STATE OF CALIFORNIA
BUILDING STANDARDS COMMISSION

CA BUILDING STANDARDS COMMISSION
JAN 16 2019
APPROVED

FINAL EXPRESS TERMS FOR PROPOSED BUILDING STANDARDS OF THE DIVISION OF THE STATE ARCHITECT–STRUCTURAL SAFETY (DSA-SS AND DSA-SS/CC) REGARDING THE 2019 CALIFORNIA MECHANICAL CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4

(DSA-SS 03/18)

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code, § 11346.2[a][1]).

The Division of the State Architect (DSA) proposes to adopt the 2018 edition of the Uniform Mechanical Code (UMC) as the 2019 edition California Mechanical Code (CMC), for application by DSA-SS to public elementary and secondary schools, community colleges, and state-owned or state-leased essential services buildings.

DSA also proposes to adopt the 2018 edition of the UMC as the 2019 edition CMC, for application by DSA-SS/CC to community colleges, which a community college district may elect to use in lieu of standards promulgated by DSA-SS (refer to Education Code, § 81053).

DSA further proposes to:

Repeal the 2015 edition UMC articles adopted as the 2016 edition CMC.

Repeal amendments to the model code that are no longer necessary, repeal or amend building standards that are not addressed by a model code;

Relocate or codify existing adopted and necessary amendments to the model code into the format of the model code proposed for adoption, the action of which has no regulatory effect; adopt new necessary amendments to the model code proposed for adoption; and/or

Adopt new building standards that are not addressed by the model code proposed for adoption.

LEGEND FOR EXPRESS TERMS:

1. Model Code language appears upright.
2. Existing California amendments appear in *italics*.
3. Amended model code or new California amendments appear *underlined and in italics*.
4. Repealed model code language appears ~~upright and in strikeout~~.
5. Repealed California amendments appear in ~~*italics and strikeout*~~.

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FINAL EXPRESS TERMS

(All existing California amendments that are not revised below shall continue without change).

DSA proposes to carry forward existing California amendments in Chapter 1 (Administration) from the 2016 CMC, including minor editorial edits noted, for adoption into the 2019 edition CMC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter as amended (amended sections listed below)	X	X	
1.1.0	X	X	
1.1.1	X	X	
1.1.2	X	X	
1.1.3	X	X	
1.1.3.1	X	X	
1.1.3.2	X	X	
1.1.4	X	X	
1.1.5	X	X	
1.1.6	X	X	
1.1.7	X	X	
1.1.7.1	X	X	
1.1.7.2	X	X	
1.1.7.3	X	X	
1.1.8	X	X	
1.1.9	X	X	
1.1.10	X	X	
1.1.11	X	X	
1.1.12	X	X	
1.9.0	X	X	
1.9.2	X	X	
1.9.2.1	X		
1.9.2.1.1	X		
1.9.2.2	~~X~~	X	
1.9.2.2.13		X	
~~*1.9.2.4*~~		~~X~~	

CHAPTER 1
ADMINISTRATION

DIVISION I
CALIFORNIA ADMINISTRATION
~~DIVISION I~~

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~~CALIFORNIA ADMINISTRATION~~

1.1.0 General.

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 thirteen parts of the official compilation and publication of the adoption, 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 2018~~5~~ Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.*

...

1.9.2 Division of the State Architect – Structural Safety.

~~***1.9.2.1 Adopting Agency Identification.*** *The provisions of this code applicable to buildings identified in this Subsection 1.9.2.2 will be identified in the Matrix Adoption Tables under the acronym DSA-SS.*~~

1.9.2.1~~2~~ DSA-SS (Division of the State Architect – Structural Safety).

Application *– Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential services buildings.*

Enforcing Agency *– Division of the State Architect – Structural Safety (DSA-SS).*

The Division of the State Architect has been delegated the responsibility and authority by the Department of General Services to review and approve the design and oversee and observe the construction of public elementary and secondary schools, community colleges, and state-owned or state-leased essential services buildings.

Authority Cited *– Education Code Sections 17310 and 81142, and Health & Safety Code Section 16022.*

References *– Education Code Sections 17280 through 17317 and 81130 through 81147, and Health & Safety Code Sections 16000 through 16023.*

1.9.2.1.1 Adopting Agency Identification.

The provisions of this code applicable to buildings identified in this Subsection 1.9.2.1 will be identified in the Matrix Adoption Tables under the acronym DSA-SS.

~~***1.9.2.3 Adopting Agency Identification.*** *The provision of this code applicable to buildings identified in this Subsection 1.9.2.4 will be identified in the Matrix Adoption Tables under the acronym DSA-SS/CC.*~~

1.9.2.24. DSA-SS/CC (Division of the State Architect – Structural Safety/Community Colleges).

Application *– Community Colleges.*

The Division of the State Architect has been delegated the authority by the Department of General Services to promulgate alternate building standards for application to community colleges, which a community college may elect to use in lieu of standards promulgated by DSA-SS in accordance with Section 1.9.2.12. Refer to Title 24, Part 2, Section 1.9.2.24.

Enforcing Agency *– Division of the State Architect – Structural Safety/Community Colleges (DSA-SS/CC).*

The Division of the State Architect has been delegated the authority by the Department of General Services to review and approve the design and oversee and observe the construction of community colleges electing to use the alternative building standards as provided in this section.

Authority Cited *– Education Code Section 81053.*

References *– Education Code Sections 81052, 81053, and 81130 through 81147.*

1.9.2.2.1 Adopting Agency Identification.

The provisions of this code applicable to buildings identified in this Subsection 1.9.2.2 will be identified in the Matrix Adoption Tables under the acronym DSA-SS/CC.

...

DIVISION II
~~**DIVISION II**~~
ADMINISTRATION

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101.0 General.

101.1 Title. This document shall be known as the "*California Mechanical Code*~~Uniform Mechanical Code~~", may be cited as such, and will be referred to herein as "this code."

...

DSA proposes to adopt Chapter 2 (Definitions) of the 2018 edition UMC with existing California amendments carried forward, into the 2019 edition CMC.

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CHAPTER 2
DEFINITIONS

...

DSA proposes to adopt Chapter 3 (General Requirements) of the 2018 edition UMC with existing California amendments carried forward, including minor editorial correction noted, into the 2019 edition CMC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	~~X~~	~~X~~	
Adopt Entire Chapter as amended (amended sections listed below)	X	X	
303.7	X	X	
312.1	X	X	

CHAPTER 3
GENERAL REQUIREMENTS

...

312.1 General. Water supply, sanitary drainage, and backflow protection shall be in accordance with the *California Plumbing Code*~~Plumbing Code~~.

...

DSA proposes to adopt Chapter 4 (Ventilation Air Supply) of the 2018 edition UMC with existing California amendments carried forward into the 2019 edition CMC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter	~~X~~	~~X~~	
Adopt Entire Chapter as amended (amended sections listed below)	X	X	
401.2	X	X	
401.2 Exceptions 1 & 2	X	X	
401.2.1	X	X	
402.1	X	X	
Table 402.1	X	X	

CHAPTER 4
VENTILATION AIR SUPPLY

...

[Relocated from 503.3] ***401.2 Filters.*** ***[DSA-SS & DSA-SS/CC]*** *In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13~~8~~. MERV 13~~8~~ filters shall be installed prior to occupancy, and*

recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual in compliance with Chapter 5, Division 5.5. of the California Green Building Standards Code (CALGreen).

Exceptions:

~~*1. An ASHRAE 10-percent to 15-percent efficiency filter shall be permitted for an HVAC unit meeting the 2013 California Energy Code having 60,000 Btu/h (17.6 kW) or less capacity per fan coil, if the energy use of the air delivery system is 0.4 W/cfm [848 W/(m³/s)] or less at design air flow.*~~

1~~2~~. Existing mechanical equipment.

[Relocated from 503.3.1] ***401.2.1 Labeling.*** *Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.*

...

402.1 Occupiable Spaces. Occupiable spaces...with this chapter. *Ventilation air ~~supply~~ requirements for occupancies...*

...

DSA proposes to adopt Chapter 5 (Exhaust Systems) of the 2018 edition UMC with existing DSA and California amendments carried forward into the 2019 edition CMC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter as amended (amended sections listed below)	X	X	
~~*503.3*~~	~~X~~	~~X~~	
~~*503.3 Exception 1 & 2*~~	~~X~~	~~X~~	
~~*503.3.1*~~	~~X~~	~~X~~	
511.1.6~~*511.1.6*~~	X	X	
512.2.5	X	X	
513.2.2	X	X	
513.2.2 Exception 2	X	X	
513.3.2	X	X	
513.11	X	X	
513.11.1	X	X	
516.2.7 Exception	X	X	
516.2.9(4)	X	X	

CHAPTER 5
EXHAUST SYSTEMS

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[Note: Code section references 503.3 and 503.3.1 are proposed for relocation to Chapter 4, Ventilation Air, to new section numbers 401.2 and 401.2.1.]

~~***503.3 Filters. [DSA-SS & DSA-SS/CC]*** *In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 8. MERV 8 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual in compliance with Chapter 5, Division 5.5. of the California Green Building Standards Code (CALGreen).*~~

~~***Exceptions:***~~

~~*1. An ASHRAE 10 percent to 15 percent efficiency filter shall be permitted for an HVAC unit meeting the 2013 California Energy Code having 60,000 Btu/h (17.6 kW) or less capacity per fan coil, if the energy use of the air delivery system is 0.4 W/cfm [848 W/(m³/s)] or less at design air flow.*~~

~~*2. Existing mechanical equipment.*~~

~~***503.3.1 Labeling.*** *Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.*~~

...

513.0 Fire-Extinguishing Equipment

...

513.2.2 Standard. *Commercial cooking equipment that produce grease laden vapors shall be provided with a Type I Hood, in accordance with this Code, and an automatic fire extinguishing system that is listed and labeled for its intended use as follows:*

...

Exceptions:

...

(2) ***[DSA-SS and DSA-SS/CC]*** *Public schools kitchens, without deep-fat fryers, shall be upgraded to a UL 300, Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Equipment, compliant system during state-funded modernization projects that are under the jurisdiction of the Division of the State Architect.*

...

DSA proposes to adopt Chapter 6 (Duct Systems) of the 2018 edition UMC with existing California amendments carried forward into the 2019 edition CMC.

CHAPTER 6

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DUCT SYSTEMS

...

DSA proposes to adopt Chapter 7 (Combustion Air) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 7
COMBUSTION AIR

...

DSA proposes to adopt Chapter 8 (Chimneys and Vents) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 8
CHIMNEYS AND VENTS

...

DSA proposes to adopt Chapter 9 (Installation of Specific Appliances) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 9
INSTALLATION OF SPECIFIC APPLIANCES

...

DSA proposes to adopt Chapter 10 (Boilers and Pressure Vessels) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 10
BOILERS AND PRESSURE VESSELS

...

DSA proposes to adopt Chapter 11 (Refrigeration) of the 2018 edition UMC with existing California amendments carried forward into the 2019 edition CMC.

CHAPTER 11
REFRIGERATION

...

DSA proposes to adopt Chapter 12 (Hydronics) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 12
HYDRONICS

...

DSA proposes to adopt Chapter 13 (Fuel Gas Piping) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 13
FUEL GAS PIPING

...

DSA proposes to adopt Chapter 14 (Process Piping) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 14
PROCESS PIPING

...

DSA proposes to adopt Chapter 15 (Solar Energy Systems) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 15
SOLAR ENERGY SYSTEMS

...

DSA proposes to adopt Chapter 16 (Stationary Power Plants) of the 2018 edition UMC into the 2019 edition CMC, without amendment.

CHAPTER 16
STATIONARY POWER PLANTS

...

DSA proposes to adopt Chapter 17 (Referenced Standards) of the 2018 edition UMC with existing California amendments carried forward into the 2019 edition CMC.

Adopting Agency	DSA-SS	DSA-SS/CC	Comments
Adopt Entire Chapter as amended (amended sections listed below)	X	X	
Table 1701.1	X	X	
Table 1701.2	X	X	

CHAPTER 17
REFERENCED STANDARDS

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...

DSA proposes to not adopt Appendices A, B or C of the 2018 edition UMC. DSA did not adopt Appendices A, B or C of the 2015 edition UMC.

APPENDIX A—RESIDENTIAL PLAN EXAMINER REVIEW FORM FOR HVAC SYSTEM DESIGN

APPENDIX B—PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION

APPENDIX C—INSTALLATION AND TESTING OF OIL [LIQUID] FUEL-FIRED EQUIPMENT

...

DSA proposes to adopt Appendix D (Fuel Supply: Manufactured/Mobile Home Parks and Recreational Vehicle Parks) of the 2018 edition UMC into the 2019 edition CMC. DSA adopted Appendix D (Fuel Supply: Manufactured/Mobile Home Parks and Recreational Vehicle Parks) of the 2015 edition UMC.

APPENDIX D
FUEL SUPPLY: MANUFACTURED/MOBILE HOME PARKS AND RECREATIONAL VEHICLE PARKS

...

DSA proposes to not adopt Appendices E, F or G of the 2018 edition UMC. DSA did not adopt Appendices E, F or G of the 2015 edition UMC.

APPENDIX E—SUSTAINABLE PRACTICES

APPENDIX F—SIZING OF VENTING SYSTEMS AND OUTDOOR COMBUSTION AND VENTILATION OPENING DESIGN

APPENDIX G—EXAMPLE CALCULATION OF OUTDOOR AIR RATE

...

Notation for [DSA-SS]
Authority: Education Code § 17310 and 81142, and Health and Safety Code §16022.
References: Education Code §§ 17280–17317, and 81130–81147, and Health and Safety Code §§16000–16023.

Notation for [DSA-SS/CC]
Authority: Education Code § 81053.
Reference: Education Code §§ 81052, 81053, and 81130–81147.

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