

REVISED

**45 DAY INITIAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS OF THE
CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2022 CALIFORNIA RESIDENTIAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2.5**

(06/21)

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS

Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.

Specific Purpose

The California Building Standards Commission (CBSC) selected the 2021 International Residential Code (IRC), published by the International Code Council (ICC), as the model code to be referenced in the California Code of Regulations (CCR), Title 24, Part 2.5, for the 2021 Triennial Code Adoption Cycle.

The specific purpose of these regulations is to adopt by reference the 2021 IRC, with California amendments, into the 2022 California Residential Code (CRC), CCR, Title 24, Part 2.5, for the following programs:

- a) **State Housing Law:** relative to residential occupancies, buildings or structures accessory thereto.
- b) **Employee Housing Act:** relative to the use of plumbing equipment and systems in or on any building or structure or outdoors on premises or property in accordance with Health and Safety Code (HSC) Section 17040.
- c) **Mobilehome Parks and Special Occupancy Parks:** relative to the use of plumbing equipment and systems in or on any permanent buildings, accessory buildings, and structures under the ownership and control of the park operator, within the park, in accordance with HSC Section 18300 for mobilehome parks, and HSC Section 18865 for special occupancy parks.
- d) **Factory-Built Housing Law:** relative to residential buildings, dwellings or portions thereof, or building components, or manufactured assemblies in accordance with HSC Section 19990.

The Public Problem, Administrative Requirement, or Other Circumstance Addressed

Administrative Requirement: HSC Sections 17922 and 19990 direct the California

Department of Housing and Community Development (HCD) to adopt the most recent edition of the model code, which, in this case, is the 2021 IRC published by ICC as selected by CBSC, into the 2022 CRC, Part 2.5 of Title 24, of the CCR.

Rationale for Necessity

The 2021 IRC was published by ICC and will automatically become adopted in its entirety, pursuant to HSC Section 17922(b), one year from its date of publication if not amended and proposed by HCD to the CBSC for adoption.

If the 2021 IRC becomes adopted in its entirety without being proposed for adoption with amendments by HCD to CBSC, such automatic adoption would cause considerable confusion because California amendments, also known as State amendments, are necessary modifications to the model code language to ensure that the 2022 CRC is consistent with state law and unique California conditions.

It is necessary to propose the adoption of some sections of the 2021 IRC, with amendments to the model code language, to incorporate state and federal laws and regulations, and to benefit the health, safety, and general welfare of California residents.

It is necessary to not propose the adoption of some sections of the 2021 IRC, as they would conflict with certain existing state and federal laws, and would not benefit the health, safety, and general welfare of California residents.

It is necessary to propose the removal of some California amendments previously proposed and adopted in the 2019 CRC that are duplicated or replaced by similar new model code language, or incorporated state and federal laws, and are no longer necessary.

It is necessary to propose to bring forward previously existing California amendments. Some existing amendments will be brought forward without any changes and will represent no change in their effect from the 2019 CRC. Other previously existing California amendments will be changed as explained below.

SPECIFIC PROPOSED REGULATORY ACTIONS

HCD proposes to adopt by reference the 2021 edition of the IRC with amendments into the 2022 CRC. The proposed amendments are intended to provide clarity, specificity, and direction to the code user and to implement and make specific existing state laws. The proposed amendments are a result of recommendations developed during the public participation period prior to submittal to the CBSC. The rationale for each amendment by chapter and section is listed below. In addition, most proposed changes include a reference to regulatory approval criteria identified in HSC Section 18930(a) (Nine-Point Criteria).

ITEM 1

CHAPTER 1, SCOPE AND ADMINISTRATION, DIVISION I, CALIFORNIA ADMINISTRATION

HCD proposes to bring forward Chapter 1, Division 1, Sections 1.1 and 1.8, from the 2019 CRC for adoption into the 2021 CRC with modifications as follows:

SECTION 1.1 – GENERAL

Section: 1.1.1 Title.

Rationale: HCD proposes continued adoption of the above referenced section with modification. The proposed modification updates the reference of the IRC from the 2018 IRC to the 2021 IRC.

- Sections:**
- 1.1.2 Purpose.**
 - 1.1.3 Scope.**
 - 1.1.3.1 Classification.**
 - 1.1.3.1.1 Utility and Miscellaneous Group U.**
 - 1.1.3.2 Regulated buildings, structures and applications.**
 - 1.1.4 Appendices.**
 - 1.1.5 Referenced codes.**
 - 1.1.6 Nonbuilding standards, orders and regulations.**
 - 1.1.7 Order of precedence and use.**
 - 1.1.7.1 Differences.**
 - 1.1.7.2 Specific provisions.**
 - 1.1.7.3 Conflicts.**
 - 1.1.7.3.1 Detached one- and two-family dwellings.**
 - 1.1.8 City, county, or city and county amendments, additions or deletions.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification. Chapter 1, Division I, contains general requirements specific to the needs of California and each state agency. Section 1.1 is similar to Section 1.1 in Chapter 1, Division I, in the California Building Code (CBC), California Existing Building Code (CEBC), California Mechanical Code (CMC) and California Plumbing Code (CPC).

Section: 1.1.8.1 Findings and filings.

Rationale: HCD proposes to correct its mailing addresses. These are editorial changes only.

- 1.1.9 Effective date of this code.**
- 1.1.10 Availability of codes.**
- 1.1.11 Format.**
- 1.1.12 Validity.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification. Chapter 1, Division I, contains general requirements specific to the needs of California and each state agency. Section 1.1 is similar to Section 1.1 in Chapter 1, Division I, in the California Building Code (CBC), California Existing Building Code (CEBC), California Mechanical Code (CMC) and California Plumbing Code (CPC).

SECTION 1.8 - DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)

Section: 1.8.1 Purpose.

Rationale: HCD proposes continued adoption of the above referenced section without modification. Chapter 1, Division I, contains general requirements specific to California, and authorizes different state agencies to promulgate building standards and regulations. Section 1.8 *et seq.*, provides specific requirements and the authority vested to HCD by statute, promotes uniform enforcement throughout the state, and ensures local enforcement agencies are provided with accurate statutory information regarding the

enforcement of building standards in California.

SECTION 1.8.2 AUTHORITY AND ABBREVIATIONS

- Section:**
- 1.8.2.1 General.**
 - 1.8.2.1.1 Housing construction.**
 - 1.8.2.1.2 Housing accessibility.**
 - 1.8.2.1.3 Permanent buildings in mobilehome parks and special occupancy parks.**

Rationale: HCD proposes continued adoption of the above referenced sections with modifications. Chapter 1, Division I, contains general requirements specific to California, and authorizes different state agencies to promulgate building standards and regulations. Section 1.8 *et seq.*, provides specific requirements and the authority vested to HCD by statute, promotes uniform enforcement throughout the state, and ensures local enforcement agencies are provided with accurate statutory information regarding the enforcement of building standards in California. The modifications are updates to the authority cited and reference sections only.

SECTION 1.8.3 LOCAL ENFORCING AGENCY

- Section:**
- 1.8.3.1 Duties and powers.**
 - 1.8.3.2 Laws, rules and regulations.**
 - 1.8.3.2.1 State Housing Law.**
 - 1.8.3.2.2 Mobilehome Parks Act.**
 - 1.8.3.2.3 Special Occupancy Parks Act.**
 - 1.8.3.2.4 Employee Housing Act.**
 - 1.8.3.2.5 Factory-Built Housing Law.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification.

SECTION 1.8.4—PERMITS, FEES, APPLICATIONS AND INSPECTIONS

- Section:**
- 1.8.4.1 Permits.**
 - 1.8.4.2 Fees.**
 - 1.8.4.3 Plan review and time limitations.**
 - 1.8.4.3.1 Retention of plans.**
 - 1.8.4.4 Inspections.**

Rationale: HCD proposes to continue adoption of the above referenced sections without modification.

SECTION 1.8.5 RIGHT OF ENTRY FOR ENFORCEMENT

- Section:**
- 1.8.5.1 General.**

Rationale: HCD proposes continued adoption of the above referenced section without modification.

SECTION 1.8.6 LOCAL MODIFICATION BY ORDINANCE OR REGULATION

- Section:**
- 1.8.6.1 General.**
 - 1.8.6.2 Findings, filings and rejections of local modifications.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification.

SECTION 1.8.7 ALTERNATE MATERIALS, DESIGNS, TESTS AND METHODS OF CONSTRUCTION

- Section:**
- 1.8.7.1 General.**
 - 1.8.7.2 Local building departments.**
 - 1.8.7.2.1 Approval of alternates.**
 - 1.8.7.3 Department of Housing and Community Development.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification.

SECTION 1.8.8 APPEALS BOARD

- Section:**
- 1.8.8.1 General.**
 - 1.8.8.2 Definitions.**
 - 1.8.8.3 Appeals.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification.

SECTION 1.8.9 UNSAFE BUILDING OR STRUCTURES

- Section:**
- 1.8.9.1 Authority to enforce.**
 - 1.8.9.2 Actions and proceedings.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification.

SECTION 1.8.10 OTHER BUILDING REGULATIONS

- Section:**
- 1.8.10.1 Existing structures.**
 - 1.8.10.2 Moved structures.**

Rationale: HCD proposes continued adoption of the above referenced sections without modification.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 2

CHAPTER 1, DIVISION II, ADMINISTRATION

HCD proposes to adopt Chapter 1, Division II, Sections R106.1.6 (formerly R105.2) (Building: 1 – 10 only), R106.1, R106.1.1, R106.1.3, R106.1.4, R106.1.5, R106.2, R109.1, R109.1.1, R109.1.1.1, R109.1.3, R109.1.4, R109.1.4.1, R109.1.4.2, R109.1.5, R109.1.5.1, R109.1.5.2, R109.1.5.3, R109.1.6, R109.1.6.1, and R109.1.6.2 only, with new and existing amendments as follows:

SECTION R105 PERMITS

- Section:**
- R105.2 Work exempt from permit.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The provision of Item 1, “Work exempt from permit,” under

the 2021 IRC, allows one-story detached accessory structures to be exempt from a permit, provided the floor area does not exceed 200 square feet (18.58 m²). HCD proposes to continue adoption of the California amendment retaining the exemption at a maximum of 120 square feet of floor area. Allowing up to 80 additional square feet of floor area will significantly increase the amount of combustible building materials and equally as significant, the amount of stored chemicals and combustible or volatile compounds. HCD, in consultation with the State Fire Marshal (SFM), has determined this may adversely affect health and safety. There is no intended change in regulatory effect.

SECTION R106 CONSTRUCTION DOCUMENTS

Sections: **R106.1 Submittal documents.**
 R106.1.1 Information on construction documents.
 R106.1.3 Information on braced wall design.
 R106.1.4 Information for construction in flood hazard areas.

Rationale: HCD proposes continued adoption of the above referenced model code sections without modifications.

Section: **R106.1.6 Exterior balconies and elevated walking surfaces.**

Rationale: HCD proposes adoption of the above referenced California amendment section. This section was formerly R106.1.5 and has been renumbered to R106.1.6. The same language was adopted in the 2016 CBC and 2016 CEBC during a 2017 Emergency Rulemaking and is currently part of the 2018 International Building Code (IBC) and 2018 International Existing Building Code (IEBC). However, it is not applicable to one- and two-family dwellings built under the CRC. The CBSC's Exterior Elevated Elements Working Group Report to the Legislature made the recommendation that HCD add the exterior elevated elements amendments from the 2017 Emergency Rulemaking for the CBC into the 2019 CRC. There is no intended change in regulatory effect.

Section: **R106.2 Site plan or plot plan.**

Rationale: HCD proposes continued adoption of the above referenced model code section without modification.

SECTION R109 INSPECTIONS

Section: **R109.1 Types of inspections.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment sets timeframes for inspections and references the inspections that are to be made. The "Note" following the section directs code users to not cover reinforcing steel or framework without approval. There is no intended change in regulatory effect.

Section: **R109.1.1 Foundation inspection.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment clarifies the inspection requirements for foundations and footings. There is no intended change in regulatory effect.

Section: **R109.1.1.1 Concrete slab and under-floor inspection.**

Rationale: HCD proposes continued adoption of the above referenced California amendment section. The existing California amendment clarifies the inspection

requirements for concrete slabs. There is no intended change in regulatory effect.

Section: R109.1.3 Floodplain inspections.

Rationale: HCD proposes continued adoption the above referenced model code section without modification.

Section: R109.1.4 Frame and masonry inspection.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment clarifies when the frame inspection shall be made. There is no intended change in regulatory effect.

**Sections: R109.1.4.1 Moisture content verification.
R109.1.4.2 Lath and gypsum board inspection.**

Rationale: HCD proposes continued adoption of the above referenced California amendment sections. The first California amendment is a pointer to CALGreen for the requirements of moisture content verification. The second amendment specifies when the lath and gypsum board inspections shall be made. There is no intended change in regulatory effect.

Section: R109.1.5 Other inspections.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment changes the referenced Section “R109.1.4” to “R109.1.4.2.” The amendment is necessary due to the proposed continued adoption of California amendments in Section R109.1.4.1 and R109.1.4.2. There is no intended change in regulatory effect.

Section: R109.1.5.1 Fire-resistance-rated construction inspection.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment specifies additional requirements for fire-resistance-rated assemblies to not be concealed until inspected. There is no intended change in regulatory effect.

Section: R109.1.5.2 Special Inspections.

Rationale: HCD proposes continued adoption of the above referenced California amendment section. The existing California amendment is a pointer to CBC Chapter 17 for special inspections.

Section: R109.1.5.3 Weather exposed balcony and walking surface waterproofing.

Rationale: HCD proposes continued adoption of the above referenced California amendment section. The same language was adopted in the 2016 CBC and 2016 CEBC during a 2017 Emergency Rulemaking and is currently part of the 2018 IBC and 2018 IEBC. However, it was not applicable to one-and two-family dwellings built under the CRC. The CBSC’s Exterior Elevated Elements Working Group Report to the Legislature made the recommendation that HCD add the exterior elevated elements amendments from the 2017 Emergency Rulemaking for the CBC in the 2019 CRC. There is no intended change in regulatory effect.

**Sections: R109.1.6 Final inspection.
R109.1.6.1 Elevation documentation.**

Rationale: HCD proposes continued adoption of the above referenced model code sections without modifications. These sections are referenced in other adopted sections of the IRC, used as part of the local agency permitting and inspection process, and are also required for meeting mandatory measures in the CALGreen, Chapter 4.

Section: R109.1.6.2 Operation and maintenance manual.

Rationale: HCD proposes continued adoption of the above referenced California amendment section. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. This pointer may also serve as a potential location for the complete CALGreen requirement in the event that HCD makes the decision in a future rulemaking to discontinue CALGreen and incorporate its requirements into other parts of Title 24, the California Building Standards Code. There is no intended change in regulatory effect.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 3 CHAPTER 2, DEFINITIONS

HCD proposes to adopt Chapter 2 from the 2021 IRC into the 2022 CRC with new, existing, and modified amendments as follows:

SECTION R201 GENERAL

Section: R201.3 Terms defined in other codes.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment deletes references to the International Codes that California does not adopt.

SECTION R202 DEFINITIONS

ADDITION. AIR-IMPERMEABLE INSULATION.

Rationale: HCD proposes continued adoption of the above referenced definitions with existing California amendments. The amendments delete the last sentence referencing Chapter 11 and Section N1101.6, which are not adopted by HCD.

ALTERATION.

Rationale: HCD proposes continued adoption of the above referenced definition with existing California amendments.

APPROVED.

Rationale: HCD proposes continued adoption of the above referenced California definition with no modification.

APPROVED AGENCY.

Rationale: HCD proposes continued adoption of the above referenced definition with existing California amendments.

**APPROVED LISTING AGENCY.
APPROVED TESTING AGENCY.**

Rationale: HCD proposes continued adoption of the above referenced California definitions.

BUILDING.

Rationale: HCD proposes continued adoption of the above referenced definition with existing California amendments.

BUILDING OFFICIAL.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment deletes model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

DEPARTMENT.

Rationale: HCD proposes continued adoption of the above referenced California definition without modification. The amendment clarifies that “Department” is the California Department of Housing and Community Development.

DUCT SYSTEM.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment.

DWELLING UNIT.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment deletes model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

ENFORCEMENT.

**ENFORCEMENT AGENCY.
ENFORCING AGENCY.**

Rationale: HCD proposes continued adoption of the above referenced California definitions without modification.

ENTRY LEVEL.

Rationale: HCD proposes this new definition in the California Residential Code (CRC) to clarify the term used in section R327. There is no implication of whether there are one or more entries into the dwelling unit.

FAMILY.

Rationale: HCD proposes continued adoption of the above referenced California definitions without modification.

FENESTRATION.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment refers the code user to the California Energy Code for the definition of “fenestration product.”

FENESTRATION, VERTICAL.

Rationale: HCD proposes to adopt the above referenced definition with a new California amendment. The amendment deletes model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

GUARD OR GUARDRAIL.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment specifies that a guard can also be a guardrail.

INSULATED SIDING.

Rationale: HCD proposes to adopt the above referenced definition with a new California amendment. The amendment deletes model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

INSULATING SHEATHING.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment deletes model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

LABELED.

LIMITED-DENSITY OWNER-BUILT RURAL DWELLINGS.

LISTED.

LISTING AGENCY.

Rationale: HCD proposes continued adoption of the above referenced California definitions with existing California amendments.

LIVE/WORK UNIT.

Rationale: HCD proposes to adopt the above referenced definition with a new California amendment. The amendment adds “or building owner” to the definition which aligns the new model code definition with the old California definition. The California definition is being repealed.

LODGING HOUSE.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment.

PASSIVE SOLAR ENERGY COLLECTOR.

Rationale: HCD proposes continued adoption of the above referenced California definition.

REPAIR.

REROOFING.

Rationale: HCD proposes continued adoption of the above referenced definitions with existing California amendments. The amendments delete the model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

ROOF ASSEMBLY.

Rationale: HCD proposes continued adoption of the above referenced definition with a

new California amendment. The new amendment deletes the model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

ROOF RECOVER.

ROOF REPAIR.

ROOF REPLACEMENT.

Rationale: HCD proposes continued adoption of the above referenced definitions with existing California amendments. The amendments delete the model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

SKYLIGHTS AND SLOPED GLAZING.

Rationale: HCD proposes to adopt the above referenced definition with a new California amendment. The amendment deletes the model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

SUNROOM.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment deletes the model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

TESTING AGENCY.

Rationale: HCD proposes continued adoption of the above referenced California amendment definition.

VENTILATION.

Rationale: HCD proposes continued adoption of the above referenced definition with an existing California amendment. The amendment deletes the model code language referring to Chapter 11 and Section N1101.6, which are not adopted by HCD.

CAC Recommendation:

Approve as submitted for all except for “Entry Level” which was recommended for “Further Study.”

Agency Response:

Accept for all definitions in Item 3 except for “Entry Level.” HCD disagrees with a need for further study and to change the definition for “Entry Level.” This definition is used in section R327 addressing aging in place design or fall prevention. Section R327 received a recommendation of “Further Study” from the Accessibility CAC. Therefore, the same CAC recommendation was provided for this definition. However, after HCD further evaluated the definition, it was determined that the definition was clear enough and no changes were made to the definition of “Entry Level.”

ITEM 4

CHAPTER 2, DEFINITIONS

SECTION R202 DEFINITIONS

CLIMATE ZONES.

Rationale: HCD proposes to repeal the above referenced California definition. The California Energy Commission will be proposing all amendments referencing climate

zones.

LIVE/WORK UNIT.

Rationale: HCD proposes to repeal the above referenced definition from the 2019 CRC. Since the model code has added a definition for “Live/Work Unit,” the California amendment is no longer needed.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 5

CHAPTER 2, DEFINITIONS

SECTION R202 DEFINITIONS (Non-adopted)

Rationale: HCD proposes to NOT adopt the following definitions from the 2021 IRC as indicated below. The terms are used in chapters not adopted by HCD. Only the term is shown for the definitions that HCD proposes to continue to not adopt.

Note: The following terms will not be printed in the 2022 CRC unless adopted by SFM.

ABOVE-GRADE WALL.

ACCESSIBLE.

ACCESSORY STRUCTURE.

AIR ADMITTANCE VALVE.

AIR BARRIER.

AIR BREAK (DRAINAGE SYSTEM).

AIR CIRCULATION, FORCED.

AIR GAP, DRAINAGE SYSTEM.

AIR GAP, WATER-DISTRIBUTION SYSTEM.

AIR-CONDITIONING SYSTEM.

ANCHORS.

ANTISIPHON.

APPLIANCE.

AUTOMATIC.

BACKFLOW, DRAINAGE.

BACKFLOW, WATER DISTRIBUTION.

BACKFLOW PREVENTER.

BACKFLOW PREVENTER, REDUCED-PRESSURE ZONE TYPE.

BACKPRESSURE.

BACKPRESSURE, LOW HEAD.

BACKSIPHONAGE.

BACKWATER VALVE.

BALANCED VENTILATION.

BALANCED VENTILATION SYSTEM.

BASEMENT WALL.

BATHROOM GROUP.

BEND.

BOILER.
BRANCH.
BRANCH, FIXTURE.
BRANCH, HORIZONTAL.
BRANCH, MAIN.
BRANCH, VENT.
BRANCH INTERVAL.
BTU/H.
BUILDING DRAIN.
BUILDING SEWER.
BUILDING SITE.
BUILDING THERMAL ENVELOPE.
CHIMNEY CONNECTOR.
CHIMNEY TYPES.
CIRCUIT VENT.
CIRCULATING HOT WATER SYSTEM.
CLEANOUT.
CLIMATE ZONE.
COLLECTION PIPE.
COMBINATION WASTE AND VENT SYSTEM
COMMON VENT.
CONDENSING APPLIANCE.
CONDITIONED FLOOR AREA.
CONDITIONED SPACE.
CONTAMINATION.
CONTINUOUS AIR BARRIER.
CONTINUOUS INSULATION (ci).
CONTINUOUS WASTE.
CONTROL, LIMIT.
CONTROL, PRIMARY SAFETY.
CONVECTOR.
CRAWL SPACE WALL.
CROSS CONNECTION.
CURTAIN WALL.
DAMPER, VOLUME.
DEMAND RECIRCULATION WATER SYSTEM.
DEVELOPED LENGTH.
DILUTION AIR.
DIRECT SYSTEM.
DIRECT-VENT APPLIANCE.
DRAFT.
DRAFT HOOD.
DRAFT REGULATOR.
DRAIN.
DRAIN-BACK SYSTEM.
DRAINAGE FITTING.
DUCT.
DUCT SYSTEM.
DWV.

**EFFECTIVE OPENING.
ELBOW.
ENERGY ANALYSIS.
ENERGY COST.
ENERGY SIMULATION TOOL.
EQUIPMENT.
EQUIVALENT LENGTH.
ERI REFERENCE DESIGN.
ESSENTIALLY NONTOXIC TRANSFER FLUIDS.
ESSENTIALLY TOXIC TRANSFER FLUIDS.
EVAPORATIVE COOLER.
EXCESS AIR.
EXHAUST HOOD, FULL OPENING.
EXISTING INSTALLATIONS.
EXTERIOR WALL.
FACTORY-MADE AIR DUCT.
FENESTRATION PRODUCT, SITE-BUILT.
FIXTURE.
FIXTURE BRANCH, DRAINAGE.
FIXTURE BRANCH, WATER-SUPPLY.
FIXTURE DRAIN.
FIXTURE FITTING.
FIXTURE GROUP, MAIN.
FIXTURE SUPPLY.
FIXTURE UNIT, DRAINAGE (d.f.u.).
FIXTURE UNIT, WATER-SUPPLY (w.s.f.u.).
FLEXIBLE AIR CONNECTOR.
FLOOD-LEVEL RIM.
FLOOR DRAIN.
FLOOR FURNACE.
FLOW PRESSURE.
FLUE.
FLUE, APPLIANCE.
FLUE COLLAR.
FLUE GASES.
FLUSH VALVE.
FLUSHOMETER TANK.
FLUSHOMETER VALVE.
FUEL-PIPING SYSTEM.
FULL-OPEN VALVE.
FULLWAY VALVE.
FURNACE.
GRADE, PIPING.
GRAYWATER.
GRIDDED WATER DISTRIBUTION SYSTEM.
GROUND-SOURCE HEAT PUMP LOOP SYSTEM.
HANGERS.
HAZARDOUS LOCATION.
HEAT PUMP.**

**HEATED SLAB.
HIGH-EFFICACY LIGHT SOURCES.
HIGH-TEMPERATURE (H.T.) CHIMNEY.
HISTORIC BUILDING.
HORIZONTAL BRANCH, DRAINAGE.
HORIZONTAL PIPE.
HOT WATER.
HYDROGEN GENERATING APPLIANCE.
IGNITION SOURCE.
INDIRECT SYSTEM.
INDIRECT WASTE PIPE.
INDIVIDUAL SEWAGE DISPOSAL SYSTEM
INDIVIDUAL VENT.
INDIVIDUAL WATER SUPPLY.
INFILTRATION.
INSULATED SIDING.
LOCKING-TYPE TAMPER-RESISTANT CAP.
LOW-VOLTAGE LIGHTING.
MACERATING TOILET SYSTEMS.
MAIN.
MAIN SEWER.
MANIFOLD WATER DISTRIBUTION SYSTEMS.
MANUAL.
MANUFACTURED HOME.
MASS WALL.
MECHANICAL DRAFT SYSTEM.
MECHANICAL EXHAUST SYSTEM.
MECHANICAL JOINT.
MECHANICAL SYSTEM.
NATURAL DRAFT SYSTEM.
OFFSET.
ON-SITE NONPOTABLE WATER REUSE SYSTEMS.
OPAQUE DOOR.
PELLET VENT.
PITCH.
PLUMBING.
PLUMBING APPLIANCE.
PLUMBING APPURTENANCE.
PLUMBING FIXTURE.
PLUMBING SYSTEMS.
POLLUTION.
PORTABLE-FUEL-CELL APPLIANCE.
POTABLE WATER.
PRESS-CONNECT JOINT.
PRESSURE-RELIEF VALVE.
PROPOSED DESIGN.
PUBLIC SEWER.
PUBLIC WATER MAIN.
PURGE.**

**PUSH-FIT FITTING.
QUICK-CLOSING VALVE.
R-VALUE, THERMAL RESISTANCE.
RATED DESIGN.
RECEPTOR.
RECLAIMED WATER.
REFRIGERANT.
REFRIGERANT COMPRESSOR.
REFRIGERATING SYSTEM.
RELIEF VALVE, VACUUM.
RESIDENTIAL BUILDING.
RETURN AIR.
RISER (PLUMBING).
ROOM HEATER.
ROUGH-IN.
R-VALUE (THERMAL RESISTANCE).
SANITARY SEWER.
SEPTIC TANK.
SERVICE WATER HEATING.
SEWAGE.
SEWAGE PUMP.
SKYLIGHT.
SLIP JOINT.
SLOPE.
SOIL STACK OR PIPE.
SOLAR HEAT GAIN COEFFICIENT (SHGC).
STACK.
STACK VENT.
STANDARD REFERENCE DESIGN.
STANDARD TRUSS.
STATIONARY FUEL CELL POWER PLANT.
STORM SEWER, DRAIN.
SUBSOIL DRAIN.
SUMP.
SUMP PUMP.
SUPPORTS.
SUPPLY AIR.
SWEEP.
TEMPERATURE- AND PRESSURE-RELIEF (T AND P) VALVE.
TEMPERATURE-RELIEF VALVE.
THERMAL ISOLATION.
THERMAL RESISTANCE, R-VALUE.
THERMAL TRANSMITTANCE, U-FACTOR.
THERMOSTAT.
THIRD-PARTY CERTIFICATION AGENCY.
THIRD PARTY CERTIFIED.
THIRD-PARTY TESTED.
TRAP.
TRAP ARM.**

TRAP PRIMER.
TRAP SEAL.
U-FACTOR, THERMAL TRANSMITTANCE.
VACUUM BREAKERS.
VENT COLLAR.
VENT CONNECTOR.
VENT DAMPER DEVICE, AUTOMATIC.
VENT GASES.
VENT STACK.
VENT SYSTEM.
VENTILATION AIR.
VENTING SYSTEM.
VERTICAL PIPE.
VISIBLE TRANSMITTANCE (VT).
WASTE.
WASTE PIPE OR STACK.
WASTE RECEPTOR.
WATER-DISTRIBUTION SYSTEM.
WATER HEATER.
WATER MAIN.
WATER OUTLET.
WATER-SERVICE PIPE.
WATER SUPPLY SYSTEM.
WET VENT.
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM.
WINDBORNE DEBRIS REGION.
ZONE.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 6
CHAPTER 3, BUILDING PLANNING

HCD proposes to adopt Chapter 3, except Figure R307.1 and Sections R313 and R322.1.9 from the 2021 IRC into the 2022 CRC with new and existing amendments as follows:

SECTION: R300 SITE DRAINAGE

Sections: **R300.1 Storm water drainage and retention during construction.**
 R300.2 Grading and paving.

Rationale: HCD proposes continued adoption of the above referenced California amendment sections without modification. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. These pointers may also serve as potential locations for the complete CALGreen requirement in the event that HCD makes the

decision in a future rulemaking to discontinue Part 11, CALGreen and incorporate its requirements into other parts of Title 24, the California Building Standards Code. There is no intended change in regulatory effect.

SECTION R301 DESIGN CRITERIA

Section: **R301.1.1.1 Alternative provisions for limited-density owner-built rural dwellings.**

Rationale: HCD proposes continued adoption of the above referenced section without modification. The existing California amendment provides five criteria demonstrating instances where the local enforcing agency must allow or can consider alternative requirements for limited-density owner-built rural dwellings. There is no intended change in regulatory effect.

Sections: **R301.1.3.1 California licensed architect or engineer.**
 R301.1.3.2 Woodframe structures greater than two-stories.
 R301.1.3.3 Structures other than woodframe.

Rationale: HCD proposes continued adoption of the above referenced California amendment sections without modification. Existing law only exempts (in specific applications) woodframe construction of two stories or less from professional design requirements. The amendment provides the code user with necessary information about additional California requirements and also directs the code user to the applicable law located in the Business and Professions Code (BPC). The amendment is intended to provide clarity and consistency to the code user for application and enforcement. There is no intended change in regulatory effect.

Section: **R301.2.2.10 Anchorage of water heaters.**

Rationale: HCD proposes continued adoption of the above referenced section with both a new and an existing California amendment. The existing amendment deletes the reference to sections of the model code that HCD does not adopt and replaces it with a reference to the CPC. The new amendment deletes the specific seismic design categories and makes the water heater anchorage requirements apply throughout the state. HSC Section 19211 requires all water heaters to be anchored. There is no change in regulatory effect since the strapping is a statewide requirement since January 1, 2004.

TABLE: **R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS**

Rationale: HCD proposes continued adoption of the above referenced table with an existing California amendment. The same language was adopted in the 2016 CBC and 2016 CEBC during a 2017 Emergency Rulemaking and is currently part of the 2018 IBC and 2018 IEBC. However, it is not applicable to one-and two-family dwellings built under the CRC. The CBSC's Exterior Elevated Elements Working Group Report to the Legislature made the recommendation that HCD add the exterior elevated elements amendments from the 2017 Emergency Rulemaking for the CBC into the 2019 CRC. There is no intended change in regulatory effect.

SECTION R302 FIRE-RESISTANT CONSTRUCTION

Section: **R302.1 Exterior walls.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides the correct reference to

CRC Section R313, which is a California amendment adopted by SFM. The IRC mechanical and plumbing provisions are not adopted by HCD. There is no intended change in regulatory effect.

TABLE: R302.1(2) EXTERIOR WALLS—DWELLINGS WITH FIRE SPRINKLERS

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC mechanical and plumbing provisions are not adopted by HCD.

Section: R302.2.2 Common walls.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides a correct reference to CEC. The IRC electrical chapters are not adopted by HCD. The amendment also deletes references to Section “P2904” and refers to Section R313 because the mechanical and plumbing provisions are not adopted by HCD. There is no intended change in regulatory effect.

Section: R302.2.6 Structural independence.

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

Section: R302.3 Two-family dwellings.

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

Section: R302.6 Dwelling/garage and/or carport fire separation.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment exempts separation between a dwelling unit and carport as specified. There is no intended change in regulatory effect.

Section: R302.13 Fire protection of floors.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

SECTION R303 LIGHT, VENTILATION AND HEATING

Section: R303.1 Habitable rooms.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment provides a correct reference to the CMC. The IRC mechanical provisions are not adopted by HCD. The existing amendment also adds Exceptions 4 and 5 in recognition of the provisions in HSC Section 17959.3 to encourage passive solar energy design. There is no intended change in regulatory effect.

Section: R303.3 Bathrooms.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides the required local exhaust rates for bathrooms and private toilet rooms as required in the CMC and repeals the reference to Section “M1505” which is not adopted by HCD. There is no intended change in regulatory effect.

Section: R303.3.1 Bathroom exhaust fans.

Rationale: HCD proposes continued adoption of the above referenced California amendment section without modification. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. These pointers may also serve as potential locations for the complete CALGreen requirement in the event that HCD makes the decision in a future rulemaking to discontinue CALGreen and incorporate its requirements into other parts of Title 24, the California Building Standards Code.

Section: R303.4 Ventilation.

Rationale: HCD proposes continued adoption of the above referenced existing California amendment section. The existing amendment directs the code user to the CMC for ventilation air rates. There is no intended change in regulatory effect.

Section: R303.5.1 Intake openings.

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment provides a correct reference to the CMC. The IRC mechanical provisions are not adopted by HCD. There is no intended change in regulatory effect.

Section: R303.9.1.1 Passive solar energy collectors.

Rationale: HCD proposes continued adoption of the above referenced California amendment without modification. There is no intended change in regulatory effect.

Section: R303.10 Required heating.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment directs the code user to Section R301.1.1.1 where California amended language for limited-density owner-built rural dwellings has been placed. There is no intended change in regulatory effect.

SECTION R304 MINIMUM ROOM AREAS

Section: R304.2 Minimum dimensions.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment in Exception 2 addresses limited-density owner-built rural dwellings. Pointers have been placed within the CRC directing code users to applicable code provisions in Section R301.1.1.1. There is no intended change in regulatory effect.

SECTION R307 TOILET, BATH AND SHOWER SPACES

Section: R307.1 Space required.

Rationale: HCD proposes continued adoption of the above referenced section with an

existing California amendment. The existing amendment provides the code user with correct reference to the CPC. The IRC plumbing provisions are not adopted by HCD. There is no intended change in regulatory effect.

FIGURE: R307.1 MINIMUM FIXTURE CLEARANCES

Rationale: HCD proposes continued non-adoption of the above referenced model code figure as it conflicts with the CPC requirements. A banner has been added in the Express Terms besides each non-adopted section stating “Not Adopted in CA.” Additionally, an obelisk has been added to the Matrix Adoption Table to identify the non-adopted section.

SECTION R309 GARAGES AND CARPORTS

Section: R309.4 Automatic garage door openers.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment refers to existing California law regarding automatic garage door openers. There is no intended change in regulatory effect.

Section: R309.5 Fire sprinklers.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

Section: R309.7 Extension garage door springs.

Rationale: HCD proposes continued adoption of the above referenced California amendment section. The existing California amendment is a pointer to the CBC Section 1210 which has additional requirements relevant to the construction of one- and two-family dwellings and townhouses covered in the CRC. There is no intended change in regulatory effect.

Section: R309.8 Electric vehicle (EV) charging infrastructure.

Rationale: HCD proposes continued adoption of the above referenced California amendment section without modification. The existing California amendment is a pointer to mandatory requirements for electric vehicle charging infrastructure in CALGreen. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. These pointers may also serve as potential locations for the complete CALGreen requirement in the event that HCD makes the decision in a future rulemaking to discontinue CALGreen and incorporate its requirements into other parts of Title 24, the California Building Standards Code. There is no intended change in regulatory effect.

SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

Section: R310.1 Emergency escape and rescue opening required.

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

SECTION R312 GUARDS AND WINDOW FALL PROTECTION

Section: R312.1.2 Height.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment maintains the same 42” guard height requirement as in the CBC. There is no intended change in regulatory effect.

SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

**Sections: R313.1 Townhouse automatic fire sprinkler systems.
R313.1.1 Design and installation.
R313.2 One- and two-family dwellings automatic sprinkler systems.
R313.2.1 Design and installation.**

Rationale: HCD proposes to not adopt the above referenced Section R313 and subsections. HCD is proposing to not adopt fire sprinkler requirements for one- and two-family dwellings and townhouses. Sections requiring fire sprinklers and fire sprinkler specifications were co-adopted by HCD and SFM during the 2009 Triennial Code Adoption Cycle. This created confusion with stakeholders regarding interpretation and enforcement. Residential fire sprinkler requirements and other amendments related to fire sprinklers, and their continued adoption and maintenance will be promulgated through SFM.

SECTION R315 CARBON MONOXIDE ALARMS

Section: R315.1.1 Listings.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment identifies the restrictions for sales, and the requirement for approval and listing by SFM. There is no intended change in regulatory effect.

Section: R315.2 Where required.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment references the statutory mandate which identifies the requirements for installation of carbon monoxide alarms in every existing dwelling unit with a fossil fuel burning heater or appliance, fireplace or an attached garage. There is no intended change in regulatory effect.

Section: R315.2.1 Existing buildings and new construction.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment clarifies the requirements for installation of carbon monoxide alarms in every existing dwelling with a fuel-fired appliance or fireplace or with an attached garage. There is no intended change in regulatory effect.

Section: R315.2.2 Alterations, repairs and additions.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment clarifies that even where a dwelling was not required to have a carbon monoxide alarm prior to the alteration repair or addition, adding a fuel burning heater, appliance, fireplace, or attached garage triggers the requirement for carbon monoxide alarms. There is no intended change in regulatory effect.

Section: R315.3 Location.

Rationale: HCD proposes continued adoption of the above referenced section with

existing California amendments. The existing amendments identify the requirements for carbon monoxide alarms to be installed in accordance with manufacturer's installation instructions. The amendment also specifies additional locations where carbon monoxide alarms are required. There is no intended change in regulatory effect.

Section: R315.4 Combination alarms.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment identifies the requirement for carbon monoxide alarms combined with smoke alarms (combination alarms) to comply with the applicable standards and requirements for listing and approval by SFM. There is no intended change in regulatory effect.

Section: R315.5 Interconnectivity.

Rationale: HCD proposes continued adoption of the above referenced section with existing California amendments. The amendment includes exceptions where interconnectivity is not required. There is no intended change in regulatory effect.

Section: R315.6 Power source.

Rationale: HCD proposes continued adoption of the above referenced section with new and existing California amendments. The existing amendment is being brought forward without modification. The amendment allows for additional power sources. The new amendment updates the NFPA reference from NFPA 720 to NFPA 72. NFPA 720, Installation of Carbon Monoxide (CO) Detection and Warning Equipment, was retired in 2018, and the requirements from NFPA 720 have been integrated into NFPA 72. This change collects the requirements for smoke alarms, carbon monoxide alarms, smoke detectors, and carbon monoxide detectors in the same document.

Section: R315.7.2 Location.

Rationale: HCD proposes continued adoption of the above referenced section with new and existing California amendments. The existing amendment specifies that the detectors are to not only be installed but also maintained in these locations. The new amendment updates the NFPA reference from NFPA 720 to NFPA 72. See R315.6 for details.

Section: R315.7.4 Combination detectors.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment requires the combination detectors to comply with all SFM requirements for smoke detectors. There is no intended change in regulatory effect.

SECTION R317 PROTECTION OF WOOD AND WOOD-BASED PRODUCTS AGAINST DECAY

Section: R317.1 Location required.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment requires positive drainage for any water that infiltrates the moisture-permeable floor. The same language was adopted in the 2016 CBC and 2016 CEBC during a 2017 Emergency Rulemaking and is currently part of the 2018 IBC and 2018 IEBC. However, it is not applicable to one- and two-family dwellings built under the CRC. The CBSC's Exterior Elevated Elements Working Group Report to the Legislature made the recommendation that HCD add the exterior elevated elements

amendments from the 2017 Emergency Rulemaking for the CBC into the 2019 CRC. There is no intended change in regulatory effect.

Section: R317.1.6 Ventilation required beneath balcony or elevated walking surfaces.

Rationale: HCD proposes continued adoption of the above referenced California amendment section. The same language was adopted in the 2016 CBC and 2016 CEBC during a 2017 Emergency Rulemaking and is currently part of the 2018 IBC and 2018 IEBC. However, it is not applicable to one-two-family dwellings built under the CRC. The CBSC's Exterior Elevated Elements Working Group Report to the Legislature made the recommendation that HCD add the exterior elevated elements amendments from the 2017 Emergency Rulemaking for the CBC into the 2019 CRC. HCD has followed that recommendation and is proposing to include the language from the 2017 Emergency Rulemaking as new amendments to the 2019 CRC. This language incorporates SFM's recommended revision for cross-ventilation areas. There is no intended change in regulatory effect.

SECTION R320 ACCESSIBILITY

Section: R320.1 Scope.

Rationale: HCD proposes continued adoption of the above referenced section with new and existing California amendments. The existing amendment directs the code user to Chapter 11A of the CBC which contains the provisions for Housing Accessibility in California. The new amendment proposes non adoption of the exception, formerly R320.1.1, which was not adopted by HCD.

Section: R320.2 Live/work units

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The amendment repeals the references to the nonresidential portion of the live/work unit and the reference to Chapter 11 of the IBC. HCD does not adopt Chapter 11 of the IBC. HCD proposes a correct reference to the CBC Chapters 11A and 11B.

SECTION R321 ELEVATORS AND PLATFORM LIFTS

Section: R321.3 Accessibility.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides a correct reference to the CBC, Chapter 11A.

SECTION R322 FLOOD-RESISTANT CONSTRUCTION

Section: R322.1.6 Protection of mechanical, plumbing and electrical systems.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides a correct reference to the California Electrical Code (CEC). There is no intended change in regulatory effect.

Section: R322.1.7 Protection of water supply and sanitary sewage systems.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment repeals the references to the

plumbing provisions of this code and the International Private Sewage Disposal Code, which are not adopted by HCD. There is no intended change in regulatory effect.

Section: R322.1.9 Manufactured homes.

Rationale: HCD proposes to continue to not adopt the above referenced section. This model code section conflicts with existing state law applicable to manufactured housing.

SECTION R324 SOLAR ENERGY SYSTEMS

Section: R324.2 Solar thermal systems.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment repeals the reference to Chapter 23 of this code and refers to the CPC and California Fire Code. There is no intended change in regulatory effect.

Section: R324.3 Photovoltaic systems.

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment provides a correct reference to the CEC.

Section: R324.6 Roof access and pathways.

Rationale: HCD proposes continued adoption of the above referenced section with new and existing California amendments. The existing amendment replaces the term “code official” with “enforcing agency,” which is the term used throughout Title 24, the California Building Standards Code. The new amendment provides a correct reference to the CEC.

Section: R324.6.2.1 Alternative setback at ridge.

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

Section: R324.6.3 Emergency escape and rescue opening openings.

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The amendment deletes a reference to NFPA 70 and provides a correct reference to the CEC.

Section: R324.7.1 Fire separation distances.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment replaces the term “local jurisdiction” with “enforcing agency,” which is the term used throughout Title 24. There is no intended change in regulatory effect.

SECTION R325 MEZZANINES

Section: R325.3 Area limitation.

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

SECTION R326 HABITABLE ATTICS

Section: R326.3 Story Above Grade Plane.

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The amendment provides the correct reference to CRC Section R313, which is a California amendment adopted by SFM. The IRC plumbing provisions are not adopted by HCD.

SECTION R327 AGING-IN-PLACE DESIGN AND FALL PREVENTION

Rationale: HCD proposes to adopt section R327 with new California amendment text addressing aging-in-place design and fall prevention. HCD proposes to continue to not adopt model code provisions for swimming pools, spas and hot tubs. HCD does not have statutory authority to adopt design and construction standards for swimming pools, spas and hot tubs.

Sections:

- R327.1 Aging-in-place design and fall prevention.**
- R327.1.1 Reinforcement for grab bars.**
- R327.1.1.1 Documentation for grab bar reinforcement.**
- R327.1.2 Electrical receptacle outlet, switch and control heights.**
- R327.1.3 Interior doors.**
- R327.1.4 Doorbell buttons.**

Rationale: On October 8, 2019, Senate Bill 280 (Chapter 640, Statutes of 2019) was signed into law and added Section 17922.15 to the HSC, requiring HCD to investigate possible changes to regulations in the CRC that promote aging-in-place design elements specifically limited to the following: the location of doorbells, light switches, and heating/ventilation/air conditioning controls; the installation of grab bar reinforcements; and one bathroom door and one bedroom with a 32-inch clear opening width. HCD proposes to adopt the above referenced new California amendments as implementation of HSC Section 17922.15. HCD has not identified any significant costs associated with implementation of these regulations since planning and design of projects can accommodate these requirements without additional costs. Aging-in-place design or fall prevention provisions were heard by the CBSC's Access Code Advisory Committee (CAC) as proposed section R320.3 and HCD has responded to the CAC recommendations as noted below.

- Item HCD 06/21-6-42 R320 title change to "Accessibility and Fall Prevention" was disapproved. HCD has withdrawn the proposed change and left the title unchanged from the 2021 IRC. In addition, HCD has relocated proposed R320.3 provisions related Fall Prevention to a dedicated section (R327) pursuant recommendations from the CAC.
- Item HCD 06/21-6-43 R320.1 was recommended for further study. HCD has withdrawn the proposed subsection title change and left the subtitle unchanged from the 2021 IRC. New model code text (exception) has been proposed for deletion as recommended by the CAC.
- Item HCD 06/21-6-44 R320.2 and Item HCD 06/21-6-45 R320.3 were recommended for further study. HCD has requested review from the Division of the State Architect – Access Compliance on these two sections and incorporated their suggested text into R320.2 and R327.1, respectively.

- Item HCD 06/21-6-46 R320.3.1 was recommended for further study. HCD has made revisions to R327.1.1 related to wall reinforcement in accordance with the CAC recommendations.
- Item HCD 06/21-6-47 R320.3.1.1 was disapproved. HCD maintains the importance of providing information on location of bathroom reinforcement in the operation and maintenance manual as addressed by the CALGreen Code is an appropriate location for this information. This section has been relocated to R327.1.1.1.
- Item HCD 06/21-6-48 R320.3.2 was recommended for further study. HCD made revisions to references to the outlet as recommended by the CAC and relocated the section to R327.1.2.
- Items HCD 06/21-6-49 R320.3.3 and HCD 06/21-6-50 R320.3.4 were approved as submitted. These sections were relocated to R327.1.3 and R327.1.4, respectively, without revision.

SECTION R328 ENERGY STORAGE SYSTEMS (formerly R327)

Section: **R328.1 General.** (formerly R327.1)

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The new amendment provides a correct reference to the CEC.

Section: **R328.6 Electrical installation.** (formerly R327.6)

Rationale: HCD proposes to adopt the above referenced section with an existing California amendment. The amendment provides a correct reference to the CEC.

Section: **R328.9 Ventilation.** (formerly R327.9)

Rationale: HCD proposes to adopt the above referenced section with an existing California amendment. The amendment provides a correct reference to the CMC. HCD does not adopt the mechanical chapters of the IRC.

Section: **R328.10 Electric vehicle use.**

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The new amendment provides a correct reference to the CEC.

SECTION R329 STATIONARY ENGINE GENERATORS

Section: **R329.2 Installation.**

Rationale: HCD proposes to adopt the above referenced section with a new California amendment. The new amendment provides a correct reference to the CEC.

SECTION R334 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

Section: **R334.1 Construction waste management.**

Rationale: HCD proposes continued adoption of the above referenced existing California amendment section without modification. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. These pointers may also serve as potential locations for the complete CALGreen requirement in the event that HCD makes the decision in a future rulemaking to discontinue CALGreen and incorporate its requirements into other parts of

Title 24, the California Building Standards Code.

SECTION R340 POLLUTANT CONTROL

Section: **R340.1 Finish material pollutant control.**

Rationale: HCD proposes continued adoption of the above referenced existing California amendment section without modification. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. These pointers may also serve as potential locations for the complete CALGreen requirement in the event that HCD makes the decision in a future rulemaking to discontinue CALGreen and incorporate its requirements into other parts of Title 24, the California Building Standards Code.

CAC Recommendation:

Approve as submitted except for provisions related to accessibility and fall prevention which received various recommendations from the CAC. The fall prevention provisions have been relocated to section R327. See separate rationale discussion in section R327 for details.

Agency Response:

Accept.

ITEM 7

CHAPTER 3, BUILDING PLANNING

HCD proposes to repeal the following California amendments from Chapter 3 of the 2019 CRC as follows:

SECTION R301 DESIGN CRITERIA

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

Rationale: HCD proposes to repeal the existing California amendment to the above referenced Table. The new model code language addresses the issue and the California amendment is no longer necessary.

SECTION R302 FIRE-RESISTANT CONSTRUCTION

Section: **R302.5.1 Opening protection.**

Rationale: HCD proposes to repeal the California amendment to the above referenced section. The new model code language addresses the issue and the California amendment is no longer necessary.

Section: **R302.14 Combustible insulation clearance.**

Rationale: HCD proposes to repeal the California amendment to the above referenced section. The California Energy Commission will be amending sections in the IRC that need to be amended to align with the California Energy Code. Therefore, HCD's amendment is no longer needed.

SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

Section: **R310.2.2 Window sill height.**

Rationale: HCD proposes to repeal the California amendment to the above referenced

section. The new model code language Section R310.2.3 addresses the issue and the California amendment is no longer necessary.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

**ITEM 8
CHAPTER 4, FOUNDATIONS**

HCD proposes to adopt Chapter 4 from the 2021 IRC into the 2022 CRC with existing amendments as follows:

SECTION R401 GENERAL

Section: R401.2 Requirements.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment informs the code user to refer to Section R301.1.1.1, which addresses limited-density owner-built rural dwellings. There is no intended change in regulatory effect.

Sections: R401.4.1.1 General and where required for applications listed in Section 1.8.2.1.1 regulated by the Department of Housing and Community Development.
R401.4.1.1.1 Preliminary soil report.
R401.4.1.1.2 Soil investigation by lot, necessity, preparation, and recommendations.
R401.4.1.1.3 Approval, building permit conditions, appeal.
R401.4.1.1.4 Liability.
R401.4.1.1.5 Alternate procedures.

Rationale: HCD proposes continued adoption of the above referenced existing California amendment sections without modification. The existing California amendments are necessary to implement existing law found in HSC Sections 17953 through 17955 which require soils investigation for subdivisions and Sections 17956 and 17957 addressing liability and authority for local use of alternate procedures, respectively. The amendment also allows for the use of alternate procedures by local enforcing agencies. There is no intended change in regulatory effect.

SECTION R404 FOUNDATION AND RETAINING WALLS

Section: R404.5.1 Design.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment requires precast concrete to be designed by a registered professional. IRC provisions for precast concrete do not include prescriptive design criteria; therefore, it requires design by a registered professional. There is no intended change in regulatory effect.

SECTION R408 UNDER-FLOOR SPACE

Section: R408.3 Unvented crawl space.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment deletes the reference to IRC sections not proposed for adoption and provides a correct reference to the CMC. There is no intended change in regulatory effect.

Section: **R408.4 Access.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. This model code section references an IRC chapter not proposed for adoption by HCD. The amendment provides a correct reference to the CMC. There is no intended change in regulatory effect.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 9 CHAPTER 4, FOUNDATIONS

HCD proposes to repeal the following California amendments from Chapter 4 of the 2019 CRC as follows:

Section **R408.3 Unvented crawl space.**

Rationale: HCD proposes to repeal the California amendment to the above referenced section. The California Energy Commission will be amending sections in the IRC that need to be amended to align with the California Energy Code. Therefore, HCD's amendment is no longer needed.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 10 CHAPTER 5, FLOORS

HCD proposes to adopt Chapter 5 from the 2021 IRC into the 2022 CRC with existing amendments as follows:

Section: **R502.1.1 Sawn lumber.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment adds a reference to limited-density owner-built rural dwellings. Pointers have been placed within the CRC directing code users to applicable code provisions in Section R301.1.1.1. There is no intended change in regulatory effect.

Section: **R502.11.1 Design.**

Rationale: HCD proposes continued adoption of the above referenced section with an

existing California amendment. The existing amendment requires wood trusses to be designed by a registered professional. Wood trusses do not have prescriptive design criteria; therefore, design by a registered design professional is required. There is no intended change in regulatory effect.

SECTION R506 CONCRETE FLOORS (ON GROUND)

Section: R506.2.3.1 Capillary break.

Rationale: HCD proposes continued adoption of the above referenced existing California amendment without modification. The existing California amendment is a pointer to mandatory CALGreen requirements. There is no intended change in regulatory effect.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 11 CHAPTER 6, WALL CONSTRUCTION

HCD proposes to adopt Chapter 6 from the 2021 IRC into the 2022 CRC with existing amendments as follows:

SECTION R602 WOOD WALL FRAMING

Section: R602.1.1 Sawn lumber.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment adds a reference to Section R301.1.1.1 for limited-density owner-built rural dwellings. There is no intended change in regulatory effect.

Section: R602.3.4.1 Rodent proofing.

Rationale: HCD proposes continued adoption of the above referenced existing California amendment without modification. The existing California amendment is a pointer to mandatory CALGreen requirements.

SECTION 606 GENERAL MASONRY CONSTRUCTION

Section: R606.1.1 Professional registration.

Rationale: HCD proposes continued adoption of the above referenced section with new and existing California amendments. The new amendment removes “not required” from the title which should not have been printed in the 2019 CRC for consistency with additional amendments in the section. The existing amendment provides the code user with necessary information about additional California requirements, and also directs the code user to the applicable law located in the Business and Professions Code which permits any person to prepare plans, drawings, or specifications for woodframe buildings. There is no intended change in regulatory effect.

SECTION R608 EXTERIOR CONCRETE WALL CONSTRUCTION

Section: R608.1 General.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides the code user with necessary information about additional California requirements and also directs the code user to the applicable law located in the BPC. There is no intended change in regulatory effect.

SECTION R610 STRUCTURAL INSULATED PANEL WALL CONSTRUCTION

Section: R610.1 General.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment provides the code user with necessary information about additional California requirements and directs the code user to the applicable law located in the BPC. There is no intended change in regulatory effect.

Section: R610.4 SIP wall panels.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The amendment adds a note referencing California statutory and regulatory requirements for factory-built components. The HSC, Factory-Built Housing Law, requires that all “factory-built housing,” which includes building components, bear insignia of approval issued by HCD through an HCD-approved third-party agency. As referenced in this section, SIPs are considered factory-built building components, assemblies, or systems manufactured in such a manner that all concealed parts or processes of manufacture cannot be inspected before installation at the building site without disassembly, damage, or destruction of the part. This amendment would provide guidance and clarification for labelling and insignia requirement for SIP products installed in California. There is no intended change in regulatory effect.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 12 CHAPTER 7, WALL COVERING

HCD proposes to adopt Chapter 7 from the 2021 IRC into the 2022 CRC with existing amendments and repeal of 2019 CRC amendments as follows:

SECTION R702 INTERIOR COVERING

Sections: R702.7 Vapor retarders (2019 CRC) R702.7.1 Class III vapor retarders (2019 CRC)

Rationale: HCD proposes to repeal California amendments to the above referenced sections. The California Energy Commission will be amending sections in the IRC that need to be amended to align with the California Energy Code. Therefore, HCD’s amendment is no longer needed.

Table R702.7.1 CLASS III VAPOR RETARDERS

Rationale: HCD proposes to continue to not adopt Table 702.7(3) and that it not be printed in the 2022 CRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 13
CHAPTER 8, ROOF-CEILING CONSTRUCTION

HCD proposes to adopt Chapter 8 from the 2021 IRC into the 2022 CRC with existing amendments as follows:

SECTION R802 WOOD ROOF FRAMING

Section: R802.1.1 Sawn lumber.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment is a pointer that has been placed within this section, directing code users to applicable code provisions in Section R301.1.1.1 addressing limited-density owner-built rural dwellings. There is no intended change in regulatory effect.

Section: R802.10.2 Design.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment specifies that truss design drawings always need to be prepared by a registered design professional not only where it is required by the local jurisdiction. There is no intended change in regulatory effect.

SECTION R806 ROOF VENTILATION, Note

Rationale: HCD proposes adoption of a note to direct the code user to Table R702.7.1. adopted by the California Energy Commission which provides a cross reference between the International Energy Conservation Code (IECC) climate zones and California Climate Zones. This note will not be adopted by HCD if the California Energy Commission adopts the note.

SECTION R807 ATTIC ACCESS

Section: R807.1 Attic access.

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The model code section references an IRC section not proposed for adoption by HCD. The amendment replaces the reference to Section M1305.1.3 with the CMC. There is no intended change in regulatory effect.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 14
CHAPTER 8, ROOF-CEILING CONSTRUCTION

HCD proposes to repeal the following California amendments from Chapter 8 of the 2019 CRC as follows:

SECTION R806 ROOF VENTILATION

Section: **R806.2 Minimum vent area.** (2019 CRC)

Rationale: HCD proposes to repeal the California amendment to the above referenced section. The California Energy Commission will be amending sections in the IRC that need to be amended to align with the California Energy Code. Therefore, HCD's amendment is no longer needed.

Section: **R806.5 Unvented attic and unvented enclosed rafter assemblies.** (2019 CRC)

Rationale: HCD proposes to repeal the California amendment to the above referenced section. The California Energy Commission will be amending any sections that need to be amended to align with the California Energy Code. Therefore, HCD's amendment is no longer needed.

TABLE R806.5 INSULATION FOR CONDENSATION CONTROL

Rationale: HCD proposes to repeal the California amendment to the above referenced Table. The California Energy Commission will be amending sections in the IRC that need to be amended to align with the California Energy Code. Therefore, HCD's amendment is no longer needed.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 15 CHAPTER 9, ROOF ASSEMBLIES

HCD proposes to adopt Chapter 9 from the 2021 IRC into the 2022 CRC with new and existing amendments as follows:

SECTION R903 WEATHER PROTECTION

Section: **R903.4.1 Secondary (emergency overflow) drains or scuppers.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment replaces the reference to Sections 1106 and 1108 of the International Plumbing Code with a reference to the CPC. The second paragraph specifying overflow drain connection requirements has been struck because it conflicts with storm water drainage provisions of the CPC. There is no intended change in regulatory effect.

SECTION R905 REQUIREMENTS FOR ROOF COVERINGS

Section: **R905.16 Photovoltaic shingles.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment replaces the reference to

NFPA 70 with a reference to the CEC as the applicable standard for electrical installations. There is no intended change in regulatory effect.

Section: **R905.17 Building-integrated Photovoltaic (BIPV) roof panels applied directly to the roof deck.**

Rationale: HCD proposes continued adoption of the above referenced section with a new California amendment. The amendment replaces the reference to NFPA 70 with a reference to the CEC as the applicable standard for electrical installations.

SECTION R907 ROOFTOP-MOUNTED PHOTOVOLTAIC SYSTEMS

Section: **R907.1 Rooftop-mounted photovoltaic panel systems.**

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The existing amendment replaces the reference to NFPA 70 with a reference to the CEC as the applicable standard for electrical installations. There is no intended change in regulatory effect.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 16 CHAPTER 10, CHIMNEYS AND FIREPLACES

HCD proposes to adopt Chapter 10, except Section 1004.4, from the 2021 IRC into the 2022 CRC with existing amendments as follows:

SECTION R1001 MASONRY FIREPLACES

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

Sections: **R1001.3 Seismic reinforcing**
R1001.4 Seismic anchorage

Rationale: HCD proposes continued adoption of the above referenced sections with existing California amendments. The existing amendments align the CRC with the CBC Chapter 21 for masonry fireplaces and masonry chimneys in Seismic Design Category “C” to meet seismic reinforcing and anchorage requirements. HCD determined that these CBC provisions should also apply to one-and two-family dwellings under the CRC masonry chimney and masonry fireplace requirements. There is no intended change in regulatory effect.

SECTION R1003 MASONRY CHIMNEYS

Sections: **R1003.3 Seismic reinforcing**
R1003.4 Seismic anchorage

Rationale: HCD proposes continued adoption of the above referenced sections with existing California amendments. The existing amendments align the CRC with the CBC Chapter 21 for masonry fireplaces and masonry chimneys in Seismic Design Category “C” to meet seismic reinforcing and anchorage requirements. HCD determined that these CBC provisions should also apply to one-and two-family dwellings under the CRC masonry

chimney and masonry fireplace requirements.

Section: R1003.11.3 Gas appliances

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The model code section references an IRC section not proposed for adoption by HCD. The amendment provides the code user a correct reference, the CMC. There is no intended change in regulatory effect.

Section: R1003.14 Flue area (appliance)

Rationale: HCD proposes continued adoption of the above referenced section with an existing California amendment. The model code section references an IRC section not proposed for adoption by HCD. The amendment provides the code user a correct reference, the CMC. There is no intended change in regulatory effect.

SECTION R1004 FACTORY-BUILT FIREPLACES

Section: R1004.1.1 Factory-built wood burning fireplaces.

Rationale: HCD proposes continued adoption of the above referenced existing California amendment without modification. During the 2013 Code Adoption Cycle pointers to mandatory CALGreen requirements were proposed for inclusion into the code to enhance user convenience and familiarity. These pointers may also serve as potential locations for the complete CALGreen requirement in the event that HCD makes the decision in a future rulemaking to discontinue CALGreen and incorporate its requirements into other parts of Title 24, the California Building Standards Code.

Section: R1004.4 Unvented gas log heaters

Rationale: HCD proposes to continue to not adopt the above referenced section, and proposes that the section not be printed in the CRC. HSC Section 19881 prohibits the sale of unvented heaters in any dwelling house or unit (exceptions apply for electric heaters and decorative gas logs). The CMC also prohibits installation, use, maintenance or permitting unvented fuel-burning room heaters in a Group R Occupancy. CALGreen requires all gas fireplaces to be sealed combustion and direct-vent appliances. This IRC provision for unvented gas log heaters appears to be in conflict with existing statute as well as the referenced codes and should not be available as a provision of the CRC to avoid conflict between codes.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

**ITEM 17
CHAPTER 11, ENERGY EFFICIENCY**

HCD proposes to continue to not adopt Part IV, Energy Conservation, Chapter 11 from the 2021 IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 18

CHAPTER 12	MECHANICAL ADMINISTRATION
CHAPTER 13	GENERAL MECHANICAL SYSTEM REQUIREMENTS
CHAPTER 14	HEATING AND COOLING EQUIPMENT AND APPLIANCES
CHAPTER 15	EXHAUST SYSTEMS
CHAPTER 16	DUCT SYSTEMS
CHAPTER 17	COMBUSTION AIR
CHAPTER 18	CHIMNEYS AND VENTS
CHAPTER 19	SPECIAL APPLIANCES, EQUIPMENT AND SYSTEMS
CHAPTER 20	BOILERS AND WATER HEATERS
CHAPTER 21	HYDRONIC PIPING
CHAPTER 22	SPECIAL PIPING AND STORAGE SYSTEMS
CHAPTER 23	SOLAR THERMAL ENERGY SYSTEMS

Rationale: HCD proposes to continue to not adopt Part V, Mechanical, Chapters 12 through 23 from the 2021 IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 19

CHAPTER 24, FUEL GAS

Rationale: HCD proposes to continue to not adopt Part VI, Fuel Gas, Chapter 24 from the 2021 IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 20

CHAPTER 25	PLUMBING ADMINISTRATION
CHAPTER 26	GENERAL PLUMBING REQUIREMENTS
CHAPTER 27	PLUMBING FIXTURES
CHAPTER 28	WATER HEATERS
CHAPTER 29	WATER SUPPLY AND DISTRIBUTION
CHAPTER 30	SANITARY DRAINAGE
CHAPTER 31	VENTS
CHAPTER 32	TRAPS
CHAPTER 33	STORM DRAINAGE

Rationale: HCD proposes to continue to **not** adopt Part VII, Plumbing, Chapters 25 through 33 from the 2021 IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

TBD

ITEM 21

CHAPTER 34	GENERAL REQUIREMENTS
CHAPTER 35	ELECTRICAL DEFINITIONS
CHAPTER 36	SERVICES
CHAPTER 37	BRANCH CIRCUIT AND FEEDER REQUIREMENTS
CHAPTER 38	WIRING METHODS
CHAPTER 39	POWER AND LIGHTING DISTRIBUTION
CHAPTER 40	DEVICES AND LUMINAIRES
CHAPTER 41	APPLIANCE INSTALLATION
CHAPTER 42	SWIMMING POOLS
CHAPTER 43	CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS

Rationale: HCD proposes to continue to **not** adopt Part VIII, Electrical, Chapters 34 through 43 from the 2021 IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 22

CHAPTER 44, REFERENCED STANDARDS

Rationale: HCD proposes continued adoption of Part IX, Chapter 44, from the 2021 IRC into the 2022 CRC with amendments as follows:

HCD proposes to delete and not print the Reference Standards that are only referenced in sections that HCD does not adopt.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 23

APPENDIX AA, SIZING AND CAPACITIES OF GAS PIPING

Rationale: HCD proposes to continue to **not** adopt Appendix AA of the 2021 IRC, and

also proposes Appendix AA **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 24

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

Rationale: HCD proposes to continue to **not** adopt Appendix AB of the 2021 IRC, and also proposes Appendix AB **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 25

APPENDIX AC, EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS

Rationale: HCD proposes to continue to **not** adopt Appendix AC of the 2021 IRC, and also proposes Appendix AC **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 26

APPENDIX AD, RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION

Rationale: HCD proposes to continue to **not** adopt Appendix AD of the 2021 IRC, and also proposes Appendix AD **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 27

APPENDIX AE, MANUFACTURED HOUSING USED AS DWELLINGS

Rationale: HCD proposes to continue to **not** adopt Appendix AE of the 2021 IRC, and also proposes Appendix AE **not** to be printed in the 2022 CRC. HCD does not adopt the manufactured housing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Approve.

ITEM 28

APPENDIX AF, RADON CONTROL METHODS

Rationale: HCD proposes to continue to **not** adopt Appendix AF of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Approve.

ITEM 29

APPENDIX AG, PIPING STANDARDS FOR VARIOUS APPLICATIONS

Rationale: HCD proposes to continue to **not** adopt Appendix AG of the 2021 IRC, and also proposes Appendix AG **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 30

APPENDIX AH, PATIO COVERS

Rationale: HCD proposes continued adoption of Appendix AH of the 2021 IRC into the 2022 CRC with existing amendment. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless

adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 31

APPENDIX AI, PRIVATE SEWAGE DISPOSAL

Rationale: HCD proposes to continue to **not** adopt Appendix AI of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 32

APPENDIX AJ, EXISTING BUILDINGS AND STRUCTURES

Rationale: HCD proposes to continue to **not** adopt Appendix AJ of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 33

APPENDIX AK, SOUND TRANSMISSION

Rationale: HCD proposes to continue to **not** adopt Appendix AK of the 2021 IRC. However, HCD proposes to bring forward the existing California amendment, which references the CBC for mandatory sound transmission requirements which are applicable to structures built to the CRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

**ITEM 34
APPENDIX AL, PERMIT FEES**

Rationale: HCD proposes to continue to not adopt Appendix AL of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

**ITEM 35
APPENDIX AM, HOME DAY CARE—R-3 OCCUPANCY**

Rationale: HCD proposes to continue to not adopt Appendix AM of the 2021 IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

**ITEM 36
APPENDIX AN, VENTING METHODS**

Rationale: HCD proposes to continue to not adopt Appendix AN of the 2021 IRC, and also proposes Appendix AN **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

**ITEM 37
APPENDIX AO, AUTOMATIC VEHICULAR GATES**

Rationale: HCD proposes to continue to not adopt Appendix AO of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 38

APPENDIX AP, SIZING OF WATER PIPING SYSTEM

Rationale: HCD proposes to continue to not adopt Appendix AP of the 2021 IRC, and also proposes Appendix AP **not** to be printed in the 2022 CRC. HCD does not adopt the electrical, mechanical or plumbing regulations from the IRC.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 39

APPENDIX AQ, TINY HOUSES

Rationale: HCD proposes continued adoption of Appendix AQ of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless referenced in the adopting ordinance or adopted by a state agency. The 2018 IRC adopted a new Appendix Q “Tiny Homes.” HCD understands that a small house can be built to the CRC, but there are some practical limitations. For example, when space is significantly limited, a conventional stairway occupies more space than may be desired and ceiling height requirements for sleeping lofts also serve as an obstacle. HCD’s adoption of Appendix AQ reflects an increased interest in smaller houses in general.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 40

APPENDIX AR, LIGHT STRAW-CLAY CONSTRUCTION

Rationale: HCD proposes to continue to not adopt Appendix AR of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 41 APPENDIX AS, STRAWBALE CONSTRUCTION

Rationale: HCD proposes continued adoption of Appendix AS of the 2021 IRC with existing and new amendments. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless referenced in the adopting ordinance **or** adopted by a state agency. HCD proposes to repeal the rest of the existing California amendments which are related to climate zones. The California Energy Commission will be amending any climate zone or energy related issues, therefore HCD's amendments are no longer necessary.

HCD proposes to add a "Note" specifying that the IECC climate zones differ from the California Energy Code climate zones.

If the California Energy Commission does not include an amendment to this Appendix, HCD proposes a note to direct the code user to Table R702.7.1 adopted by the California Energy Commission which provides a cross reference between the IECC climate zones and California Climate Zones. This note will not be adopted by HCD if the California Energy Commission adopts the note.

HCD proposes to continue to adopt Appendix AS from the 2021 IRC into the 2022 CRC. The California State Legislature originally approved Strawbale Construction Guidelines as California law in Section 18944.30 et seq. of the HSC in 1995. The statutory language specifically stated that it was the intent of the Legislature that these statutory guidelines were to serve as an interim measure pending the evaluation of straw bales as a construction material; determination of construction standards; and the adoption of material and construction standards into the California Building Standards Code. The model code language in Appendix AS addresses the same prescriptive requirements found in the statutory guidelines, and in some cases provides more specificity. The model code provides requirements for wall thickness; structural considerations including live loads, dead loads, compressive strength, attachment to foundations, resistance to wind and uplift forces, seismic design, and fire resistance; and references ASTM Standards.

SECTION AS104 FINISHES

Section: AS104.2 Purpose, and where required

Rationale: HCD proposes to repeal the amendment to the above referenced section. The existing amendment replaces the reference to the International Climate Zones with a correct reference to the California Climate Zones as referenced in the California Energy Code. HCD will no longer be proposing amendments in regard to climate zones or energy related issues. The California Energy Commission will be proposing all necessary climate zone and energy related amendments in their rulemaking.

SECTION AS105 STRAWBALE WALLS—GENERAL

Section: AS105.6.2 Vapor retarders AS105.6.3 Penetrations in exterior strawbale walls

Rationale: HCD proposes to repeal the amendment to the above referenced section. The

existing amendment replaces the reference to the International Climate Zones with a correct reference to the California Climate Zones as referenced in the California Energy Code. HCD will no longer be proposing amendments in regard to climate zones or energy related issues. The California Energy Commission will be proposing all necessary climate zone and energy related amendments in their rulemaking.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 42

APPENDIX AT, SOLAR-READY PROVISIONS—DETACHED ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES

Rationale: HCD proposes to continue to not adopt Appendix AT of the 2021 IRC. HCD proposes to bring forward the amendment to the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 43

APPENDIX AU, COB CONSTRUCTION (MONOLITHIC ADOBE)

Rationale: HCD proposes to not adopt Appendix AU of the 2021 IRC. HCD proposes to add a sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 44

APPENDIX AV, BOARD OF APPEALS

Rationale: HCD proposes to not adopt Appendix AV, an informative appendix which is not part of the code, of the 2021 CRC. HCD proposes to amend the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 45

APPENDIX AW, 3D-PRINTED BUILDING CONSTRUCTION

Rationale: HCD proposes to not adopt Appendix AW of the 2021 CRC. HCD proposes to amend the first sentence to state that the provisions of the appendix are not mandatory unless adopted by a state agency or referenced in the adopting ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

ITEM 46

APPENDIX AX, EMERGENCY HOUSING

Rationale: HCD proposes to continue to adopt Appendix AX without modification from the 2019 CRC with the exception of the title to match the format of the code. This appendix was added to the 2016 CRC as an emergency rulemaking and was subsequently adopted as permanent regulations. Although adopted by HCD, Appendix AX is mandatory if adopted by local ordinance.

CAC Recommendation:

Approve as submitted.

Agency Response:

Accept.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS

Government Code Section 11346.2(b)(3) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).

- 2021 IRC
- SB 280

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.

HSC Section 17922 requires HCD to adopt by reference model building codes, e.g., IRC, which contains prescriptive standards. Prescriptive standards provide the following: explicit guidance for certain mandated requirements; consistent application and enforcement of building standards while also establishing clear design parameters; and ensure

compliance with minimum health, safety and welfare standards for owners, occupants and guests.

Performance standards are permitted by state law; however, they must be demonstrated to the satisfaction of the proper enforcing agency.

CONSIDERATION OF REASONABLE ALTERNATIVES

Government Code Section 11346.2(b)(4)(A) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.

None. There were no alternatives available to HCD. HCD is required by statute to adopt this model code by reference. The proposed amendments are the only reasonable alternative for clarifying the 2022 CRC.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

Government Code Section 11346.2(b)(4)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.

HCD is required by statute to adopt this model code by reference, however, HCD also has authority to propose additions and deletions to the model code per HSC Section 17922. HCD convened a pre-rulemaking stakeholder meeting on March 29, 2021, to solicit comment on new requirements in the 2021 IRC. No comments were received related to adverse impacts on small businesses.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS

Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.

HCD has determined that this regulatory action would have no significant adverse economic impact on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states. HCD convened a stakeholder meeting March 29, 2021, to provide an opportunity for stakeholders to comment on major issues of concern related to adoption of the 2021 IRC.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)

HSC has assessed whether or not and to what extent this proposal will affect the following:

- A.** The creation or elimination of jobs within the State of California.

These regulations will not affect the creation, or cause the elimination, of jobs within the State of California.

- B.** The creation of new businesses or the elimination of existing businesses within the State of California.

These regulations will not affect the creation or the elimination of existing business within the State of California.

- C.** The expansion of businesses currently doing business within the State of California.

These regulations will not affect the expansion of businesses currently doing business within the State of California.

- D.** The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

The adoption of the 2021 IRC through incorporation by reference with California amendments will provide stakeholders with a code regulating the construction of single-family houses, two-family houses (duplexes) and buildings consisting of three or more townhouse units. The benefits of devoting a separate code to residential construction include the fact that the user need not navigate through a multitude of code provisions that do not apply to residential construction in order to locate that which is applicable. Due to California's adoption of the Uniform Plumbing Code, Uniform Mechanical Code, California Energy Code and National Electrical Code, chapters in the IRC addressing these subjects are not adopted. These regulations will also update and improve minimum existing building standards, which will provide increased protection of public health and safety, worker safety and the environment.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

Government Code Section 11346.2(b)(5)(B)(i) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.

- No increased cost of compliance for those regulations that make only technical and nonsubstantive changes.
- There are no significant costs associated with the Fall Prevention provisions proposed for the 2022 CRC. These costs were discussed with stakeholders in a Focus Group Meeting held on March 9, 2021, and also in previous meetings related to the adoption of Universal Design provisions. Only minor, if any, costs were related to the provision of reinforcement materials which could use scrap materials from construction.
- Government Code Section 11346.2(b)(5)(B)(ii) provides that the model codes adopted pursuant to HSC Section 18928 shall be exempt from the requirements of Government Code Section 11346.2(b)(5)(B) unless upon request as specified. The purpose of this rulemaking is to adopt the 2021 IRC which is a model code setting forth requirements one- and two-family homes and townhomes.
- The potential benefits provide recognition and appropriate use of new technologies and materials, clarity for the code users and local enforcement agencies, and may

increase business due to the adoption of new building standards.

- As noted in Section D (“benefits of the regulation”) benefits include protection of public health and safety, worker safety and the environment.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.

The regulations do not duplicate nor conflict with federal regulations. The State of California has preemptive authority to adopt more restrictive mandatory standards for the construction methods and materials addressed in these regulations.