

GreenPoint Rated Version 8.0

New Single Family and Multifamily Programs

GreenPoint Rated is the most trusted home rating system in California—with more than 63,000 certified units. The introduction of GreenPoint Rated Version 8.0 offers certification for buildings that go beyond code and provides innovative pathways for buildings to achieve California’s long-term net zero energy and low carbon homes goals. This version goes into effect Jan. 1, 2020 and will be applicable to all projects permitted under 2019 building code.

Summary of Changes

GreenPoint Rated 8.0 clarifies existing code, incorporates upcoming code changes, and anticipates future code. Updates were made as a result of input from the public sector, building professionals, and selected stakeholder groups. Changes include the following:

- Deleting measures that have become code-required
- Addressing CALGreen mandatory measures
- Adding new measures for current best practices
- Improving and clarifying definitions of current measures
- Adding new measures that support our low carbon and resiliency goals for building in California

Program Changes

Energy Evaluation. With the updates to the 2019 Energy Code, there will be two options for energy compliance under Version 8: Compliance using Title 24 software and the GPR Energy & Water calculator. The compliance software provides a Delta Energy Design Rating (EDR) for low rise and a compliance margin for high rise. For both low rise and high rise, GPR will have a two thresholds: mixed-fuel and all-electric. The thresholds are based on the draft cost effectiveness studies. The GPR Energy & Water Calculator path will be available for high-rise residential buildings.

1. **Option One: Mixed Fuel:** Compliance Over Title 24. Projects can meet the following delta Energy Design Rating (EDR) over Title 24 Part 6 to meet GreenPoint Rated minimum requirements. Note that if multiple software runs were completed for the project and one application is being submitted for all dwellings, the lowest delta EDR must be used for the submission and will be applied to all homes. Averages will not be accepted for program compliance. Note that non-residential (high-rise) still requires a 10% compliance margin as there are no EDR calculations for non-residential buildings. For mixed fuel buildings the following requirements apply:

All homes must be pre-wired for the following appliances:

- Dryer: conductor rated for 40-amp
- Range: conductor rater for 50-amp

High-rise residential requires a 10% compliance margin

Low-rise residential requires a Total EDR Margin for Low-Rise Residential table below. PV and Storage can be used to meet Total EDR Margin.

Climate Zone	Total Delta EDR
	Low-Rise Residential
1	10
2	
3	
4	
5	9
6	
7	
8	8
9	
10	9
11	
12	
13	
14	
15	6
16	9

The EDR is shown on the compliance form for low rise and the percentage compliance margin is shown on the compliance form for high rise residential. The final simulation report must be used to show evidence that the project exceeds the CEC. The report must include the actual building components and HVAC systems included in the final building.

- Option Two: All Electric Compliance:** All electric buildings must meet or exceed the energy budget as allowed by the California Energy Code. This includes credit given under the California Energy code for PV. The heat pump water heater must have a minimum COP 2.8.
- Option Three: Annual Energy Use Compliance:** This pathway is a compliance pathway that aligns with Net Zero Energy. This option requires a project to demonstrate a percentage over a whole building use based on the GPR Energy and Water Calculator. The end uses in this tool include heating, cooling, domestic hot water, appliances, lighting, and plug loads. The compliance margin over the whole building usage is 20%. This compliance margin applies to single family and multifamily low rise and high rise.

CALGreen. CALGreen residential and non-residential mandatory measures will still be prerequisites for GreenPoint Rated. The CALGreen checklists will be updated to reflect the 2019 California Green Building Code. For New Home projects, points will continue to be allocated for CALGreen compliance as follows: four points (one in each Energy, IEQ/Health, Resources, and Water). Although GreenPoint Rated is a residential rating system, the non-residential standards have been included in the prerequisites for buildings where required, whereby the GreenPoint Rater will verify CALGreen Measures to facilitate verification of CALGreen compliance. The commercial portion of the building is not part of the GreenPoint Rated certification. This verification is not intended to replace code inspection (enforcement), unless authorized by the authority having jurisdiction. There are very minor changes to CALGreen from the 2016 standards. Some of the changes include electric vehicle charging requirements. Please see updated CALGreen checklists for Residential and Non-Residential when released.

Prerequisites. Below is a summary of the prerequisites for New Home rating systems. Minor changes include CALGreen mandatory measures for code compliance and update of ASHRAE 62.2 - 2016 which continues to apply to all residential occupancies. A new required measure, which will also earn 1 point, has been added: Certified Energy Analyst to prepare the Title 24 documents.

Table 1. Summary of Prerequisites

Measure Category	New Home Single Family	New Home Multifamily
CALGreen Residential	X	X
CALGreen Non Residential		If required
Energy Performance	See above	See above
GreenPoint Rated Checklist on Blueprints	X	X
ASHRAE 62.2-2016	X	X
Certified Energy Analyst	X	X
Green Appraisal Addendum	X	X
Minimum points in each category	X	X
Minimum Total Points	50	50

- **Other Measures.** The annotated checklist identifies anticipated changes to specific measures for both Single Family and Multifamily. These changes have been vetted with subject matter experts and informed by the appropriate codes and standards.
 - **A2.1. 75% C&D Waste Diversion.** Measure has been decreased to 70% due to current status of recycling industry. Single source separation is still one of the best options for highest diversion rates.
 - **A2.2. 65% C&D Waste Diversion (excluding ADC). This measure has been removed** due to recycling industry deficiencies. Obtaining the recycling rate excluding this is not readily available. BIG will continue to monitor the status of recycling industry to determine potential impactful measures.
 - **C4.2 Turf on a Small Percentage of Landscaped Area.** Less than 25% area tier was removed to align with current building trends and standards for lower water landscapes.
 - **H6.1. Meet ASHRAE 62.2-2016 Ventilation Residential Standards.** Title 24 has adopted the 2016 62.2 standards; measure has been updated to comply with state standards.
 - **H6.3. Outdoor Air is Filtered and Tempered.** Increased filter to MERV 16+. The options for this measure are based on a study by LBNL which demonstrated the 95%+ removal of ultra-fine particles, PM2.5, and black carbon when using MERV 16 on supply.
 - **H8. High Efficiency HVAC Filter (MERV 16+).** Increased filter to MERV 16+. Code required MERV 13 as a minimum in 2019 Title 24 Part 6
 - **I2.2. Low Carbon Home.** Given the transition in focus to CO₂e and reduction in greenhouse gas emissions, GPR has replaced the Net Zero Energy Home with a Low Carbon Home measure. This measure uses the CEC Compliance software. It is also acceptable to use the Energy and Water Calculator for compliance with this measure. The lbs CO₂e/sq. ft. quantity must be calculated and a target lbs CO₂e/sq. ft met based on climate zone and home type (as provided in the manual). Conceptually, criteria would drive to all electric home built to Title 24 standards with all or partial clean electricity supply.
 - **I3. Energy Storage System.** This measure will align with the JA12 Title 24 storage system requirements for battery storage. Thermal storage still remains a viable measure and will be reviewed on a case by case basis. Other storage options can also be reviewed on a case by case basis as this is a rapidly evolving area.
 - **J4. All Electric or Combustion Appliance Safety Testing.** Measure is now more explicit on all electric option.

- **J6. Title 24 Prepared and Signed by a CABEC Certified Energy Analyst.** Measure now required with 1 Energy point. As the Title 24 becomes more complicated, getting it right is paramount to achieve savings and benefits that are anticipated. Professionals trained in Title 24 compliance are an asset to client.
- **N8.2 Strategies to Address Assessment Findings.** There is greater awareness around resiliency. The measure in version 7, is broad on the checklist and indicates that strategies in general were undertaken to address vulnerabilities. To highlight strategies undertaken, version 8 calls out strategies to address specific climatic extremes, including: wildfire, extreme heat, flooding/extreme precipitation, and other. This will allow developers, cities, and others to more clearly see what issues have been undertaken by the project. Each strategy will include a description of potential actions to meet the intent as well as identify other measures in the checklist that are synergistic. The descriptions of strategies are not exhaustive in order to accommodate evolving strategies, technologies, and creativity.
- **O7. Green Appraisal Addendum.** Addendum is only now required to be submitted with final certification and not with the initial application.