



TRI-COUNTY
REGIONAL ENERGY NETWORK

SAN LUIS OBISPO • SANTA BARBARA • VENTURA

2025 Residential CALGreen

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In Balance Green Consulting

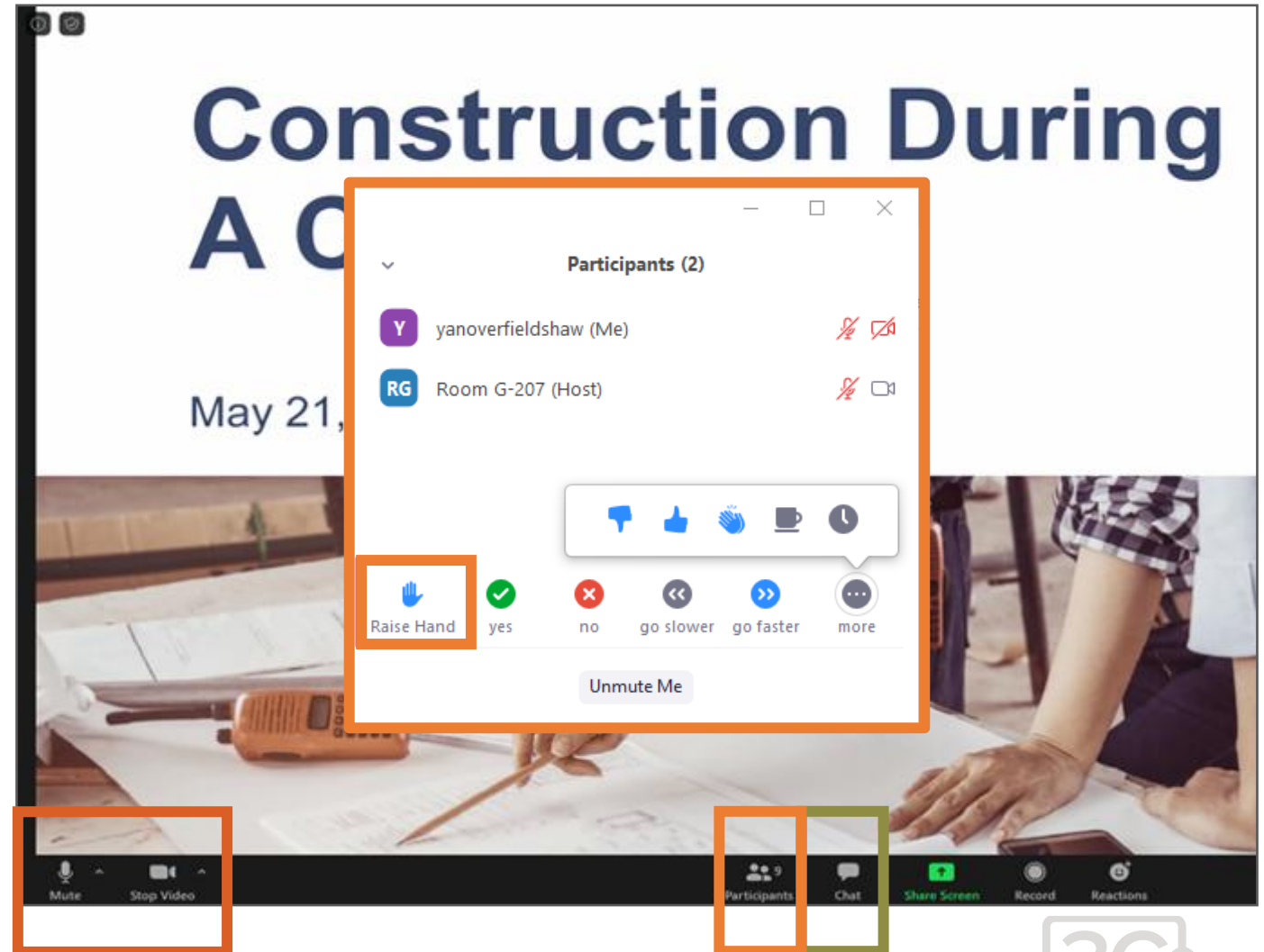
July 8th, 2026

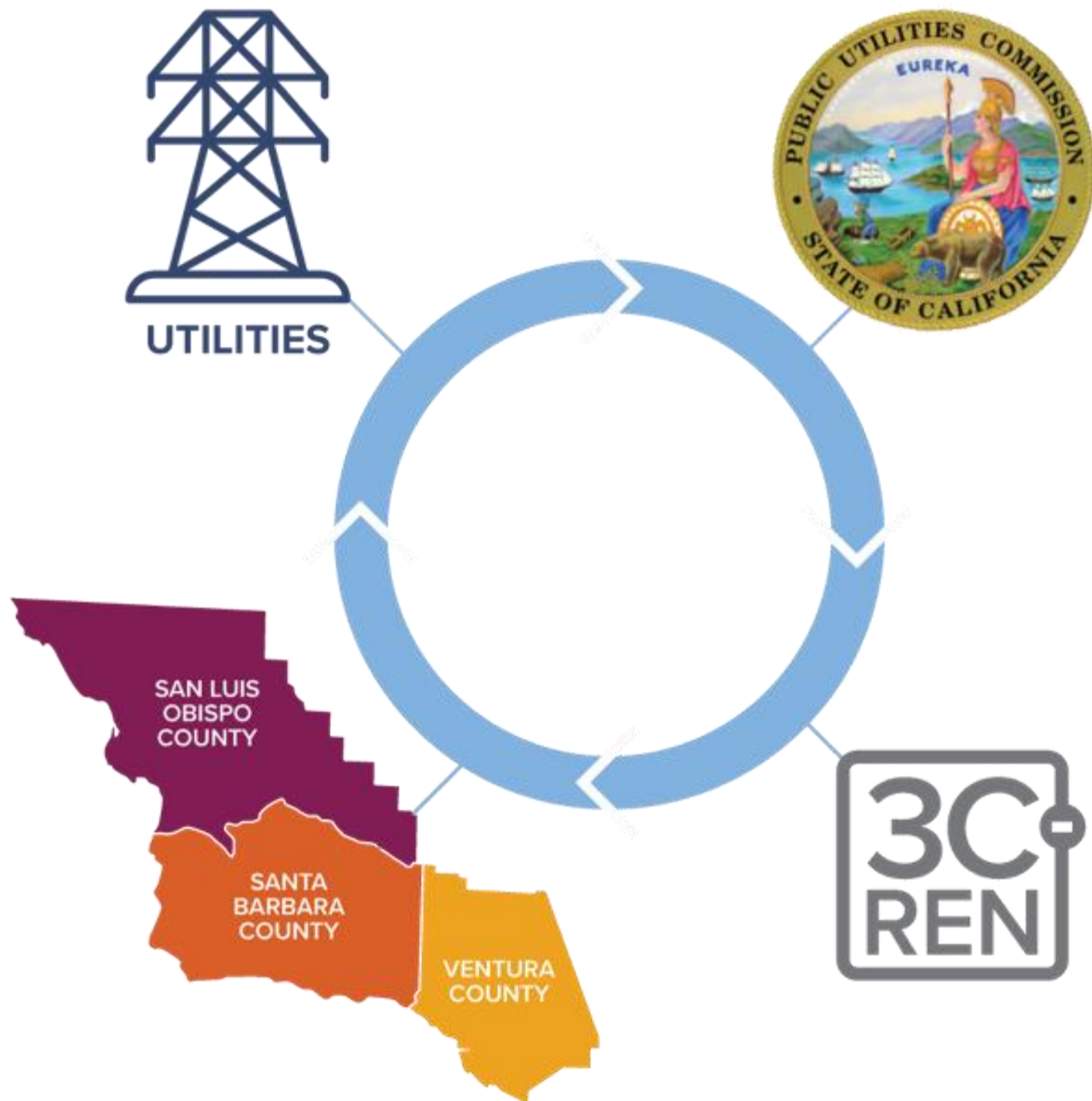


Before We Begin

Here are some quick reminders:

- Call in? Please **share** full name to confirm attendance
- To receive AIA LUs, you **must attend** at least 80% of the training. Attendance will be verified
- Use the "**Chat**" to share questions or comments
- Slides/recording are **shared** after most events and can be found on 3C-REN's on-demand page
- 3C-REN does **not** allow **AI notetakers**, unless used to accommodate a disability





Tri-County Regional Energy Network

3C-REN is a collaboration between the tri-counties

Our programs reduce energy use for a more sustainable, equitable and economically vibrant Central Coast

Our free services are funded via the CPUC, bringing ratepayer dollars back to the region

Our Services

Incentives



HOME ENERGY SAVINGS

3c-ren.org/for-residents

3c-ren.org/multifamily



COMMERCIAL ENERGY SAVINGS

3c-ren.org/commercial

Contractors can enroll at
3c-ren.org/contractors

Training



BUILDING PERFORMANCE TRAINING

3c-ren.org/events

3c-ren.org/building



ENERGY CODE CONNECT

3c-ren.org/code

View past trainings at
3c-ren.org/on-demand

Technical Assistance



AGRICULTURE ENERGY SOLUTIONS

3c-ren.org/agriculture



ENERGY ASSURANCE SERVICES

3c-ren.org/assurance

Today's Learning Objectives

- Understand CAL Green compliance process for residential and nonresidential projects, highlighting changes in the 2025 code.
- Become familiar with CAL Green mandatory measures and green building benefits of each
- Understand Tier 1 and Tier 2 options.
- Learn tools and best practices for submitting and reviewing compliance documentation.

Learning Units:

- 1.5 AIA HSW LU approved for this course
- 0.15 ICC CEU's approved for this course

Video Recording and Slides
will be provided





Overview of CALGreen

Intent of CALGreen

- Provide a **baseline green building code** that raises the bar for the state, yet remains feasible to the building community
- Provide a higher voluntary tier that establishes a 'reach code' standard

Mandatory

- All projects

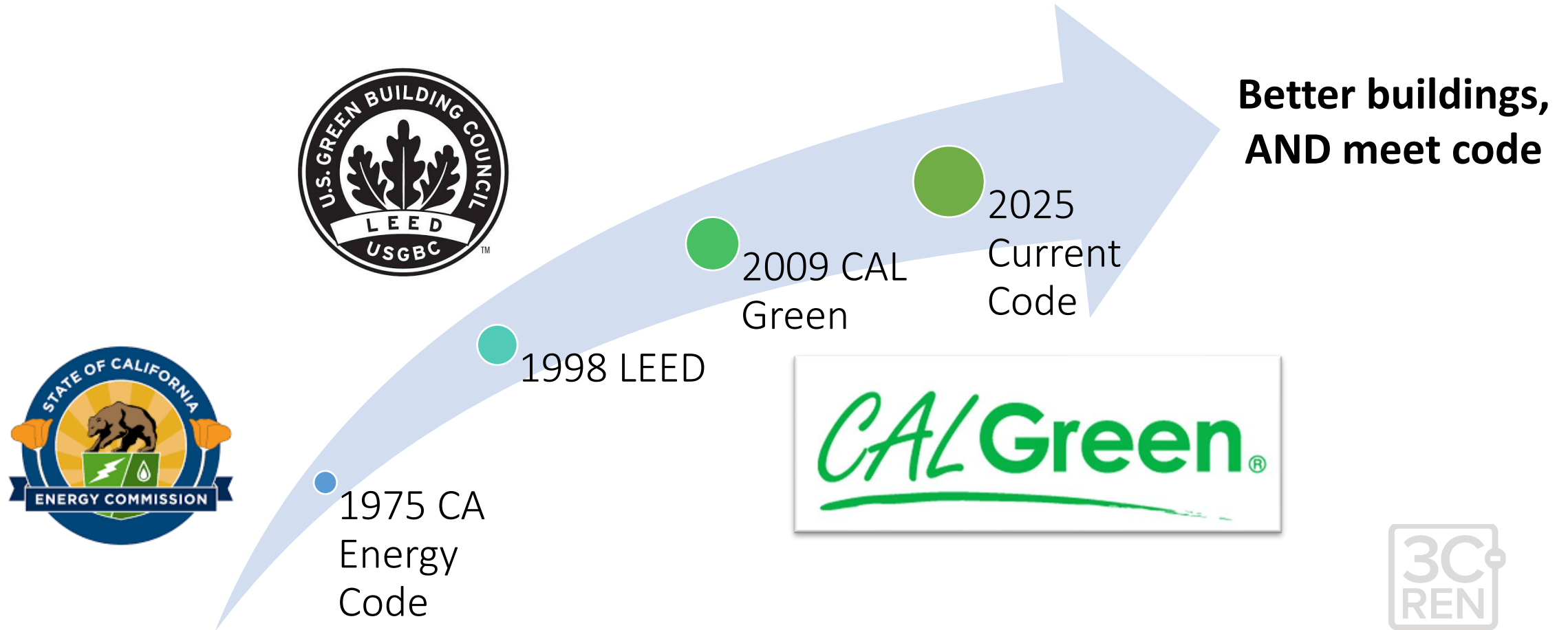
Voluntary/Reach

- Tier 1
- Tier 2

“... to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a **reduced negative impact or positive environmental impact** and encouraging sustainable construction practices...”



Code Evolution of Green Building



California Building Standards – Title 24

- Part 1 - CA Administrative Code
- Part 2 - CA Building Code
- Part 3 - CA Electrical Code
- Part 4 - CA Mechanical Code
- Part 5 - CA Plumbing Code
- Part 6 - CA Energy Code
- Part 7 - Wildland Urban Interface
- Part 8 - CA Historical Building Code
- Part 9 - CA Fire Code
- Part 10 - CA Existing Building Code
- Part 11 - **CA Green Building Standards Code**
- Part 12 - CA Referenced Standards Code

Not to be
confused with



Reading the Code- Adopting Agencies

- Housing and Community Development (**HCD**) – Residential, including hotels/motels
- Building Standards Commission (**BSC**) – Nonresidential
- Division of the State Architect (**DSA**) – State and Schools – some sections
- OSHPD – Hospitals, nursing facilities – some sections

CALIFORNIA GREEN BUILDING STANDARDS CODE – MATRIX ADOPTION TABLE
CHAPTER 5 – NONRESIDENTIAL MANDATORY MEASURES
DIVISION 5.1 – PLANNING AND DESIGN

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.
See Chapter 1 for state agency authority and building applications.)

Adopting agency	BSC	BSC- CG	SFM	HCD			DSA		OSHPD						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1/AC	AC	SS	1	1R	2	3	4	5								
Adopt entire CA chapter		X																				
Adopt entire chapter as amended (amended sections listed below)																						
Adopt only those sections that are listed below								X														
Chapter/Section																						
5.101								X														
5.102 Definitions								X														
5.106.4.2 and subsections								X														



Chapters of CALGreen

- Chapter 1: Administration
- Chapter 2: Definitions
- Chapter 3: Green Building (scope)
- Chapter 4: Residential Mandatory Measures
- Chapter 5: Nonresidential Mandatory Measures
- Chapter 6: Reference Organizations & Standards
- Chapter 7: Installer & Special Inspector Qualifications
- Chapter 8: Compliance Forms and Worksheets
- Appendix A4 – HCD voluntary measures
- Appendix A5 – BSC voluntary measures
- Appendix A6.1 – OSHPD voluntary measures



Chapter 3 – CALGreen Scope

Residential

New Construction

Alt/Add that adds area or volume*

Non-Res

New Construction

Adds over 1,000 SF

Alteration >\$200,000*

Parking Lot Alt./Add.

*CALGreen applies ONLY to new work in an alteration.
Exceptions when triggered, e.g., upgrade all old plumbing fixtures



Chapter 3 – CALGreen Scope

- Single Family, Multifamily and Hotels/Motels
- Mixed occupancy shall comply with appropriate requirements for each separate occupancy type.
 - Watch out for hotels, mid-rise/high-rise housing
 - May require Res and non-res worksheets
- Phased projects
 - For shell buildings & initial Tenant Improvements (TI), code measures relevant to the new construction building components & systems shall apply.
 - Subsequent TI's are considered alterations



Century Towers, San Jose. Credit: Swenson Builders



2025 CALGREEN RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST
SECTION A4.602
Effective January 1, 2026

FEATURE OR MEASURE	LEVELS APPLICANT TO SELECT ELECTIVE MEASURES			VERIFICATIONS ENFORCING AGENCY TO SPECIFY VERIFICATION METHOD		
	Mandatory	Prerequisites and Electives ¹		Enforcing Agency ☐ All	Installer or Designer ☐ All	Third- Party ☐ All
		Tier 1	Tier 2			
PLANNING AND DESIGN						
Site Selection						
A4.103.1 A site which complies with at least one of the following characteristics is selected: 1. An infill site is selected. 2. A grey field site is selected. 3. An EPA-recognized Brownfield site is selected		☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐
A4.103.2 Facilitate community connectivity by one of the following methods: 1. Locate project within a 1/4-mile true walking distance of at least 4 basic services; 2. Locate project within 1/2-mile true walking distance of at least 7 basic services; 3. Other methods increasing access to additional resources.		☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐
Site Preservation						
A4.104.1 An individual with oversight responsibility for the project has participated in an educational program promoting environmentally friendly design or development and has provided training or instruction to appropriate entities.		☐	☐	☐	☐	☐
Deconstruction and Reuse of Existing Materials						
A4.105.2 Existing buildings are disassembled for reuse or recycling of building materials. The proposed structure utilizes at least one of the following materials which can be easily reused: 1. Light fixtures 2. Plumbing fixtures 3. Doors and trim 4. Masonry 5. Electrical devices 6. Appliances 7. Foundations or portions of foundations		☐	☐	☐	☐	☐
Site Development						
4.106.2 A plan is developed and implemented to manage storm water drainage during construction.	☒			☐	☐	☐
4.106.3 Construction plans shall indicate how site grading, or a drainage system will manage all surface water flows to keep water from entering buildings.	☒			☐	☐	☐

Showing Compliance

- 1.02.3 Requires a completed Residential Occupancies Application Checklist or alternate method acceptable to the enforcing agency to be used for documentation of conformance.
- e.g., could be an Excel doc or other format
- Include space for sheet reference



AIA CAL Green Sheets

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

SECTION	MEASURE	SECTION	MEASURE	SECTION	MEASURE
CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL	301.1 SCOPE: Buildings shall be designed to include the green building measures specified as mandatory in the application checklist contained in this code. Voluntary green building measures are also included in the application checklist and may be included in the design and construction of buildings covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.2.	4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided for new multifamily dwellings, hotels and motels that 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.	4.106.4.3 Electric vehicle charging for additions and alterations of parking buildings serving existing multifamily buildings, hotels and motels. 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 at Level 2 EV charging, unless determined as infeasible by the project builder or designer and subject to concurrence of the local enforcing agency.	DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY	4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE 4.406.1 ROOFING PROTECTORS: Access to roof access panels, roof access panels, and roof access panels in collection plates at exterior walls shall be protected against the passage of rodents by closing each opening with a metal cover, concrete membrane or a similar material resistant to the following agency.
301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS (HCD) The provisions of individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LRI) or high-rise only (HRI). When the section applies to both low-rise and high-rise buildings, no banner will be used.	301.2.1 IDENTIFICATION: The service panel or subpanel circuit diagram shall identify the movement (protective device space) reserved for future EV charging "EV-CAPABLE". The new/renewal installation shall be permanently and visibly marked as "EV-CAPABLE".	4.106.4.4 Bicycle parking. Bicycle parking shall comply with Section 4.106.4.4.1 through 4.106.4.4.3.	4.106.4.4.1 Short-term bicycle parking for multifamily buildings, hotels and motels. Provide on-site bicycle parking at a ratio of one parking space for every 150,000 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 persons by accessible parking facilities shall be conveniently accessible from the street and may include, but not be limited to: 1. Permanently anchored bicycle parking devices, racks, or bollards in an unobstructed open area. 2. Concrete or concrete equivalent with permanently anchored bicycle parking devices or racks. 3. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.	4.406.2 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING 4.406.2.1 CONSTRUCTION WASTE MANAGEMENT: Recycle waste volume for reuse is a minimum of 65% of 4,000, 4,400, 4,800, or 4,900, or meet a more stringent local construction and demolition waste management ordinance.	4.408 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.
SECTION 302 MIXED OCCUPANCY BUILDINGS	302.1 MIXED OCCUPANCY BUILDINGS: In mixed occupancy buildings, each portion of a building that complies with the specific green building measures applicable to each specific occupancy.	4.106.4.5 Long-term bicycle parking for multifamily buildings. Provide on-site bicycle parking at a ratio of one parking space for every five dwelling units. 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 bollards in an unobstructed open area. 2. Concrete or concrete equivalent with permanently anchored bicycle parking devices or racks. 3. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.	4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.3 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.4 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.
DIVISION 4.1 PLANNING AND DESIGN	4.106.4.6 IDENTIFICATION: The service panel or subpanel circuit diagram shall identify the movement (protective device space) reserved for future EV charging "EV-CAPABLE". The new/renewal installation shall be permanently and visibly marked as "EV-CAPABLE".	4.106.4.7 Long-term bicycle parking for multifamily buildings. Provide on-site bicycle parking at a ratio of one parking space for every five dwelling units. 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 bollards in an unobstructed open area. 2. Concrete or concrete equivalent with permanently anchored bicycle parking devices or racks. 3. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.	4.408.5 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.6 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.7 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.
SECTION 4.2 RESIDENTIAL MANDATORY MEASURES	4.201.1 IDENTIFICATION: The service panel or subpanel circuit diagram shall identify the movement (protective device space) reserved for future EV charging "EV-CAPABLE". The new/renewal installation shall be permanently and visibly marked as "EV-CAPABLE".	4.106.4.8 Long-term bicycle parking for multifamily buildings. Provide on-site bicycle parking at a ratio of one parking space for every five dwelling units. 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 bollards in an unobstructed open area. 2. Concrete or concrete equivalent with permanently anchored bicycle parking devices or racks. 3. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.	4.408.8 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.9 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.10 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.
SECTION 4.3 RESIDENTIAL MANDATORY MEASURES	4.301.1 IDENTIFICATION: The service panel or subpanel circuit diagram shall identify the movement (protective device space) reserved for future EV charging "EV-CAPABLE". The new/renewal installation shall be permanently and visibly marked as "EV-CAPABLE".	4.106.4.9 Long-term bicycle parking for multifamily buildings. Provide on-site bicycle parking at a ratio of one parking space for every five dwelling units. 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 bollards in an unobstructed open area. 2. Concrete or concrete equivalent with permanently anchored bicycle parking devices or racks. 3. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.	4.408.11 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.12 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.13 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.
SECTION 4.4 RESIDENTIAL MANDATORY MEASURES	4.401.1 IDENTIFICATION: The service panel or subpanel circuit diagram shall identify the movement (protective device space) reserved for future EV charging "EV-CAPABLE". The new/renewal installation shall be permanently and visibly marked as "EV-CAPABLE".	4.106.4.10 Long-term bicycle parking for multifamily buildings. Provide on-site bicycle parking at a ratio of one parking space for every five dwelling units. 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 bollards in an unobstructed open area. 2. Concrete or concrete equivalent with permanently anchored bicycle parking devices or racks. 3. Lockable bicycle storage rooms with permanently anchored bicycle parking devices or racks.	4.408.14 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.15 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.	4.408.16 CONSTRUCTION WASTE MANAGEMENT PLAN: 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.

NOTE

• Yes or Not applicable
• Detail/Sheet Reference



Chapter 4

Residential Mandatory Measures

Chapter Divisions

- Division 4.1 - Planning and Design
- Division 4.2 - Energy Efficiency
- Division 4.3 - Water Efficiency & Conservation
- Division 4.4 - Material Conservation and Resource Efficiency
- Division 4.5 - Environmental Quality

Notes on Documentation:
Provided in orange boxes



4.1 Planning and Design



Storm Water Drainage and Retention During Construction

<1 acre

Measures must:

- Prevent flooding to adjacent property
- Prevent erosion & retain soil on site
- Prevent run-off from construction activity



Contain runoff to washout



Burlap mat & straw wattles at catch basin



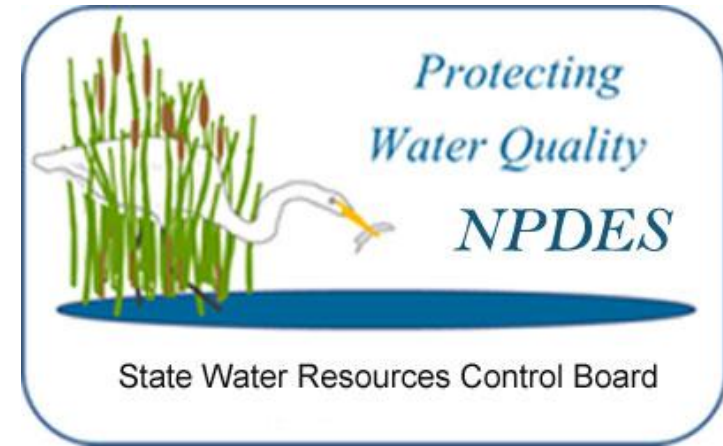
Prevent runoff from construction activity



4.106.2

Storm Water Drainage and Retention During Construction – 1 Acre or More

- Comply with stormwater discharge regulations and postconstruction requirements from **National Pollution Discharge Elimination System (NPDES)**



Documentation:

Site or Civil Drawings demonstrate compliance with either local ordinance, best management practices listed here, or NPDES requirements

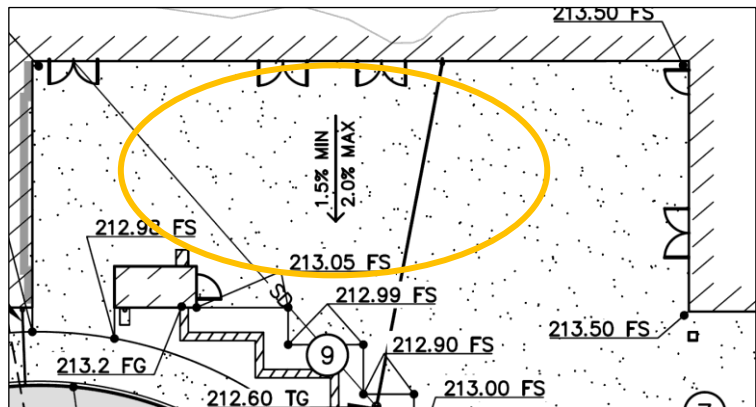




SLO Co. Probation Building

Grading and Paving

- Managed to prevent water from entering building
- Swales and other strategies that also “...aid in groundwater recharge.”
- Exception – additions/alterations not altering drainage path



Flatwork should bring water away from building and possibly to landscaping

Documentation:
Site Plan & Landscape Plans
show required slope on flatwork



4.106.3



Electric Vehicle Charging Topics

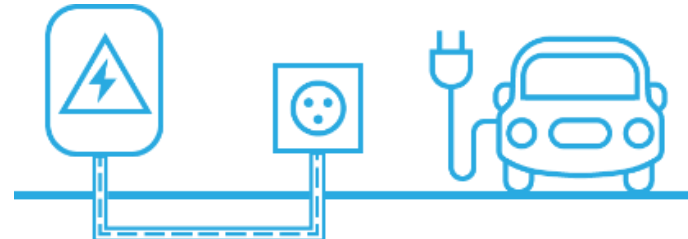
- EV charging Definitions
- Single Family
- Hotel/Motel
- Multi Family
- Parking Additions & Alterations

EV Charging – 3 Types



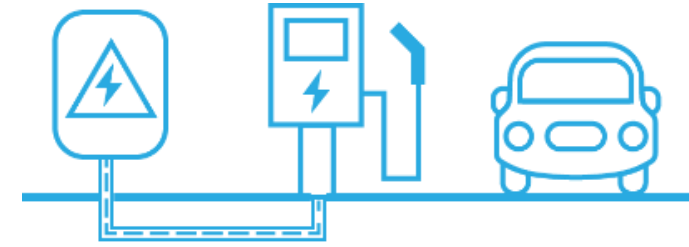
EV CAPABLE

Provide electrical panel space, conduit (no wire), and a termination box for a future 208/240-volt, 40-amp circuit



EV READY

Provide a space that is fully wired for 208/240 volt and has a receptacle so it's "ready" for someone with their own plug-in cord



EV CHARGING STATION

Provide Level 2 EV Charging Stations (EVCS). These should be stand-alone chargers in common-use parking areas

Types of Chargers



Level 1

120-volt, 16-amp
commercial cable



Level 2

208/240-volt, 40-amp
receptacle, or charge
station

**This is what is
required of EVCS**



Level 3 & DCFC

(Direct current Fast Charger)

480-volt, 80-amp
charging station

**Allowed but not
required by code**



Two types of “Level 2”



Level 2

208/240-volt, 40-amp charge station, Used for EVCS



Low Power Level 2

208/240-volt, **20-amp** receptacle, Used for EV Ready



Market options for Receptacle Use



Electric Vehicle Charging- New Single Family

- One- and two-family dwellings, townhouses with attached private garages
- Requires EV Capable (no charger, just conduit and panel space for future)
- Exception: Not required for ADUs/JADUs



Clear Labeling for Future & Installed EV

For EV Capable (future) Spaces

- Label on Breaker for EV Space
- Stub Up Labeled for EV Space
- **No** Label/Paint Marking on Stall



For Installed EV Spaces

- Label on Breaker for EV Space
- Clear Paint Marking for EV Stall



Escalante Meadows, Guadalupe

EV Charging - Hotel/Motels

2022 Code (same as MF):

- 40% low power Level 2 EV charging receptacles
- 10% Level 2 EV chargers

2025 Code:

- 40% low power Level 2 EV charging receptacles
- **25%** Level 2 EV chargers



EV Charging - Multifamily

2025 Code:

- One low power Level 2 EV charging receptacles for each unit! Or, if fewer spaces than units, 100% of spaces!
- Plus 25% Level 2 EV chargers in 'common area' parking



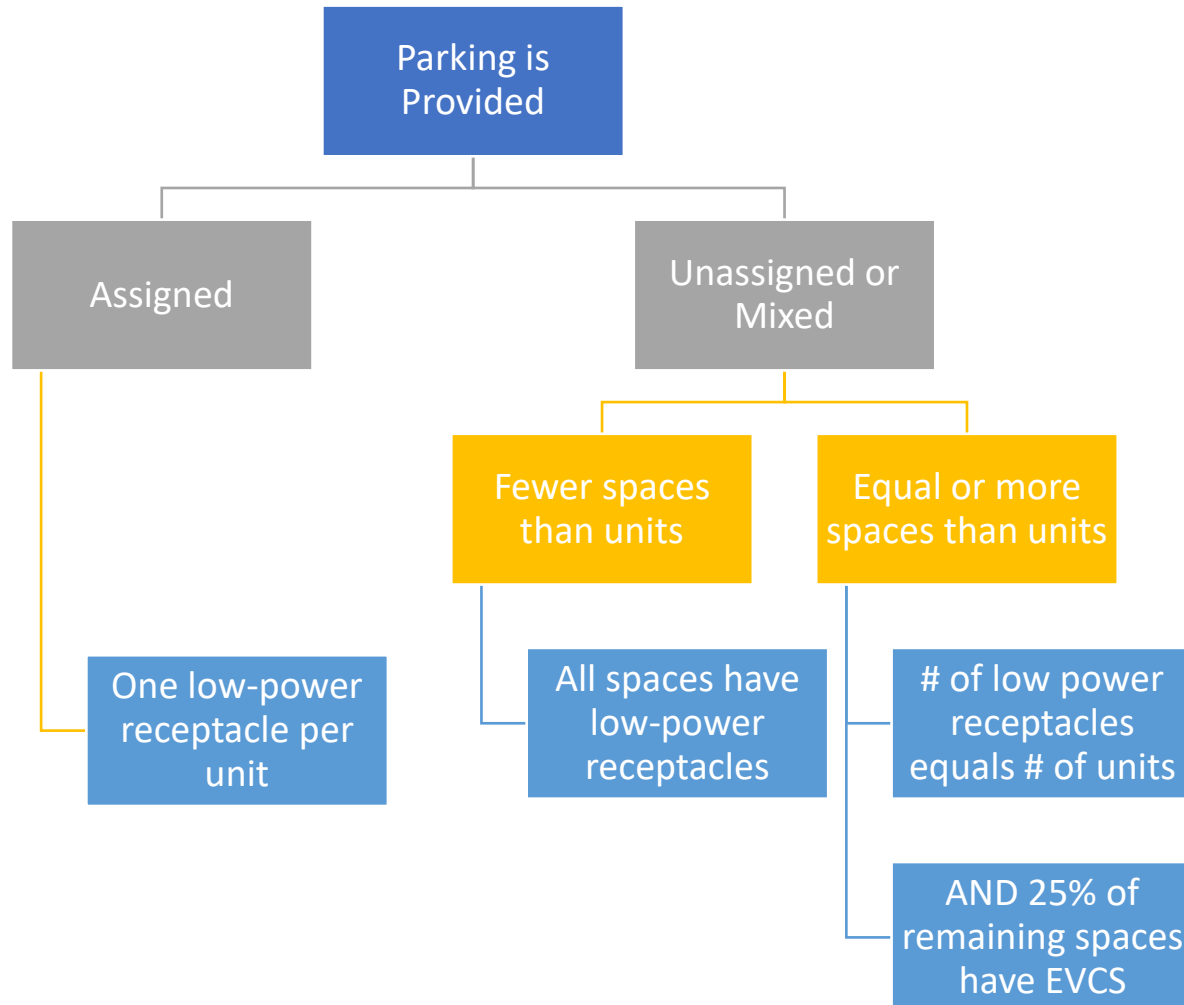
Note for Multi-family:

EV charging receptacles ... shall be provided with a dedicated branch circuit connected to the ***dwelling unit's*** electrical panel (unless infeasible)



4.106.4.2

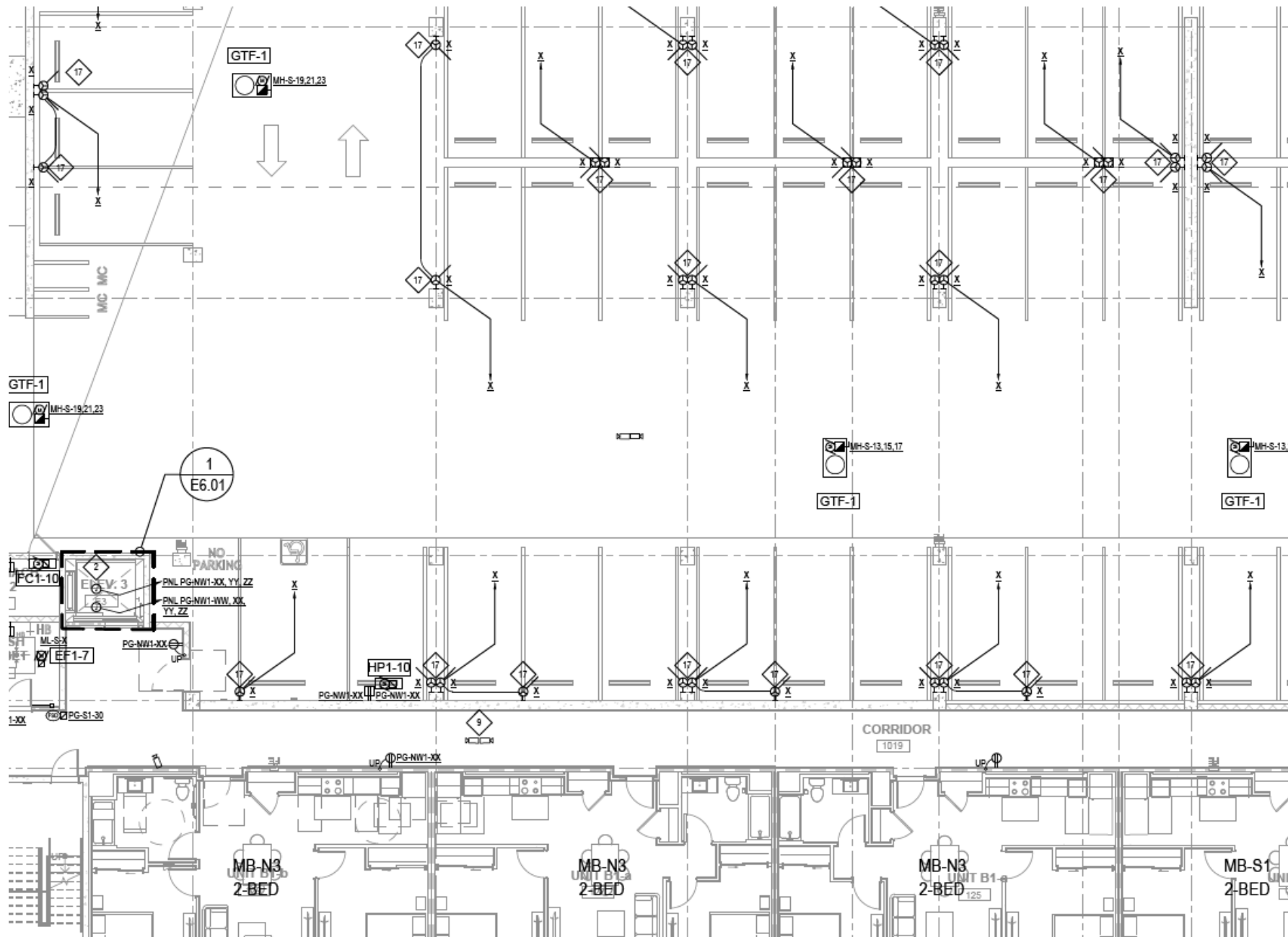
Examples for Multifamily



Examples for Unassigned or Mixed:

- 200 units with 140 parking spaces – *all 140 are Low Power Level 2*
- 200 units with 240 parking spaces – *200 Low Power Level 2 and 10 EVCS (25% of 40)*





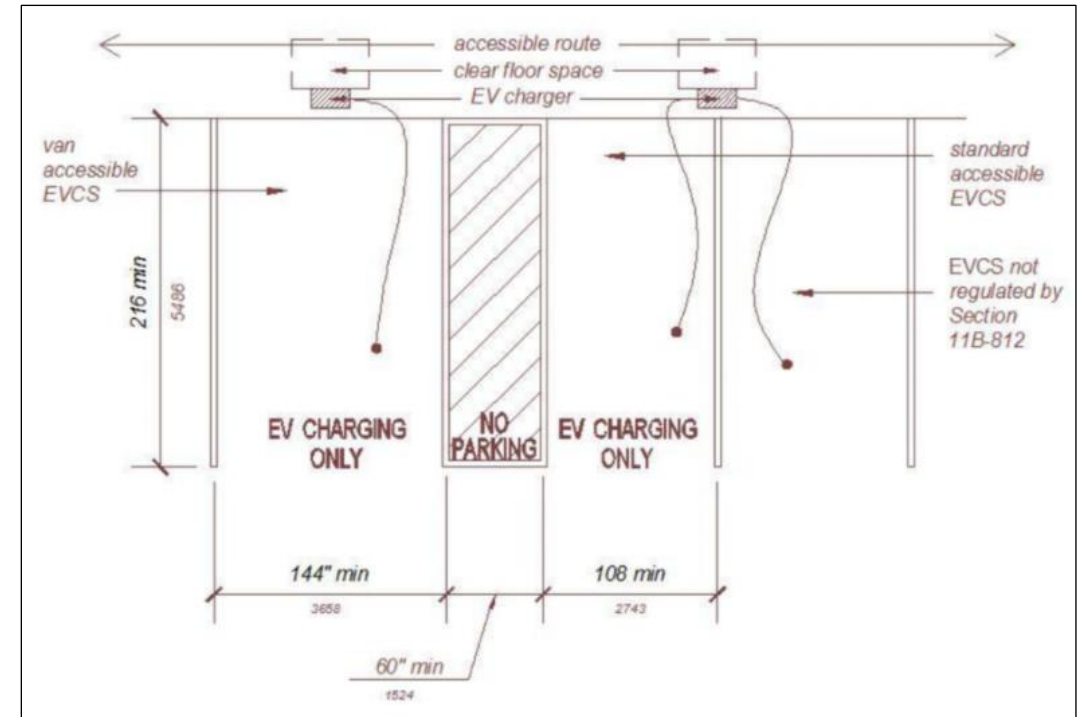
**Note 17: LOW POWER LEVEL
2 ELECTRIC VEHICLE (EV)
CHARGING RECEPTACLE - A**
208/240-volt 20-ampere
minimum branch circuit and
a receptacle



EV Charging- Accessibility

All of the EVCS that are built for Non-residential uses, or hotels, motels and public housing, must comply with California Building Code, Chapter 11B-228.3.

CALGreen now includes similar provisions for Multifamily, where Chapter 11 is silent.



Parking Lot Addition/Alterations

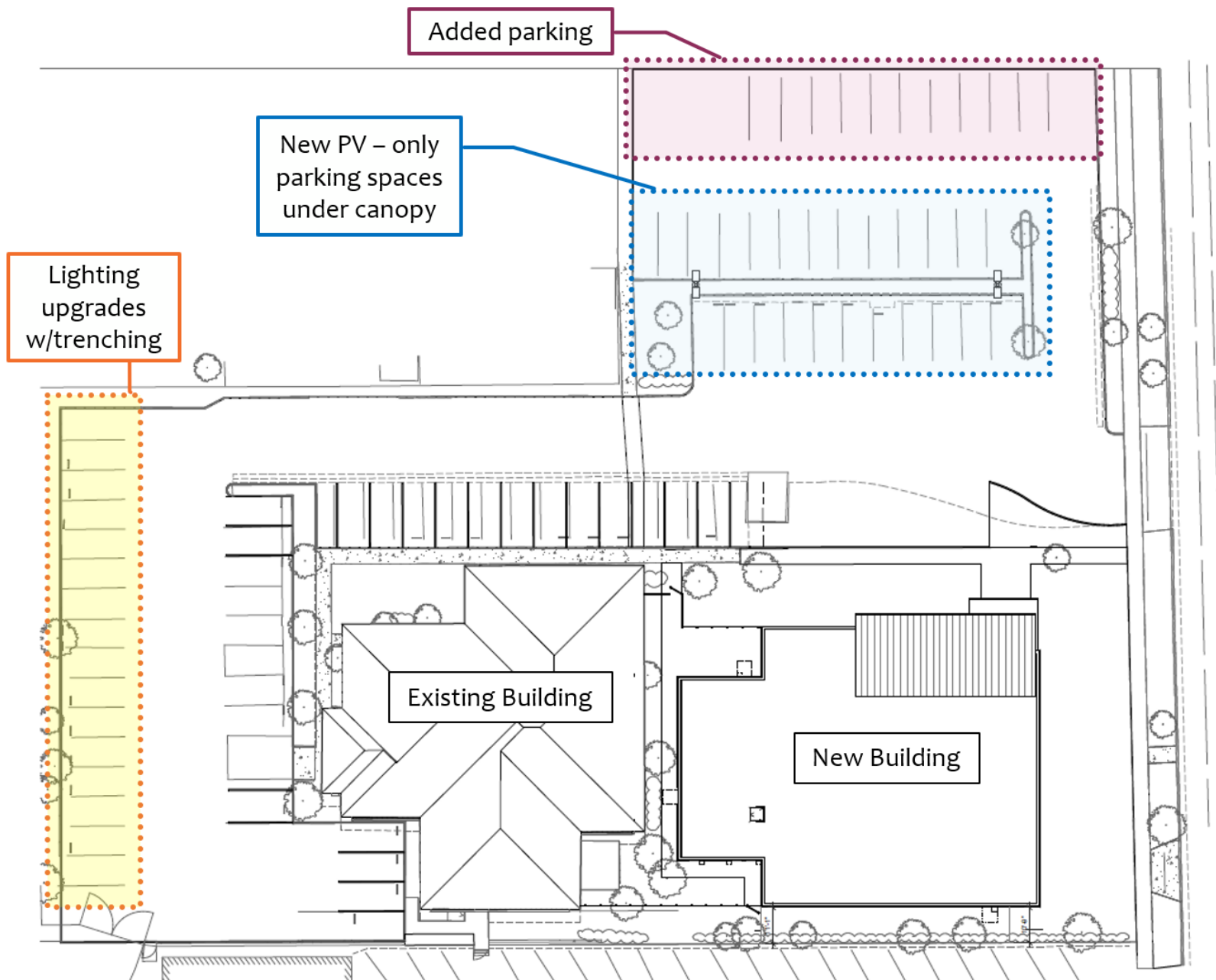


Multifamily and Hotel/Motel

- Parking facilities are added OR
- Parking facilities are altered, and the work requires a building permit, then:

ALL new or altered spaces must be EV Ready or EVCS





Parking Alterations and Additions

Note:

A building addition does not trigger EV charging on its own, only additional parking does.

Alterations – Adding PVs

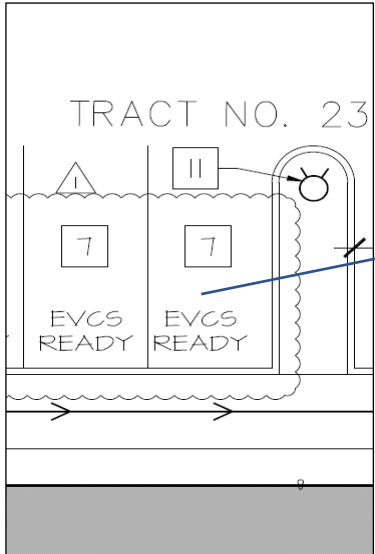


Credit: Powerflex.com

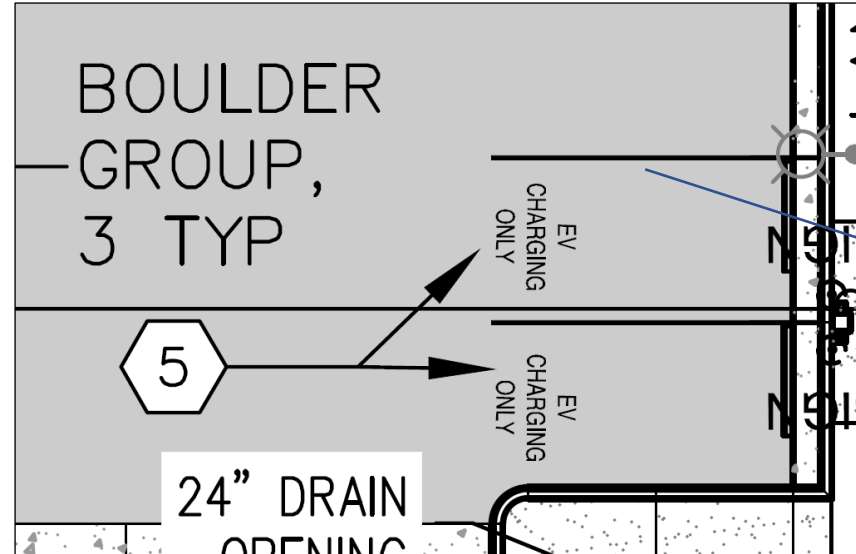
Intervening Code Cycle
Clarification:

Only spaces *under* a new
solar canopy trigger EV
Charging upgrades; *not* the
entire parking lot

Documentation for EV



Shows Builder (and plans examiner) location of EV ready spaces



Shows Builder *striping* for stall of EVCS space

Documentation:

- Calculations on Cover Sheet for number and type of spaces
 - Spaces labeled on Site Plans, with Details
 - Sufficient capacity in panels on Electrical Sheets





Bicycle Parking – Residential Added in 2025 Code

Short-term bike parking for multifamily buildings, hotels, and motels – permanent racks within 200ft of building entrance

- Easily visible, 2 bike minimum
- **1 space for every 10,000 square feet of building**

Long-Term bike parking – easily accessible from street

- For multifamily buildings – 1 parking space for every 2 dwelling units
- For hotel and motel buildings – 1 space for every 25,000 square feet; minimum of 2 spaces



Escalante Meadows, Guadalupe



Bicycle Parking: Long-Term Parking

Acceptable Long-Term
Parking Facilities:

- Covered, lockable enclosure w/ permanently anchored racks
- Lockable Bicycle Rooms w/ permanently anchored racks
- Lockable, permanently anchored bike lockers

Yes



Likely Not



4.2 Energy Efficiency



Chapter 4.2 – Energy Efficiency

- Must comply with Title 24, Part 6 (Energy Code).

That's it.



4.3 Water Efficiency and Conservation



Water Conserving Plumbing Fixtures & Fitting

Fixture Type		
Residential Bathroom	> 0.8 gpm	≤ 1.2 gpm
Public Bathrooms	≤ 0.5 gpm	
Metering Faucets	≤0.2 gallons/cycle	
Kitchen Faucets	≤ 1.8 gpm	
Wash Fountains	≤ 1.8 gpm	
Metering Faucets for Wash Fountains	≤0.2 gallons/cycle	
Water Sense Toilet	≤ 1.28gpf	
Wall Mounted Urinal	≤ 0.125gpf	
Other Urinals	≤ 0.5gpf	
Watersense Showerheads	≤ 1.8 gpm	
Multiple Showerheads	Total flow ≤ 1.8 gpm	
Pre-rinse Spray Valve	≤ 0.5gpf	



Submeters

- Install submeters for each individual rental dwelling units
- “Multifamily” is 2 units or more- including ADUs, etc.
- A project’s status as “Multifamily” is determined by AHJ



Model Water Efficient Landscape Ordinance (MWELO)

Local water efficient landscape ordinance or DWR Model Water Efficient Landscape Ordinance

- ≥500 SF of landscape area for residential projects



Cox Cottages, Santa Maria

AB 1881 MODEL - WELO (WATER EFFICIENT LANDSCAPE ORDINANCE)							
WATER EFFICIENT LANDSCAPE WORKSHEET							
ETO FOR, S.L.O., CA	43.8						
REGULAR LANDSCAPE AREAS							
HYDROZONE# PLANTING DESCRIPTION	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Hydrozone Landscape Area (SF)	ETAF x AREA	ESTIMATED Total H2O Use (Gallons / Year)
DROUGHT TOLERANT PLTGS. - Agave Clusters in Decorative Gravel (WUCOLS - VERY LOW)	0.2	DRIP	0.81	0.25	5,640.00	1,392.59	37,817.24
DROUGHT TOL. PLTGS. - Agave Mass'g / Dec. Rock (WUCOLS - LOW)	0.3	DRIP	0.81	0.37	4,655.00	1,724.07	46,818.96
DROUGHT TOLERANT PLNT'G. - Sun Exposure (WUCOLS - LOW / MED)	0.5	DRIP	0.81	0.62	8,075.00	4,984.57	135,360.93
ENTRY / CTYARD PLTG AREAS - Succulent Mix (WUCOLS - MED)	0.6	DRIP	0.81	0.74	1,015.00	751.85	19,849.87
TOTALS				1.98	19,385.00	8,853.09	239,847.00
SPECIAL LANDSCAPE AREAS							
Retent'n. Basin / Dri-Creek (WUCOLS - SPEC'L USE)	1.0	COBBLE	0.75	1.33	1150.00	1,533.33	1,533.33
TOTALS				3.31	20,535.00	10,386.42	241,380.33
ETAF CALCULATIONS						MAWA =	325,444.29
TOTAL ETAF	10,386.42						
TOTAL AREA	20,535.00				** THIS PLAN COMPLIES WITH AB 1881 **		
AVERAGE ETAF	0.51						
					WATER WISE PLANTS (SF).		18,370.00
					NON-WATER WISE PLANTS (SF)		2,285.19
					% OF WATER WISE PLANTS		89.46
MAWA = (Eto)/(0.62)[(0.55 x LA) + (0.45 x SLA)]							
ETO	43.80						
LA	20,535	SQ FT					
SLA	1,533						
MAWA	325,444	GALLONS					
DAILY WATER	892	GALLONS					



4.4 Material Conservation and Resource Efficiency



Rodent Proofing

- CEC: air seal all penetrations
- CALGreen asks to rodent seal all penetrations with materials such as cement mortar, concrete or similar materials (like metal) NOT foam



Construction Waste Reduction at least 65%

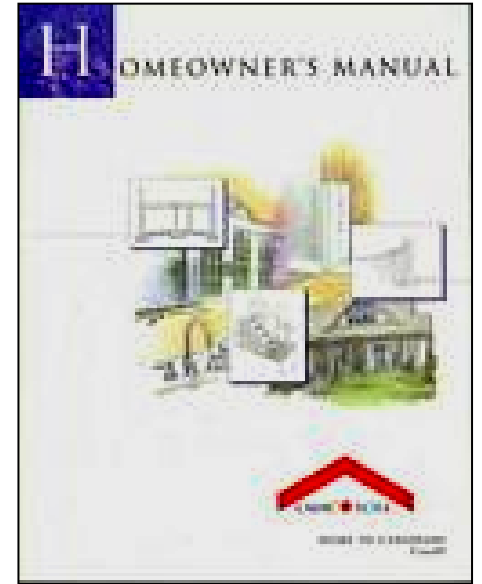


- Recycle and/or salvage a min of 65% of construction waste
 - Excludes hazardous waste
- Requires **Waste Management Plan** & statement of results (must meet local ordinance if higher than 65%)
- *Optional pathway is proving “reduced generation” to a max of 3.4 lbs/sf (res)*



Operation and Maintenance Manual

- Provide Building Owner or Representative with manual that contains:
 - Instructions for operation
 - Warranties for appliances
 - Testing of systems
 - New in 2022: Defensible Space!
- Commissioning process can help produce these documents.



Documentation:

Add requirements to Notes on plan set



4.410.1

Recycling by Occupants

- ≥ 5 units: Must have recycling and organic waste collection onsite or meet local recycling ordinance.



Trash Recycling Enclosure - Escalante Meadows, Guadalupe



Maxine Lewis Apartments, SLO



Harry's House, Santa Ynez



4.410.2

4.5 Environmental Quality



Fireplaces

- Must be direct-vent sealed-combustion type
- Meet California Energy Code & local ordinance



Direct Vent



Sealed glass front



4.503.1

Covering of Duct Openings and Protection of Mechanical Equipment During Construction

Cypress & 7th, Lompoc

- Covered with tape, plastic, sheet metal, etc. during construction
- Arrives at jobsite covered



Yes: air tight, stays for the whole process, and won't need cleaning



None of these are good enough and will require cleaning or replacement



4.504.1

Pollutant Control: Low Emitting Materials

Requires demonstrating compliance with maximum limits. See CALGreen Tables.

Demonstrated on product or on cutsheet.

- **Adhesives, Sealants, & Caulks (4.504.1&2)**
- **Carpet and Carpet Adhesives (4.504.1)**
- **Resilient Flooring (4.503.4)**
- **Paints & Coatings (4.503.3)**
- **Composite Wood Products (4.504.5)**

TABLE 4.504.1 ADHESIVE VOC LIMIT^{1, 2}

Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50

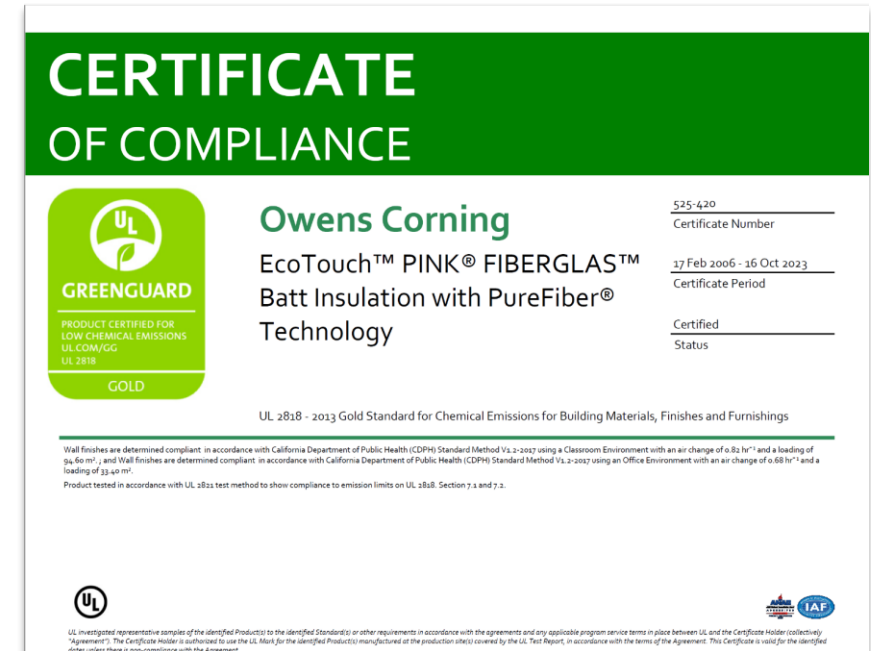


4.504.2.1

Pollutant Control: Low Emitting Materials

Added in 2022:

- Insulation
- Ceiling Tiles
- Wall Panels



Can also demonstrate compliance with Certificate Programs

Documentation:
Notes on plan set.
Cutsheets available, if requested



4.504.2.1

Concrete Slab Foundations & Capillary Break

- All Concrete slab foundations or slab on ground floors must have vapor retarder
- Compliant with CBC chapter 19 and CRC chapter 5
- Vapor retarder and capillary break (4" layer of ½" gravel) is installed at slab on grade foundations.



4.505.2

Concrete Slab Foundations & Capillary Break



- When a concrete slab is required to have a vapor retarder per CBC chapter 19 or CRC chapter 5,
- Then a vapor retarder and capillary break (4" layer of ½" gravel) shall be installed at slab on grade foundations
- Or as specified by an engineer



Moisture Content of Building Materials

- Wall and floor framing shall not be enclosed if materials exceed 19% Moisture Content
- Requires 3 random floor/wall moisture tests
- Don't install materials with visible water damage or mold



Bad



Better



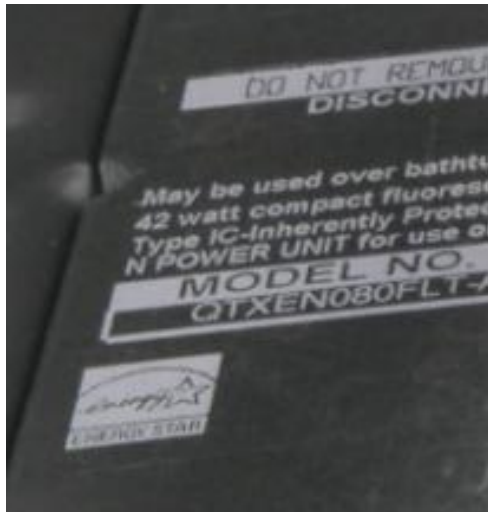
Best



4.505.3

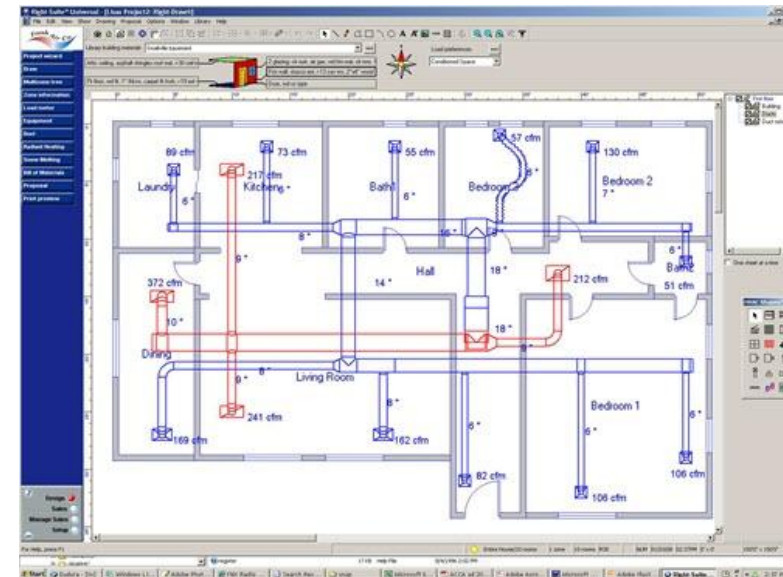
Bathroom Exhaust Fan (tub, shower rooms)

- Exhaust ducted to exterior
- Energy Star compliant
- Unless used as whole house ventilation, fans must be controlled by a humidistat – on wall or in unit, capable of 50-80% RH



Heating and AC System Design

- Design/Install HVAC System:
 - ASHRAE, or
 - ACCA Manual J, D, & S Recommendations



Documentation:
Drawings! Calculations!



4.507.2



Other Stuff and Appendix A4 - Voluntary Tiers



Chapters 6, 7 & 8

- Chapter 6: Current links to all References
- Chapter 7: Special Inspections, with 2025 Code clean up for consistency
- Chapter 8: Handy-dandy forms for water budget, Construction Waste Management (CWM), Life Cycle Analysis (LCA), Commissioning (Cx) and more



Voluntary Tiers - Residential

<u>Category</u>	<u>Tier 1 = Mandatory +</u>	<u>Tier 2 = Tier 1 +</u>
Planning & Design	<u>4 required, 2 elective</u>	<u>4 required, 4 elective</u>
Energy Efficiency	<u>4 required</u>	<u>4 required</u>
Water Efficiency and Conservation	<u>2 elective</u>	<u>3 elective</u>
Material Conservation and Resource Efficiency	<u>3 required, 2 elective</u>	<u>3 required, 4 elective</u>
Environmental Quality	<u>2 required, 1 elective</u>	<u>2 required, 1 elective</u>



Tier 1 and 2 Examples – Planning and Design

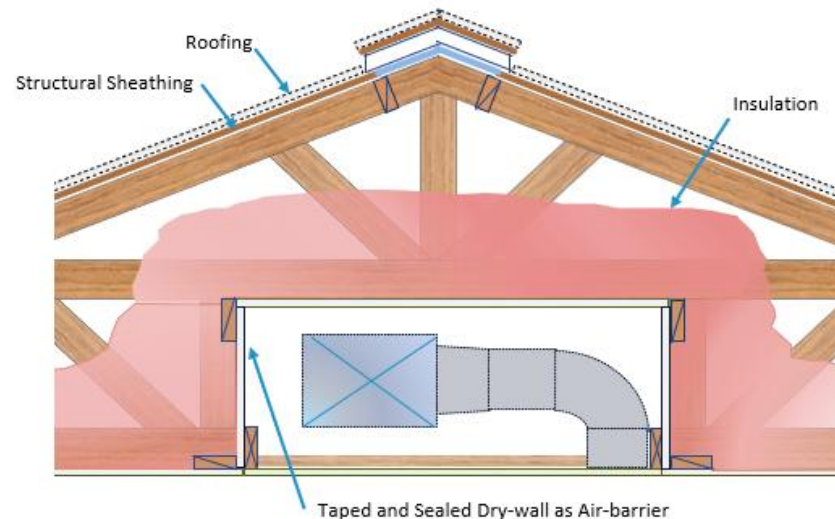


- Site selection – infill site, brownfield, access to transit
- Soil analysis and protection
- Landscape with 75% native or adapted plants
- Cool roof, cool site strategies to reduce heat island effect
- Increased EV charging



Tier 1 and 2 Examples - Energy

- Ducts in conditioned spaces
- Compact hot water distribution system
- Drain water heat recovery
- Battery storage system controls



Tier 1 and 2 Examples – Others

Water Efficiency

- Rainwater Catchment
- Water Reuse Systems

Material Conservation

- Efficient Framing Techniques
- Recycled content materials
- 75% construction waste diversion



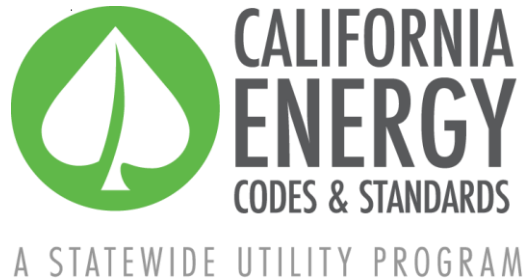


Wrap up

Other CALGreen Resources



CALGreen Checklists (AIA California) 
Checklist / Worksheet, Link



- Guides and other resources
- Local Reach Codes
- Links to codes online



Questions about Title 24?

3C-REN offers a *free* Code Coach Service



Online:
3c-ren.org/code

Call:
805.781.1201

Energy Code Coaches are local experts who can help answer your Title 24 Part 6 or Part 11 questions.

They can provide code citations and offer advice for your res or non-res projects.



Español

CONEXIÓN A CÓDIGOS TÉCNICOS

¿Preguntas sobre el Título 24?



Closing

Continuing Education Units Available

- Contact dresurreccion@co.slo.ca.us for AIA and ICC LUs

Coming to Your Inbox Soon!

- Slides & Recording

2025 CALGreen - Nonresidential:

- [August 5 @ 9:30 AM – 11 AM](#)

Other Upcoming Courses:

- [7/15 Recovery Ventilator: Installation, Energy Savings, and Compliance](#)
- [7/22 Next Generation Passive Solar & Passive House](#)
- [7/30 Using the ECC \(HERS\) Registry for Energy Code Compliance](#)

Any phone numbers who joined? Please share your name!

