

**EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION (CBSC)**

**REGARDING PROPOSED ADOPTION OF THE
2009 UNIFORM MECHANICAL CODE (UMC) FOR THE
CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 4**

LEGEND FOR EXPRESS TERMS

1. Existing California amendments or code language being modified, as well as selected terms set forth in Chapter 2, Definitions are in italics when they appear in the model code text, independent of state amended definitions: All such language appears in *italics*, modified language is underlined.
 2. New California amendments: All such language appears underlined and in italics.
- Repealed text: All such language appears in ~~strikeout~~.

The California Building Standards Code (California Code of Regulations, Title 24, Part 1, 2, 3, 4, 5, 6, 8, 10, 11 & 12) is published in its entirety every three years and is effective to all buildings that submit an application for a building permit during its effective period. Each triennial edition of the California Building Standards Code becomes effective 180 days after its publication and is effective at the time an application for a building permit is submitted.

These proposed regulations will make effective the 2009 edition of the Uniform Mechanical Code (UMC) of the International Association of Plumbing and Mechanical Officials (IAPMO) for state owned buildings, including buildings constructed by the Trustees of the California State University and buildings constructed by the Regents of the University of California that are permitted under the next triennial edition of the California Mechanical Code (CMC). Further, California law makes the UMC standards adopted by the Commission applicable to all occupancies in California.

EXPRESS TERMS:

The California Building Standards Commission proposes to adopt the 2009 edition of the Uniform Mechanical Code (UMC) of the International Association of Plumbing and Mechanical Officials (IAPMO) for codification and effectiveness in the next triennial edition of the California Mechanical Code (CMC) as presented on the following pages. The California Building Standards Commission further proposes to repeal the 2007 California Mechanical Code, the 2006 edition of the Uniform Mechanical Code of the International Conference of Building Officials, as presented on the following pages.

Adopt Chapter 1, Sections 1.1 through 1.2 with amended articles as indicated:

MATRIX ADOPTION TABLE

CHAPTER 1 – DIVISION I & II

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments		
Adopt Entire Chapter as amended (amended sections listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1,2,3} listed below	X	
101 <u>1.1</u>	X	
102 <u>1.2</u>	X	

**~~CALIFORNIA CHAPTER 1
GENERAL CODE PROVISIONS~~**

CHAPTER 1

CALIFORNIA ADMINISTRATION

DIVISION I

~~401-0~~ 1.1.0 General

~~401-1~~ 1.1.1 Title. *These regulations shall be known as the California Mechanical Code, may be cited as such and will be referred to herein as “this code.” The California Mechanical Code is Part 4 of twelve parts of the official compilation and publication of the adoptions, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the ~~2006~~ 2009 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.*

~~401-2~~ 1.1.2 Purpose. *The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.*

~~401-3~~ 1.1.3 Scope. *The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout the State of California.*

~~401-3.1~~ 1.1.3.1 Nonstate-regulated buildings, structures, and applications. *Except as modified by local ordinance pursuant to Section ~~401-8~~ 1.1.8, the following standards in the California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 6, 9, ~~and 10 and 11~~ shall apply to all occupancies and applications not regulated by a state agency.*

1.1.3.2 State-regulated buildings, structures, and applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions shall apply to the following buildings, structures, and applications regulated by state agencies as referenced in the Matrix Adoption Tables and as specified in Sections 1.2 through 1.14, except where modified by local ordinance pursuant to Section 1.1.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the State Legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

1. State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the Regents of the University of California, and regulated by the Building Standards Commission. See Section 1.2 for additional scope provisions.
2. Local detention facilities regulated by the Corrections Standards Authority. See Section 1.3 for additional scope provisions.
3. Barbering, cosmetology or electrolysis establishments, acupuncture offices, pharmacies, veterinary facilities, and structural pest control locations regulated by the Department of Consumer Affairs. See Section 1.4 for additional scope provisions.
4. Reserved for the California Energy Commission. See Section 1.5 for additional scope provisions.
5. Dairies and places of meat inspection regulated by the Department of Food and Agriculture. See Section 1.6 for additional scope provisions.
6. Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles, and wild animal quarantine facilities regulated by the Department of Public Health Services. See Section 1.7 for additional scope provisions.
7. Hotels, motels, lodging houses, apartment houses, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 1.8.2.1 for additional scope provisions.
8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use spaces serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of a ~~Covered multifamily dwelling~~ "COVERED MULTIFAMILY DWELLINGS," and common-use spaces serving covered multifamily dwellings which are regulated by the Department of Housing and Community Development. See Section 1.8.2.1.2 for additional scope provisions.
9. Permanent buildings and permanent accessory buildings or structures constructed within mobilehome parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 1.8.2.1.3 for additional scope provisions.
10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 1.9.1 for additional scope provisions.
11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 1.9.2 for additional scope provisions.
12. Reserved for the State Historical Building Safety Board with the Division of the State Architect. See Section 1.9.3 for additional scope provisions.
13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Public Health Services and correctional treatment

centers regulated by the Office of Statewide Health Planning and Development. See Section 440 1.10 for additional scope provisions.

14. Applications regulated by the Office of State Fire Marshal include but are not limited to the following in accordance with Section 444 1.11:

44.1. Buildings or structures used or intended for use as an:

44.1.1. Asylum, jail, prison.

44.1.2. Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.

44.1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.

44.1.4. Small family day care homes, large family day-care homes, residential facilities and residential facilities for the elderly, residential care facilities.

44.1.5. State institutions or other state-owned or state-occupied buildings.

44.1.6. High rise structures.

44.1.7. Motion picture production studios.

44.1.8. Organized camps.

44.1.9. Residential structures.

44.2. Tents, awnings or other fabric enclosures used in connection with any occupancy.

44.3. Fire alarm devices, equipment and systems in connection with any occupancy.

44.4. Hazardous materials, flammable and combustible liquids.

44.5. Public school automatic fire detection, alarm, and sprinkler systems.

44.6. Wildland-urban interface fire areas.

15. Public libraries constructed and renovated using funds from the California Library Construction and Renovation Bond Act of 1988 and regulated by the State Librarian. See Section 442 1.12 for additional scope provisions.

16. Graywater systems regulated by the Department of Water Resources. See Section 443 1.13 for additional scope provisions.

17. For applications listed in Section 409.4 1.9.1 regulated by the Division of the State Architect – Access Compliance, outdoor environments and uses shall be classified according to accessibility uses described in Chapter 11A, 11B and 11C.

18. Marine Oil Terminals regulated by the California State Lands Commission. See Section 444 1.14 for additional scope provisions.

401.4 1.1.4 Appendices. Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section ~~18938 (b)~~ 18901 et. seq. for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 404.8 1.1.8 of this code.

401.5 1.1.5 Referenced codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as

standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes, standards, and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire prevention engineering practices.

401-6 1.1.6 NonBuilding standards, orders and regulations. Requirements contained in the Uniform Mechanical Code or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909, shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.

401-7 1.1.7 Order of precedence and use.

401-7-1 1.1.7.1 Differences. In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.

401-7-2 1.1.7.2 Specific provisions. Where a specific provision varies from a general provision, the specific provision shall apply.

401-7-3 1.1.7.3 Conflicts. When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirements shall prevail.

401-8 1.1.8 City, county, or city and county amendments, additions or deletions.

The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section ~~401-8-4~~ 1.1.8.1. The effective date of amendments, additions, or deletions to this code ~~by of cities a city, counties county,~~ or city and ~~counties county~~ filed pursuant to Section ~~401-8-4~~ 1.1.8.1 shall be the date filed. However, in no case shall the amendments, additions or deletions to this code be effective any sooner than the effective date of this code.

Local modifications shall comply with Health and Safety Code Section 18941.5 for Building Standards Law, Health and Safety Code Section 17958 for State Housing Law or Health and Safety Code Section 13869.7 for Fire Protection Districts.

401-8-1 1.1.8.1 Findings and filings.

1. The city, county, or city and county shall make express findings for each amendment, addition or deletion based upon climatic, topographical, or geological conditions.

Exception: Hazardous building ordinances and programs mitigating unreinforced masonry buildings.

2. The city, county, or city and county shall file the amendments, additions, or deletions expressly marked and identified as to the applicable findings. Cities, counties, cities and counties, and fire departments shall file the amendments, additions or deletions, and the findings with the California Building Standards Commission at 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833.
3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development, Division of Codes and Standards, P.O. Box 1407, Sacramento, CA 95812-1407 or at 1800 3rd Street, Room 260, Sacramento, CA ~~95814~~ 95811.

401-9 1.1.9 Effective date of this code. Only those standards approved by the California Building Standards Commission that are effective at the time an application for building permit is submitted shall apply to the plans and specifications for, and to the construction performed under, that permit. For the effective dates of the provisions contained in this code, see the History Note page of this code.

401-10 1.1.10 Availability of codes. At least one ~~entire~~ complete copy each of Titles 8, 19, 20, 24, and 25 with all revisions shall be maintained in the office of the building official responsible for the administration and enforcement of this code. Each state department concerned and each city, county or city and county shall have an up-to-date copy of the code available for public inspection. See Health and Safety Code Section 18942 (d)(1) and (2).

401-11 1.1.11 Format. This part fundamentally adopts the Uniform Mechanical Code by reference on a chapter-by-

chapter basis. Such adoption is reflected in the Matrix Adoption Table of each chapter of this part. When the Matrix Adoption Tables make no reference to a specific chapter of the International Building Code such chapter of the International Building Code is not adopted as a portion of this code.

401-12 1.1.12 Validity. If any chapter, section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, contrary to statute, exceeding the authority of the state as stipulated by statutes or otherwise inoperative, such decision shall not affect the validity of the remaining portion of this code.

SECTION ~~402~~ 1.2 BUILDING STANDARDS COMMISSION

~~402.1~~ 1.2.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

1.2.2 Alternate Materials and Methods of Construction Equivalency. Nothing in this code is intended to prevent the use of systems, methods, or devices of equivalent

1. State Buildings for all occupancies.

Application – State buildings (all occupancies), including buildings constructed by the Trustees of the California State University and the Regents of the University of California where no state agency has the authority to adopt building standards applicable to such buildings.

Enforcing Agency – State or local agency specified by the applicable provisions of law.

Authority Cited – Health and Safety Code section 18934.5.

Reference – Health and Safety Code, Division 13, Part 2.5, commencing with section 18901.

2. University of California, California State Universities, and California Community Colleges.

Application – Standards for lighting for parking lots and primary campus walkways at the University of California, California State Universities, and California Community Colleges.

Enforcing Agency – State or local agency specified by the applicable provisions of law.

Authority Cited – Government Code section 14617.

Reference – Government Code section 14617.

3. Existing State-Owned Buildings, including those owned by the University of California and by the California State University–

Building seismic retrofit standards including abating falling hazards of structural and nonstructural components and strengthening of building structures. See also Division of the State Architect.

Enforcing Agency – State or local agency specified by the applicable provisions of law.

Authority Cited – Government Code section 16600

Reference – Government Code sections 16600 through 16604

4. Unreinforced Masonry Bearing Wall Buildings.

Application – Minimum seismic strengthening standards for buildings specified in Appendix Chapter 1 of the California Code for Building Conservation, except for buildings subject to building standards adopted pursuant to Part 1.5 (commencing with Section 17910)

Enforcing Agency – State or local agency specified by the applicable provisions of law.

Authority Cited – Health and Safety Code section 18934.6

Reference – Health and Safety Code sections 18901 through 18949

1.2.3 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 building 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.

1.2.3.1 Research Reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

1.2.3.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

~~APPENDIX CHAPTER 1~~

ADMINISTRATION

DIVISION II

(Chapter 1, Administration has been relocated from Appendix Chapter 1 and renamed Division II)

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Notation

Authority: Health and Safety Code §18934.5

References: Health and Safety Code §18934.5

Adopt Chapter 2 and 3 of the 2009 UMC:

**MATRIX ADOPTION TABLE
Adopt Chapters 2 & 3**

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments	X	
Adopt Entire Chapter as amended (amended sections listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		

CHAPTERS 2 and 3

CBSC is proposing to adopt chapters 2 and 3 without amendments.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Adopt Chapter 4 of the 2009 UMC as amended:

MATRIX ADOPTION TABLE Adopt Chapter 4 VENTILATION AIR SUPPLY

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments		
Adopt Entire Chapter as amended (amended sections listed below)	X	
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		
402.1	X	Existing amendment to remain unchanged
Table 4-1, <i>Note</i>	X	Existing amendment to remain unchanged

CHAPTERS 4

CBSC is proposing to adopt chapter 4 with amendments.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Adopt Chapters 5 through 10 of the 2009 UMC:

MATRIX ADOPTION TABLE Adopt Chapters 5 - 10

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments	X	
Adopt Entire Chapter as amended (amended sections listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		

CHAPTERS 5 - 10

CBSC is proposing to adopt chapters 5 through 10 without amendments.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Adopt Chapter 11 of the 2009 UMC as amended:

MATRIX ADOPTION TABLE Adopt Chapter 11 REFRIGERATION

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments	X	
Adopt Entire Chapter as amended (amended sections listed below)	X	
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		
<u>1106.3.1</u>	X	Add amendment to limit unauthorized access to refrigerant and decrease accessibility of refrigerants by children

CHAPTER 11

1106.3.1 Unauthorized Access to Refrigerant Ports.[BSC] Outdoor connections for filling the system with refrigerant shall be protected from unauthorized access by an approved means acceptable to the Authority Having Jurisdiction.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Adopt Chapters 12 through 14 of the 2009 UMC:

MATRIX ADOPTION TABLE Adopt Chapters 12 - 14

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments	X	
Adopt Entire Chapter as amended (amended sections listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		

CHAPTERS 12 - 14

CBSC is proposing to adopt chapters 12 through 14 without amendments.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Chapter 15 of the 2009 UMC NOT ADOPTED:

MATRIX ADOPTION TABLE Chapter 15 – Not Adopted

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments		
Adopt Entire Chapter as amended (amended sections listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		

**CHAPTER 15
SOLAR SYSTEMS**

CBSC is proposing not to adopt chapters 15

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Adopt Chapters 16 and 17 of the 2009 UMC:

**MATRIX ADOPTION TABLE
Adopt Chapters 16 & 17**

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments	X	
Adopt Entire Chapter as amended (amended sections listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1, 2, 3} listed below		

CHAPTERS 16 and 17

CBSC is proposing to adopt chapters 16 and 17 without amendments.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Adopt Appendices A, B, C and D of the 2009 UMC:

**MATRIX ADOPTION TABLE
Adopt Appendices A, B, C and D:**

Adopting Agency	BSC	COMMENTS
Adopt entire Chapter without amendments	X	
Adopt Entire Chapter as amended (amended sections		

listed below)		
Adopt Only those sections that are listed below and/or Adopt Only those California promulgated sections ^{1,2,3} listed below		

Appendices A, B, C and D

CBSC is proposing to adopt appendices A, B, C and D with no new amendments.

Notation

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5