

EXPRESS TERMS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE ADOPTION BY REFERENCE OF THE
2009 EDITION OF THE INTERNATIONAL RESIDENTIAL CODE (IRC)
WITH PROPOSED AMENDMENTS INTO THE
2010 CALIFORNIA RESIDENTIAL CODE (CRC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2.5

The Department of Housing and Community Development (HCD) proposes to adopt the 2009 edition of the International Residential Code (IRC) for codification and effectiveness into the 2010 edition of the California Residential Code (CRC) as presented on the following pages, including any necessary amendments. HCD further proposes to:

- Adopt building standards that are not addressed by the model code proposed for adoption; and/or
 - Adopt new necessary amendments to the model code proposed for adoption.
-

LEGEND FOR EXPRESS TERMS:

1. **Existing California amendments or code language being modified:** There are no existing California amendments to the CRC; the 2010 CRC is a new code for California.
 2. **IRC language with new California amendments:** IRC language shown in normal Arial 9-point; California amendments to IRC text shown underlined and in italics.
 3. **Repealed text:** All language shown in ~~strikeout~~.
 4. **Amended, adopted or repealed language after public hearing:** All such language appears in double underline or ~~double strikeout~~.
 5. **Notation:** Authority and Reference citations are provided at the end of each chapter.
-

SPECIAL NOTE: THIS DOCUMENT IS A COMPILATION OF THE FOLLOWING ITEMS:

- 1: **STRUCTURAL STANDARDS [Chapters 4, 5, 6, 8, 9 and 10]**
- 2: **NON-STRUCTURAL STANDARDS [Chapters 1, 2, 3, 7, 44, Appendix H]**
- 3: **NON-ADOPTED STANDARDS [Chapters 11 – 43 and remaining Appendices]**

The Express Terms include amendments which correct references from International Residential Code to *California Residential Code*. Similar amendments are also proposed to correct references to other International model codes to the appropriate California code and to correct reference to IRC sections not proposed by HCD. These types of amendments are not specifically identified in the Matrix Adoption Table as adopted for HCD applications.

1. HCD proposes to adopt “Part I Administrative”, divide Chapter 1 into two divisions and adopt “Chapter 1, California Administration, Division I” (Sections 1.1 to 1.2.9.2) with amendments as follows:

Part I — Administrative

CHAPTER 1
CALIFORNIA ADMINISTRATION
DIVISION I

SECTION 1.1
GENERAL

1.1.1 Title. *These regulations shall be known as the California Residential Code, may be cited as such and will be referred to herein as “this code.” The California Residential Code is Part 2.5 of twelve 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 2009 International Residential Code of the International Code Council with necessary California amendments.*

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.*

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 detached one- and two-family dwelling, townhouse not more than three stories above grade plane in height with a separate means of egress and structures accessory thereto throughout the State of California.*

Exception: *Live/work units complying with the requirements of Section 419 of the California Building Code shall be permitted to be built as one- and two-family dwellings or townhouses. Fire suppression required by Section 419.5 of the California Building Code when constructed under the California Residential Code for one- and two-family dwellings shall conform to Section 903.3.1.3 of the California Building Code.*

1.1.3.1 Reserved

1.1.3.2 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 detached one- and two-family dwellings, townhouses, and structures accessory thereto. State agencies with regulatory authority are referenced in the Matrix Adoption Table and as specified in Sections 1.2 through 1.9, 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. One- and two-family dwellings, townhouses, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with common toilets or cooking facilities. See Section 1.2.1.1.1.*
- 2. 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 1.2.1.1.3.*

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 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 1.1.8 of this code.*

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.*

1.1.6 Non-building standards, orders and regulations. *Requirements contained in the International Residential 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 non-building standards, orders and regulations see other titles of the California Code of Regulations.*

1.1.7 Order of precedence and use.

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.*

1.1.7.2 Specific provisions. *Where a specific provision varies from a general provision, the specific provision shall apply.*

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.*

1.1.7.3.1 Detached one- and two-family dwellings. *Detached one-and two-family dwellings and townhouses not more than three stories above grade plane with a separate means of egress and their accessory structures shall not be required to comply with the more restrictive requirements contained in Title 24, Part 2, the California Building Code, unless the proposed structure(s) exceed the design limitations established in the California Residential Code and the code user is specifically directed to use the California Building Code.*

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 1.1.8.1. The effective date of amendments, additions or deletions to this code by city, county or city and county filed pursuant to Section 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.

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 1800 3rd Street, Room 260, Sacramento, CA 95811.*

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.

1.1.10 Availability of codes. At least one 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).

1.1.11 Format. This part fundamentally adopts the International Residential 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 Table makes no reference to a specific chapter of the International Residential Code, such chapter of the International Residential Code is not adopted as a portion of this code.

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 1.2 **DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)**

SECTION 1.2.1 **AUTHORITY AND ABBREVIATIONS**

1.2.1.1 General. The Department of Housing and Community Development is authorized by law to promulgate and adopt building standards and regulations for several types of building applications. These applications are grouped and identified by abbreviation in the Matrix Adoption Table to show which model code sections and amendments are applicable to each application. The applications under the authority of the Department of Housing and Community Development are listed in Sections 1.2.1.1.1 through 1.2.1.1.3.

1.2.1.1.1 Housing construction. Application –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 toilet or cooking facilities including accessory buildings, facilities, and uses thereto. Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation “HCD 1.”

Enforcing Agency–Local building department or the Department of Housing and Community Development.

Authority Cited–Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference–Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1.2.1.1.2 Housing accessibility. Application – Covered multifamily dwellings as defined in Chapter 11A of the California Building Code (CBC) including, but not limited to, lodging houses, dormitories, timeshares, condominiums, shelters for homeless persons, congregate residences, apartment houses, dwellings, employee housing, factory-built housing and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities.

Disabled access regulations promulgated under HCD authority are located in Chapter 11A of the California Building Code (CBC) and are identified in the Matrix Adoption Table by the abbreviation “HCD 1-AC.” Application of such provisions shall be in conjunction with other requirements of the Building Standards Code and apply only to newly constructed “Covered multifamily dwellings” as defined in CBC Chapter 11A. “HCD 1-AC” applications include, but are not limited to, the following:

1. All newly constructed "Covered multifamily dwellings" as defined in CBC Chapter 11A.
2. New "Common use areas" as defined in CBC Chapter 11A serving existing covered multifamily dwellings.
3. Additions to existing buildings, where the addition alone meets the definition of "COVERED MULTIFAMILY DWELLINGS" as defined in CBC Chapter 11A.
4. Common use areas serving covered multifamily dwellings.
5. Where any portion of a building's exterior is preserved, but the interior of the building is removed, including all structural portions of floors and ceilings, the building is considered a new building for the purpose of determining the application of CBC Chapter 11A.

"HCD 1-AC" building standards generally do not apply to public use areas or public accommodations such as hotels and motels or public housing. Public use areas, public accommodations, public housing and housing which is publicly funded as defined in the CBC are subject to the Division of the State Architect (DSA-AC) and are referenced in CBC Section 1.9.1.

Enforcing Agency—Local building department or the Department of Housing and Community Development.

Authority cited—Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference—Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1.2.1.1.3 Permanent buildings in mobilehome parks and special occupancy parks. Application--Permanent buildings, and permanent accessory buildings or structures, constructed within mobilehome parks and special occupancy parks that are under the control and ownership of the park operator. Sections of this code which pertain to applications listed in this section are identified in the Matrix Adoption Table using the abbreviation "HCD 2."

Enforcing agency—Local building department or other local agency responsible for the enforcement of Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 for mobilehome parks and Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 for special occupancy parks; or the Department of Housing and Community Development.

Authority cited—Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference—Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

SECTION 1.2.2 **LOCAL ENFORCING AGENCY**

1.2.2.1 Duties and powers. The building department of every city, county or city and county shall enforce all the provisions of law, this code, and the other rules and regulations promulgated by the Department of Housing and Community Development pertaining to the installation, erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartment houses, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities and uses thereto.

The provisions regulating the erection and construction of dwellings and appurtenant structures shall not apply to existing structures as to which construction is commenced or approved prior to the effective date of these regulations. Requirements relating to use, maintenance and occupancy shall apply to all dwellings and appurtenant structures approved for construction or constructed before or after the effective date of this code.

For additional information regarding the use and occupancy of existing buildings and appurtenant structures, see California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Article 1, Section 1.

1.2.2.2 Laws, rules, and regulations. Other than the building standards contained in this code, and notwithstanding other provisions of law, the statutory authority and location of the laws, rules, and regulations to be enforced by local enforcing agencies are listed by statute in Sections 1.2.2.2.1 through 1.2.2.2.5 below:

1.2.2.2.1 State Housing Law. Refer to the State Housing Law, California Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1, for the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition or arrangement of apartment houses, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

1.2.2.2.2 Mobilehome Parks Act. Refer to the Mobilehome Parks Act, California Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000 for mobilehome park administrative and enforcement authority, permits, plans, fees, violations, inspections and penalties both within and outside mobilehome parks.

Exception: Mobilehome parks where the Department of Housing and Community Development is the enforcing agency.

1.2.2.2.3 Special Occupancy Parks Act. Refer to the Special Occupancy Parks Act, California Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000 for special occupancy park administrative and enforcement authority, permits, fees, violations, inspections and penalties both within and outside of special occupancy parks.

Exception: Special occupancy parks where the Department of Housing and Community Development is the enforcing agency.

1.2.2.2.4 Employee Housing Act. Refer to the Employee Housing Act, California Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600 for employee housing administrative and enforcement authority, permits, fees, violations, inspections and penalties.

1.2.2.2.5 Factory-Built Housing Law. Refer to the Factory-Built Housing Law, California Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000 for factory-built housing administrative and enforcement authority, permits, fees, violations, inspections and penalties.

SECTION 1.2.3 **PERMITS, FEES, APPLICATIONS AND INSPECTIONS**

1.2.3.1 Permits. A written construction permit shall be obtained from the enforcing agency prior to the erection, construction, reconstruction, installation, moving or alteration of any building or structure.

Exceptions:

1. Work exempt from permits as specified in Chapter 1, Administration Division II, Section R105.2.
2. Changes, alterations, or repairs of a minor nature not affecting structural features, egress, sanitation, safety or accessibility as determined by the enforcing agency.

Exemptions from permit requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of other provisions of law or this code.

1.2.3.2 Fees. Subject to other provisions of law, the governing body of any city, county or city and county may prescribe fees to defray the cost of enforcement of rules and regulations promulgated by the Department of Housing and Community Development. The amount of the fees shall not exceed the amount reasonably necessary to administer or process permits, certificates, forms, or other documents, or to defray the costs of enforcement. For additional information, see State Housing Law, Health and Safety Code, Division 13, Part 1.5, Section 17951 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, Article 3, commencing with Section 6.

1.2.3.3 Plan review and time limitations. Subject to other provisions of law, provisions related to plan checking, prohibition of excessive delays and contracting with or employment of private parties to perform plan checking are set forth in State Housing Law, Health and Safety Code Section 17960.1, and for employee housing, in Health and Safety Code Section 17021.

1.2.3.3.1 Retention of plans. The building department of every city, county or city and county shall maintain an official copy, microfilm, electronic or other type of photographic copy of the plans of every building, during the life of the building, for which the department issued a building permit.

Exceptions:

1. Single or multiple dwellings not more than two stories and basement in height.
2. Garages and other structures appurtenant to buildings listed in Exception 1.
3. Farm or ranch buildings appurtenant to buildings listed in Exception 1.
4. Any one-story building where the span between bearing walls does not exceed 25 feet (7620 mm), except a steel frame or concrete building.

All plans for common interest developments as defined in Section 1351 of the California Civil Code shall be retained. For additional information regarding plan retention and reproduction of plans by an enforcing agency, see Health and Safety Code Sections 19850 through 19852.

1.2.3.4 Inspections. Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or other regulations of the Department of Housing and Community Development. Required inspections are listed in the Matrix Adoption Table and in Chapter 1, Administration, Division II. See Section R109.1.

SECTION 1.2.4
RIGHT OF ENTRY FOR ENFORCEMENT

1.2.4.1 General. Subject to other provisions of law, officers and agents of the enforcing agency may enter and inspect public and private properties to secure compliance with the rules and regulations promulgated by the Department of Housing and Community Development. For limitations and additional information regarding enforcement, see the following:

1. For applications subject to the State Housing Law as referenced in Section 1.2.2.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
2. For applications subject to the Mobilehome Parks Act as referenced in Section 1.2.2.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.

3. For applications subject to the Special Occupancy Parks Act as referenced in Section 1.2.2.2.3 of this Code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
4. For applications subject to the Employee Housing Act as referenced in Section 1.2.2.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.2.2.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Sections 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

SECTION 1.2.5
LOCAL MODIFICATION BY ORDINANCE OR REGULATION

1.2.5.1 General. Subject to other provisions of law, a city, county or city and county may make changes to the provisions adopted by the Department of Housing and Community Development. If any city, county or city and county does not amend, add, or repeal by local ordinances or regulations the provisions published in this code or other regulations promulgated by the Department of Housing and Community Development, those provisions shall be applicable and shall become effective 180 days after publication by the California Building Standards Commission. Amendments, additions, and deletions to this code adopted by a city, county or city and county pursuant to California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5, together with all applicable portions of this code, shall also become effective 180 days after publication of the California Building Standards Code by the California Building Standards Commission.

1.2.5.2 Findings, filings, and rejections of local modifications. Prior to making any modifications or establishing more restrictive building standards, the governing body shall make express findings and filings, as required by California Health and Safety Code Section 17958.7, showing that such modifications are reasonably necessary due to local climatic, geological, or topographical conditions. No modification shall become effective or operative unless the following requirements are met:

1. The express findings shall be made available as a public record.
2. A copy of the modification and express finding, each document marked to cross-reference the other, shall be filed with the California Building Standards Commission for a city, county or city and county and with the Department of Housing and Community Development for fire protection districts.
3. The California Building Standards Commission has not rejected the modification or change.

Nothing in this section shall limit the authority of fire protection districts pursuant to California Health and Safety Code Section 13869.7(a).

SECTION 1.2.6
ALTERNATE MATERIALS, DESIGNS, TESTS AND METHODS OF CONSTRUCTION

1.2.6.1 General. The provisions of this code as adopted by the Department of Housing and Community Development are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, design or method of construction not specifically prescribed by this code. Consideration and approval of alternates shall comply with Section 1.2.6.2 for local building departments and Section 1.2.6.3 for the Department of Housing and Community Development.

1.2.6.2 Local building departments. The building department of any city, county or city and county may approve alternates for use in the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition or arrangement of an apartment house, hotel, motel, lodging house, dwelling, or an accessory structure, except for the following:

1. Structures located in mobilehome parks as defined in California Health and Safety Code Section 18214.
2. Structures located in special occupancy parks as defined in California Health and Safety Code Section 18862.43.
3. Factory-built housing as defined in California Health and Safety Code Section 19971.

1.2.6.2.1 Approval of alternates. The consideration and approval of alternates by a local building department shall comply with the following procedures and limitations:

1. The approval shall be granted on a case-by-case basis.
2. Evidence shall be submitted to substantiate claims that the proposed alternate, in performance, safety, and protection of life and health, conforms to, or is at least equivalent to, the standards contained in this code and other rules and regulations promulgated by the Department of Housing and Community Development.
3. The local building department may require tests performed by an approved testing agency at the expense of the owner or owner's agent as proof of compliance.
4. If the proposed alternate is related to accessibility in covered multifamily dwellings or in facilities serving "Covered multifamily dwellings" as defined in CBC Chapter 11A, the proposed alternate must also meet the threshold set for "Equivalent facilitation" as defined in CBC Chapter 11A.

For additional information regarding approval of alternates by a building department pursuant to the State Housing Law, see California Health and Safety Code Section 17951(e) and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

1.2.6.3 Department of Housing and Community Development. The Department of Housing and Community Development may approve alternates for use in the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal or demolition of an apartment house, hotel, motel, lodging house, dwelling, or an accessory thereto. The consideration and approval of alternates shall comply with the following:

1. The department may require tests at the expense of the owner or owner's agent to substantiate compliance with the California Building Standards Code.
2. The approved alternate shall, for its intended purpose, be at least equivalent in performance and safety to the materials, designs, tests or methods of construction prescribed by this code.

SECTION 1.2.7 **APPEALS BOARD**

1.2.7.1 General. Every city, county or city and county shall establish a local appeals board and a housing appeals board. The local appeals board and housing appeals board shall each be comprised of at least five voting members that shall serve at the pleasure of the city, county or city and county. Appointees shall not be employees of the jurisdiction and shall be qualified and specifically knowledgeable in the California Building Standards Codes and applicable local ordinances.

1.2.7.2 Definitions. The following terms shall for the purposes of this section have the meaning shown.

HOUSING APPEALS BOARD. The board or agency of a city, county or city and county which is authorized by the governing body of the city, county or city and county to hear appeals regarding the requirements of the city, county or city and county relating to the use, maintenance, and change of occupancy of buildings and structures, including requirements governing alteration, additions, repair, demolition and moving. In any area in which there is no such board or agency, "Housing Appeals Board" means the local appeals board having jurisdiction over the area.

LOCAL APPEALS BOARD. *The board or agency of a city, county or city and county which is authorized by the governing body of the city, county or city and county to hear appeals regarding the building requirements of the city, county or city and county. In any area in which there is no such board or agency, "Local Appeals Board" means the governing body of the city, county or city and county having jurisdiction over the area.*

1.2.7.3 Appeals. *Except as otherwise provided in law, any person, firm or corporation adversely affected by a decision, order or determination by a city, county or city and county relating to the application of building standards published in the California Building Standards Code, or any other applicable rule or regulation adopted by the Department of Housing and Community Development, or any lawfully enacted ordinance by a city, county or city and county, may appeal the issue for resolution to the local appeals board or housing appeals board as appropriate.*

The local appeals board shall hear appeals relating to new building construction and the housing appeals board shall hear appeals relating to existing buildings.

SECTION 1.2.8 **UNSAFE BUILDINGS OR STRUCTURES**

1.2.8.1 Authority to enforce. *Subject to other provisions of law, the administration, enforcement, actions, proceedings, abatement, violations and penalties for unsafe buildings and structures are contained in the following statutes and regulations:*

- 1. For applications subject to the State Housing Law as referenced in Section 1.2.2.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.*
- 2. For applications subject to the Mobilehome Parks Act as referenced in Section 1.2.2.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.*
- 3. For applications subject to the Special Occupancy Parks Act as referenced in Section 1.2.2.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.*
- 4. For applications subject to the Employee Housing Act as referenced in Section 1.2.2.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.*
- 5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.2.2.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.*

1.2.8.2 Actions and proceedings. *Subject to other provisions of law, punishments, penalties and fines for violations of building standards are contained in the following statutes and regulations:*

- 1. For applications subject to the State Housing Law as referenced in Section 1.2.2.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.*
- 2. For applications subject to the Mobilehome Parks Act as referenced in Section 1.2.2.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.*

3. For applications subject to the Special Occupancy Parks Act as referenced in Section 1.2.2.2.3 of this code, refer to the Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
4. For applications subject to the Employee Housing Act as referenced in Section 1.2.2.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.2.2.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

SECTION 1.2.9
OTHER BUILDING REGULATIONS

1.2.9.1 Existing structures. Subject to the requirements of California Health and Safety Code Sections 17912, 17920.3, 17922, 17922.3, 17958.8 and 17958.9, provisions relating to existing structures (additions, alterations and repairs) shall only apply as identified in the California Building Code Chapter 34 Matrix Adoption Table under the authority of the Department of Housing and Community Development as listed in Sections 1.2.1.1.1 through 1.2.1.1.3 of this code.

1.2.9.2 Moved structures. Subject to the requirements of California Health and Safety Code Sections 17922.3 and 17958.9, provisions relating to a moved residential structure are located in CBC Chapter 34 and shall only apply as identified in the CBC Chapter 34 Matrix Adoption Table under the authority of the Department of Housing and Community Development as listed in Sections 1.2.1.1.1 through 1.2.1.1.3 of this code.

1.3 Reserved

1.4 Reserved

1.5 Reserved

1.6 Reserved

1.7 Reserved

1.8 Reserved

1.9 Reserved for the Office of the State Fire Marshal

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1-A. HCD proposes to amend the heading of model code “Chapter 1, Scope and Administration”, to “Administration, Division II.” HCD proposes to adopt model code Sections R109.1.3, R109.1.5 and R109.1.6 without amendment and Sections R105.2, R109.1, R109.1.1, R109.1.1.1, R109.1.4, R109.1.4.1, R109.1.5.1, and R109.1.5.2 with amendments as follows:

CHAPTER 1 SCOPE AND ADMINISTRATION
ADMINISTRATION
DIVISION II

Division II is not adopted by the Department of Housing and Community Development except where specifically identified in the Matrix Adoption Table.

SECTION R105 PERMITS

R105.2 Work exempt from permit. Permits shall not be required for the following. Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 ~~200~~ square feet (11.15 ~~18.58~~ m²).
2. ...(text unchanged)
3. ...(text unchanged)
4. ...(text unchanged)
5. ...(text unchanged)
6. ...(text unchanged)
7. ...(text unchanged)
8. ...(text unchanged)
9. ...(text unchanged)
10. ...(text unchanged)

SECTION R109 INSPECTIONS

R109.1 Types of inspections. For onsite construction, from time to time the building official, upon notification from the permit holder or his agent, shall make or cause to be made any necessary inspections and shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code. The enforcing agency upon notification of the permit holder or their agent shall within a reasonable time make the inspections set forth in Sections R109.1.1, R109.1.1.1, R109.1.3, R109.1.4, R109.1.4.1, R109.1.5, R109.1.5.1, R109.1.5.2 and R109.1.6.

Note: Reinforcing steel or structural framework of any part of any building or structure shall not be covered or concealed without first obtaining the approval of the enforcing agency.

R109.1.1 Foundation inspection. Inspection of the foundation and footings shall be made after poles or piers are set or trenches or basement areas are excavated and any required forms erected and any required reinforcing steel is in place and supported prior to the placing of concrete. The foundation or footing inspection shall include excavations for thickened slabs intended for the support of bearing walls, partitions, structural supports, or equipment and special requirements for wood foundations. Materials for the foundation shall be on the job site except where concrete is ready-mixed in accordance with ASTM C 94. Under this circumstance concrete is not required to be at the job site.

R109.1.1.1 Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduits, piping or other ancillary building trade products or equipment are installed, but before any concrete is placed or floor sheathing is installed, including the subfloor.

R109.1.4 Frame and masonry inspection. Inspection of framing and masonry construction shall be made after the roof, masonry, all framing, firestopping, draftstopping and bracing are in place and after chimneys and vents to be concealed are completed and the rough electrical, plumbing, heating wires, pipes, and ducts are approved the plumbing, mechanical and electrical rough inspections are approved.

R109.1.4.1 Lath and gypsum board inspection. Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

R109.1.5 Other inspections. In addition to the called inspections above, the building official may make or require any other inspections to ascertain compliance with this code and other laws enforced by the building official.

R109.1.5.1 Fire-resistance-rated construction inspection. Where fire-resistance-rated construction is required between dwelling units or due to location on property, the building official shall require an inspection of such construction after all lathing and/or wallboard is in place, but before any plaster is applied, or before wallboard joints and fasteners are taped and finished. Protection of joints and penetrations in fire resistance rated assemblies shall not be concealed from view until inspected and approved.

R109.1.5.2 Special Inspections. For special inspections, see California Building Code, Chapter 17.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

2. HCD proposes to adopt Part II, Chapter 2, with amendments as follows:

Part II — Definitions

CHAPTER 2 DEFINITIONS

SECTION R201 GENERAL

R201.3 Terms defined in other codes. Where terms are not defined in this code such terms shall have meanings ascribed to them as in ~~other code publications of the International Code Council~~ the California Building Standards Code, Title 24, California Code of Regulations.

SECTION R202 DEFINITIONS

ACCESSIBLE. [NOT ADOPTED IN CA] Signifies access that requires the removal of an access panel or similar removable obstruction.

ACCESSIBLE, READILY. [NOT ADOPTED IN CA] Signifies access without the necessity for removing a panel or similar obstruction.

AIR ADMITTANCE VALVE. [NOT ADOPTED IN CA] A one-way valve designed to allow air into the plumbing drainage system when a negative pressure develops in the piping. This device shall close by gravity and seal the terminal under conditions of zero differential pressure (no flow conditions) and under positive internal pressure.

AIR BARRIER. [NOT ADOPTED IN CA] Material(s) assembled and joined together to provide a barrier to air leakage through the building envelope. An air barrier may be a single material, or a combination of materials.

AIR BREAK (DRAINAGE SYSTEM). [NOT ADOPTED IN CA] An arrangement in which a discharge pipe from a fixture, appliance or device drains indirectly into a receptor below the flood-level rim of the receptor, and above the trap seal.

AIR CIRCULATION, FORCED. [NOT ADOPTED IN CA] A means of providing space conditioning utilizing movement of air through ducts or plenums by mechanical means.

AIR-CONDITIONING SYSTEM. [NOT ADOPTED IN CA] A system that consists of heat exchangers, blowers, filters, supply, exhaust and return-air systems, and shall include any apparatus installed in connection therewith.

AIR GAP, DRAINAGE SYSTEM. **[NOT ADOPTED IN CA]** The unobstructed vertical distance through free atmosphere between the outlet of a waste pipe and the flood-level rim of the fixture or receptor into which it is discharging.

AIR GAP, WATER-DISTRIBUTION SYSTEM. **[NOT ADOPTED IN CA]** The unobstructed vertical distance through free atmosphere between the lowest opening from a water supply discharge to the flood-level rim of a plumbing fixture.

AIR-IMPERMEABLE INSULATION. **[NOT ADOPTED IN CA]** An insulation having an air permeance equal to or less than 0.02 L/s-m² at 75 Pa pressure differential tested according to ASTM E 2178 or E 283.

ANTISIPHON. **[NOT ADOPTED IN CA]** A term applied to valves or mechanical devices that eliminate siphonage.

APPLIANCE. **[NOT ADOPTED IN CA]** A device or apparatus that is manufactured and designed to utilize energy and for which this code provides specific requirements.

APPROVED. ~~Acceptable to the building official.~~ *Meeting the approval of the enforcing agency, except as otherwise provided by law, when used in connection with any system, material, type of construction, fixture or appliance as the result of investigations and tests conducted by the agency, or by reason of accepted principles or tests by national authorities or technical, health, or scientific organizations or agencies.*

Notes:

1. See Health and Safety Code Section 17920 for "Approved" as applied to residential construction and buildings or structures accessory thereto, as referenced in Section 1.2.1.1.1.

2. See Health and Safety Code Section 17921.1 for "Approved" as applied to the use of hotplates in residential construction referenced in Section 1.2.1.1.1.

3. See Health and Safety Code Section 17921.3 for "Approved" as applied to low-flush water closets in residential construction, as referenced in Section 1.2.1.1.1.

4. See Health and Safety Code Section 19966 for "Approved" as applied to factory-built housing as referenced in Section 1.2.2.2.5.

5. See Health and Safety Code Section 18201 for "Approved" as applied to mobilehome parks as referenced in Section 1.2.2.2.2.

6. See Health and Safety Code Section 18862.1 for "Approved" as applied to special occupancy parks as referenced in Section 1.2.2.2.3.

APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the building official. **[HCD 1 & HCD 2]** *"Approved agency shall mean "Listing agency" and "Testing agency."*

APPROVED LISTING AGENCY. *Any agency approved by the enforcing agency, unless otherwise provided by law, which is in the business of listing and labeling and which makes available at least an annual published report of such listings in which specific information is included that the product has been tested to recognized standards and found to comply.*

APPROVED TESTING AGENCY. *Any agency which is determined by the enforcing agency, except as otherwise provided by law, to have adequate personnel and expertise to carry out the testing of systems, materials, and construction fixtures or appliances.*

BACKFLOW, DRAINAGE. **[NOT ADOPTED IN CA]** A reversal of flow in the drainage system.

BACKFLOW PREVENTER. **[NOT ADOPTED IN CA]** A device or means to prevent backflow.

BACKFLOW PREVENTER, REDUCED-PRESSURE ZONE TYPE. [NOT ADOPTED IN CA] A backflow-prevention device consisting of two independently acting check valves, internally force loaded to a normally closed position and separated by an intermediate chamber (or zone) in which there is an automatic relief means of venting to atmosphere internally loaded to a normally open position between two tightly closing shutoff valves and with means for testing for tightness of the checks and opening of relief means.

BACKFLOW, WATER DISTRIBUTION. [NOT ADOPTED IN CA] The flow of water or other liquids into the potable water-supply piping from any sources other than its intended source. Backsiphonage is one type of backflow.

BACKPRESSURE. [NOT ADOPTED IN CA] Pressure created by any means in the water distribution system, which by being in excess of the pressure in the water supply mains causes a potential backflow condition.

BACKPRESSURE, LOW HEAD. [NOT ADOPTED IN CA] A pressure less than or equal to 4.33 psi (29.88 kPa) or the pressure exerted by a 10-foot (3048 mm) column of water.

BACKSIPHONAGE. [NOT ADOPTED IN CA] The flowing back of used or contaminated water from piping into a potable water-supply pipe due to a negative pressure in such pipe.

BACKWATER VALVE. [NOT ADOPTED IN CA] A device installed in a drain or pipe to prevent backflow of sewage.

BATHROOM GROUP. [NOT ADOPTED IN CA] A group of fixtures, including or excluding a bidet, consisting of a water closet, lavatory, and bathtub or shower. Such fixtures are located together on the same floor level.

BEND. [NOT ADOPTED IN CA] A drainage fitting, designed to provide a change in direction of a drain pipe of less than the angle specified by the amount necessary to establish the desired slope of the line (see “Elbow” and “Sweep”).

BOILER. [NOT ADOPTED IN CA] A self-contained appliance from which hot water is circulated for heating purposes and then returned to the boiler, and which operates at water pressures not exceeding 160 pounds per square inch gage (psig) (1102 kPa gauge) and at water temperatures not exceeding 250°F (121°C).

BRANCH. [NOT ADOPTED IN CA] Any part of the piping system other than a riser, main or stack.

BRANCH, FIXTURE. [NOT ADOPTED IN CA] See “Fixture branch, drainage.”

BRANCH, HORIZONTAL. [NOT ADOPTED IN CA] See “Horizontal branch, drainage.”

BRANCH INTERVAL. [NOT ADOPTED IN CA] A vertical measurement of distance, 8 feet (2438 mm) or more in developed length, between the connections of horizontal branches to a drainage stack. Measurements are taken down the stack from the highest horizontal branch connection.

BRANCH, MAIN. [NOT ADOPTED IN CA] A water-distribution pipe that extends horizontally off a main or riser to convey water to branches or fixture groups.

BRANCH, VENT. [NOT ADOPTED IN CA] A vent connecting two or more individual vents with a vent stack or stack vent.

BTU/H. [NOT ADOPTED IN CA] The listed maximum capacity of an appliance, absorption unit or burner expressed in British thermal units input per hour.

BUILDING. Building shall mean any one- and two-family dwelling or portion thereof, including townhouses, that is used, or designed or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, and shall include accessory structures thereto.

Exceptions: *For applications listed in Section 1.2.1 regulated by the Department of Housing and Community Development, “Building” shall not include the following:*

- 1. Any mobilehome as defined in Health and Safety Code Section 18008.*
- 2. Any manufactured home as defined in Health and Safety Code Section 18007.*

3. Any commercial modular as defined in Health and Safety Code Section 18001.8 or any special purpose commercial modular as defined in Section 18012.5.

4. Any recreational vehicle as defined in Section Health and Safety Code 18010.

5. Any multifamily manufactured home as defined in Section Health and Safety Code 18008.7.

For additional information, see Health and Safety Code Section 18908

BUILDING DRAIN. **[NOT ADOPTED IN CA]** The lowest piping that collects the discharge from all other drainage piping inside the house and extends 30 inches (762 mm) in developed length of pipe, beyond the exterior walls and conveys the drainage to the building sewer.

BUILDING SEWER. **[NOT ADOPTED IN CA]** That part of the drainage system that extends from the end of the building drain and conveys its discharge to a public sewer, private sewer, individual sewage-disposal system or other point of disposal.

BUILDING THERMAL ENVELOPE. **[NOT ADOPTED IN CA]** The basement walls, exterior walls, floor, roof and any other building element that enclose conditioned spaces.

CHIMNEY. **[NOT ADOPTED IN CA]** A primary vertical structure containing one or more flues, for the purpose of carrying gaseous products of combustion and air from a fuel-burning appliance to the outside atmosphere.

CHIMNEY CONNECTOR. **[NOT ADOPTED IN CA]** A pipe that connects a fuel-burning appliance to a chimney.

CHIMNEY TYPES **[NOT ADOPTED IN CA]** **Residential-type appliance.** An approved chimney for removing the products of combustion from fuel-burning, residential-type appliances producing combustion gases not in excess of 1,000°F (538°C) under normal operating conditions, but capable of producing combustion gases of 1,400°F (760°C) during intermittent forces firing for periods up to 1 hour. All temperatures shall be measured at the appliance flue outlet. Residential-type appliance chimneys include masonry and factory-built types.

CIRCUIT VENT. **[NOT ADOPTED IN CA]** A vent that connects to a horizontal drainage branch and vents two traps to a maximum of eight traps or trapped fixtures connected into a battery.

CLEANOUT. **[NOT ADOPTED IN CA]** An accessible opening in the drainage system used for the removal of possible obstruction.

COMBINATION WASTE AND VENT SYSTEM. **[NOT ADOPTED IN CA]** A specially designed system of waste piping embodying the horizontal wet venting of one or more sinks or floor drains by means of a common waste and vent pipe adequately sized to provide free movement of air above the flow line of the drain.

COMBUSTION AIR. **[NOT ADOPTED IN CA]** The air provided to fuel-burning equipment including air for fuel combustion, draft hood dilution and ventilation of the equipment enclosure.

COMMON VENT. **[NOT ADOPTED IN CA]** A single pipe venting two trap arms within the same branch interval, either back-to-back or one above the other.

CONDENSATE. **[NOT ADOPTED IN CA]** The liquid that separates from a gas due to a reduction in temperature, e.g., water that condenses from flue gases and water that condenses from air circulating through the cooling coil in air conditioning equipment.

CONDENSING APPLIANCE. **[NOT ADOPTED IN CA]** An appliance that condenses water generated by the burning of fuels.

CONDITIONED AIR. **[NOT ADOPTED IN CA]** Air treated to control its temperature, relative humidity or quality.

CONDITIONED AREA. **[NOT ADOPTED IN CA]** That area within a building provided with heating and/or cooling systems or appliances capable of maintaining, through design or heat loss/gain, 68°F (20°C) during the heating season and/or 80°F (27°C) during the cooling season, or has a fixed opening directly adjacent to a conditioned area.

CONDITIONED FLOOR AREA. [NOT ADOPTED IN CA] The horizontal projection of the floors associated with the conditioned space.

CONDITIONED SPACE. [NOT ADOPTED IN CA] For energy purposes, space within a building that is provided with heating and/or cooling equipment or systems capable of maintaining, through design or heat loss/gain, 50°F (10°C) during the heating season and 85°F (29°C) during the cooling season, or communicates directly with a conditioned space. For mechanical purposes, an area, room or space being heated or cooled by any equipment or appliance.

CONTAMINATION. [NOT ADOPTED IN CA] An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste.

CONTINUOUS WASTE. [NOT ADOPTED IN CA] A drain from two or more similar adjacent fixtures connected to a single trap.

CONTROL, LIMIT. [NOT ADOPTED IN CA] An automatic control responsive to changes in liquid flow or level, pressure, or temperature for limiting the operation of an appliance.

CONTROL, PRIMARY SAFETY. [NOT ADOPTED IN CA] A safety control responsive directly to flame properties that senses the presence or absence of flame and, in event of ignition failure or unintentional flame extinguishment, automatically causes shutdown of mechanical equipment.

CONVECTOR. [NOT ADOPTED IN CA] A system-incorporating heating element in an enclosure in which air enters an opening below the heating element, is heated and leaves the enclosure through an opening located above the heating element.

CROSS CONNECTION. [NOT ADOPTED IN CA] Any connection between two otherwise separate piping systems whereby there may be a flow from one system to the other.

DAMPER, VOLUME. [NOT ADOPTED IN CA] A device that will restrict, retard or direct the flow of air in any duct, or the products of combustion of heat-producing equipment, vent connector, vent or chimney.

DEAD END. [NOT ADOPTED IN CA] A branch leading from a DWV system terminating at a developed length of 2 feet (610 mm) or more. Dead ends shall be prohibited except as an approved part of a rough-in for future connection.

DEPARTMENT. *The Department of Housing and Community Development.*

DEVELOPED LENGTH. [NOT ADOPTED IN CA] The length of a pipeline measured along the center line of the pipe and fittings.

DIAMETER. [NOT ADOPTED IN CA] Unless specifically stated, the term “diameter” is the nominal diameter as designated by the approved material standard.

DILUTION AIR. [NOT ADOPTED IN CA] Air that enters a draft hood or draft regulator and mixes with flue gases.

DIRECT-VENT APPLIANCE. [NOT ADOPTED IN CA] A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

DRAFT. [NOT ADOPTED IN CA] The pressure difference existing between the appliance or any component part and the atmosphere, that causes a continuous flow of air and products of combustion through the gas passages of the appliance to the atmosphere.

Induced draft. [NOT ADOPTED IN CA] The pressure difference created by the action of a fan, blower or ejector, that is located between the appliance and the chimney or vent termination.

Natural draft. [NOT ADOPTED IN CA] The pressure difference created by a vent or chimney because of its height, and the temperature difference between the flue gases and the atmosphere.

DRAFT HOOD. [NOT ADOPTED IN CA] A device built into an appliance, or a part of the vent connector from an appliance, which is designed to provide for the ready escape of the flue gases from the appliance in the event of no draft, backdraft or stoppage beyond the draft hood; prevent a backdraft from entering the appliance; and neutralize the effect of stack action of the chimney or gas vent on the operation of the appliance.

DRAFT REGULATOR. [NOT ADOPTED IN CA] A device that functions to maintain a desired draft in the appliance by automatically reducing the draft to the desired value.

DRAIN. [NOT ADOPTED IN CA] Any pipe that carries soil and water-borne wastes in a building drainage system.

DRAINAGE FITTING. [NOT ADOPTED IN CA] A pipe fitting designed to provide connections in the drainage system that have provisions for establishing the desired slope in the system. These fittings are made from a variety of both metals and plastics. The methods of coupling provide for required slope in the system (see "Durham fitting").

DUCT SYSTEM. [NOT ADOPTED IN CA] A continuous passageway for the transmission of air which, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances.

DURHAM FITTING. [NOT ADOPTED IN CA] A special type of drainage fitting for use in the durham systems installations in which the joints are made with recessed and tapered threaded fittings, as opposed to bell and spigot lead/oakum or solvent/cemented or soldered joints. The tapping is at an angle (not 90 degrees) to provide for proper slope in otherwise rigid connections.

DURHAM SYSTEM. [NOT ADOPTED IN CA] A term used to describe soil or waste systems where all piping is of threaded pipe, tube or other such rigid construction using recessed drainage fittings to correspond to the types of piping.

DWV. [NOT ADOPTED IN CA] Abbreviated term for drain, waste and vent piping as used in common plumbing practice.

EFFECTIVE OPENING. [NOT ADOPTED IN CA] The minimum cross-sectional area at the point of water-supply discharge, measured or expressed in terms of diameter of a circle and if the opening is not circular, the diameter of a circle of equivalent cross-sectional area. (This is applicable to air gap.)

ELBOW. [NOT ADOPTED IN CA] A pressure pipe fitting designed to provide an exact change in direction of a pipe run. An elbow provides a sharp turn in the flow path (see "Bend" and "Sweep").

ENFORCEMENT. *Notwithstanding other provisions of law, the applicable section of the Health and Safety Code, Section 17920, is repeated here for clarity:*

"Enforcement" means diligent effort to secure compliance, including review of plans and permit applications, response to complaints, citation of violations, and other legal process. Except as otherwise provided in this part, "enforcement" may, but need not, include inspections of existing buildings on which no complaint or permit application has been filed, and effort to secure compliance as to these existing buildings.

ENFORCING AGENCY. *The designated department or agency as specified by statute or regulation.*

ENFORCEMENT AGENCY. *See "Enforcing Agency."*

EQUIPMENT. [NOT ADOPTED IN CA] All piping, ducts, vents, control devices and other components of systems other than appliances that are permanently installed and integrated to provide control of environmental conditions for buildings. This definition shall also include other systems specifically regulated in this code.

EQUIVALENT LENGTH. [NOT ADOPTED IN CA] For determining friction losses in a piping system, the effect of a particular fitting equal to the friction loss through a straight piping length of the same nominal diameter.

ESSENTIALLY NONTOXIC TRANSFER FLUIDS. [NOT ADOPTED IN CA] Fluids having a Gosselin rating of 1, including propylene glycol; mineral oil; polydimenthyoil oxane; hydrochlorofluorocarbon, chlorofluorocarbon and hydrofluorocarbon refrigerants; and FDA-approved boiler water additives for steam boilers.

ESSENTIALLY TOXIC TRANSFER FLUIDS. [NOT ADOPTED IN CA] Soil, water or gray water and fluids having a Gosselin rating of 2 or more including ethylene glycol, hydrocarbon oils, ammonia refrigerants and hydrazine.

EVAPORATIVE COOLER. [NOT ADOPTED IN CA] A device used for reducing air temperature by the process of evaporating water into an airstream.

EXCESS AIR. [NOT ADOPTED IN CA] Air that passes through the combustion chamber and the appliance flue in excess of that which is theoretically required for complete combustion.

EXHAUST HOOD, FULL OPENING. [NOT ADOPTED IN CA] An exhaust hood with an opening at least equal to the diameter of the connecting vent.

EXISTING INSTALLATIONS. [NOT ADOPTED IN CA] Any plumbing system regulated by this code that was legally installed prior to the effective date of this code, or for which a permit to install has been issued.

FACTORY-BUILT CHIMNEY. [NOT ADOPTED IN CA] A listed and labeled chimney composed of factory-made components assembled in the field in accordance with the manufacturer's instructions and the conditions of the listing.

FAMILY. [HCD 1] *An individual or two or more persons who are related by blood or marriage; or otherwise, live together in a dwelling unit.*

FENESTRATION. Skylights, roof windows, vertical windows (whether fixed or moveable); opaque doors; glazed doors; glass block; and combination opaque/glazed doors. See "Fenestration Product" as defined in Title 24, Part 6, the California Energy Code.

FIXTURE. [NOT ADOPTED IN CA] See "Plumbing fixture."

FIXTURE BRANCH, DRAINAGE. [NOT ADOPTED IN CA] A drain serving two or more fixtures that discharges into another portion of the drainage system.

FIXTURE BRANCH, WATER-SUPPLY. [NOT ADOPTED IN CA] A water-supply pipe between the fixture supply and a main water-distribution pipe or fixture group main.

FIXTURE DRAIN. [NOT ADOPTED IN CA] The drain from the trap of a fixture to the junction of that drain with any other drain pipe.

FIXTURE FITTING. [NOT ADOPTED IN CA]

Supply fitting. [NOT ADOPTED IN CA] A fitting that controls the volume and/or directional flow of water and is either attached to or accessible from a fixture or is used with an open or atmospheric discharge.

Waste fitting. [NOT ADOPTED IN CA] A combination of components that conveys the sanitary waste from the outlet of a fixture to the connection of the sanitary drainage system.

FIXTURE GROUP, MAIN. [NOT ADOPTED IN CA] The main water-distribution pipe (or secondary branch) serving a plumbing fixture grouping such as a bath, kitchen or laundry area to which two or more individual fixture branch pipes are connected.

FIXTURE SUPPLY. [NOT ADOPTED IN CA] The water-supply pipe connecting a fixture or fixture fitting to a fixture branch.

FIXTURE UNIT, DRAINAGE (d.f.u.). [NOT ADOPTED IN CA] A measure of probable discharge into the drainage system by various types of plumbing fixtures, used to size DWV piping systems. The drainage fixture-unit value for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a single drainage operation and on the average time between successive operations.

FIXTURE UNIT, WATER-SUPPLY (w.s.f.u.). [NOT ADOPTED IN CA] A measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures used to size water-piping systems. The water-supply fixture-unit value for a particular fixture depends on its volume rate of supply, on the time duration of a single supply operation and on the average time between successive operations.

FLOOD-LEVEL RIM. [NOT ADOPTED IN CA] The edge of the receptor or fixture from which water overflows.

FLOOR DRAIN. [NOT ADOPTED IN CA] A plumbing fixture for recess in the floor having a floor-level strainer intended for the purpose of the collection and disposal of waste water used in cleaning the floor and for the collection and disposal of accidental spillage to the floor.

FLOOR FURNACE. [NOT ADOPTED IN CA] A self-contained furnace suspended from the floor of the space being heated, taking air for combustion from outside such space, and with means for lighting the appliance from such space.

FLOW PRESSURE. [NOT ADOPTED IN CA] The static pressure reading in the water-supply pipe near the faucet or water outlet while the faucet or water outlet is open and flowing at capacity.

FLUE. [NOT ADOPTED IN CA] See “Vent.”

FLUE, APPLIANCE. [NOT ADOPTED IN CA] The passages within an appliance through which combustion products pass from the combustion chamber to the flue collar.

FLUE COLLAR. [NOT ADOPTED IN CA] The portion of a fuel-burning appliance designed for the attachment of a draft hood, vent connector or venting system.

FLUE GASES. [NOT ADOPTED IN CA] Products of combustion plus excess air in appliance flues or heat exchangers.

FLUSH VALVE. [NOT ADOPTED IN CA] A device located at the bottom of a flush tank that is operated to flush water closets.

FLUSHOMETER TANK. [NOT ADOPTED IN CA] A device integrated within an air accumulator vessel that is designed to discharge a predetermined quantity of water to fixtures for flushing purposes.

FLUSHOMETER VALVE. [NOT ADOPTED IN CA] A flushometer valve is a device that discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure.

FUEL-PIPING SYSTEM. [NOT ADOPTED IN CA] All piping, tubing, valves and fittings used to connect fuel utilization equipment to the point of fuel delivery.

FULLWAY VALVE. [NOT ADOPTED IN CA] A valve that in the full open position has an opening cross-sectional area equal to a minimum of 85 percent of the cross-sectional area of the connecting pipe.

FURNACE. [NOT ADOPTED IN CA] A vented heating appliance designed or arranged to discharge heated air into a conditioned space or through a duct or ducts.

GRADE, PIPING. [NOT ADOPTED IN CA] See “Slope.”

GRIDDED WATER DISTRIBUTION SYSTEM. [NOT ADOPTED IN CA] A water distribution system where every water distribution pipe is interconnected so as to provide two or more paths to each fixture supply pipe.

GROUND-SOURCE HEAT PUMP LOOP SYSTEM. [NOT ADOPTED IN CA] Piping buried in horizontal or vertical excavations or placed in a body of water for the purpose of transporting heat transfer liquid to and from a heat pump. Included in this definition are closed loop systems in which the liquid is recirculated and open loop systems in which the liquid is drawn from a well or other source.

HANGERS. [NOT ADOPTED IN CA] See “Supports.”

HAZARDOUS LOCATION. [NOT ADOPTED IN CA] Any location considered to be a fire hazard for flammable vapors, dust, combustible fibers or other highly combustible substances.

HEAT PUMP. [NOT ADOPTED IN CA] An appliance having heating or heating/cooling capability and that uses refrigerants to extract heat from air, liquid or other sources.

HEATING DEGREE DAYS (HDD). [NOT ADOPTED IN CA] The sum, on an annual basis, of the difference between 65°F (18°C) and the mean temperature for each day as determined from “NOAA Annual Degree Days to Selected Bases Derived from the 1960-1990 Normals” or other weather data sources acceptable to the code official.

HIGH-EFFICACY LAMPS. [NOT ADOPTED IN CA] Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps or lamps with a minimum efficacy of:

1. 60 lumens per watt for lamps over 40 watts.
2. 50 lumens per watt for lamps over 15 watts to 40 watts.
3. 40 lumens per watt for lamps 15 watts or less.

HIGH-TEMPERATURE (H.T.) CHIMNEY. [NOT ADOPTED IN CA] A high temperature chimney complying with the requirements of UL 103. A Type H.T. chimney is identifiable by the markings "Type H.T." on each chimney pipe section.

HORIZONTAL BRANCH, DRAINAGE. [NOT ADOPTED IN CA] A drain pipe extending laterally from a soil or waste stack or building drain that receives the discharge from one or more fixture drains.

HORIZONTAL PIPE. [NOT ADOPTED IN CA] Any pipe or fitting that makes an angle of less than 45 degrees (0.79 rad) with the horizontal.

HOT WATER. [NOT ADOPTED IN CA] Water at a temperature greater than or equal to 110°F (43°C).

HYDROGEN GENERATING APPLIANCE. [NOT ADOPTED IN CA] A self-contained package or factory-matched packages of integrated systems for generating gaseous hydrogen. Hydrogen generating appliances utilize electrolysis, reformation, chemical, or other processes to generate hydrogen.

IGNITION SOURCE. [NOT ADOPTED IN CA] A flame, spark or hot surface capable of igniting flammable vapors or fumes. Such sources include appliance burners, burner ignitions and electrical switching devices.

INDIRECT WASTE PIPE. [NOT ADOPTED IN CA] A waste pipe that discharges into the drainage system through an air gap into a trap, fixture or receptor.

INDIVIDUAL SEWAGE DISPOSAL SYSTEM. [NOT ADOPTED IN CA] A system for disposal of sewage by means of a septic tank or mechanical treatment, designed for use apart from a public sewer to serve a single establishment or building.

INDIVIDUAL VENT. [NOT ADOPTED IN CA] A pipe installed to vent a single-fixture drain that connects with the vent system above or terminates independently outside the building.

INDIVIDUAL WATER SUPPLY. [NOT ADOPTED IN CA] A supply other than an approved public water supply that serves one or more families.

LABELED. ~~Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose. Labeled means equipment or materials to which has been attached a label, symbol or other identifying mark of an organization, approved by the Department, that maintains a periodic inspection program of production of labeled products, installations, equipment, or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.~~

LIMITED-DENSITY OWNER-BUILT RURAL DWELLINGS. *Any structure consisting of one or more habitable rooms intended or designed to be occupied by one family with facilities for living or sleeping, with use restricted to rural areas designated by local jurisdiction. Notwithstanding other sections of law, the applicable section of Health and Safety Code Section 17958.2 is repeated here for clarification purposes.*

Section 17958.2. *(a) Notwithstanding Section 17958, regulations of the department adopted for limited-density owner-built rural dwellings, which are codified in Article 8 (commencing with Section 74) of Subchapter 1 of Chapter 1 of Title 25 of the California Code of Regulations, shall not become operative within any city or county unless and until the governing body of the city or county makes an express finding that the application of those regulations within the city or county is reasonably necessary because of local conditions and the city or county files a copy of that finding with the department.*

(b) In adopting ordinances or regulations for limited-density owner-built rural dwellings, a city or county may make such changes or modifications in the requirements contained in Article 8 (commencing with Section 74) of Subchapter 1 of Chapter 1 of Title 25 of the California Code of Regulations that it determines are reasonably necessary because of local conditions, if the city or county files a copy of the changes or modifications and the express findings for the changes or modifications with the department. No change or modification of that type shall become effective or operative for any purpose until the finding and the change or modification has been filed with the department.

LISTED. Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Listed means all products that appear in a list published by an approved testing or listing agency. For additional information, see Health and Safety Code Section 17920(h).

LISTING AGENCY. An agency approved by the department that is in the business of listing and labeling products, materials, equipment, and installations tested by an approved testing agency, and that maintains a periodic inspection program on current production of listed products, equipment, and installations, and that, at least annually, makes available a published report of these listings. For additional information, see Health and Safety Code Section 17920(i).

MACERATING TOILET SYSTEMS. **[NOT ADOPTED IN CA]** A system comprised of a sump with macerating pump and with connections for a water closet and other plumbing fixtures, that is designed to accept, grind and pump wastes to an approved point of discharge.

MAIN. **[NOT ADOPTED IN CA]** The principal pipe artery to which branches may be connected.

MAIN SEWER. **[NOT ADOPTED IN CA]** See "Public sewer."

MANIFOLD WATER DISTRIBUTION SYSTEMS. **[NOT ADOPTED IN CA]** A fabricated piping arrangement in which a large supply main is fitted with multiple branches in close proximity in which water is distributed separately to fixtures from each branch.

MANUFACTURED HOME. **[NOT ADOPTED IN CA]** Manufactured home means a structure, transportable in one or more sections, which in the traveling mode is 8 body feet (2438 body mm) or more in width or 40 body feet (12,192 body mm) or more in length, or, when erected on site, is 320 square feet (30m²) or more, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein; except that such term shall include any structure that meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the secretary (HUD) and complies with the standards established under this title. For mobile homes built prior to June 15, 1976, a label certifying compliance to the Standard for Mobile Homes, NFPA 501, in effect at the time of manufacture is required. For the purpose of these provisions, a mobile home shall be considered a manufactured home.

MASONRY UNIT. Brick, tile, stone, glass block or concrete block conforming to the requirements specified in Section 2103 of the ~~International~~ California Building Code.

Clay. A building unit larger in size than a brick, composed of burned clay, shale, fire clay or mixtures thereof.

Concrete. A building unit or block larger in size than 12 inches by 4 inches by 4 inches (305 mm by 102 mm by 102 mm) made of cement and suitable aggregates.

Glass. Nonload-bearing masonry composed of glass units bonded by mortar.

Hollow. A masonry unit whose net cross-sectional area in any plane parallel to the loadbearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane.

Solid. A masonry unit whose net cross-sectional area in every plane parallel to the loadbearing surface is 75 percent or more of its cross-sectional area measured in the same plane.

MASS WALL. [NOT ADOPTED IN CA] Masonry or concrete walls having a mass greater than or equal to 30 pounds per square foot (146 kg/m²), solid wood walls having a mass greater than or equal to 20 pounds per square foot (98 kg/m²), and any other walls having a heat capacity greater than or equal to 6 Btu/ft² • °F [266 J/(m² • K)].

MECHANICAL DRAFT SYSTEM. [NOT ADOPTED IN CA] A venting system designed to remove flue or vent gases by mechanical means, that consists of an induced draft portion under nonpositive static pressure or a forced draft portion under positive static pressure.

Forced-draft venting system. [NOT ADOPTED IN CA] A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static pressure.

Induced draft venting system. [NOT ADOPTED IN CA] A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under nonpositive static vent pressure.

Power venting system. [NOT ADOPTED IN CA] A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static vent pressure.

MECHANICAL EXHAUST SYSTEM. [NOT ADOPTED IN CA] A system for removing air from a room or space by mechanical means.

MECHANICAL SYSTEM. [NOT ADOPTED IN CA] A system specifically addressed and regulated in this code and composed of components, devices, appliances and equipment.

NATURAL DRAFT SYSTEM. [NOT ADOPTED IN CA] A venting system designed to remove flue or vent gases under nonpositive static vent pressure entirely by natural draft.

NONCONDITIONED SPACE. [NOT ADOPTED IN CA] A space that is not a conditioned space by insulated walls, floors or ceilings.

OFFSET. [NOT ADOPTED IN CA] A combination of fittings that makes two changes in direction bringing one section of the pipe out of line but into a line parallel with the other section.

PASSIVE SOLAR ENERGY COLLECTOR. *Uses architectural components, rather than mechanical components, to provide heating or cooling for a building interior.*

PELLET FUEL-BURNING APPLIANCE. [NOT ADOPTED IN CA] A closed combustion, vented appliance equipped with a fuel feed mechanism for burning processed pellets of solid fuel of a specified size and composition.

PELLET VENT. [NOT ADOPTED IN CA] A vent listed and labeled for use with a listed pellet fuel-burning appliance.

PITCH. [NOT ADOPTED IN CA] See "Slope."

PLENUM. [NOT ADOPTED IN CA] A chamber that forms part of an air-circulation system other than the occupied space being conditioned.

PLUMBING. [NOT ADOPTED IN CA] For the purpose of this code, plumbing refers to those installations, repairs, maintenance and alterations regulated by Chapters 25 through 33.

PLUMBING APPLIANCE. [NOT ADOPTED IN CA] An energized household appliance with plumbing connections, such as a dishwasher, food-waste grinder, clothes washer or water heater.

PLUMBING APPURTENANCE. [NOT ADOPTED IN CA] A device or assembly that is an adjunct to the basic plumbing system and demands no additional water supply nor adds any discharge load to the system. It is presumed that it performs some useful function in the operation, maintenance, servicing, economy or safety of the plumbing system. Examples include filters, relief valves and aerators.

PLUMBING FIXTURE. [NOT ADOPTED IN CA] A receptor or device that requires both a water-supply connection and a discharge to the drainage system, such as water closets, lavatories, bathtubs and sinks. Plumbing appliances as a special class of fixture are further defined.

PLUMBING SYSTEM. [NOT ADOPTED IN CA] Includes the water supply and distribution pipes, plumbing fixtures, supports and appurtenances; soil, waste and vent pipes; sanitary drains and building sewers to an approved point of disposal.

POLLUTION. [NOT ADOPTED IN CA] An impairment of the quality of the potable water to a degree that does not create a hazard to the public health but that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use.

PORTABLE-FUEL-CELL APPLIANCE. [NOT ADOPTED IN CA] A fuel cell generator of electricity, which is not fixed in place. A portable fuel cell appliance utilizes a cord and plug connection to a grid-isolated load and has an integral fuel supply.

POTABLE WATER. [NOT ADOPTED IN CA] Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming in bacteriological and chemical quality to the requirements of the public health authority having jurisdiction.

PRESSURE-RELIEF VALVE. [NOT ADOPTED IN CA] A pressure-actuated valve held closed by a spring or other means and designed to automatically relieve pressure at the pressure at which it is set.

PUBLIC SEWER. [NOT ADOPTED IN CA] A common sewer directly controlled by public authority.

PUBLIC WATER MAIN. [NOT ADOPTED IN CA] A water-supply pipe for public use controlled by public authority.

PURGE. [NOT ADOPTED IN CA] To clear of air, gas or other foreign substances.

QUICK-CLOSING VALVE. [NOT ADOPTED IN CA] A valve or faucet that closes automatically when released manually or controlled by mechanical means for fast-action closing.

R-VALUE, THERMAL RESISTANCE. [NOT ADOPTED IN CA] The inverse of the time rate of heat flow through a building thermal envelope element from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ($h \cdot ft^2 \cdot ^\circ F/Btu$).

RECEPTOR. [NOT ADOPTED IN CA] A fixture or device that receives the discharge from indirect waste pipes.

REFRIGERANT. [NOT ADOPTED IN CA] A substance used to produce refrigeration by its expansion or evaporation.

REFRIGERANT COMPRESSOR. [NOT ADOPTED IN CA] A specific machine, with or without accessories, for compressing a given refrigerant vapor.

REFRIGERATING SYSTEM. [NOT ADOPTED IN CA] A combination of interconnected parts forming a closed circuit in which refrigerant is circulated for the purpose of extracting, then rejecting, heat. A direct refrigerating system is one in which the evaporator or condenser of the refrigerating system is in direct contact with the air or other substances to be cooled or heated. An indirect refrigerating system is one in which a secondary coolant cooled or heated by the refrigerating system is circulated to the air or other substance to be cooled or heated.

RELIEF VALVE, VACUUM. [NOT ADOPTED IN CA] A device to prevent excessive buildup of vacuum in a pressure vessel.

RETURN AIR. [NOT ADOPTED IN CA] Air removed from an approved conditioned space or location and recirculated or exhausted.

RISER. [NOT ADOPTED IN CA] A water pipe that extends vertically one full story or more to convey water to branches or to a group of fixtures.

ROOM HEATER. [NOT ADOPTED IN CA] A freestanding heating appliance installed in the space being heated and not connected to ducts.

ROUGH-IN. [NOT ADOPTED IN CA] The installation of all parts of the plumbing system that must be completed prior to the installation of fixtures. This includes DWV, water supply and built-in fixture supports.

SANITARY SEWER. [NOT ADOPTED IN CA] A sewer that carries sewage and excludes storm, surface and groundwater.

SEPTIC TANK. [NOT ADOPTED IN CA] A water-tight receptor that receives the discharge of a building sanitary drainage system and is constructed so as to separate solids from the liquid, digest organic matter through a period of detention, and allow the liquids to discharge into the soil outside of the tank through a system of open joint or perforated piping or a seepage pit.

SEWAGE. [NOT ADOPTED IN CA] Any liquid waste containing animal matter, vegetable matter or other impurity in suspension or solution.

SEWAGE PUMP. [NOT ADOPTED IN CA] A permanently installed mechanical device for removing sewage or liquid waste from a sump.

SIDE VENT. [NOT ADOPTED IN CA] A vent connecting to the drain pipe through a fitting at an angle less than 45 degrees (0.79 rad) to the horizontal.

SLIP JOINT. [NOT ADOPTED IN CA] A mechanical-type joint used primarily on fixture traps. The joint tightness is obtained by compressing a friction-type washer such as rubber, nylon, neoprene, lead or special packing material against the pipe by the tightening of a (slip) nut.

SLOPE. [NOT ADOPTED IN CA] The fall (pitch) of a line of pipe in reference to a horizontal plane. In drainage, the slope is expressed as the fall in units vertical per units horizontal (percent) for a length of pipe.

SOIL STACK OR PIPE. [NOT ADOPTED IN CA] A pipe that conveys sewage containing fecal material.

SOLAR HEAT GAIN COEFFICIENT (SHGC). [NOT ADOPTED IN CA] The solar heat gain through a fenestration or glazing assembly relative to the incident solar radiation (Btu/h • ft² • °F).

STACK. [NOT ADOPTED IN CA] Any main vertical DWV line, including offsets, that extends one or more stories as directly as possible to its vent terminal.

STACK VENT. [NOT ADOPTED IN CA] The extension of soil or waste stack above the highest horizontal drain connected.

STACK VENTING. [NOT ADOPTED IN CA] A method of venting a fixture or fixtures through the soil or waste stack without individual fixture vents.

STANDARD TRUSS. [NOT ADOPTED IN CA] Any construction that does not permit the roof/ceiling insulation to achieve the required R-value over the exterior walls.

STATIONARY FUEL CELL POWER PLANT. [NOT ADOPTED IN CA] A self-contained package or factory-matched packages which constitute an automatically-operated assembly of integrated systems for generating useful electrical energy and recoverable thermal energy that is permanently connected and fixed in place.

STORM SEWER, DRAIN. [NOT ADOPTED IN CA] A pipe used for conveying rainwater, surface water, subsurface water and similar liquid waste.

SUBSOIL DRAIN. [NOT ADOPTED IN CA] A drain that collects subsurface water or seepage water and conveys such water to a place of disposal.

SUMP. [NOT ADOPTED IN CA] A tank or pit that receives sewage or waste, located below the normal grade of the gravity system and that must be emptied by mechanical means.

SUMP PUMP. [NOT ADOPTED IN CA] A pump installed to empty a sump. These pumps are used for removing storm water only. The pump is selected for the specific head and volume of the load and is usually operated by level controllers.

SUPPLY AIR. [NOT ADOPTED IN CA] Air delivered to a conditioned space through ducts or plenums from the heat exchanger of a heating, cooling or ventilating system.

SWEEP. [NOT ADOPTED IN CA] A drainage fitting designed to provide a change in direction of a drain pipe of less than the angle specified by the amount necessary to establish the desired slope of the line. Sweeps provide a longer turning radius than bends and a less turbulent flow pattern (see “Bend” and “Elbow”).

TEMPERATURE- AND PRESSURE-RELIEF (T AND P) VALVE. [NOT ADOPTED IN CA] A combination relief valve designed to function as both a temperature-relief and pressure-relief valve.

TEMPERATURE-RELIEF VALVE. [NOT ADOPTED IN CA] A temperature-actuated valve designed to discharge automatically at the temperature at which it is set.

TESTING AGENCY. *An agency approved by the department as qualified and equipped for testing of products, materials, equipment and installations in accordance with nationally recognized standards. For additional information, see Health and Safety Code Section 17920(m).*

THERMAL ISOLATION. [NOT ADOPTED IN CA] Physical and space conditioning separation from conditioned space(s) consisting of existing or new walls, doors and/or windows. The conditioned space(s) shall be controlled as separate zones for heating and cooling or conditioned by separate equipment.

THERMAL RESISTANCE, R-VALUE. [NOT ADOPTED IN CA] The inverse of the time rate of heat flow through a body from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ($h \cdot ft^2 \cdot ^\circ F/Btu$).

THERMAL TRANSMITTANCE, U-FACTOR. [NOT ADOPTED IN CA] The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films ($Btu/h \cdot ft^2 \cdot ^\circ F$).

TRAP. [NOT ADOPTED IN CA] A fitting, either separate or built into a fixture, that provides a liquid seal to prevent the emission of sewer gases without materially affecting the flow of sewage or waste water through it.

TRAP ARM. [NOT ADOPTED IN CA] That portion of a fixture drain between a trap weir and the vent fitting.

TRAP PRIMER. [NOT ADOPTED IN CA] A device or system of piping to maintain a water seal in a trap, typically installed where infrequent use of the trap would result in evaporation of the trap seal, such as floor drains.

TRAP SEAL. [NOT ADOPTED IN CA] The trap seal is the maximum vertical depth of liquid that a trap will retain, measured between the crown weir and the top of the dip of the trap.

TYPE L VENT. [NOT ADOPTED IN CA] A listed and labeled vent conforming to UL 641 for venting oil-burning appliances listed for use with Type L vents or with gas appliances listed for use with Type B vents.

U-FACTOR, THERMAL TRANSMITTANCE. [NOT ADOPTED IN CA] The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films ($Btu/h \cdot ft^2 \cdot ^\circ F$).

VACUUM BREAKERS. [NOT ADOPTED IN CA] A device which prevents backsiphonage of water by admitting atmospheric pressure through ports to the discharge side of the device.

VENT. [NOT ADOPTED IN CA] A passageway for conveying flue gases from fuel-fired appliances, or their vent connectors, to the outside atmosphere.

VENT COLLAR. [NOT ADOPTED IN CA] See “Flue collar.”

VENT CONNECTOR. [NOT ADOPTED IN CA] That portion of a venting system which connects the flue collar or draft hood of an appliance to a vent.

VENT DAMPER DEVICE, AUTOMATIC. [NOT ADOPTED IN CA] A device intended for installation in the venting system, in the outlet of an individual, automatically operated fuel burning appliance and that is designed to open the venting system automatically when the appliance is in operation and to close off the venting system automatically when the appliance is in a standby or shutdown condition.

VENT GASES. [NOT ADOPTED IN CA] Products of combustion from fuel-burning appliances, plus excess air and dilution air, in the venting system above the draft hood or draft regulator.

VENT STACK. [NOT ADOPTED IN CA] A vertical vent pipe installed to provide circulation of air to and from the drainage system and which extends through one or more stories.

VENT SYSTEM. [NOT ADOPTED IN CA] Piping installed to equalize pneumatic pressure in a drainage system to prevent trap seal loss or blow-back due to siphonage or back pressure.

VENTING SYSTEM. [NOT ADOPTED IN CA] A continuous open passageway from the flue collar of an appliance to the outside atmosphere for the purpose of removing flue or vent gases. A venting system is usually composed of a vent or a chimney and vent connector, if used, assembled to form the open passageway.

VERTICAL PIPE. [NOT ADOPTED IN CA] Any pipe or fitting that makes an angle of 45 degrees (0.79 rad) or more with the horizontal.

WASTE. [NOT ADOPTED IN CA] Liquid-borne waste that is free of fecal matter.

WASTE PIPE OR STACK. [NOT ADOPTED IN CA] Piping that conveys only liquid sewage not containing fecal material.

WATER-DISTRIBUTION SYSTEM. [NOT ADOPTED IN CA] Piping which conveys water from the service to the plumbing fixtures, appliances, appurtenances, equipment, devices or other systems served, including fittings and control valves.

WATER HEATER. [NOT ADOPTED IN CA] Any heating appliance or equipment that heats potable water and supplies such water to the potable hot water distribution system.

WATER MAIN. [NOT ADOPTED IN CA] A water-supply pipe for public use.

WATER OUTLET. [NOT ADOPTED IN CA] A valved discharge opening, including a hose bibb, through which water is removed from the potable water system supplying water to a plumbing fixture or plumbing appliance that requires either an air gap or backflow prevention device for protection of the supply system.

WATER-SERVICE PIPE. [NOT ADOPTED IN CA] The outside pipe from the water main or other source of potable water supply to the water-distribution system inside the building, terminating at the service valve.

WATER-SUPPLY SYSTEM. [NOT ADOPTED IN CA] The water-service pipe, the water-distributing pipes and the necessary connecting pipes, fittings, control valves and all appurtenances in or adjacent to the building or premises.

WET VENT. [NOT ADOPTED IN CA] A vent that also receives the discharge of wastes from other fixtures.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

3. HCD proposes to adopt Part III, Chapter 3, with amendments as follows:

Part III—Building Planning and Construction

CHAPTER 3 BUILDING PLANNING

SECTION R301 DESIGN CRITERIA

R301.1 Application. Buildings and structures, and all parts thereof, shall be constructed to safely support all loads, including dead loads, live loads, roof loads, flood loads, snow loads, wind loads and seismic loads as prescribed by this code. The construction of buildings and structures in accordance with the provisions of this code shall result in a system that provides a complete load path that meets all requirements for the transfer of all loads from their point of origin through the load-resisting elements to the foundation. Buildings and structures constructed as prescribed by this code are deemed to comply with the requirements of this section.

R301.1.1 Alternative provisions. As an alternative to the requirements in Section R301.1 the following standards are permitted subject to the limitations of this code and the limitations therein. Where engineered design is used in conjunction with these standards, the design shall comply with the ~~International~~ California Building Code.

1. American Forest and Paper Association (AF&PA) *Wood Frame Construction Manual* (WFCM).
2. American Iron and Steel Institute (AISI) *Standard for Cold-Formed Steel Framing—Prescriptive Method for One- and Two-Family Dwellings* (AISI S230).
3. ICC-400 *Standard on the Design and Construction of Log Structures*.

R301.1.1.1 Alternative provisions for limited-density owner-built rural dwellings. *The purpose of this subsection is to permit alternatives that provide minimum protection of life, limb, health, property, safety and welfare of the general public and the owners and occupants of limited-density owner-built rural dwellings as defined in Chapter 2 of this code. For additional information see Chapter 1, Subchapter 1, Article 8, of Title 25, California Code of Regulations, commencing with Section 74.*

To meet compliance with the requirements of this code, provisions of Section R301.1.1.1, items 1 through 5 may be utilized for limited-density owner-built rural dwellings when the materials, methods of construction, or appliances are determined appropriate or suitable for their intended purpose by the local enforcing agency.

1. *A limited-density owner-built rural dwelling may be of any type of construction which will provide for a sound structural condition. Structural hazards which result in an unsound condition and which may constitute a substandard building are delineated in Section 17920.3 of the Health and Safety Code.*
2. *There shall be no requirements for room dimensions as required in Chapter 3, provided there is adequate light and ventilation and means of egress.*
3. *There shall be no specified requirement for heating capacity or for temperature maintenance. The use of solid-fuel or solar heating devices shall be deemed as complying with the requirements of Chapter 3. If nonrenewable fuel is used in these dwellings, rooms so heated shall meet current installation standards.*
4. *Pier foundations, stone masonry footings and foundations, pressure-treated lumber, poles, or equivalent foundation materials or designs may be used provided that bearing is sufficient.*
5. *Owner produced or used materials and appliances may be utilized unless found not to be of sufficient strength or durability to perform the intended function. Owner produced or used lumber, or shakes and shingles may be utilized unless found to contain dry rot, excessive splitting or other defects obviously rendering the material unfit in strength or durability for the intended purpose.*

R301.1.3 Engineered design. When a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of

nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the ~~International~~ *California Building Code* is permitted for all buildings and structures, and parts thereof, included in the scope of this code.

R301.1.3.1 California licensed architect or engineer. *When any portion of any structure deviates from substantial compliance with conventional framing requirements for woodframe construction found in this code, the building official shall require the construction documents to be approved and stamped by a California licensed architect or engineer for that irregular or non-conforming portion of work. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Section 6737.1.*

R301.1.3.2 Woodframe structures greater than two-stories. *The building official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than two stories and basement in height. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Section 6737.1.*

R301.1.3.3 Structures other than woodframe. *The building official shall require floor, wall or roof-ceiling structural elements in dwellings designed of cold-formed steel, concrete, masonry or structural insulated panels prescribed by this code to be approved and stamped by a California licensed architect or engineer. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Section 6737.1.*

**TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

| GROUND SNOW LOAD | WIND DESIGN | | SEISMIC DESIGN CATEGORY ^f | SUBJECT TO DAMAGE FROM | | | WINTER DESIGN TEMP ^g | ICE BARRIER UNDER-LAYMENT REQUIRED ^h | FLOOD HAZARDS ^g | AIR FREEZING INDEX ⁱ | MEAN ANNUAL TEMP ^g |
|------------------------|-----------------------------|-------------------------------------|--|-------------------------|-------------------------------------|----------------------|---------------------------------------|---|-------------------------------|---------------------------------------|-------------------------------------|
| | Speed ^d (mph) | Topographic Effects ^k | | Weathering ^a | Frost line depth ^b | Termite ^c | | | | | |
| | | | | | | | | | | | |

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., “negligible,” “moderate” or “severe”) for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. ~~The outdoor design dry bulb temperature shall be selected from the columns of 97 1/2 percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures~~ Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction’s entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMS and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.
- h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table “Air Freezing Index- USA Method (Base 32°)” at www.ncdc.noaa.gov/fpsf.html.

- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°)" at www.ncdc.noaa.gov/ftp.html.
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

R301.2.2.1.1 Alternate determination of seismic design category. The Seismic Design Categories and corresponding Short Period Design Spectral Response Accelerations, S_{DS} shown in Figure R301.2(2) are based on soil Site Class D, as defined in Section 1613.5.2 of the ~~International~~ *California Building Code*. If soil conditions are other than Site D, the Short Period Design Spectral Response Accelerations, S_{DS} , for a site can be determined according to Section 1613.5 of the ~~International~~ *California Building Code*. The value of S_{DS} determined according to Section 1613.5 of the ~~International~~ *California Building Code* is permitted to be used to set the seismic design category according to Table R301.2.2.1.1, and to interpolate between values in Tables R602.10.1, R603.7 and other seismic design requirements of this code.

R301.2.2.1.2 Alternative determination of Seismic Design Category E. Buildings located in Seismic Design Category E in accordance with Figure R301.2(2) are permitted to be reclassified as being in Seismic Design Category D₂ provided one of the following is done:

1. A more detailed evaluation of the seismic design category is made in accordance with the provisions and maps of the ~~International~~ *California Building Code*. Buildings located in Seismic Design Category E per Table R301.2.2.1.1, but located in Seismic Design Category D per the ~~International~~ *California Building Code*, may be designed using the Seismic Design Category D₂ requirements of this code.

2. Buildings located in Seismic Design Category E that conform to the following additional restrictions are permitted to be constructed in accordance with the provisions for Seismic Design Category D₂ of this code:

2.1. All exterior shear wall lines or braced wall panels are in one plane vertically from the foundation to the uppermost story.

2.2. Floors shall not cantilever past the exterior walls.

2.3. The building is within all of the requirements of Section R301.2.2.2.5 for being considered as regular.

R301.2.2.3.7 Anchorage of water heaters. Water heaters shall be anchored against movement and overturning in accordance with ~~Section M1307.2~~ *the California Plumbing Code*.

R301.2.2.4 Seismic Design Category E. Buildings in Seismic Design Category E shall be designed in accordance with the ~~International~~ *California Building Code*, except when the seismic design category is reclassified to a lower seismic design category in accordance with Section R301.2.2.1.

R301.3 Story height. Buildings constructed in accordance with these provisions shall be limited to story heights of not more than the following:

1. For wood wall framing, the laterally unsupported bearing wall stud height permitted by Table R602.3(5) plus a height of floor framing not to exceed 16 inches (406 mm).

Exception: For wood framed wall buildings with bracing in accordance with Tables R602.10.1.2(1) and R602.10.1.2(2), the wall stud clear height used to determine the maximum permitted *story height* may be increased to 12 feet (3658 mm) without requiring an engineered design for the building wind and seismic force resisting systems provided that the length of bracing required by Table R602.10.1.2(1) is increased by multiplying by a factor of 1.10 and the length of bracing required by Table R602.10.1.2(2) is increased by multiplying by a factor of 1.20. Wall studs are still subject to the requirements of this section.

2. For steel wall framing, a stud height of 10 feet (3048 mm), plus a height of floor framing not to exceed 16 inches (406 mm).

3. For masonry walls, a maximum bearing wall clear height of 12 feet (3658 mm) plus a height of floor framing not to exceed 16 inches (406 mm).

Exception: An additional 8 feet (2438 mm) is permitted for gable end walls.

4. For insulating concrete form walls, the maximum bearing wall height per story as permitted by Section R611 tables plus a height of floor framing not to exceed 16 inches (406 mm).

5. For structural insulated panel (SIP) walls, the maximum bearing wall height per story as permitted by Section 614 tables shall not exceed 10 feet (3048 mm) plus a height of floor framing not to exceed 16 inches (406 mm).

Individual walls or walls studs shall be permitted to exceed these limits as permitted by Chapter 6 provisions, provided story heights are not exceeded. Floor framing height shall be permitted to exceed these limits provided the story height does not exceed 11 feet 7 inches (3531 mm). An engineered design shall be provided for the wall or wall framing members when they exceed the limits of Chapter 6. Where the story height limits are exceeded, an engineered design shall be provided in accordance with the ~~International~~ California Building Code for the overall wind and seismic force resisting system.

**SECTION R302
FIRE-RESISTANT CONSTRUCTION**

R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1), *or dwellings equipped throughout with an automatic residential fire sprinkler system installed in accordance with Section 313 shall comply with Table R302.1(2).*

Exceptions:

1. Walls, projections, openings, or penetrations in walls perpendicular to the line used to determine the fire separation distance.
2. Walls of dwellings and accessory structures located on the same lot.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
4. Detached garages accessory to a dwelling located within 2 feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.

R302.1(1)

EXTERIOR WALLS – DWELLINGS WITHOUT AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION

| EXTERIOR WALL ELEMENT | | MINIMUM FIRE-RESISTANCE RATING | MINIMUM FIRE SEPARATION DISTANCE |
|-----------------------|-----------------------------|--|----------------------------------|
| Walls | (Fire-resistance rated) | 1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure form <u>from</u> both sides | <5 feet |
| | (Not fire-resistance rated) | 0 hours | ≥5 feet |
| Projections | (Fire-resistance rated) | 1 hour on the underside | ≥ 2 feet to 5 feet |
| | (Not fire-resistance rated) | 0 | 5 feet |
| Openings in walls | Not allowed | N/A | < 3 feet |
| | 25% Maximum of Wall Area | 0 hours | 3 feet |
| | Unlimited | 0 hours | 5 feet |
| Penetrations | All | Comply with Section R317.3 <u>R302.4</u> | < 5 feet |
| | | None required | 5 feet |

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable

TABLE R302.1(2)
EXTERIOR WALLS – DWELLINGS WITH AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION

| <u>EXTERIOR WALL ELEMENT</u> | | <u>MINIMUM FIRE-RESISTANCE RATING</u> | <u>MINIMUM FIRE SEPARATION DISTANCE</u> |
|-------------------------------------|------------------------------------|--|--|
| <u>Walls</u> | <u>(Fire-resistance rated)</u> | <u>1 hour-tested in accordance with ASTM E 119 or UL 263 with exposure from both sides</u> | <u><3 feet</u> |
| | <u>(Not fire-resistance rated)</u> | <u>0 hours</u> | <u>≥3 feet</u> |
| <u>Projections</u> | <u>(Fire-resistance rated)</u> | <u>1 hour on the underside</u> | <u>≥ 2 feet to 3 feet</u> |
| | <u>(Not fire-resistance rated)</u> | <u>0</u> | <u>3 feet</u> |
| <u>Openings in walls</u> | <u>Not allowed</u> | <u>N/A</u> | <u>< 3 feet</u> |
| | <u>Unlimited</u> | <u>0 hours</u> | <u>3 feet</u> |
| <u>Penetrations</u> | <u>All</u> | <u>Comply with Section R302.4</u> | <u>< 3 feet</u> |
| | | <u>None required</u> | <u>3 feet</u> |

*For SI: 1 foot = 304.8 mm.
N/A = Not Applicable*

R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception: A common 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with ~~Chapters 34 through 43~~ The California Electrical Code. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors. Doors shall be self-closing and self-latching.

R302.6 Dwelling/garage fire separation. The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall. A separation is not required between the dwelling unit and a carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

R302.13 Combustible insulation clearance. Combustible insulation shall be separated a minimum of 3 inches (76 mm) from recessed luminaires, fan motors and other heat-producing devices.

Exception: Where heat-producing devices are listed for lesser clearances, combustible insulation complying with the listing requirements shall be separated in accordance with the conditions stipulated in the listing.

Recessed luminaires installed in the building thermal envelope shall meet or exceed the requirements of Section N1102.4.5 specified in the California Energy Code for recessed luminaires installed in insulated ceilings.

**SECTION R303
LIGHT, VENTILATION AND HEATING**

R303.1 Habitable rooms. All habitable rooms shall have an aggregate glazing area of not less than 8 percent of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants. The minimum openable area to the outdoors shall be 4 percent of the floor area being ventilated.

Exceptions:

1. The glazed areas need not be openable where the opening is not required by Section R310 and an approved mechanical ventilation system is provided capable of producing 0.35 air change per hour in the room is installed or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) (78 L/s) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.
2. The glazed areas need not be installed in rooms where Exception 1 above is satisfied and artificial light is provided capable of producing an average illumination of 6 footcandles (65 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.
3. Use of sunroom additions and patio covers, as defined in Section R202, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening.
4. The windows, doors, louvers and other approved closeable openings not required by Section R310 may open into a passive solar energy collector for ventilation required by this section. The area of ventilation openings to the outside of the passive solar energy collector shall be increased to compensate for the openings required by the interior space.
5. Glazed openings may open into a passive solar energy collector provided the area of exterior glazed opening(s) into the passive solar energy collector is increased to compensate for the area required by the interior space.

R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m²), one-half of which must be openable.

Exception: The glazed areas shall not be required where artificial light and a mechanical *ventilation* system are provided. The minimum *ventilation* rates shall be 50 cubic feet per minute (24 L/s) for intermittent *ventilation* or ~~20~~ 25 cubic feet per minute (~~10~~ 12 L/s) for continuous *ventilation*. *Ventilation* air from the space shall be exhausted directly to the outside.

R303.7 Required glazed openings. Required glazed openings shall open directly onto a street or public alley, or a yard or court located on the same lot as the building.

Exceptions:

1. Required glazed openings may face into a roofed porch where the porch abuts a street, yard or court and the longer side of the porch is at least 65 percent unobstructed and the ceiling height is not less than 7 feet (2134 mm).
2. Eave projections shall not be considered as obstructing the clear open space of a *yard* or court.
3. Required glazed openings may face into the area under a deck, balcony, bay or floor cantilever provided a clear vertical space at least 36 inches (914 mm) in height is provided.
4. Glazed openings covered by a passive solar energy collector in accordance with Section R303.1, Exception 5.

R303.7.1 Sunroom additions. Required glazed openings shall be permitted to open into sunroom additions or patio covers that abut a street, yard or court if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening, and the ceiling height of the sunroom is not less than 7 feet (2134 mm).

R303.7.1.1 Passive solar energy collectors. *When a passive solar energy collector is designed as a conditioned area it shall comply with the California Energy Code, Title 24, Part 6. Non conditioned passive solar energy collectors are exempt from Title 24, Part 6.*

R303.8 Required heating. When the winter design temperature in Table R301.2(1) is below 60°F (16°C), every dwelling unit shall be provided with heating facilities capable of maintaining a minimum room temperature of 68°F (20°C) at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in all habitable rooms at the design temperature. The installation of one or more portable space heaters shall not be used to achieve compliance with this section.

Note: See Section R301.1.1.1 for limited-density owner-built rural dwellings.

SECTION R304 MINIMUM ROOM AREAS

R304.3 Minimum dimensions. Habitable rooms shall not be less than 7 feet (2134 mm) in any horizontal dimension.

Exceptions:

1. Kitchens.
2. Limited-density owner-built rural dwellings. See Section R301.1.1.1.

SECTION R307 TOILET, BATH AND SHOWER SPACES

R307.1 Space required. Fixtures shall be spaced in accordance with the California Plumbing Code. ~~Figure R307.1, and in accordance with the Requirements of Section P2705.1.~~

FIGURE R307.1 MINIMUM FIXTURE CLEARANCES **[NOT ADOPTED IN CA]**

SECTION R308 GLAZING

R308.5 Site built windows. Site built windows shall comply with Section 2404 of the ~~International~~ California Building Code.

SECTION R309 GARAGES AND CARPORTS

R309.4 Automatic garage door openers. Automatic garage door openers, if provided, shall be listed in accordance with UL 325. See Health and Safety Code Sections 19890 and 19891 for additional provisions for residential garage door openers.

R309.5 Extension garage door springs. *Every extension garage door spring sold or offered for sale, whether new or sold as a replacement, or installed in any garage or carport which is accessory to a dwelling covered by this code, shall conform to the requirements for garage door springs located in Section 1211 of the California Building Code.*

SECTION R312 GUARDS

R312.1 Where required. Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a guard.

R312.2 Height. Required guards at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than ~~36 inches (914 mm)~~ 42 inches (1067 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads.

Exceptions:

1. Guards on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
2. Where the top of the guard also serves as a handrail on the open sides of stairs, the top of the guard shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

**SECTION R313
AUTOMATIC FIRE SPRINKLER SYSTEMS**

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section ~~P2904~~ R313.3 or NFPA 13D.

R313.2 One- and two-family dwellings automatic fire systems. ~~Effective January 1, 2011, a~~ An automatic residential fire sprinkler system shall be installed in one- and two- family dwellings.

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section ~~P2904~~ R313.3 or NFPA 13D.

**SECTION R315
CARBON MONOXIDE ALARMS**

R315.1 Carbon monoxide alarms. For new construction, an approved carbon monoxide alarm shall be installed ~~outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units and in sleeping units within which fuel-burning fired appliances are installed and in dwelling units that have attached garages.~~

R315.1.1 Power supply. *For new construction required carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery back-up. Alarm wiring shall be directly connected to the permanent building wiring without a disconnecting switch other than as required for overcurrent protection.*

Exceptions:

1. *In dwelling units where there is no commercial power supply the carbon monoxide alarm may be solely battery operated.*
2. *In existing dwelling units a carbon monoxide alarm is permitted to be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space.*

R315.1.2 Interconnection. *Where more than one carbon monoxide alarm is required to be installed within the dwelling unit or within a sleeping unit the alarm shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit.*

Exception:

1. *Interconnection is not required in existing dwelling units where repairs do not result in the removal of wall and ceiling finishes, there is no access by means of attic, basement or crawl space, and no previous method for interconnection existed.*

R315.2 Where required in existing dwellings. Where work requiring a permit occurs in existing dwellings that have attached garages or in existing dwellings or sleeping units within which fuel-burning fixed appliances exist, carbon monoxide alarms shall be provided in accordance with Section R315.1. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained

R315.3 Alarm requirements. Single-and multiple- station carbon monoxide alarms shall be listed as complying with the requirements of UL 2034 for equipment performance and shall be installed in accordance with this code, the current edition of NFPA 720 for "Single- and Multiple-Station Alarms and Household Carbon Monoxide Detection Systems," and the manufacturer's installation instructions. Other carbon monoxide alarm and detection devices as recognized in NFPA 720 are also acceptable.

Carbon monoxide alarms required by Sections R315.1 and R315.2 shall be installed in the following locations:

1. Outside of each separate dwelling unit sleeping area in the immediate vicinity of the bedroom(s).
2. On every level of a dwelling unit including basements.

R315.3.1 Multi-purpose alarms. When a carbon monoxide alarm is combined with a smoke alarm, in addition to the requirements of Section R315, all applicable standards described in Section R314, Smoke Alarms, shall apply.

SECTION R320 ACCESSIBILITY

R320.1 Scope. ~~Where there are four or more dwelling units or sleeping units in a single structure, the provisions of Chapter 11 of the International Building Code for Group R-3 shall apply.~~ Dwelling units in a building consisting of three or more dwelling units or four or more condominium units shall meet the requirements of the California Building Code Chapter 11A. Covered Multifamily Dwellings include but are not limited to dwelling units listed in Section 1.2.1.1.2. Dwelling units within a single structure separated by firewalls do not constitute separate buildings.

SECTION R321 ELEVATORS AND PLATFORM LIFTS

R321.1 Elevators. Where provided, passenger elevators, limited-use/limited-application elevators or private residence elevators shall comply with ASME A17.1.

R321.2 Platform lifts. Where provided, platform lifts shall comply with ASME A18.1.

R321.3 Accessibility. Elevators or platform (wheelchair) lifts that are part of an accessible route required by Chapter 11A of the ~~International~~ California Building Code, shall comply with ~~ICC-A117.4.~~ ASME A17.1, Safety Code for Elevators and Escalators, Title 8, of the California Code of Regulations, under "Elevator Safety Orders"; ASME A18.1, Safety Standard for Platform Lifts and Stairway Chair Lifts; the State of California, the Department of Industrial Relations, Division of Occupational Safety and Health, and any applicable safety regulations of other administrative authorities having jurisdiction. See Section 1124A of the California Building Code for additional information.

SECTION R322 FLOOD-RESISTANT CONSTRUCTION

R322.1.6 Protection of mechanical and electrical systems. Electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall be located at or above the elevation required in Section R322.2 (flood hazard areas including A Zones) or R322.3 (coastal high-hazard areas including V Zones). If replaced as part of a substantial improvement, electrical systems, equipment and components; heating, ventilating, air conditioning and plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall meet the requirements of this section. Systems, fixtures, and equipment and components shall not be mounted on or penetrate through walls intended to break away under flood loads.

Exception: Locating electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment is permitted below the elevation required in Section R322.2 (flood hazard areas including A Zones) or R322.3 (coastal high-hazard areas including V Zones) provided that they are designed and installed to prevent water from entering or accumulating

within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in accordance with ASCE 24. Electrical wiring systems are permitted to be located below the required elevation provided they conform to the provisions of the ~~electrical part of this code~~ California Electrical Code for wet locations.

R322.1.7 Protection of water supply and sanitary sewage systems. ~~New and replacement w~~ Water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the water supply and distribution systems ~~in accordance with the plumbing provisions of this code.~~ ~~New and replacement s~~ Sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into sanitary drainage systems and discharges from sanitary drainage systems into floodwaters ~~in accordance with the plumbing provisions of this code and Chapter 3 of the International Private Sewage Disposal Code.~~

R322.1.9 Manufactured homes. **[NOT ADOPTED IN CA]** New or replacement manufactured homes shall be elevated in accordance with Section R322.2 or Section R322.3 in coastal high hazard areas (V Zones). The anchor and tie-down requirements of Sections AE604 and AE605 of Appendix E shall apply. The foundation and anchorage of manufactured homes to be located in identified floodways shall be designed and constructed in accordance with ASCE 24.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

4. HCD proposes to adopt Part III, Chapter 4, with amendments as follows:

CHAPTER 4 FOUNDATIONS

SECTION R401 GENERAL

R401.2 Requirements. Foundation construction shall be capable of accommodating all loads according to Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Gravel fill used as footings for wood and precast concrete foundations shall comply with Section R403.

Note: See Section R301.1.1.1 for limited-density owner-built rural dwellings.

R401.4 Soil tests. Where quantifiable data created by accepted soil science methodologies indicate expansive, compressible, shifting or other questionable soil characteristics are likely to be present, the building official shall determine whether to require a soil test to determine the soil's characteristics at a particular location. This test shall be done by an approved agency using an approved method.

R401.4.1 Geotechnical evaluation. In lieu of a complete geotechnical evaluation, the load-bearing values in Table R401.4.1 shall be assumed.

**TABLE R401.4.1
PRESUMPTIVE LOAD-BEARING VALUES OF
FOUNDATION MATERIALS^a**

| CLASS OF MATERIAL | LOAD-BEARING PRESSURE (pounds per square foot) |
|---|---|
| Crystalline bedrock | 12,000 |
| Sedimentary and foliated rock | 4,000 |
| Sandy gravel and/or gravel (GW and GP) | 3,000 |
| Sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM and GC) | 2,000 |
| Clay, sandy clay, silty clay, clayey silt, silt and sandy silt (CL, ML, MH and CH) | 1,500 ^b |

For SI: 1 pound per square foot = 0.0479 kPa.

- a. When soil tests are required by Section R401.4, the allowable bearing capacities of the soil shall be part of the recommendations.
- b. Where the building official determines that in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation.

R401.4.1.1 General and where required for applications listed in Section 1.2.1.1.1 regulated by the Department of Housing and Community Development. *Foundations and soils investigations shall be conducted in conformance with Health and Safety Code Sections 17953 through 17955 as summarized below.*

R401.4.1.1.1 Preliminary soil report. *Each city, county, or city and county shall enact an ordinance which requires a preliminary soil report, prepared by a civil engineer who is registered by the state. The report shall be based upon adequate test borings or excavations, of every subdivision, where a tentative and final map is required pursuant to Section 66426 of the Government Code.*

The preliminary soil report may be waived if the building department of the city, county or city and county, or other enforcement agency charged with the administration and enforcement of the provisions of this part, shall determine that, due to the knowledge such department has as to the soil qualities of the soil of the subdivision or lot, no preliminary analysis is necessary.

R401.4.1.1.2 Soil investigation by lot, necessity, preparation, and recommendations. *If the preliminary soil report indicates the presence of critically expansive soils or other soil problems which, if not corrected, would lead to structural defects, such ordinance shall require a soil investigation of each lot in the subdivision.*

The soil investigation shall be prepared by a civil engineer who is registered in this state. It shall recommend corrective action which is likely to prevent structural damage to each dwelling proposed to be constructed on the expansive soil.

R401.4.1.1.3 Approval, building permit conditions, appeal. *The building department of each city, county or city and county, or other enforcement agency charged with the administration and enforcement of the provisions of this part, shall approve the soil investigation if it determines that the recommended action is likely to prevent structural damage to each dwelling to be constructed. As a condition to the building permit, the ordinance shall require that the approved recommended action be incorporated in the construction of each dwelling. Appeal from such determination shall be to the local appeals board.*

SECTION R403 FOOTINGS

R403.1.8 Foundations on expansive soils. Foundation and floor slabs for buildings located on expansive soils shall be designed in accordance with Section 4805.8 1808.6 of the International California Building Code.

**SECTION R404
FOUNDATION AND RETAINING WALLS**

R404.5 Precast concrete foundation walls.

R404.5.1 Design. Precast concrete foundation walls shall be designed in accordance with accepted engineering practice. The design and manufacture of precast concrete foundation wall panels shall comply with the materials requirements of Section R402.3 or ACI 318. The panel design drawings shall be prepared by a registered design professional, where required by the statutes of the *jurisdiction* in which the project is to be constructed in accordance with Section R406.1.

**SECTION R408
UNDER-FLOOR SPACE**

R408.3 Unvented crawl space. Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where:

1. Exposed earth is covered with a continuous Class I vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall; and
2. One of the following is provided for the under-floor space:
 - 2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7m²) of crawlspace floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with the California Energy Code Section N1102.2.9;
 - 2.2. Conditioned air supply sized to deliver at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m²) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with the California Energy Code Section N1102.2.9;
 - 2.3. Plenum in existing structures complying with the California Mechanical Code Section M1604.5 if under-floor space is used as a plenum.

R408.4 Access. Access shall be provided to all under-floor spaces. Access openings through the floor shall be a minimum of 18 inches by 24 inches (457 mm by 610 mm). Openings through a perimeter wall shall be not less than 16 inches by 24 inches (407 mm by 610 mm). When any portion of the through-wall access is below grade, an areaway not less than 16 inches by 24 inches (407 mm by 610 mm) shall be provided. The bottom of the areaway shall be below the threshold of the access opening. Through wall access openings shall not be located under a door to the residence. See Section M1305.1.4 the California Mechanical Code for access requirements where mechanical equipment is located under floors.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

5. HCD proposes to adopt Part III, Chapter 5, with amendments as follows:

CHAPTER 5 FLOORS

SECTION R502 WOOD FLOOR FRAMING

R502.1 Identification. Load-bearing dimension lumber for joists, beams and girders shall be identified by a grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS 20. In lieu of a grade mark, a certificate of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted.

Note: See Section R301.1.1.1 for limited-density owner-built rural dwellings.

R502.11.1 Design. Wood trusses shall be designed in accordance with *approved* engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional, ~~where required by the statutes of the jurisdiction in which the project is to be constructed in accordance with Section R106.1.~~

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

6. HCD proposes to adopt Part III, Chapter 6, with amendments as follows:

CHAPTER 6 WALL CONSTRUCTION

SECTION R602 WOOD WALL FRAMING

R602.1 Identification. Load-bearing dimension lumber for studs, plates and headers shall be identified by a grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS 20. In lieu of a grade mark, a certification of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted.

Note: See Section R301.1.1.1 for limited-density owner-built rural dwellings.

6-A: HCD proposes no change to Table R602.10.1.2(2) except Footnote “a” as follows:

**TABLE R602.10.1.2(2)^{a, b, c}—continued
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY
(AS A FUNCTION OF BRACED WALL LINE LENGTH)**

| SOIL CLASS D ^a WALL HEIGHT = 10 FT 10 PSF FLOOR DEAD LOAD 15 PSF ROOF/CEILING DEAD LOAD BRACED WALL LINE SPACING ≤ 25 FT | | | MINIMUM TOTAL LENGTH (feet) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE | | | |
|---|----------------|---|---|-------------------------------------|------------|----------------------|
| Seismic Design Category (SDC) | Story Location | Braced Wall Line Length | Method LIB | Methods DWB, SFB, GB, PBS, PCP, HPS | Method WSP | Continuous Sheathing |
| SDC A and B and Detached Dwellings in C | | Exempt from Seismic Requirements Use Table R602.10.1.2(1) for Bracing Requirements | | | | |
| SDC D ₂ | | 10 | NP | 4.0 | 2.5 | 2.1 |
| | | 20 | NP | 8.0 | 5.0 | 4.3 |
| | | 30 | NP | 12.0 | 7.5 | 6.4 |
| | | 40 | NP | 16.0 | 10.0 | 8.5 |
| | | 50 | NP | 20.0 | 12.5 | 10.6 |
| | | 10 | NP | 7.5 | 5.5 | 4.7 |
| | | 20 | NP | 15.0 | 11.0 | 9.4 |
| | | 30 | NP | 22.5 | 16.5 | 14.0 |
| | | 40 | NP | 30.0 | 22.0 | 18.7 |
| | | 50 | NP | 37.5 | 27.5 | 23.4 |
| | | 10 | NP | NP | NP | NP |
| | | 20 | NP | NP | NP | NP |
| | | 30 | NP | NP | NP | NP |
| | | 40 | NP | NP | NP | NP |
| | | 50 | NP | NP | NP | NP |

For SI: 1 foot = 304.8 mm, 1 pound per square foot = 47.89 Pa.

- Wall bracing lengths are based on a soil site class “D.” Interpolation of bracing length between the S_{ds} values associated with the Seismic Design Categories shall be permitted when a site-specific S_{ds} value is determined in accordance with Section 1613.5 of the *International California Building Code*.
- Foundation cripple wall panels shall be braced in accordance with Section R602.10.9.
- Methods of bracing shall be as described in Sections R602.10.2, R602.10.4 and R602.10.5.

R602.10.5.4 Continuously sheathed braced wall lines. Where a continuously-sheathed braced wall line is used in Seismic Design Categories D₀, D₁ and D₂ or regions where the basic wind speed exceeds 100 miles per hour (45 m/s), the braced wall line shall be designed in accordance with accepted engineering practice and the provisions of the *International California Building Code*. Also, all other exterior braced wall lines in the same story shall be continuously sheathed.

**SECTION R606
GENERAL MASONRY CONSTRUCTION**

R606.1 General. Masonry construction shall be designed and constructed in accordance with the provisions of this section or in accordance with the provisions of ACI 530/ASCE 5/TMS 402.

R606.1.1 Professional registration not required. ~~When the~~ Empirical design provisions of ACI 530/ASCE 5/TMS 402 Chapter 5 or the provisions of this section are used to design masonry, project drawings, typical details and specifications *shall not exempt construction documents from the requirement to be stamped by a California licensed architect or engineer. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Section 6737.1.* ~~are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.~~

**TABLE R606.12.2.1
MINIMUM SOLID WALL LENGTH ALONG EXTERIOR WALL LINES**

| SEISMIC DESIGN CATEGORY | MINIMUM SOLID WALL LENGTH (percent) ^a | | |
|----------------------------------|--|--|---|
| | One Story or Top Story of Two Story | Wall Supporting Light-framed Second Story and Roof | Wall Supporting Masonry Second Story and Roof |
| Townhouses in C | 20 | 25 | 35 |
| D ₀ or D ₁ | 25 | NP | NP |
| D ₂ | 30 | NP | NP |

NP = Not permitted, except with design in accordance with the International California Building Code.

a. For all walls, the minimum required length of solid walls shall be based on the table percent multiplied by the dimension, parallel to the wall direction under consideration, of a rectangle inscribing the overall building plan

**SECTION R611
EXTERIOR CONCRETE WALL CONSTRUCTION**

R611.1 General. Exterior concrete walls shall be designed and constructed in accordance with the provisions of this section or in accordance with the provisions of PCA 100 or ACI 318. ~~When~~ PCA 100, ACI 318 or the provisions of this section are used to design concrete walls, project drawings, typical details and specifications *shall not exempt construction documents from the requirement to be stamped by a California licensed architect or engineer. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Section 6737.1.* ~~are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.~~

**SECTION R613
STRUCTURAL INSULATED PANEL WALL CONSTRUCTION**

R613.1 General. Structural insulated panel (SIP) walls shall be designed in accordance with the provisions of this section. ~~When~~ The provisions of this section are used to design structural insulated panel walls, project drawings, typical details and specifications *shall not exempt construction documents from the requirement to be stamped by a California licensed architect or engineer. Notwithstanding other sections of law, the law establishing these provisions is found in Business and Professions Code Section 6737.1.* ~~are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.~~

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

7. HCD proposes to adopt Part III, Chapter 7, with amendments as follows:

CHAPTER 7 WALL COVERING

SECTION R703 EXTERIOR COVERING

R703.1 General. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8.

R703.1.1 Water Resistance. The exterior wall envelope shall be designed and constructed in a manner that prevents the accumulation of water within the wall assembly by providing a water-resistant barrier behind the exterior veneer as required by Section R703.2 and a means of draining to the exterior water that enters the assembly. Protection against condensation in the exterior wall assembly shall be provided in accordance with ~~Section R604.3 of this code~~ the California Energy Code.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

8. HCD proposes to adopt Part III, Chapter 8, with amendments as follows:

CHAPTER 8 ROOF-CEILING CONSTRUCTION

SECTION R802 WOOD ROOF FRAMING

R802.1 Identification. Load-bearing dimension lumber for rafters, trusses and ceiling joists shall be identified by a grade mark of a lumber grading or inspection agency that has been approved by an accreditation body that complies with DOC PS 20. In lieu of a grade mark, a certificate of inspection issued by a lumber grading or inspection agency meeting the requirements of this section shall be accepted.

Note: See Section R301.1.1.1 for limited-density owner-built rural dwellings.

R802.1.3.4 Labeling. Fire-retardant-treated lumber and wood structural panels shall be *labeled*. *The label shall contain:*

1. The identification mark of an approved agency in accordance with Section 1703.5 of the ~~International~~ California Building Code.
2. Identification of the treating manufacturer.
3. The name of the fire-retardant treatment.
4. The species of wood treated.
5. Flame spread index and smoke-developed index.
6. Method of drying after treatment.

7. Conformance to applicable standards in accordance with Sections R802.1.3.5 through R802.1.3.8.
8. For FRTW exposed to weather, or a damp or wet location, the words “No increase in the listed classification when subjected to the Standard Rain Test” (ASTM D 2898).

R802.10.2 Design. Wood trusses shall be designed in accordance with accepted engineering practice. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional where required by the statutes of the State of California or the jurisdiction in which the project is to be constructed, ~~in accordance with Section R406.1.~~

**SECTION R806
ROOF VENTILATION**

**TABLE R806.4
INSULATION FOR CONDENSATION CONTROL**

| CLIMATE ZONE | MINIMUM RIGID BOARD OR AIR-IMPERMEABLE INSULATION R-VALUE ^a |
|--------------------------|--|
| 2B and 3B tile roof only | 0 (none required) |
| 1, 2A, 2B, 3A, 3B, 3C | R-5 |
| 4C | R-10 |
| 4A, 4B | R-15 |
| 5 | R-20 |
| 6 | R-25 |
| 7 | R-30 |
| 8 | R-35 |

a. Contributes to but does not supersede Chapter 14 California Energy Code requirements

**SECTION R807
ATTIC ACCESS**

R807.1 Attic access. Buildings with combustible ceiling or roof construction shall have an attic access opening to attic areas that exceed 30 square feet (2.8 m²) and have a vertical height of 30 inches (762 mm) or greater. The vertical height shall be measured from the top of the ceiling framing members to the underside of the roof framing members.

The rough-framed opening shall not be less than 22 inches by 30 inches (559 mm by 762 mm) and shall be located in a hallway or other readily accessible location. When located in a wall, the opening shall be a minimum of 22 inches wide by 30 inches high. When the access is located in a ceiling, minimum unobstructed headroom in the attic space shall be 30 inches (762 mm) at some point above the access measured vertically from the bottom of ceiling framing members. See ~~Section M1305.1.3~~ the California Mechanical Code for access requirements where mechanical equipment is located in attics.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

9. HCD proposes to adopt Part III, Chapter 9, with amendments as follows:

CHAPTER 9 ROOF ASSEMBLIES

SECTION R903 WEATHER PROTECTION

R903.4.1 Overflow drains and scuppers. Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51 mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains and having a minimum opening height of 4 inches (102 mm) shall be installed in the adjacent parapet walls with the inlet flow located 2 inches (51 mm) above the low point of the roof served. The installation and sizing of overflow drains, leaders and conductors shall comply with the ~~International~~ California Plumbing Code.

~~Overflow drains shall discharge to an approved location and shall not be connected to roof drain lines.~~

R905.10.3 Material standards. Metal-sheet roof covering systems that incorporate supporting structural members shall be designed in accordance with the ~~International~~ California Building Code. Metal-sheet roof coverings installed over structural decking shall comply with Table R905.10.3(1). The materials used for metal-sheet roof coverings shall be naturally corrosion resistant or provided with corrosion resistance in accordance with the standards and minimum thicknesses shown in Table R905.10.3(2).

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

10. HCD proposes to adopt Part III, Chapter 10, with amendments as follows:

CHAPTER 10 CHIMNEYS AND FIREPLACES

SECTION R1001 MASONRY FIREPLACES

R1001.3 Seismic reinforcing. Masonry or concrete chimneys in Seismic Design Category C, D₀, D₁ or D₂ shall be reinforced. Reinforcing shall conform to the requirements set forth in Table R1001.1 and Section R609, Grouted Masonry.

R1001.4 Seismic anchorage. Masonry or concrete chimneys in Seismic Design Categories C, D₀, D₁ or D₂ shall be anchored at each floor, ceiling or roof line more than 6 feet (1829 mm) above grade, except where constructed completely within the exterior walls. Anchorage shall conform to the requirements of Section R1001.4.1.

**TABLE R1001.1
SUMMARY OF REQUIREMENTS FOR MASONRY FIREPLACES AND CHIMNEYS**

| ITEM | LETTER ^a | REQUIREMENTS |
|---|---------------------|---|
| Hearth slab thickness | A | 4" |
| Hearth extension (each side of opening) | B | 8" fireplace opening < 6 square foot. 12" fireplace opening ≥ 6 square foot. |
| Hearth extension (front of opening) | C | 16" fireplace opening < 6 square foot. 20" fireplace opening ≥ 6 square foot. |
| Hearth slab reinforcing | D | Reinforced to carry its own weight and all imposed loads. |
| Thickness of wall of firebox | E | 10" solid brick or 8" where a firebrick lining is used. Joints in firebrick ¼" maximum. |
| Distance from top of opening to throat | F | 8" |
| Smoke chamber wall thickness Unlined walls | G | 6" 8" |
| Chimney Vertical reinforcing ^b | H | Four No. 4 full-length bars for chimney up to 40" wide. Add two No. 4 bars for each additional 40" or fraction of width or each additional flue. |
| Horizontal reinforcing | J | ¼" ties at 18" and two ties at each bend in vertical steel. |
| Bond beams | K | No specified requirements. |
| Fireplace lintel | L | Noncombustible material. |
| Chimney walls with flue lining | M | Solid masonry units or hollow masonry units grouted solid with at least 4 inch nominal thickness. |
| Distances between adjacent flues | — | See Section R1003.13. |
| Effective flue area (based on area of fireplace opening) | P | See Section R1003.15. |
| Clearances: Combustible material Mantel and trim Above roof | R | See Sections R1001.11 and R1003.18. See Section R1001.11, Exception 4. 3' at roofline and 2' at 10'. |
| Anchorage ^b Strap Number Embedment into chimney Fasten to Bolts | S | 3/16" × 1" Two 12" hooked around outer bar with 6" extension. 4 joists Two ½" diameter. |
| Footing Thickness Width | T | 12" min. 6" each side of fireplace wall. |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929M².

Note: This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure R1001.1, which shows examples of typical construction. This table does not cover all requirements, nor does it cover all aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

a. The letters refer to Figure R1001.1.

b. Not required in Seismic Design Category A, or B or C.

SECTION R1003 MASONRY CHIMNEYS

R1003.3 Seismic reinforcing. Masonry or concrete chimneys shall be constructed, anchored, supported and reinforced as required in this chapter. In Seismic Design Category C, D₀, D₁ or D₂ masonry and concrete chimneys shall be reinforced and anchored as detailed in Section R1003.3.1, R1003.3.2 and R1003.4. In Seismic Design Category A, or B or C, reinforcement and seismic anchorage is not required.

R1003.4 Seismic anchorage. Masonry and concrete chimneys and foundations in Seismic Design Category C, D₀, D₁ or D₂ shall be anchored at each floor, ceiling or roof line more than 6 feet (1829 mm) above grade, except where constructed completely within the exterior walls. Anchorage shall conform to the requirements in Section R1003.4.1.

R1003.11.3 Gas appliances. Flue lining systems for gas appliances shall be in accordance with ~~Chapter 24~~ the California Mechanical Code.

R1003.14 Flue area (appliance). Chimney flues shall not be smaller in area than that of the area of the connector from the appliance [see Tables R1003.14(1) and R1003.14(2)]. The sizing of a chimney flue to which multiple appliance venting systems are connected shall be in accordance with ~~Section M1805.3~~ the California Mechanical Code.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

11. HCD proposes to not adopt Part IV, Energy Conservation, which includes Chapter 11.

Part IV—Energy Conservation

CHAPTER 11 ENERGY EFFICIENCY

(Note: This chapter is not adopted in California. See California Energy Code, Title 24, Part 6.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

12. HCD proposes to not adopt Part V, Mechanical, which includes Chapters 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 and 23.

Part V—Mechanical

CHAPTER 12 MECHANICAL ADMINISTRATION

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 13 GENERAL MECHANICAL SYSTEM REQUIREMENTS

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 14 HEATING AND COOLING EQUIPMENT

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 15
EXHAUST SYSTEMS

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 16
DUCT SYSTEMS

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 17
COMBUSTION AIR

(Note: This chapter is not adopted. See California Mechanical Code and California Plumbing Code, Title 24, Parts 4 and 5.)

CHAPTER 18
CHIMNEYS AND VENTS

(Note: This chapter is not adopted. See California Mechanical Code and California Plumbing Code, Title 24, Parts 4 and 5.)

CHAPTER 19
SPECIAL FUEL-BURNING EQUIPMENT

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 20
BOILERS AND WATER HEATERS

(Note: This chapter is not adopted. See California Mechanical Code and California Plumbing Code, Title 24, Parts 4 and 5.)

CHAPTER 21
HYDRONIC PIPING

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 22
SPECIAL PIPING AND STORAGE SYSTEMS

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

CHAPTER 23
SOLAR SYSTEMS

(Note: This chapter is not adopted. See California Mechanical Code, Title 24, Part 4.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

13. HCD proposes to not adopt Part VI, Fuel Gas, which includes Chapter 24.

Part VI—Fuel Gas

CHAPTER 24 FUEL GAS

(Note: This chapter is not adopted. See California Mechanical Code and California Plumbing Code, Title 24, Parts 4 and 5.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

14. HCD proposes to not adopt Part VII, Plumbing, which includes Chapters 25, 26, 27, 28, 29, 30, 31, 32 and 33.

Part VII—Plumbing

CHAPTER 25 PLUMBING ADMINISTRATION

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 26 GENERAL PLUMBING REQUIREMENTS

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 27 PLUMBING FIXTURES

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 28 WATER HEATERS

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 29 WATER SUPPLY AND DISTRIBUTION

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 30 SANITARY DRAINAGE

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 31 VENTS

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 32
TRAPS

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

CHAPTER 33
STORM DRAINAGE

(Note: This chapter is not adopted. See California Plumbing Code, Title 24, Part 5.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

15. HCD proposes not to adopt Part VIII, Electrical, which includes Chapters 34, 35, 36, 37, 38, 39, 40, 41, 42 and 43.

Part VIII—Electrical

CHAPTER 34
GENERAL REQUIREMENTS

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 35
ELECTRICAL DEFINITIONS

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 36
SERVICES

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 37
BRANCH CIRCUIT AND FEEDER REQUIREMENTS

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 38
WIRING METHODS

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 39
POWER AND LIGHTING DISTRIBUTION

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 40
DEVICES AND LUMINAIRES

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

CHAPTER 41
APPLIANCE INSTALLATION

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

**CHAPTER 42
SWIMMING POOLS**

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

**CHAPTER 43
CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS**

(Note: This chapter is not adopted. See California Electrical Code, Title 24, Part 3.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

16. HCD proposes to adopt Part IX, Chapter 44, with amendments as follows:

Part IX—Referenced Standards

**CHAPTER 44
REFERENCED STANDARDS**

Notwithstanding California laws and regulations, these referenced standards shall be applicable only to those California Residential Code sections that are adopted.

Part IX—Referenced Standards

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02269

NFPA

| Standard Reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| 13—07 | Installation of Sprinkler Systems | 302.3 |
| 13D—07 | Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes. | P2904.1, P2904.2, P2904.6.1, R313.2.1 |
| 31—06 | Installation of Oil-burning Equipment | M1801.3.1, M1805.3 |
| 58—08 | Liquefied Petroleum Gas Code | G2412.2, G2414.6.2 |
| 70—08 | National Electrical Code | E3401.1, E3401.2, E4301.1, Table E4303.2, E4304.3, E4304.4 |
| 72—07 | National Fire Alarm Code. | R314.1, R314.2 |
| 85—07 | Boiler and Construction Systems Hazards Code | G2452.1 |
| 211—06 | Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances | G2427.5.5.1, R1002.5 |
| 259—03 | Test Method for Potential Heat of Building Materials | R316.5.7, 316.5.8 |
| 286—06 | Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth. | R302.9.4, R316.4, R316.5.8, R316.6 |
| 501—05 | Standard on Manufactured Housing | R202, AE201 |
| 853—07 | Standard for the Installation of Stationary Fuel Cell Power Systems. | M1903.1 |
| <u>720—09</u> | <u>Installation of Carbon Monoxide (CO Detection and Warning Equipment)</u> | <u>R315.3</u> |

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

17. HCD proposes to not adopt Appendix A.

**APPENDIX A
SIZING AND CAPACITIES OF GAS PIPING**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

18. HCD proposes to not adopt Appendix B.

**APPENDIX B
SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I
APPLIANCES, AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

19. HCD proposes to not adopt Appendix C.

**APPENDIX C
EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

20. HCD proposes to not adopt Appendix D.

APPENDIX D

RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

21. HCD proposes to not adopt Appendix E.

APPENDIX E

MANUFACTURED HOUSING USED AS DWELLINGS

(Note: This appendix is not adopted. See California Code of Regulations, Title 25.)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

22. HCD proposes to not adopt Appendix F.

APPENDIX F

RADON CONTROL METHODS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

23. HCD proposes to not adopt Appendix G.

APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE: See Chapter 31, Section 3109 of the California Building Code, Title 24, Part 2.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

24. HCD proposes to adopt Appendix H without amendment:

**APPENDIX H
PATIO COVERS**

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

25. HCD proposes to not adopt Appendix I.

**APPENDIX I
PRIVATE SEWAGE DISPOSAL**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

26. HCD proposes to not adopt Appendix J.

**APPENDIX J
EXISTING BUILDINGS AND STRUCTURES**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

27. HCD proposes to not adopt Appendix K.

APPENDIX K SOUND TRANSMISSION

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

28. HCD proposes to not adopt Appendix L.

APPENDIX L PERMIT FEES

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

29. HCD proposes to not adopt Appendix M.

APPENDIX M HOME DAY CARE— R-3 OCCUPANCY

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

30. HCD proposes to not adopt Appendix N.

APPENDIX N VENTING METHODS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

31. HCD proposes to not adopt Appendix O.

**APPENDIX O
GRAY WATER RECYCLING SYSTEMS**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

32. HCD proposes to not adopt Appendix P.

**APPENDIX P
SIZING OF WATER PIPING SYSTEM**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

33. HCD proposes to not adopt Appendix Q.

**APPENDIX Q
ICC INTERNATIONAL RESIDENTIAL CODE ELECTRICAL PROVISIONS/NATIONAL ELECTRICAL CODE
CROSS REFERENCE**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11 and 19990; and Government Code Section 12955.1.

Reference: Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.
