



# MARIN COUNTY GREEN BUILDING GUIDE SINGLE FAMILY RESIDENTIAL: NEW CONSTRUCTION

These green building standards have been established to ensure that new homes built in Marin County are healthy for occupants, have limited impact on the environment, reduce demand for energy, and save the homeowner and occupants money over time. This guide is intended to help applicants understand the green building requirements that apply to their project and what documentation is necessary to comply with these standards.

## GREEN BUILDING PROJECT TIMELINE

### 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. Marin's single family green building standards are different depending on project size, and multiple compliance methods are available to ensure flexibility for applicants.

### 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 SUBMITAL

Include the Green Building Checklist, CALGreen Checklist, and Title 24 Part 6 Energy calculations with building plans. Incorporate selected measures on a separate, full-sized plan sheet, and include it with building plans.

### 4 FINAL INSPECTION

When the project is completed, submit final documentation, including a letter from the CALGreen Inspector attesting to the accuracy of the assessment, with the final permit materials to the building department to have the green building hold lifted.

For more information, please visit [maringreenbuilding.org](http://maringreenbuilding.org)



# MARIN COUNTY GREEN BUILDING GUIDE SINGLE FAMILY RESIDENTIAL: NEW CONSTRUCTION<sup>1</sup>

## STEP 1: FOR ALL PROJECTS, SELECT ONE GREEN BUILDING REQUIREMENT

COMPLIANCE METHOD:	REQUIREMENT:	FIELD VERIFIER:
<input type="checkbox"/> <b>CALGREEN TIER 1</b>	Develop the proposed home to CALGreen Tier 1	CALGreen Inspector
<input type="checkbox"/> <b>GREEN POINT RATED</b>	Achieve Silver Certification Level	Green Point Rater
<input type="checkbox"/> <b>LEED FOR HOMES</b>	Achieve LEED for Homes Silver	LEED AP

## STEP 2A (FOR HOMES <4,000 SQUARE FEET): SELECT ONE ENERGY EFFICIENCY METHOD<sup>2</sup>

COMPLIANCE METHOD:	REQUIREMENT:	FIELD VERIFIER:
<input type="checkbox"/> <b>PROJECT WITHOUT SOLAR</b>	If a photovoltaic system is <u>not</u> installed, demonstrate <sup>3</sup> that the energy use of the proposed home is 15% more efficient than the 2016 State Energy Code.	HERS Rater, where verification is required <sup>4</sup>
<input type="checkbox"/> <b>PROJECT WITH SOLAR</b>	If a photovoltaic system is installed, demonstrate <sup>3</sup> that the energy use of the proposed home is 20% more efficient than the 2016 State Energy Code.	
<input type="checkbox"/> <b>ALL-ELECTRIC</b>	Demonstrate that the proposed home will be all electric <sup>5</sup>	

## STEP 2B (FOR HOMES ≥4,000 SQUARE FEET): SELECT ONE ENERGY EFFICIENCY METHOD<sup>2</sup>

COMPLIANCE METHOD:	REQUIREMENT:	FIELD VERIFIER:
<input type="checkbox"/> <b>ZERO NET ELECTRICITY</b>	Demonstrate <sup>3</sup> that the proposed mixed-fuel <sup>6</sup> home: <ul style="list-style-type: none"> <li>• is 35% more efficient than the 2016 State Energy Code</li> <li>• will generate as much electricity on-site as it is expected to use in a year, estimated to be equivalent to an energy design rating (EDR) of 20 or less.</li> </ul>	HERS Rater, where verification is required <sup>4</sup>
<input type="checkbox"/> <b>ALL-ELECTRIC ALTERNATIVE</b>	Demonstrate <sup>3</sup> that the proposed all-electric <sup>5</sup> home: <ul style="list-style-type: none"> <li>• is 20% more efficient than the 2016 State Energy Code</li> <li>• includes at least 2.5 kW of solar.</li> </ul>	
<input type="checkbox"/> <b>PASSIVE HOUSE</b>	Develop the proposed home to Passive House Institute US (PHIUS) Standards.	PHIUS Rater

## STEP 3: FOR ALL PROJECTS, ACHIEVE ELECTRIC VEHICLE (EV) READINESS REQUIREMENT

COMPLIANCE METHOD:	REQUIREMENT:	FIELD VERIFIER:
<input type="checkbox"/> <b>DEDICATED 208/240-VOLT BRANCH CIRCUIT</b>	Comply with CALGreen Measure A4.106.8.1	Verifier from Step 1

<sup>1</sup> 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 new construction requirements.

<sup>2</sup> All new homes must comply with mandatory elements of Title 24, Part 6 (California Energy Code)

<sup>3</sup> Energy savings demonstrated via Title 24 Energy Calculations (Registered Certificate of Compliance: CF1R-PRF)

<sup>4</sup> HERS Verification requirements are summarized in Residential Appendix RA2, published by the California Energy Commission.

<sup>5</sup> Construction considered 'all-electric' if electricity is the only permanent source of energy for water-heating, space-heating, space cooling, cooking and clothes-drying and there is no gas meter connection.

<sup>6</sup> A mixed-fuel home is a home where both natural gas and/or propane and electricity are used.