chapter 80, Referenced Standards.

The bulk of amendments regarding Type IV construction—tall wood/mass timber and cross-laminated timber—occur in Chapter 7 Section 701.6, Chapter 9 Section 914.3.1.2, and Chapter 33.

#### SIGNIFICANT CHANGES

		050			
		CFC		MASTER	
NFW	- CHANGE	SECTION/TABLE	COMMENTARY	IMPA	
	011/11102	NUMBER		YES -	NO
		1.11.1	New definition to clarify buildings occupied by the state	П	$\boxtimes$
		1.11.1	under the OSFM jurisdiction.		
	<u> </u>	4.44.0	Amendment referencing CBC Section 105.2 to clarify work		
	$\boxtimes$	1.11.6	exempt from permitting requirements.		$\boxtimes$
			Scope and administration match chapter 1 of the building		
	$\boxtimes$	Chapter 1	code.		$\boxtimes$
	$\boxtimes$	105.3.1.1	Permit expiration extended to 12 months.		$\boxtimes$
$\vdash \vdash$	$\square$	105.5.1	Additive Manufacturing (3D Printing) requires operational	<b>-</b>	
		100.0.1	permit as regulated by 230.3		
		105.5.14	An operational permit is required for stationary and mobile		$\boxtimes$
		105.5.14			
$\vdash$	<u> </u>	405.0.5	energy storage systems regulated by 1207.		
		105.6.5	Construction permit for ESS regulated by 1207	<u> </u>	
	$\boxtimes$	105.6.53	Amendment to require an operational permit for an		$\boxtimes$
			accumulation of more than 15 cubic feet of lithium-ion and		
			lithium metal batteries and storage shall comply with new		
			amendments in CFC Section 322.		
	$\boxtimes$	114	Reasons to deem a structure unsafe expanded.		$\boxtimes$
	$oxed{\boxtimes}$	Chapter 2	Definition added for 3D printer and subtypes of 3D		$oxed{\boxtimes}$
		'	printing.		_
		3D Printer	F9.		
	$\square$		Definition added for Atrium.		$\square$
	$\boxtimes$	Chapter 2	Definition added for Athum.		$\boxtimes$
		Atrium			
	$\boxtimes$	Chapter 2	Added a new defined term for child care that is consistent		$\boxtimes$
			with Title 22 (Social Security) of the California Code of		
		Child Care	Regulations.		
	$\square$	Chapter 2	Amended the defined term day-care to specify the time		$\square$
		Onapiei Z	period for the care of persons is not to exceed 24 hours,		
		Day-Care	and is to be consistent with Title 22.		
	$\boxtimes$	Chapter 2	New defined term to specify characteristics of inflatable		$\boxtimes$
			structures that need to be properly constructed and		
			anchored.		

		CFC SECTION/TABLE		MASTEI IMP	
NEW -	CHANGE	NUMBER	COMMENTARY	YES	
		Inflatable Amusement Device			
		Chapter 2  Mobile Food Preparation Vehicles	Repealed this term to align with California Code of Regulations Title 25, Housing and Community Development. See Chapter 3 changes below.		
		Chapter 2  PV Panel System, Ground- Mounted	New defined term to be consistent with references in CBC Chapters 16 and 31, CRC Chapter 3 and CFC Chapter 12.		
		Chapter 2  PV Support  Structure,  Elevated	New defined term for an elevated PV support structure designed with useable space underneath intended for secondary use such as providing shade for motor vehicle parking. Requirements for installation are addressed in CBC Chapters 15 and 16.		
		301.2	Repealed model code and references to mobile food vehicles throughout the code to address concerns regarding conflicting jurisdiction requirements between Title 25 and the CFC.		
$\boxtimes$		320	Additive Manufacturing (3D Printing) New section added to address 3D printing.		$\boxtimes$
$\boxtimes$		321	Artificial Combustible Vegetation. New section added to address artificial plants that may be fire hazard.		
		322	Lithium-ion and lithium Metal Batteries. Adopted new section to address safety requirements, as well as associated sections in Chapter 4.		
$\boxtimes$		403.10.6	Lithium-ion and lithium Metal Batteries mitigation planning. Amendments in these sections address fire safety and emergency action regarding battery storage and mitigation planning in the event of thermal runaway.		
		508.1.3	Specific fire command center locations for F-1 and S-1 occupancies.		$\boxtimes$
		508.1.5	Additional restrictions on what can be contained within a Fire Command center.		
		508.1.7	"FIRE COMMAND CENTER" Door labeling required.		$\boxtimes$
		510	Emergency Responder Communication Coverage. Changes throughout.		$\boxtimes$
		603	Electrical Equipment, wiring hazards. References added to electrical code and expansions to electrical enforcement.		
		605	Fuel Fire Appliances. References and code requirements addressing these appliances		
$\boxtimes$		610	Clothes Dryer Exhaust Systems. Reference provided to applicable codes and maintenance required.		

		CFC		MASTE	R PLAN
NEW	- CHANGE	SECTION/TABLE NUMBER	COMMENTARY	IMP/ YES	
	$\boxtimes$	703.2 and 704.2	Repair of penetrations.		$\boxtimes$
		708	Spray Fire-Resistant Materials. To be maintained or replaced.		$\boxtimes$
		808.5	Requirements for play structures added to existing buildings.		
	$\boxtimes$	Chapter 9	For Changes, see Building Code updates.		$\boxtimes$
		907.2.6.4	Group I-4. New section to include the intent of the smoke detection requirements for Group I-4 occupancies with a reference to Section 436.1.		
		907.2.11.8	Modified to address the references based on changes to both the NFPA 72 Standard 29.11.3.4, and the model code regarding smoke alarms and smoke detection systems.		
		913.1	Amend the exception for automatic sprinkler pumps to correlate with the California Residential Code section R313.		
		1032.2.1.2 and 1032.2.1.3	Adjustments and revisions to address maintenance requirements for fire escapes that have been relocated to Section 1032.		$\boxtimes$
	$\boxtimes$	Chapter 10	For Changes, see Building Code updates.		
	$\boxtimes$	1103.7.5.1	New Exception to manual fire alarm in R-1 occupancies.		$\boxtimes$
	$\boxtimes$	1103.9	Occupancies sited where carbon monoxide detection is required.		$\boxtimes$
		1105.6.1	Two means of egress from smoke compartment or access to two adjacent smoke compartments.		
		1202, 1203, 1204, 1205, 1206, and 1207	Repealed, renumbered, amended and carried forward existing amendments in Chapter 12 to adopt updated 2021 IFC model code language.		
		1207.11.7- 1207.11.7.3	Amendments regarding specific appliances, ESS equipment and devices that need protection from impact in a clearly defined area in residential garages and carports.		
		1207.11.7.1	Added to illustrate the zones in which a typical residential garage ESS installation would trigger the need for impact protection, following prescriptive barrier and post designs.		$\boxtimes$
	$\boxtimes$	1203.1.2	Changes to requirements for protections of fuel lines of emergency and standby power systems.		$\boxtimes$
		1203.2.5	Backup power required for exhaust ventilation systems required by section 1207.6.4.2.1.		$\boxtimes$
		1203.4.1 and 1203.5.1.	Sections revised to include ambulatory care facilities.		$\boxtimes$
$\boxtimes$		1204	Portable generator requirements added.		$\boxtimes$
		1205.2 and 1205.2.3	Building Integrated photovoltaic exceptions addressed.		

		CFC		MASTE	
NEW	- CHANGE	SECTION/TABLE NUMBER	COMMENTARY	IMP/ YES	
		1205.5	Ground mounted PV systems, vegetation control.		
$\boxtimes$		1206.14	Interconnection of a fuel cell vehicle energy storage system use.		$\boxtimes$
		1207	Electrical Energy Storage Systems (ESS). New section addressing requirements for these systems.		
	$\boxtimes$	2201	Exceptions for Combustible dust producing operations.		$\boxtimes$
	$\boxtimes$	2203	Dust Explosion Prevention requirements greatly expanded.		
	$\boxtimes$	2208.2	Fueling appliance listings.		$\boxtimes$
	$\boxtimes$	2311.8	Exceptions for repair garages for vehicles fueled by lighter than air fuels.		
	$\boxtimes$	2808.3	Size of wood piles expanded and additional exceptions and separation added.		
	$\boxtimes$	3006	Exceptions to fire protection for industrial ovens added.		$\boxtimes$
		3108	Requirements for inflatable Amusement Devices.		
	$\boxtimes$	3101.1	Carried forward existing amendments and added new amendment regarding temporary structures, water filled vessels and inflatable amusement devices.		$\boxtimes$
	$\boxtimes$	3103.8.2	Repealed the reference to Title 19 regulations regarding vehicle parking near tents.		
		3103.9.1	Amendment requiring the tent manufacturer to provide the documentation permitting use of water filled vessels for anchoring and securing their tents.		
	$\boxtimes$	3104.3	Label requirements for temporary and permanent tents and membrane structures.		$\boxtimes$
		3106	Amendment requiring basic design and safety criterion in accordance with ASTM F2374 for inflatable amusement devices also known as "bounce houses."		$\boxtimes$
		3205.1	Approved storage layout of high piled combustible storage shall be evaluated annually.		$\boxtimes$
$\boxtimes$		3209.4	Emergency shutdown for automated storage.		$\boxtimes$
		Chapter 33	Extensive changes to chapter on Fire Safety During Construction and Demolition.		$\boxtimes$
		Chapter 38	IFC Chapter 38 is omitted in its entirety to correlate with the California Building Code and amendments regarding the Group L occupancy.		
	$\boxtimes$	3904	Listing and approvals for equipment for processing and extraction.		$\boxtimes$
	$\boxtimes$	Chapter 40	Storage of Distilled Spirits and Wines. New chapter.		
		4902	New definition of plants less likely to ignite, contribute heat or spread flame. Also provides a list of resources for more information about these types of plants.		$\boxtimes$

NEW -	CHANGE	CFC SECTION/TABLE	COMMENTARY	MASTEF IMP	ACT
14277	011/11102	NUMBER Fire-Resistant	OCIVINIZITATION	YES ·	- NO
		Vegetation		ı	
		4902	Amended to be consistent with language used in rest of the WUI regulations.		$\boxtimes$
		Local Responsibility Area			
		4903	Added to grant authority to local fire officials to require building owners to provide a fire protection plan to mitigate the wildfire hazards that may exist based on a project-specific wildfire hazard assessment that includes considerations of location, topography, aspect, and climatic and fire history.		
			The fire protection plan shall address fire department access, egress, road and address signage, water supply, fuel reduction and defensible space requirements in accordance with the California Public Resources Code.		
		4903.3	New amendment establishes requirements for local agencies to provide information to the public regarding the identification of very high fire hazard severity zones (VHFHSZ) within a 30-day period. Other new requirements in this subsection address local agency responsibilities and duties to develop fire severity zone maps accessible to the general public, as well as requirements to designate by ordinance VHFHSZ.		
		4906	New amendments in this section include additional requirements for the development, identification and maintenance of the vegetation management zones adjacent to structures, as well as design criteria for specific types of fire-resistant and non-fire-resistant vegetation.		
		4908	New code sections added to comply with AB 2911 (Chapter 641, Statutes of 2018) which requires a survey of local governments every five years to identify existing subdivisions in the state responsibility area (SRA) or VHFHSZ without a secondary egress route. Subsections authorize the Board of Forestry and SFM-specified local government bodies to make recommendations to include creating secondary access or access road improvements, among other options.		
		4910	Added to comply with AB 2911 (Chapter 641, Statutes of 2018) which requires cities and counties to adopt a comprehensive general plan with various elements including a safety element for protection of the community from unreasonable risks associated with various hazards, including wildfires.		
	$\boxtimes$	5001.1	Exceptions added to Hazardous materials.		$\boxtimes$

NEW	- CHANGE	CFC SECTION/TABLE	COMMENTARY	IMP	R PLAN ACT
14244	011/11102	NUMBER	OOMINIENTATO	YES	- NO
		5004.14	Outdoor Storage Locations of Hazardous Materials.		
	$\boxtimes$	Chapter 51	Plastic Aerosols provisions added.		
	$\boxtimes$	5606.6	Requirements for commercial reloading of small ammunitions added.		
	$\boxtimes$	5701.2	Exceptions added for flammable and combustible liquids.		
	$\boxtimes$	5707	Changes to On-Demand Mobile Fueling Operations.		
	$\boxtimes$	Chapter 80	Amended several referenced standards to correlate with model code revisions and new California amendments.		
	$\boxtimes$	ASTM F2374	Added regarding provisions for inflatable amusement devices.		$\boxtimes$
		Appendix P	Although SFM does not adopt Appendix P statewide in the California Fire Code, when adopted by local jurisdictions and fire districts, this appendix is meant to be a tool to enable communities to collect, assemble and represent the associated risks within a WUI fire area.		