

SIGNIFICANT CHANGES TO THE CALIFORNIA RESIDENTIAL CODE
2016 EDITION

BY Paul D. Armstrong, Stephen A. Van Note, Sandra Hyde, P.E.

A book report prepared by the Sacramento Valley Association of Building Officials
Code Development and Review Committee.

NOTE: This report is not intended to replace the book Significant Changes to the California Residential Code 2016 Edition. SVABO members are encouraged to purchase the publication for insights, additional information, and comments regarding the significance of the changes.

Section	Code Change	Significance	Remarks
PART 1 ADMINISTRATION AND DEFINITIONS			
R1.1.3.2	Adds efficiency dwelling units to the list of buildings regulated by the CRC	This change clarifies that the CRC may be used for the design of efficiency dwelling units. Previously it was not clear that these types of units were regulated by the CRC.	
R1.1.7.3.1	Adds efficiency dwelling units to list of building types that may be designed under the CRC	See above.	
	Adds the statement ""may be designed and constructed in accordance with this code or the California Building Code, but not both."	Clarifies that the Designer may utilize the CBC or the CRC but not both. Some designers believed that they could use a mix of the two codes.	
R1.8.10.2	Identifies that moved structures must comply with the California Existing Building Code (CEBC) not CBC Chapter 34.	The Code was modified to reflect that CBC Chapter 34 has been replaced with the CEBC.	
R101.2,	Adds a limitation that accessory structures be not more than three stories above the grade plane.		
R202	Removes the square footage limit allowable for accessory structures		
R104.11	Adds to Alternate Means and Methods "Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating	Previously the building official was not required to provide written reasons for denial. This allows the applicant to review the reasons for denial and then either propose a substitute material or method of	

	the reasons why the alternative was not approved.	construction or correct errors in the original application.	
R105.3.1.1		The criteria used to determine substantial improvement or substantial damage for existing buildings in flood hazard areas has been moved from the Building Board of Appeals provisions in Section R112.2.1 to Section R105.3.1.1. In effect this now makes the determination a one-step process as opposed to the current two-step process.	
R106.1.4	Adds “and in Coastal A Zones where such zones are delineated on flood hazard maps identified in Table R301.2(1) or otherwise delineated by the jurisdiction.” To the required information for Construction in Flood Hazard Areas.	Dwellings in areas designated as “Coastal A Zones” are now required to meet the requirements of Section R322.3 for dwellings in coastal high-hazard zones (Zone V). A new exception in R322.3 allows backfilled stem wall foundations rather than open pilings if the foundation is designed to take into account the wave action, debris impact, and local scour in Coastal A Zones.	
Chapter 2	Defines that the Climate Zones are the 16 geographic areas established by the California Energy Commission.	Aligns Climate Zones in the CRC with the Requirements of the Energy Code.	
Chapter 2	ADDS DEFINITION: Lodging House (HCD1) Any building or portion thereof containing not more than five guestrooms where rent is paid in money, goods, labor or otherwise, and that is occupied by the proprietor as the residence of such proprietor.	HCD states that this modification is intended to provide clarity in the determination of transient lodging.	
Part 2: BUILDING PLANNING			
Table R301.2(1)	Table R301.2(1) Climatic and Geographical Design Criteria now contains a section to include whether the jurisdiction contains special wind regions or wind borne debris zones.	The special wind regions and wind design required regions are shown on a single map for the continental United States. This can lead to errors interpreting the contour lines. The identification of zones where wind-borne debris requirements are applied should be provided by the local jurisdiction to ensure that those provisions are applied correctly.	

R202	Hurricane-Prone Regions are defined by ultimate design wind speed is 115 MPH rather than basic wind speed of 90 MPH.	The change brings the CRC wind provisions into alignment with the CBC.	Related Sections: R301.2.1 R301.2.1.1 R301.2.1.3
R301.2	Wind Speed Maps have been added to the CRC	Wind Speed Maps based on ASCE 7-10 Ultimate Wind Speeds	
Table R301.2(2)	The Table Component and Cladding Loads for a Building with a Mean Roof Height of 30 Feet Located in Exposure B (ASD) (psf). Table has been modified to reflect Ultimate Wind Speed not basic wind speed.		
R301.2.1.1.1	Construction requirements for Sunrooms have been completely revised.		
R301.2.1.2			
R301.2.4			
Table R301.2.1.5.1			
R301.2.4			
R301.3	Story Height: Story Height for wood framed walls is now limited to 11'-7" maximum with an allowable increase of 8' for bearing gable end walls. Story Height for masonry bearing walls is 11'		
R302.1	Unprotected roof overhangs are now permitted to extend to within 2' of the property line when fireblocking is installed between the top of the wall and roof sheathing. For dwellings with or without fire sprinklers penetrations of exterior walls do not require protection unless they are located less than 3' from the property line.		
R302.2	The provisions for separating townhouses with structurally independent fire-resistance-rated walls in accordance with R302.1 have been		

	removed in favor of the common wall provisions of Section R302.2. Common walls between townhouses must now be rated 2-hours unless fire sprinklers are provided.		
R302.13	The provisions for fire protections for floors have been relocated from Chapter 5 to the fire-resistant construction provisions of Section R302, New language clarifies that the Code does not regulate penetrations or opening in the fire protection membrane.		
R303.7 R303.8	Interior and Exterior stairway illumination provisions have been placed in separate sections. Conflicting language has been removed to clarify requirement.		
R304.1	Minimum Room area of 120 square feet has been removed. Habitable Rooms shall have a floor area of not less than 70 square feet has been added.		
R305.1	Ceiling heights have been modified: Habitable spaces, hallways and portions of basements containing these rooms shall have a ceiling height of not less than 7 feet (No change), Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6'-8" (Modification).		
R308.4.2	Glazing installed perpendicular to a door in a closed position and within 24-inches of the door only requires safety glazing if it is on the hinge side of the door.	The revised language identifies the hazard of someone being pushed into the glazing by the door swinging open.	
R308.4.5	The exception from safety glazing requirements for glazing that is 60-inches or greater from the water's edge of a bathtub, pool or spa has been expanded to include glazing that is an equivalent distance from the	Change clarifies that the code regulates the area inside, as well as outside safety glazing.	

	edge of a shower, sauna or steam room.		
R308.4.7	Glazing adjacent to the bottom stair landing is now defined as the area in front of the plane of the bottom tread.	The Code has been modified to better define the area adjacent to the bottom stair landing in front of and to the side of the direction of travel.	
R309.8	New single- and two-family dwellings and townhouses now must be ready for EV charger installation.		
R310	The emergency escape and rescue opening provisions have been reorganized. Separate provisions spell out the requirements for windows and doors used for emergency escape and rescue.	Clarifies provisions. No Change	
R310.5 R310.6	The basement of a dwelling unit ADDITION does not require an emergency escape and rescue opening if there is access to a basement that does have an emergency escape and rescue opening. Remodeling of an existing basement does not trigger the emergency escape and rescue opening requirements unless a new bedroom is added.		
R311.1	The required egress door of a dwelling unit must open directly into a public way or to a yard or to a court that opens to a public way.		
R311.7.2 R311.7.5.1	The total allowable vertical rise of a stairway without a landing is increased from 144-inches to 147-inches. Open risers are now only permitted when they are 30-inches or less above the floor.		
R311.7.10.1	The code now adds a definition of a spiral stairway and deletes the requirement that there be a center post. It also modifies the walkline requirements.		
R311.7.11 R311.7.12	Alternating tread devices and ships ladders have been added to the stair provisions.		

	Neither is approved as a means of egress.		
R311.8	Ramps that do not serve the required egress door are now permitted to have a slope not greater than 1 unit vertical in 8 units horizontal.	Maximum slope or ramps serving non-egress doors is permitted to be 2'-6" in 20'-0"	
R312.1.2	The provisions requiring the guard height to be measured from the surface of adjacent fixed seating have been removed.		
R312.2.1	The window fall provisions have been revised to clarify the meaning, remove redundant language, and achieve consistency with the CBC provisions.	Clarification. No changes to requirements.	
R314	Battery-operated smoke alarms are permitted for satisfying the requirements for smoke fire alarms when alterations, repairs, and additions occur. New provisions address smoke alarms installed near bathrooms and cooking appliances.	Requires smoke alarms to be installed within 3-feet of a bathroom door (where the bathroom contains a shower or bathtub) unless this would prevent the placement of the smoke alarm.	
R315	Carbon Monoxide alarms have been relocated into a new section.	These are generally editorial changes and relocation of sections being carried forward. These need to be incorporated into the significant changes for Section R315 above.	
R322.1 R322.2	Section R322.1 is modified to emphasize that the provision applies to existing buildings in flood hazard areas where 50 percent or more of the structure has damage and requires restoration. Section R322.2 limits the minimum elevation allowed for dwellings in flood hazard areas and defines Coastal A Zone.		
R322.3	Coastal A Zones are defined and an exception for foundation types in Coastal A Zones is added.		
R325	New provisions place limitations on the construction of mezzanines related to ceiling	Clear height below: 7-feet minimum. 1/3 maximum area of the room in which they are	

	height and openings consistent with the CBC.	located. Open to the room where they are contained with some exceptions.	
PART 3 BUILDING CONSTRUCTION			
R403.1.1			
R403,1,2 R602,10.9.1			
R403.1.3			
R403.1.6			
R404.1.4.1			
R404.4			
Tables R502.3.1(1) R502.3.1(2)			
R502.10			
R507.1 R507.4			
R507.2			
R507.2.4			
R507.5 R507.6 R507.7			
R507.8			
Table R602.3(1)			
Table R602.3(1)			
Table R602.3(10)			
R602.3.1			
R602.7			
Table R602.10.3(1)			

Table R602.10.5			
R602.10.6.2			
R602.10.11			
R602.12			
R603.9.5			
R606			
R606.3.5			
R610.7	Drilling and notching for Structural Insulated Panels (SIP) are clarified.		
R703.3	Table R703.4 Weather Resistant Siding Attachment and Minimum Thickness is simplified. New code language is added to Section R703 to clarify limitations of use of the table and to describe fastener type, length and penetration.		
R703.5	Minimum spacing based on siding thickness has been moved from 2013 CRC Table R703.4 footnote I, siding attachment and minimum thickness to 2016 CRC Section R703.5.2, panel siding. Requirements for vertical wood siding have been moved from 2013 CR%C footnote j to 2016 CRC Section R703.5.1, vertical wood siding.		
R703.6	The provisions for the application of wood shakes and shingles have been reorganized to give more information within tables for ease of use.		
R703.9	Limitations for exterior insulation and finish systems with and without damage have been added to the 2016 CRC.		
R703.11.1	Clarifies nailing penetration and spacing requirements for vertical and horizontal vinyl siding.		

R703.13 R703.14	New sections set minimum requirements for insulated vinyl siding and polypropylene siding.		
R703.15 R703.16 R703.17	Three new sections set minimum requirements for cladding attachment over foam sheathing to wood framing (R703.15), cold formed steel framing (R703.16), and masonry or concrete walls (R703.17). For light frame construction, prescriptive requirements are given. Connection to concrete and masonry continues to require engineered design in most cases when placing foam over masonry or concrete wall.		
Tables R802.4 R802.5.1	Table 802,4(1). Changes to Southern Pine, Douglas Fir-Larch and Hemlock Fir capacities have changed the maximum spans for lumber in ceiling joists and rafter span tables.		
R806.1	The 2013 CRC exception allowing the building official to waive ventilation requirements for attics due to atmospheric or climatic conditions has been deleted.		
R806.5 Item 4.1	A requirement for installation of Class I or II vapor retarders in unventilated high performance attics has been added.		
R806.5,Item 1 and Table R806.5	This modification removes the previous amendment and references Table 806.5.	Section R806.5 provides 3 options for installing insulation at the roof line for unventilated attics and unvented rafter spaces	
R905.1.1	The multiple code provisions placed in the 2012 CRC for underlayment have been combined into section R905.1.1 with 3 tables listing underlayment type, application and attachment. Sections on ice barriers from the 2013 CRC are reorganized and combined into Section R905.1.2.		
R905.7.5	The minimum requirements for application of		

	wood shingles are expanded . Fastener type is clarified and a new table lists minimum sizes for box nails. Labeling requirements for fastener packaging have also been added.		
R905.8.6	The minimum requirements for application of wood shakes are expanded . Fastener type is clarified and a new table lists minimum sizes for box nails. Labeling requirements for fastener packaging have also been added.		
R905.16	Additional requirements and limits for photovoltaic shingles have been added to Section R905.16.		
R907	New code requirements and limits of roof-mounted photovoltaic systems.		
R1004.1	A direct reference to the federal regulations found in Cal Green has been added to the factory-built fireplaces..		
Appendix R			
Appendix S			