























# California 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 1

Y NA RESPON. PARTY  
YES APPLICABLE  
NOT APPLICABLE  
RESPONSIBLE PARTY (BY ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

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		<b>CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL</b>
		<b>301.1 SCOPE.</b> Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.
		<b>301.1.1 Additions and alterations. [HCD]</b> The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.
		The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.
		<b>Note:</b> Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.
		<b>Note:</b> On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.
		<b>301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD]</b> The provisions of individual sections within this code shall be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.
		<b>SECTION 302 MIXED OCCUPANCY BUILDINGS</b>
		<b>302.1 MIXED OCCUPANCY BUILDINGS.</b> In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.
		<b>Exceptions:</b>
		1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
		2. [HCD] For purposes of CALGreen, In-work units, complying with Section 419 of the California Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.
		<b>DIVISION 4.1 PLANNING AND DESIGN</b>
		<b>ABBREVIATION DEFINITIONS:</b>
		HCD Department of Housing and Community Development
		BSC California Building Standards Commission
		DSA-SS Division of the State Architect, Structural Safety
		OSHPD Office of Statewide Health Planning and Development
		LR Low Rise
		HR High Rise
		AA Additions and Alterations
		N New
		<b>CHAPTER 4 RESIDENTIAL MANDATORY MEASURES</b>
		<b>SECTION 4.102 DEFINITIONS</b>
		<b>4.102.1 DEFINITIONS</b> The following terms are defined in Chapter 2 (and are included here for reference)
		<b>FRENCH DRAIN.</b> A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar porous material used to collect or channel drainage or runoff water.
		<b>WATTLES.</b> Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.
		<b>4.106 SITE DEVELOPMENT</b>
		<b>4.106.1 GENERAL.</b> Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.
		<b>4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION.</b> Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.
		1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
		2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
		3. Compliance with a lawfully enacted storm water management ordinance.
		<b>Note:</b> Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil. (Website: <a href="https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html">https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html</a> )
		<b>4.106.3 GRADING AND PAVING.</b> Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:
		1. Swales
		2. Water collection and disposal systems
		3. French drains
		4. Water retention gardens
		5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
		<b>Exception:</b> Additions and alterations not altering the drainage path.
		<b>4.106.4 Electric vehicle [EV] charging for new construction.</b> New construction shall comply with Section 4.106.4.1 or 4.106.4.2. Electric vehicle supply equipment (EVSE) shall comply with the California Electrical Code.
		<b>Exceptions:</b>
		1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
		1.1 Where there is no local utility power supply or the local utility is unable to supply adequate power.
		1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.
		2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.
		<b>4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.</b> For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.
		<b>Exception:</b> A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the California Electrical Code.
		<b>4.106.4.1.1 Identification.</b> The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

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		<b>4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.</b> When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the requirements of Section 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.
		<b>4.106.4.2.1 Reserved.</b>
		<b>4.106.4.2.2 Multifamily dwellings, hotels and motels</b>
		<b>1. EV ready parking spaces with receptacles.</b>
		<b>a. Multifamily parking facilities with assigned parking.</b> Where dwelling units are provided with assigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an assigned parking space for each dwelling unit.
		1. Where the total number of dwelling units exceeds the number of assigned parking spaces, all assigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.
		<b>Exception:</b> Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code, or parking facilities otherwise incapable of supporting electric vehicle charging.
		<b>b. Multifamily parking facilities with unassigned parking.</b> Where dwelling units are provided with unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an unassigned parking space for each dwelling unit.
		1. Where the total number of dwelling units exceeds the number of unassigned parking spaces, all unassigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.
		<b>Exception:</b> Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code, or parking facilities otherwise incapable of supporting electric vehicle charging.
		<b>3. Multifamily parking facilities with assigned and unassigned parking.</b> Where multifamily buildings are provided with both assigned and unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided for each dwelling unit at either the assigned or unassigned parking space, but not both.
		<b>d. Receptacle power source.</b> EV charging receptacles in multifamily parking facilities at assigned parking spaces shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.
		<b>Exception:</b> Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code, or parking facilities otherwise incapable of supporting electric vehicle charging.
		<b>e. Receptacle configurations.</b> 208/240V EV charging receptacles shall comply with one of the following configurations:
		1. For 20-ampere receptacles, NEMA 6-20R
		2. For 30-ampere receptacles, NEMA 14-30R
		3. For 50-ampere receptacles, NEMA 14-50R
		<b>2. EV ready parking spaces with EV chargers</b>
		<b>a. Multifamily parking facilities with unassigned or common use parking.</b> In addition to the low power Level 2 EV charging receptacle requirements of Section 4.106.4.2.2 (1), twenty-five (25) percent of unassigned or common use parking spaces not already provided with low power Level 2 EV charging receptacles, pursuant to Section 4.106.4.2.2 (1), shall be equipped with Level 2 EV chargers and shall be made available for use by all residents or guests.
		<b>b. EV charger connectors.</b> EV chargers shall be equipped with J1772 or J3400 connectors.
		<b>c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS.</b> The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.
		<b>4.106.4.2.2.1 Electric vehicle charging stations (EVCS).</b> Electric vehicle charging stations required by Section 4.106.4.2.2, Item 2, with EV chargers installed shall comply with Section 4.106.4.2.2.1.1.
		<b>Exception:</b> Electric vehicle charging stations serving public accommodations, public housing, motels and hotels shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable requirements.
		<b>4.106.4.2.2.1.1 Electric vehicle charging stations (EVCS) spaces with EV chargers installed; dimensions and location.</b>
		EVCS spaces shall be designed to comply with the following:
		1. The minimum length of each EVCS space shall be 18 feet (5486 mm).
		2. The minimum width of each EVCS space shall be 9 feet (2743 mm).
		3. One in every 25 EVCS spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EVCS space is 12 feet (3658 mm). Surface slope for the EVCS space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction. These EVCS spaces shall also comply with at least one of the following:
		a. The EVCS space shall be located adjacent to an accessible parking space meeting the requirements of the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.
		b. The EVCS space shall be located on an accessible route, as defined in the California Building Code, Chapter 2, to the building.
		<b>Exception:</b> Electric vehicle charging stations designed and constructed in compliance with the California Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1.
		<b>4.106.4.2.2.1.2 Accessible electric vehicle charging station spaces.</b> In addition to the requirements in Section 4.106.4.2.2.1.1, all EV chargers, where installed, shall comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section 1109A.
		<b>4.106.4.2.3 Reserved.</b>
		<b>4.106.4.2.4 Reserved.</b>
		<b>4.106.4.2.5 Electric vehicle ready space signage.</b> Electric vehicle ready spaces shall be identified by signage or pavement markings. In compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).
		<b>4.106.4.2.6 Hotels and motels.</b>
		<b>1. EV ready parking spaces with receptacles.</b>
		<b>a. Hotels and motels.</b> Forty (40) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles.
		<b>Exception:</b> Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code, or parking facilities otherwise incapable of supporting electric vehicle charging.
		<b>b. Receptacle configurations.</b> 208/240V EV charging receptacles shall comply with one of the following configurations:
		1. For 20-ampere receptacles, NEMA 6-20R
		2. For 30-ampere receptacles, NEMA 14-30R
		3. For 50-ampere receptacles, NEMA 14-50R.
		<b>2. EV ready parking spaces with EV chargers.</b>
		<b>a. Hotels and motels.</b> Twenty-five (25) percent of the total number of parking spaces shall be equipped with Level 2 EV chargers.
		<b>b. EV charger connectors.</b> EV chargers shall be equipped with J1772 or J3400 connectors.
		<b>Exception:</b> Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code, or parking facilities otherwise incapable of supporting electric vehicle charging.

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		<b>c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS.</b> The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.
		<b>4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multi-family buildings, hotels and motels.</b> When existing parking facilities are altered or new parking spaces are added to existing parking facilities, and the work requires a building permit, each parking space added or altered shall have access to either a low power Level 2 EV charging receptacle or Level 2 EV charger, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.
		<b>Exception:</b> Where work requiring a permit is being performed for the installation of 120-volt electrical receptacle(s) for level 1 EV charging.
		<b>4.106.4.4 Bicycle parking.</b> Bicycle parking shall comply with Sections 4.106.4.4.1 through 4.106.4.4.3.
		<b>4.106.4.4.1 Short-term bicycle parking for multifamily buildings, hotels and motels.</b> Provide on-site bicycle parking at a ratio of one parking space for every 10,000 square feet, but not less than two spaces. Short-term bicycle parking shall be located within 200 feet of building entrances, and readily visible to passers-by. Acceptable parking facilities shall be conveniently accessed from the street and may include, but not be limited to:
		1. Permanently anchored bicycle parking devices, racks, or lockers in an unsheltered, open area.
		2. Covered or uncovered enclosures with permanently anchored bicycle parking devices or racks.
		<b>4.106.4.4.2 Long-term bicycle parking for multifamily buildings.</b> Provide on-site bicycle parking at a ratio of one parking space for every two dwelling units. Acceptable parking facilities shall be conveniently accessed from the street and may include, but not be limited to:
		1. Covered, lockable enclosures with permanently anchored bicycle parking devices or racks.
		2. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.
		3. Lockable, weatherproof, permanently anchored bicycle lockers.
		<b>4.106.4.4.3 Long-term bicycle parking for hotel and motel buildings.</b> Provide one on-site long-term bicycle parking space for every 25,000 square feet, but not less than two. Acceptable parking facilities shall be conveniently accessed from the street and may include, but not be limited to:
		1. Covered, lockable enclosures with permanently anchored bicycle parking devices or racks.
		2. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.
		3. Lockable, weatherproof, permanently anchored bicycle lockers.
		<b>DIVISION 4.2 ENERGY EFFICIENCY</b>
		<b>4.201 GENERAL</b>
		<b>4.201.1 SCOPE.</b> For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards.
		<b>DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION</b>
		<b>4.303 INDOOR WATER USE</b>
		<b>4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.</b> Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, and 4.303.4.4.
		<b>Note:</b> All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy, or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates.
		<b>4.303.1.1 Water Closets.</b> The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-type Toilets.
		<b>Note:</b> The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.
		<b>4.303.1.2 Urinals.</b> The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.
		<b>4.303.1.3 Showerheads.</b>
		<b>4.303.1.3.1 Single Showerhead.</b> Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.
		<b>4.303.1.3.2 Multiple showerheads serving one shower.</b> When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only allow one shower outlet to be in operation at a time.
		<b>Note:</b> A hand-held shower shall be considered a showerhead.
		<b>4.303.1.4 Faucets.</b>
		<b>4.303.1.4.1 Residential Lavatory Faucets.</b> The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 80 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi.
		<b>4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas.</b> The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.
		<b>4.303.1.4.3 Metering Faucets.</b> Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.
		<b>4.303.1.4.4 Kitchen Faucets.</b> The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.
		<b>Note:</b> Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.
		<b>4.303.1.4.5 Pre-rinse spray valves.</b> When installed, commercial pre-rinse spray valves shall meet the requirements in the California Plumbing Code, Section 420.3.
		<b>4.303.2 Submersers for multifamily buildings and dwelling units in mixed-use residential/commercial buildings.</b> Submersers shall be installed to measure water usage of individual rental dwelling units in accordance with the California Plumbing Code.
		<b>4.303.3 Standards for plumbing fixtures and fittings.</b> Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1-1 of the California Plumbing Code.
		<b>4.304 OUTDOOR WATER USE</b>
		<b>4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.</b> Residential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.
		<b>NOTES:</b>
		1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: <a href="https://www.water.ca.gov/">https://www.water.ca.gov/</a>

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		<b>DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY</b>
		<b>4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE</b>
		<b>4.406.1 RODENT PROOFING.</b> Annual spaces around pipes, electric cables, conduits or other openings in soffit/bottom plates at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.
		<b>4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING</b>
		<b>4.408.1 CONSTRUCTION WASTE MANAGEMENT.</b> Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.
		<b>Exceptions:</b>
		1. Excavated soil and land-clearing debris.
		2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
		3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the local boundaries of the diversion facility.
		<b>4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN.</b> Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.
		1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.
		2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
		3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
		4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
		5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.
		<b>4.408.3 WASTE MANAGEMENT COMPLY.</b> Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.
		<b>Note:</b> The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.
		<b>4.408.4 WASTE STREAM REDUCTION ALTERNATIVE (LR).</b> Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.0 lbs. sq. ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.
		<b>4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE.</b> Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1.
		<b>4.408.5 DOCUMENTATION.</b> Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4.
		<b>Notes:</b>
		1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at <a href="http://www.hcd.ca.gov/CALGreen.html">www.hcd.ca.gov/CALGreen.html</a> may be used to assist in documenting compliance with this section.
		2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).
		<b>4.410 BUILDING MAINTENANCE AND OPERATION</b>
		<b>4.410.1 OPERATION AND MAINTENANCE MANUAL.</b> At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building:
		1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
		2. Operation and maintenance instructions for the following:
		a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
		b. Roof and yard drainage, including gutters and downspouts.
		c. Space conditioning systems, including condensers and air filters.
		d. Landscape irrigation systems.
		e. Water reuse systems.
		3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations.
		4. Public transportation and/or carpool options available in the area.
		5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range.
		6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
		7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
		8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
		9. Information about state solar energy and incentive programs available.
		10. A copy of all special inspections verifications required by the enforcing agency or this code.
		11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures.
		12. Information and/or drawings identifying the location of grab bar reinforcements.
		<b>4.410.2 RECYCLING BY OCCUPANTS.</b> Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.
		<b>Exception:</b> Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are not required to comply with the organic waste portion of this section.
		<b>DIVISION 4.5 ENVIRONMENTAL QUALITY</b>
		<b>SECTION 4.501 GENERAL</b>
		<b>4.501.1 Scope</b> The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.
		<b>SECTION 4.502 DEFINITIONS</b>
		<b>5.102.1 DEFINITIONS</b> The following terms are defined in Chapter 2 (and are included here for reference)
		<b>AGRIFIBER PRODUCTS.</b> Agrifiber products include wheatboard, strawboard, panel substrates and door cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.
		<b>COMPOSITE WOOD PRODUCTS.</b> Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardwood, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated wood joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section 93120.1.
		<b>DIRECT-VENT APPLIANCE.</b> A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.









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County of San Bernardino Building & Safety Division 305 N. Arrowhead Ave. 1st Floor San Bernardino, CA 92415 909-387-8311 SBCounty.gov

All projects shall comply with the 2025 California Building Code (CBC) and/or California Residential Code (CRC), 2025 California Green Building Standards Code (CalGreen), 2025 California Wildland-Urban Interface Code (CWUI), 2025 California Mechanical Code (CMC), 2025 California Plumbing Code (CPC), 2025 California Fire Code (CFC), 2025 California Building Energy Efficiency Standards (CBEES), and all San Bernardino County amendments.

By using these standard plans, the user agrees to release San Bernardino County from any and all claims, liabilities, suits, and demands on account of any injury, damage, or loss to persons or property, including injury or death, or economic losses, arising out of the use of these construction documents. The use of these plans does not eliminate or reduce the user's responsibility to verify any and all information

Consultant Address Phone Fax e-mail

560 sf ADU

FASTENING SCHEDULE

Table with 4 columns: ITEM, DESCRIPTION OF BUILDING ELEMENTS, NUMBER AND TYPE OF FASTENER, SPACING AND LOCATION. Includes sections for Roof and Wall.

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FASTENING SCHEDULE

Table with 4 columns: ITEM, DESCRIPTION OF BUILDING ELEMENTS, NUMBER AND TYPE OF FASTENER, SPACING AND LOCATION. Includes sections for Other wall sheathing and Wood structural panels.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa. a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections are carbon steel and shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less. Connections using nails and staples of other materials, such as stainless steel, shall be designed by accepted engineering practice or approved under Section R104.11. b. RRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667. c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically. e. Spacing of fasteners not included in this table shall be based on Table R602.3(2). f. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 4 inches on center where the ultimate design wind speed is greater than 130 mph in Exposure B or greater than 110 mph in Exposure C. g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with ASTM C1280 or GA 253. Fiberboard sheathing shall conform to ASTM C208. h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking. i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.

Table with 3 columns: No., Description, Date. Multiple empty rows for project details.

Owner

Minimum Nailing Schedule

Table with 2 columns: Project number, Project Number; Date, Issue Date; Drawn by, Author; Checked by, Checker.

S002

Scale





