

2016 California Mechanical Code (CMC) Changes

SUMMARY

Some of the significant changes are:

Equipment platforms required on roofs with greater than a 4 in 12 pitch. New Air Classification types defined by area served and recirculation restrictions between them. Minimum exhaust rates revised based on Air Class. Newly installed gas fireplaces must be direct vent type. Listings for specific mechanical equipment have been added to the sections where requirements for those pieces of equipment are located.

Additionally, several code sections have been reorganized, meaning the previous requirements have been included in other or new sections. A 'Section Relocation' Table has been provided on pages xviii-xxi.

SIGNIFICANT CHANGES

NEW - CHANGE	CMC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT	
			YES	NO
<input type="checkbox"/> <input checked="" type="checkbox"/>	1.1.7.3 Except.	Exception: Rather than having to comply with the most restrictive requirement, detached one or two family dwellings, efficiency dwelling units, lodging houses, live/work units, and townhouses not more than three stories above grade shall not be required to comply with the California Residential Code if they are constructed to comply with the California Building Code.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	302.1	Listed materials required to be used in mechanical systems unless approved by AHJ.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	302.3	Process for approval of 'Alternative Engineered Designs'.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	303.2	Closet or Alcove installations of furnaces or boilers shall not be allowed to have the clearances reduced.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	303.10.1	Unlisted appliances must be installed in accordance with Table 303.10.1 when more restrictive than the manufacturer's installation instructions.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	304.2	Equipment and appliances requiring service with a roof pitch of 4 in 12 or more shall be provided with a level platform of not less than 30"x30" and shall be provided at the service side of the unit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	304.3.1.2 (4)	Rungs for permanent ladders to access mechanical equipment must not exceed 12" and each rung must be capable of supporting 300lb.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	305.1	All appliances installed in garages and adjacent spaces with burners or burner ignition devices must be installed so that such is installed 18" above the floor unless it is listed as flammable vapor ignition resistant.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	305.3	No mechanical systems may be installed in elevator shafts unless required for functionality and safety of the elevator system.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	310.1.1	Requirements for Condensate Pumps.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	310.2 (1) (2) (3) (4)	Additional allowances for method of secondary condensate overflow control.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SIGNIFICANT CHANGES (cont'd)

NEW - CHANGE	CMC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO	
<input checked="" type="checkbox"/> <input type="checkbox"/>	310.2.1	Insulation and associated components of mechanical equipment with condensate pans shall be installed above the flood rim level of the of the drain pan. Where supports are in contact with condensate waste they shall be approved corrosion resistant material.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	310.3	Condensate waste pipe material must be approved for the material that it will be discharging.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	310.3.1	Cleanouts for condensate piping shall be provided.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	311.2	Media-type air filters must comply with UL900	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	402.2.1	Requirements for floor areas to be ventilated for natural ventilation systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	403.9 Table 402.1	Air classification and recirculation allowances of each class of air. Also, see Definitions in chapter 2 for definition of Class 1, 2, 4, and 4 Air and table 402.1 for specific Occupancy Categories Air Class.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	Table 403.7	Minimum Exhaust Rates table now includes Air Class types for specific occupancies.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	502.1	Exhaust openings terminating to the outdoors shall be covered with a corrosion resistant screen having not less than ¼” openings, and shall have not more than ½” openings. Except Clothes dryers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	502.2.1	Environmental Air Ducts shall not terminate less than 10’ from a forced air inlet and shall not discharge on to a public way.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	503.3	Minimum Efficiency Reporting Value (MERV) 8 filters installed before occupancy on outside and return air on units having over 60,000 BTU/h. Units under provided with ASHRAE 10-15% efficiency filter.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	504.1 Except.	Ductless Range Hoods and Condensing Clothes Dryers are exempt from environmental air duct requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	504.1 Except. (2)(2)	Backdraft protection is not required where the exhaust duct serves spaces that are not mechanically heated or cooled or at a space that is maintained at positive pressure.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	504.2	Single or combined mechanical exhaust systems shall be independent of other exhaust systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	504.4.3.1(6)	Exhaust fans for Type 2 clothes dryers shall operate continuously or be interlocked to exhaust air where a clothes dryer is in operation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	504.4.4	Requirements for common exhaust systems for clothes dryers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	504.4.5	UL listing requirements for Heat (Energy) Recovery Ventilators.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	505.2	Fire dampers shall not be installed where product conveying ducts are carrying material considered toxic where the toxic hazard is more than the fire hazard. Exhaust ducts shall not pass through fire walls.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SIGNIFICANT CHANGES (cont'd)

NEW - CHANGE	CMC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO	
<input type="checkbox"/> <input checked="" type="checkbox"/>	508	Clarification on where type I and II hoods shall be installed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	510.1.3	Drains shall be provided at low points of horizontal ducts in exhaust systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	510.5	Factory built grease ducts shall be listed with UL 1978.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	510.5.6	Testing procedures for grease duct systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	510.8	Requirements for underground grease ducts.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	510.10	Termination of type II hoods.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	511.2.2	Performance and capture and containment testing required for hoods.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	511.2.3	Exhaust fans serving hoods shall be provided with a means so that the fan is activated when an appliance under the hood is turned on.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	511.3.1	Air balance plans for facilities with commercial kitchen ventilation required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	513.2.5.6	Separate control valves for fire sprinklers and water supply of hoods with water wash.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	513.11	Class K fire extinguishers required at cooking appliances that involve combustible cooking media such as vegetable oils, animal oils, and fats.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	517.3.1.1	Requirements for Equipment with Solid Fuel for Flavoring.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	517.7.6	Exceptions for providing sprinklers at solid fuel storage.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	518	Downdraft Appliance requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	602.2	Changes in combustible materials allowed in ducts or plenums.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	603.3.3	Ducts in structures that are classified as seismic design category C, D, E, or F shall be in accordance with the building code.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	603.5	Flexible air ducts shall not penetrate fire-resistance rated assemblies or construction and shall be not more than 5'.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	603.6	Plastic duct allowed underground if listed for installation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	802.6.2.7	Metal shield required where a gas vent passes through and insulated assembly to 2" above the insulation.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	905.9	Requirements for heaters in Aircraft Hangars separated from repair garages.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	912.2 (HCD 1 & HCD 2)	Newly installed gas fireplaces shall be direct-vent sealed-combustion type.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	913.0	Listing requirements for Factory-Built Fireplaces.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	935.0	Requirements for Refrigeration Appliances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/>	936.0	Requirements for Ductless Mini-Split Systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	Chapter 11	Many changes to refrigerant systems requirements.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	Chapter 12	The entire chapter on Hydronic systems has been revised.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/>	1308.5.2.3	Aluminum Alloy pipe not allowed underground or exterior.	<input type="checkbox"/>	<input checked="" type="checkbox"/>