DOCKETED			
Docket Number:	22-BSTD-07		
Project Title:	Local Ordinance Applications Exceeding the 2022 Energy Code		
TN #:	248488-4		
Document Title:	Marin County - 2022 Local Ordinance Building Requirements Checklist		
Description:	Plain text of the Marin County local ordinance requirements		
Filer:	Danuta Drozdowicz		
Organization:	California Energy Commission		
Submitter Role:	Commission Staff		
Submission Date:	1/20/2023 8:12:21 PM		
Docketed Date:	1/23/2023		

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR SINGLE- AND MULTI-FAMILY, AND HOTEL/MOTEL NEW CONSTRUCTION

These green building standards have been established to ensure that residential (one- and two-family, multifamily, hotels, motels, and other dwellings) new construction in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The four-step process below helps applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building</u> <u>Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## **1 PROJECT DESIGN**

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (pages 2-3)
- □ Completed Marin County 2022 CALGreen Tier 1 Checklist (*pages 4-16*), with plan sheet references where applicable.
- □ Title 24 Part 6 energy calculations demonstrating compliance with State standards

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- □ Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements.

### MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR SINGLE- AND MULTI-FAMILY, AND HOTEL/MOTEL NEW CONSTRUCTION

PROJECT ADDRESS:

APN:

#### \_\_\_\_\_ APPLICANT NAME:\_\_\_\_

#### 1. ELECTRIFICATION (REQUIRED FOR ALL NEW CONSTRUCTION PROJECTS)

Note: all projects must comply with mandatory requirements of Title 24, Part 6 (California Energy Code) **All Electric**, which includes:

- All-electric end uses
- No natural gas or propane appliances
- No gas meters or propane infrastructure
- Compliance with energy efficiency standards required by the State

**VERIFICATION:** Compliance will be verified by submitting Title 24 Energy Reports

#### 2. GREEN BUILDING

☐ The permit application includes this completed Marin County 2022 Green Building Checklist AND CALGreen Tier 1 Checklist: Standards for Residential New Construction (see pg. 4).

**VERIFICATION:** For the final hold to be lifted, these combined checklists must be completed and signed by a qualified green building rater, such as a CALGreen Special Inspector.

#### 3. LOW CARBON CONCRETE (IF APPLICABLE)

□ Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.

**VERIFICATION:** For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

#### 4. ELECTRIC VEHICLE (EV) READINESS

The completed Marin County 2022 <u>CALGreen Tier 1 Checklist: Standards for Residential New</u> <u>Construction</u> with plans that demonstrate compliance with Marin's readiness for EV charging in accordance with one of the following CALGreen Measures (check one):

- □ 4.106.4.1 (multi-family) as amended by Marin County Building Code
- $\Box$  4.106.4.2 (hotels/motels) as amended by Marin County Building Code
- □ A4.106.8.1 (single-family) as per CALGreen Tier 1,

**VERIFICATION:** Completion of this measure should be confirmed by the qualified green building rater selected for the completion of the <u>CALGreen Tier 1 Checklist: Standards for Residential</u> <u>New Construction below</u>.

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR SINGLE-FAMILY RENOVATIONS 750 SQUARE FEET OR MORE

These green building standards have been established to ensure that single-family residential (one- and two-family dwellings and townhouses with attached private garages) renovations (aka additions and alterations) in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The four-step process below helps applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## 1 PROJECT DESIGN

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (*pages 2-4*)
- □ Completed Marin County 2022 CALGreen Tier 1 Checklist (*pages 9-20*), with plan sheet references where applicable.
- Energy Reach Code compliance documents as required under State Energy Code, Title 24 Part 6 and Marin County Building Code

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- $\hfill\square$  Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements. If your renovation (addition and alteration) project meets this definition, please see the guide for new construction.

## MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS SINGLE-FAMILY RENOVATIONS 750 SQUARE FEET OR MORE

PROJECT ADDRESS:

APN:

APPLICANT NAME:

#### 1. GREEN BUILDING

 Permit application includes this completed Marin County 2022 Green Building Checklist AND <u>CALGreen Tier 1 Checklist: Standards for Residential Renovations 750 square feet or more</u>.
 VERIFICATION: For the final hold to be lifted, these combined checklists must be completed and signed by a qualified building professional, such as an architect, engineer, or a qualified green building professional.

### 2. LOW CARBON CONCRETE (IF APPLICABLE)

Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.
 VERIFICATION: For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

### 3. ELECTRIC VEHICLE (EV) READINESS (IF APPLICABLE)

 For projects upgrading the electrical service panel, complete Marin County 2022 <u>CALGreen</u> <u>Tier 1 Checklist: Standards for Residential Renovations 750 square feet or more</u> with plans that demonstrate compliance with CALGreen Tier 1 measure A4.106.8.1
 VERIFICATION: Completion of this measure to be confirmed by the verifier of the <u>CALGreen</u> Tier 1 Checklist: Standards for Residential Renovations 750 square feet or more.

### 4. ENERGY EFFICIENCY, ELECTRIC READINESS, AND ELECTRIFICATION

- A. (IF APPLICABLE) A resident owner or occupant can be exempt if they can demonstrate low-income qualification by submitting proof of enrollment in one of the following (If applicable, *choose at least one and skip to Section 7, pg. 4, for minimum compliance requirements; otherwise continue below to 4B.*):
  - □ PG&E California Alternative Rates for Energy (CARE) program
  - □ PG&E Family Electric Rate Assistance (FERA) program

# **B.** Building Vintage (Choose a date when building plans for the original construction was submitted)

- □ After 2011 (On or after January 1, 2011 are exempt; skip to Section 8, pg.4)
- □ Pre-2010 (On or before December 31, 2010 are not exempt; continue below to 4C.)

#### C. Fuel Type of Current and Proposed Project (Choose one)

□ All-Electric and No Resistance Heat (*skip to Section 8, pg. 4*):

- Existing systems and proposed design include all the following: All-electric end uses, no natural gas, no gas meters or propane infrastructure, and no electric resistance space or water heat in compliance with State minimum energy efficiency standards
- □ **Mixed-Fuel** existing system and/or proposed project includes gas/propane appliances (*continue* below to Section 5, pg. 3)

#### 5. MEASURE MENU AND TARGET SCORE

□ Complete Steps (1) – (6) listed in Table 1. Energy and Electrification Menu of Measures by Climate Zone table below.

Table 1. Energy and Electrification Menu of Measures by Climate Zone						
				e Zone		
				Z)	Steps	
Measure			• <sup>2</sup>	3 <b>•</b>	<ul> <li>(1) Choose your Climate Zone</li> <li>(CZ) based on zip code (use Table 5, pg. 8 to determine</li> <li>CZ) then continue to Step 2</li> </ul>	
		Spec. ID	ITarget	Scorel	(2) Note minimum target score	
Check		(Refer	8	6	needed to comply (1 point = 1MMBTU savings per yr.)	
(⊠)	Specification	to Table 4)			then continue to Step 3	
	Lighting	E1	Mano	latory		
	Water Heating Package	E2	1	1	(3) Choose a measure or a combination of measures that	
	Air Sealing	E3	1	1	adds up to at least the	
	R-49 Attic Insulation	E4	1	1	minimum target score noted in step 2 above. Measures	
	Duct Sealing	E5	1	Ŧ	listed as "Mandatory" MUST	
	New Ducts + Duct Sealing	E6	2	2	be installed. (4) Measures installed or to be	
	PV + Electric Ready Pre-Wire	ER1	12	12	installed MUST be marked	
	Electric Readiness Measures	ER2	Mandatory (if remodeling kitchen, laundry, or upgrading panel)		with a corresponding Check (図) in this table's far left column.	
	HPWH	FS1	12	12	(5) Use the Specification Number	
	High Eff HPWH	FS2	13	13	(Spec. ID) column as a key	
	HVAC Heat Pump	FS3	13	10	and conform to the List of Measure Specifications in	
	High Eff HVAC Heat Pump	FS4	14	11	Table 4, pgs. 5-7 below.	
	Heat Pump Clothes Dryer	FS5	1	1	Table 4 describes, specifies, and details compliance with	
	Induction Cooktop	FS6	1	1	each corresponding measure.	
	Total Points C	laimed			<ul> <li>(6) Sum points then complete</li> <li>Summary of Results a. – c.</li> <li>(Continue below to Section 6)</li> </ul>	

#### 6. SUMMARY OF RESULTS (FROM TABLE 1 ABOVE)

□ Complete a., b., and c. listed in Table 2. Summary of Results table below.

	Table 2. Summary of Results				
a.	Target Score ( <i>from Table 1, Step 2 where CZ 2 = 8 points and CZ 3 = 6 points</i> )				
b.	Total Points Claimed ( <i>from Table 1, Step 6</i> )				
C.	Subtract line a from line b ( <i>must be greater than or equal to 0 to comply</i> ) ( <i>Continue below to Section 7</i> )				

#### 7. MANDATORY MEASURES REQUIRED OF ALL PROJECTS

□ Complete Steps (1) – (2) listed in Table 3. Mandatory Measures table below

Table 3. Mandatory Measures				
Check	Measures		Steps	
(⊠)	Specification	Spec. ID		
	LED + Exterior Photosensor <i>Mandatory</i>	E1	(1) All measures installed or to be installed MUST be marked with a Check (⊠) in this table's far left column.	
	Electric Readiness Measures <i>Mandatory</i> when remodeling kitchen, laundry, or upgrading panel	ER2	(2) Use the Specification Number (Spec. ID) column as a key and conform the List of Measure Specifications in Table 4 below. Table 4 describes, specifies, and details compliance with each corresponding measure. ( <i>Continue below to Section 8</i> ).	

#### 8. VERIFICATION

This form has been completed by \_\_\_\_\_(name) of

\_(company), the party responsible for this building permit

application for the above listed project who verifies that it accurately represents the project plans.

Signature
-----------

Date

#### 9. LIST OF MEASURE SPECIFICATIONS

Table 4. List of Measure Specifications				
ID	Measure Specification			
Energy Mea	asures			
E1	Lighting Measures – Replace all interior and exterior screw-in incandescent, halogen, and compact fluorescent lamps with LED lamps. Install photocell controls on all exterior lighting luminaires.			
E2	<ul> <li>Water Heating Package: Add exterior insulation meeting a minimum of R-6 to existing storage water heaters. Insulate all accessible hot water pipes with pipe insulation a minimum of ¾ inch thick. This includes insulating the supply pipe leaving the water heater, piping to faucets underneath sinks, and accessible pipes in attic spaces or crawlspaces. Upgrade fittings in sinks and showers to meet current California Green Building Standards Code (Title 24, Part 11) Section 4.303 water efficiency requirements.</li> <li>Exception 1: Water heater blanket is not required on water heaters less than 20 gallons.</li> <li>Exception 2: Water heater blanket not required if application of a water heater blanket voids the warranty on the water heater.</li> <li>Exception 3: Upgraded fixtures are not required if existing fixtures have rated or measured flow rates of no more than ten percent greater than 2022 California Green Building Standards Code (Title 24, Part 11) Section 4.303 water efficiency requirements.</li> <li>Exception 4: Water heaters with factory installed insulation of R-24 or greater</li> </ul>			
E3	Air Sealing: Seal all accessible cracks, holes, and gaps in the building envelope at walls, floors, and ceilings. Pay special attention to penetrations including plumbing, electrical, and mechanical vents, recessed can light luminaires, and windows. Weather-strip doors if not already present. Verification shall be conducted following a prescriptive checklist that outlines which building aspects need to be addressed by the permit applicant and verified by an inspector. Compliance can also be demonstrated with blower door testing conducted by a certified HERS Rater no more than three years prior to the permit application date that either: a) shows at least a 30 percent reduction from pre-retrofit conditions; or b) shows that the number of air changes per hour at 50 Pascals pressure difference (ACH50) does not exceed ten. If combustion appliances are located within the pressure boundary of the building, conduct a combustion safety test by a professional certified by the Building Performance Institute in accordance with the ANSI/BPI-1200-S-2017 Standard Practice for Basic Analysis of Buildings <sup>1</sup> , the Whole House Combustion Appliance Safety Test Procedure for the Comfortable Home Rebates Program 2020 or the California Community Services and Development Combustion Appliance Safety Testing Protocol.			

E4	R-49 Attic Insulation: Attic insulation shall be installed to achieve a weighted assembly U-factor of 0.020 or insulation installed at the ceiling level shall have a thermal resistance of R-49 or greater for the insulation alone. Recessed downlight luminaires in the ceiling shall be covered with insulation to the same depth as the rest of the ceiling. Luminaires not rated for insulation contact must be replaced or
	fitted with a fire-proof cover that allows for insulation to be installed directly over the cover. Exception: In buildings where existing R-30 is present and existing recessed
	downlight luminaires are not rated for insulation contact, insulation is not required to be installed over the luminaires.
E5	Duct Sealing: Air seal all space conditioning ductwork to meet the requirements of the 2022 Title 24 Section 150.2(b)1E. The duct system must be tested by a HERS Rater no more than three years prior to the Covered Single Family Project permit application date to verify the duct sealing and confirm that the requirements have been met. This measure may not be combined with the New Ducts and Duct Sealing measure in this Table.
E6	New Ducts + Duct Sealing: Replace existing space conditioning ductwork with new R-8 ducts that meet the requirements of 2022 Title 24 Section 150.0(m)11. This measure may not be combined with the Duct Sealing measure in this Table. To qualify, a preexisting measure must have been installed no more than three years before the Covered Single Family Project permit application date.
E7	Windows: Replace all existing windows with high performance windows with an area-weighted average U-factor no greater than 0.32.
E8	R-13 Wall Insulation: Install wall insulation in all exterior walls to achieve a weighted U-factor of 0.102 or install wall insulation in all exterior wall cavities that shall result in an installed thermal resistance of R-13 or greater for the insulation alone.
Fuel Substit	sution Measures
FS1	Heat Pump Water Heater (HPWH): Replace all existing electric resistance and natural gas storage water heaters with heat pump water heaters.
FS2	High Efficiency Heat Pump Water Heater (HPWH): Replace all existing electric resistance and natural gas storage water heaters with heat pump water heaters with a Northwest Energy Efficiency Alliance (NEEA) Tier 3 or higher rating.
FS3	HVAC Heat Pump: Replace all existing gas space heating system and existing electric resistance heating systems with electric heat pump systems.
FS4	High Efficiency HVAC Heat Pump: Replace all existing gas space heating system and existing electric resistance heating systems with electric heat pump systems with a SEER rating of 21 or greater and an HSPF rating of 11 or greater.
FS5	Heat Pump Clothes Dryer: Replace all existing electric resistance clothes dryers with heat pump dryers with no resistance element and cap the gas lines.
FS6	Induction Cooktop: Replace all existing gas and electric resistance stove tops with inductive stove tops and cap the gas lines.
Solar PV and	d Electric-Readiness Measures
ER1	PV+ Electric Ready Pre-Wire: For New PV Systems: Install a new solar PV system that meets the requirements of 2022 Title 24 Section 150.1(c)14 and upgrade the service panel to meet the

	and the second sec
	requirements of ER2.G. and install any two of the other measures from ER2.A – ER2.F.
	For Existing PV Systems: If the home already has an existing PV system, to claim credit for this measure, ER1, upgrade the service panel to meet the requirements of ER2.G. and install any two of the other measures from ER2.A – ER2.F.
ER2	Electric Readiness Measures:
	To claim credit for Item ER1, in addition to the solar PV system installed, upgrade the panelboard to meet the requirements of Item ER2.G and install any two of the other measures ER2.A – ER2.F, below to allow for installation of electric appliances at a future date.
	For any Covered Project, if the service panel is being upgraded, install any two of the other measures below.
	If the laundry room is being remodeled, comply with Item ER2.D and upgrade the panelboard to meet the requirements of Item ER2.G.
	If the kitchen is being remodeled, comply with Item ER2.C and upgrade the service panel to meet the requirements of Item ER2.G.
	<ul> <li>A. Heat Pump Water Heater Ready, as specified in Section 150.0(n)1.</li> <li>B. Heat Pump Space Heater Ready, as specified in Section 150.0(t).</li> <li>C. Electric Cooktop Ready, as specified in Section 150.0(u).</li> <li>D. Electric Clothes Dryer Ready, as specified in Section 150.0(v).</li> <li>E. Energy Storage Systems (ESS) Ready, as specified in Section 150.0(s).</li> <li>F. EV Charger Ready. Install a listed raceway for an EV charger, that meets the requirements of the California Green Building Standards Code (Title 24, Part 11) Section A4.106.8.1, Tier 1 and 2, which otherwise applies to new construction.</li> </ul>
	G. Upgrade the panelboard serving the individual dwelling to either:
	<ul> <li>(i) a minimum 200 amp panel with a minimum 225 amp busbar rating to accommodate future connection of electric appliances, including heat pump water heaters, heat pump space heaters, electric cooktops, electric clothes dryers as specified in California Energy Code Section 150.0 (n), (t), (u) and (v) and Level 2 electric vehicle supply equipment; or,</li> </ul>
	(ii) provide electrical load calculations and appliance specifications for serving all of these end-uses with a minimum 100-amp panel.
	Exception: If an electrical permit is not otherwise required for the project other than compliance with this Item, ER2.

### 10. CHOOSING CLIMATE ZONE BY ZIP CODE

FOR PROJECTS SUBMITTED ON OR AFTER JANUARY 1, 2023 10 \* If the climate zone can't be found using Table 5, visit and use the California Energy Commission

Table 5. Climate Zone by zip Code			
Marin Zip Codes	Climate Zone		
94901	2		
94903	2		
94904	2		
94912	2		
94913	2		
94914	2 2 2 2 2 2 2 2		
94915	2		
94920	3		
94924	3		
94925	3 3 3		
94929	3		
94930	2		
94933	3		
94937	3 3 3 2 3 3 3 2 2 2		
94938	3		
94939	2		
94940	3		
94941	3		
94942	3		
94945	2		
94946			
94947	2		
94948	2		
94949	2		
94950	3		
94952	2		
94956	3 2 3 2		
94957	2		
94960	2		
94963	2		
94964	2 2 2 3 3 3 3 2		
94965	3		
94966	3		
94970	3		
94971	3		
94973	2		
94974	2 3 3 2 2 2 2		
94976	3		
94977	3		
94978	2		
94979	2		
94998	2		

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR SINGLE-FAMILY RENOVATIONS LESS THAN 750 SQUARE FEET

These green building standards have been established to ensure that single-family residential (one- and two-family dwellings and townhouses with attached private garages) renovations (aka additions and alterations) in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The four-step process below helps applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## 1 PROJECT DESIGN

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (*page 2-3*)
- □ Completed Marin County 2022 CALGreen Checklist (*pages 4-9*), with plan sheet references where applicable.
- □ Compliance documents as required under State Energy Code, Title 24 Part 6

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- $\hfill\square$  Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- □ Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements. If your renovation (addition and alteration) project meets this definition, please see the guide for new construction.

### MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR SINGLE-FAMILY RENOVATIONS LESS THAN 750 SQUARE FEET

PROJECT ADDRESS:

APN:

APPLICANT NAME:

#### 4. GREEN BUILDING

□ Permit application includes this completed Marin County 2022 Green Building Checklist AND CALGreen Checklist: Standards for Residential Renovations Less Than 750 square feet.

**VERIFICATION:** The checklist will be verified by a County plans examiner.

#### 5. LOW CARBON CONCRETE (IF APPLICABLE)

□ Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.

**VERIFICATION:** For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

#### 6. ELECTRIC VEHICLE (EV) READINESS (IF APPLICABLE)

For projects upgrading the electrical service panel, complete Marin County 2022 <u>CALGreen</u> <u>Checklist: Standards for Residential Renovations Less Than 750 square feet</u> with plans that demonstrate compliance with Marin's readiness for future Level 2 EV charging, CALGreen Tier 1 measure A4.106.8.1 as amended by Marin County Building Code.

**VERIFICATION:** Completion of this measure to be confirmed by the verifier of the <u>CALGreen</u> <u>Checklist: Standards for Residential Renovations Less Than 750 square feet</u>.

#### 4. ENERGY EFFICIENCY, ELECTRIC READINESS, AND ELECTRIFICATION

- □ Meet the standards outlined for the project in the 2022 State Building Energy Efficiency Standards. While local standards for renovations less than 750 square feet do not require applicants to exceed statewide energy efficiency codes, be aware of the mandatory requirements established by the state that may apply to your project. Changes that may trigger additional requirements or HERS verification may include, but are not limited to, the addition, alteration, or expansion of:
  - Fenestration, including windows, skylights, and doors with more than 3 square feet of glass
  - Insulation
  - Ducts
  - New space heating and cooling, water heating, and ventilation systems

VERIFICATION: Compliance will be verified via Title 24 Energy Reports

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR MULTI-FAMILY AND HOTEL/MOTEL RENOVATIONS 750 SQ. FT. OR MORE

These green building standards have been established to ensure that residential renovations (aka additions and alterations) such as multi-family residences, hotel/motels, and other dwellings in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The four-step process below helps applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## **1 PROJECT DESIGN**

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (pages 2)
- □ Completed Marin County 2022 CALGreen Tier 1 Checklist (*pages 3-14*), with plan sheet references where applicable.
- □ Compliance documents as required under State Energy Code, Title 24 Part 6

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- $\hfill\square$  Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements. If your renovation (addition and alteration) project meets this definition, please see the guide for new construction

## MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR MULTI-FAMILY AND HOTEL/MOTEL RENOVATIONS 750 SQ. FT. OR MORE

PROJECT ADDRESS:

APN:

\_ APPLICANT NAME:\_\_\_\_\_

#### 7. GREEN BUILDING

Permit application includes this completed Marin County 2022 Green Building Checklist AND <u>CALGreen Tier 1 Checklist: Standards for Multifamily Residential Renovations 750 square feet</u> <u>or more.</u>

**VERIFICATION:** For the final hold to be lifted, these combined checklists must be completed and signed by a qualified building professional, such as an architect, engineer, or a qualified green building professional.

#### 8. LOW CARBON CONCRETE (IF APPLICABLE)

Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.
 VERIFICATION: For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

#### 9. ELECTRIC VEHICLE (EV) READINESS

□ For projects upgrading the service panel or modifying the parking lot (paving material and curbing removed), complete Marin County 2022 <u>CALGreen Tier 1 Checklist: Standards for Multifamily Residential Renovations 750 square feet or more</u> with plans that demonstrate compliance with Marin's readiness for EV charging in existing buildings, CALGreen measure 4.106.4.1.2 as amended by Marin County Building Code.

**VERIFICATION:** Completion of this measure to be confirmed by the verifier of the <u>CALGreen</u> <u>Tier 1 Checklist: Standards for Multifamily Residential Renovations 750 square feet or more</u>

#### 4. ENERGY EFFICIENCY, ELECTRIC READINESS, AND ELECTRIFICATION

- □ Meet the standards outlined for the project in the 2022 State Building Energy Efficiency Standards. While local standards for multifamily renovations do not require applicants to exceed statewide energy efficiency codes, be aware of the mandatory requirements established by the state that may apply to your project. Changes that may trigger additional requirements or HERS verification may include, but are not limited to, the addition, alteration, or expansion of:
  - Fenestration, including windows, skylights, and doors with more than 3 square feet of glass
  - Insulation
  - Ducts
  - New space heating and cooling, water heating, and ventilation systems

**VERIFICATION:** Compliance will be verified via Title 24 Energy Reports

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR MULTI-FAMILY AND HOTEL/MOTEL RENOVATIONS LESS THAN 750 SQ. FT.

These green building standards have been established to ensure that residential renovations (aka additions and alterations) such as multi-family residences, hotel/motels, and other dwellings in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The four-step process below helps applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## **1 PROJECT DESIGN**

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (*pages 2*)
- □ Completed Marin County 2022 CALGreen Checklist (*pages 3-9*), with plan sheet references where applicable.
- □ Compliance documents as required under State Energy Code, Title 24 Part 6

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- $\hfill\square$  Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements. If your renovation (addition and alteration) project meets this definition, please see the guide for new construction.

## MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR MULTI-FAMILY AND HOTEL/MOTEL RENOVATIONS LESS THAN 750 SQ. FT.

PROJECT ADDRESS:

APN:

APPLICANT NAME:

#### 10. GREEN BUILDING

□ Permit application includes this completed Marin County 2022 Green Building Checklist AND CALGreen Checklist: Standards for Multifamily Residential\_Renovations Less Than 750 sq. ft.

**VERIFICATION:** The checklist will be verified by a County plans examiner.

#### 11. LOW CARBON CONCRETE (IF APPLICABLE)

□ Permit application includes a completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.

**VERIFICATION:** For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts in compliance with <u>Low Carbon</u> <u>Concrete Code</u>.

#### 12. ELECTRIC VEHICLE (EV) READINESS

For projects upgrading the service panel or modifying the parking lot (paving material and curbing removed), complete Marin County 2022 <u>CALGreen Checklist: Standards for Multifamily Residential Renovations Less Than 750 sq. ft.</u> with plans that demonstrate compliance with Marin's readiness for EV charging in existing buildings, CALGreen measure 4.106.4.1.2 as amended by Marin County Building Code.

**VERIFICATION:** Completion of this measure to be confirmed by the verifier of the <u>CALGreen</u> <u>Checklist: Standards for Multifamily Residential Renovations Less Than 750 sq. ft.</u>

#### 4. ENERGY EFFICIENCY, ELECTRIC READINESS, AND ELECTRIFICATION

- □ Meet the standards outlined for the project in the 2022 State Building Energy Efficiency Standards. While local standards for multifamily renovations do not require applicants to exceed statewide energy efficiency codes, be aware of the mandatory requirements established by the state that may apply to your project. Changes that may trigger additional requirements or HERS verification may include, but are not limited to, the addition, alteration, or expansion of:
  - Fenestration, including windows, skylights, and doors with more than 3 square feet of glass
  - Insulation
  - Ducts
  - New space heating and cooling, water heating, and ventilation systems

VERIFICATION: Compliance will be verified via Title 24 Energy Reports

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR NONRESIDENTIAL NEW CONSTRUCTION

These green building standards have been established to ensure that nonresidential new construction in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The four-step process below is intended to help applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## **1 PROJECT DESIGN**

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

## 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (pages 2-3)
- □ Completed Marin County 2022 CALGreen Tier 1 Checklist (*pages 4-16*), with plan sheet references where applicable.
- □ Title 24 Part 6 energy calculations demonstrating compliance with State standards

## 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- □ Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements.

#### MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR NONRESIDENTIAL NEW CONSTRUCTION

PROJECT ADDRESS:

APN:

#### APPLICANT NAME:

#### 2. ELECTRIFICATION (REQUIRED FOR ALL NEW CONSTRUCTION PROJECTS)

Note: all projects must comply with mandatory requirements of Title 24, Part 6 (California Energy Code) **All Electric**, which includes:

- All-electric end uses
- No natural gas or propane appliances
- No gas meters or propane infrastructure
- Compliance with energy efficiency standards required by the State

**VERIFICATION:** Compliance will be verified by submitting Title 24 Energy Reports

#### 2. GREEN BUILDING

☐ The permit application includes this completed Marin County 2022 Green Building Checklist AND <u>CALGreen Tier 1 Checklist: Standards for Nonresidential New Construction</u> (see pg. 4).

**VERIFICATION:** For the final hold to be lifted, these combined checklists must be completed and signed by a qualified green building rater, such as a CALGreen Special Inspector.

#### 3. LOW CARBON CONCRETE (IF APPLICABLE)

□ Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.

**VERIFICATION:** For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

#### 4. ELECTRIC VEHICLE (EV) READINESS

□ The completed Marin County 2022 <u>CALGreen Tier 1 Checklist: Standards for Nonresidential</u> <u>New Construction</u> with plans that demonstrate compliance with Marin's readiness for EV charging, CALGreen Tier 1 measure A5.106.5.3.1 as amended by Marin County Building Code.

**VERIFICATION:** Completion of this measure should be confirmed by the qualified green building rater selected for the completion of the <u>CALGreen Tier 1 Checklist: Standards for Nonresidential</u> <u>New Construction below</u>.

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR NONRESIDENTIAL RENOVATIONS 3,000 SQUARE FEET OR MORE

These green building standards have been established to ensure that nonresidential renovations (aka additions and alterations) in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The fourstep process below is intended to help applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## **1 PROJECT DESIGN**

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- Completed Marin County 2022 Green Building Checklist (pages 2-3)
- □ Completed Marin County 2022 CALGreen Tier 1 Checklist (*pages 4-16*), with plan sheet references where applicable.
- □ Title 24 Part 6 energy calculations demonstrating compliance with State standards

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- □ Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements.

### MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR NONRESIDENTIAL RENOVATIONS 3,000 SQUARE FEET OR MORE

PROJECT ADDRESS:

APN:

APPLICANT NAME:

#### **1. GREEN BUILDING**

□ The permit application includes this completed Marin County 2022 Green Building Checklist AND <u>CALGreen Tier 1 Checklist: Standards for Nonresidential Renovations 3,000 Square Feet</u> or More.

**VERIFICATION:** The checklist must be completed and signed off on by a qualified building professional, such as an architect, engineer, contractor, or qualified green building professional.

#### 2. LOW CARBON CONCRETE (IF APPLICABLE)

Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.
 VERIFICATION: For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

#### 3. ELECTRIC VEHICLE (EV) READINESS

□ The completed Marin County 2022 <u>CALGreen Tier 1 Checklist: Standards for Nonresidential</u> <u>Renovations 3,000 Square Feet or More</u> with plans that demonstrate compliance with Marin's readiness for EV charging in existing buildings, CALGreen measure A5.106.5.3.2 as amended by Marin County Building Code.

**VERIFICATION:** Completion of this measure should be confirmed by the qualified green building rater selected for the completion of the <u>CALGreen Tier 1 Checklist: Standards for Nonresidential</u> <u>Renovations 3,000 Square Feet or More</u>.

### 4. ENERGY EFFICIENCY, ELECTRIC READINESS, AND ELECTRIFICATION

- □ Meet the standards outlined for the project in the 2022 State Building Energy Efficiency Standards. While local standards for multifamily renovations do not require applicants to exceed statewide energy efficiency codes, be aware of the mandatory requirements established by the state that may apply to your project. Changes that may trigger additional requirements or HERS verification may include, but are not limited to, the addition, alteration, or expansion of:
  - Fenestration, including windows, skylights, and doors with more than 3 square feet of glass
  - Insulation
  - Ducts
  - New space heating and cooling, water heating, and ventilation systems

VERIFICATION: Compliance will be verified via Title 24 Energy Reports

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

## MARIN COUNTY GREEN BUILDING FORM STANDARDS FOR NONRESIDENTIAL RENOVATIONS LESS THAN 3,000 SQUARE FEET

These green building standards have been established to ensure that nonresidential renovations (aka additions and alterations) in Marin County is healthy for occupants, has limited impact on the environment, reduces demand for energy, and results in cost savings from building operation. The fourstep process below is intended to help applicants understand and comply with the County's green building requirements. Please reference <u>Title 19.04 and 19.07 of the Marin County Building Code</u> to comply with green building requirements.

# GREEN BUILDING PROJECT PROCESS

## 1 **PROJECT DESIGN**

It is important for project owners, architects, engineers, and designers to understand the applicable state and local green building requirements prior to project design. Early consideration of these standards allows for design of buildings and systems that are compliant, energy efficient, and cost effective, and minimize back and forth when applying for the project permit.

# 2 PLANNING APPLICATION (IF REQUIRED)

If your project is subject to planning review, be prepared to identify in your planning application what compliance methods you've selected and how you plan to meet the requirements. If you anticipate difficulties meeting the requirements outlined in the Green Building Checklist, these concerns and any requests for exemptions should be identified in your planning application.

## **3 INITIAL BUILDING PERMIT SUBMITTAL**

All the following MUST be included with your initial application for a building permit:

- □ Completed Marin County 2022 Green Building Checklist (pages 2-3)
- □ Completed Marin County 2022 CALGreen Tier 1 Checklist (*pages 4-16*), with plan sheet references where applicable.
- □ Title 24 Part 6 energy calculations demonstrating compliance with State standards

# 4 FINAL INSPECTION

When the project is completed, submit the following to have the green building hold lifted:

- □ Re-submit Green Building and CALGreen finalized checklists in step 3 above
- □ A Statement of Conformance from the applicable verifier attesting to the accuracy of the assessment.
- □ Certificate of Compliance from Home Energy Rating System (HERS) provider
- □ Other necessary supporting permit material (*if applicable*)

#### DEFINITION OF "NEW CONSTRUCTION"

Removal or substantial modification of more than 75 percent of the linear sum of a building's exterior walls for each story shall be considered demolition of the building (County of Marin Development Code Chapter 22.130.030), triggering the new construction requirements.

### MARIN COUNTY 2022 GREEN BUILDING CHECKLIST STANDARDS FOR NONRESIDENTIAL RENOVATIONS LESS THAN 3,000 SQUARE FEET

PROJECT ADDRESS:

APN:

\_ APPLICANT NAME:\_\_\_\_\_

#### **1. GREEN BUILDING**

☐ The permit application includes this completed Marin County 2022 Green Building Checklist AND <u>CALGreen Tier 1 Checklist: Standards for Nonresidential Renovations Less than 3,000</u> <u>Square Feet</u>.

VERIFICATION: The checklist will be verified by County plans examiners.

#### 2. LOW CARBON CONCRETE (IF APPLICABLE)

□ Permit application includes completed Cement or Embodied Carbon limit compliance forms that can be found on the <u>County's Low-Carbon Concrete Requirements</u> webpage.

**VERIFICATION:** For the final hold to be lifted, compliance forms must be re-submitted after completion of poured concrete along with batch (proof) receipts.

#### 3. ELECTRIC VEHICLE (EV) READINESS

□ The completed Marin County 2022 <u>CALGreen Tier 1 Checklist: Standards for Nonresidential</u> <u>Renovations Less than 3,000 Square Feet</u> with plans that demonstrate compliance with Marin's readiness for EV charging in existing buildings, CALGreen measure A5.106.5.3.2 as amended by Marin County Building Code.

**VERIFICATION:** Completion of this measure should be confirmed by the qualified green building rater selected for the completion of the <u>CALGreen Tier 1 Checklist: Standards for Nonresidential</u> <u>Renovations Less than 3,000 Square Feet</u>.

### 4. ENERGY EFFICIENCY, ELECTRIC READINESS, AND ELECTRIFICATION

- Meet the standards outlined for the project in the 2022 State Building Energy Efficiency Standards. While local standards for multifamily renovations do not require applicants to exceed statewide energy efficiency codes, be aware of the mandatory requirements established by the state that may apply to your project. Changes that may trigger additional requirements or HERS verification may include, but are not limited to, the addition, alteration, or expansion of:
  - Fenestration, including windows, skylights, and doors with more than 3 square feet of glass
  - Insulation
  - Ducts
  - New space heating and cooling, water heating, and ventilation systems

VERIFICATION: Compliance will be verified via Title 24 Energy Reports

Note: Information available via Title 24 computer software used to summarize energy use □ Total Conditioned Floor Area \_\_\_\_\_\_ square feet

□ Input all applicable End Uses and their Standard and Proposed Design Energy use below:

End Use	Standard Design Site Electricity (kWh)	Standard Design Site Natural Gas (therms)	Proposed Design Site Electricity (kWh)	Proposed Design Site Natural Gas (therms)
Space Heating				
Space Cooling				
Indoor Air Quality (IAQ) Ventilation				
Water Heating				
Self Util/Flexibility Credit				
Photovoltaics (a negative number)				
Battery				
Flexibility (demand shifting of appliance use)				
Inside (Interior) Lighting				
Cooking Appliances (stove or range only)				
Plug Loads				
Exterior Lighting				
Total (Sum All End Uses)				

FOR PROJECTS SUBMITTED ON OR AFTER JANUARY 1, 2023