



## Green Building & Energy Reach Code Frequently Asked Questions (FAQs)

**SCOPE:** RESIDENTIAL

**APPLICABLE CODES:** 2019 CBC, CRC, CPC, CMC, CEC, CALGreen, CEnC, and PAMC

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### General Questions:

1. **Question:** What is expected during construction of new mixed-use office building and multi-family building for Green Building? Please explain the process.

Answer: The project will be subject to a mandatory Green Building Pre-Construction Meeting (IVR#151), a Green Building Incremental Verification during Rough Inspection (IVR#152), and a Green Building Final (IVR#153) prior to the Building Final. For the residential portion, the project must follow the Residential Green Building Inspection Guidelines. For the non-residential portion, the project will be required to follow the Non-Residential Green Building Inspection Guidelines. In addition, the owner must hire a Residential and Non-Residential Green Building Special Inspector (GBSI) from the Palo Alto approved list. See the Green Building Compliance page for details.

2. **Question:** If I submitted my project for Planning Review prior to 6/22/2015, is my project subject to the new green building and energy ordinances?

Answer: Yes. The requirements are impacted by the permit submittal date only. Projects that previously submitted for Planning using the Green Point Rated system must resubmit under the new ordinance if the project submitted for permit after 6/22/2015.

3. **Question:** Do I need to hire Green Building Special Inspector from the City's approved list for a new multi-family project? If yes, where can I find the list?

Answer: Yes. See the Green Building Compliance page for the most current list of Green Building Special Inspectors.

4. **Question:** I want a clear understanding of the columns on the GB-1 Tier 2 sheet. What do Y and N stand for?

Answer: "Y" is for Yes and "N" stands for No and/or Not Applicable. Mark "N" if the option is either not

being chosen as an elective, or it is out of the scope of work.

**5. Question: The 'PLAN CHECK' column is for the City to complete, right?**

Answer: Yes. The columns on the right-hand side of the GB-1 are for City Staff enforcement purposes.

**6. Question: Do I need to concern myself with the Rough Inspection or Final Inspection columns?**

Answer: No. These columns are intended for the internal city staff oversight. The tools to use for project teams are listed on the Green Building Compliance page and are outlined in the Green Building Inspection Guidelines.

**Individual Provisions Questions:**

**7. Question: For the O&M Manual, the builder wrote on the GB-1 that they will deliver it at 'Final.' Should I make sure they include that text in the plan set as well?**

Answer: Yes.

**8. Question: Recycled Content for Additions -- HCD Recycled Content Calculations Table 1: For a partial remodel and addition, do we only include the area of the addition in the floor area calculation, or the remodeled area as well?**

Answer: Yes. Include the area of work for both the addition and alteration.

**9. Question: Concrete, Alternative Method for Calculating Recycled Value A4.405.3.1.5: How do I find the value of just the cementitious portion of the concrete?**

Answer: Contact the manufacturer and use the assembly calculator provided by HCD to isolate the material. <https://www.hcd.ca.gov/building-standards/calgreen/cal-green-forms.shtml>

**10. Question: How do I calculate the 45% default rate required for recycled content using my permit value?**

Answer: Use the Excel spreadsheet for [RCV- Table 1 Recycled Content Value Calculations](#) spreadsheet provided by the Housing and Community Development. Utilize "2. Estimated project cost/ valuation (\$)" under "For calculating the total material cost, choose ONLY ONE of the three options below." Enter total permit value in the field to the right of "2. Estimated project cost/ valuations (\$)." The calculator will provide the "Total Recycled Content Value as a percentage of the Total Material Cost.

[http://hcd.ca.gov/codes/calgreen/Table1\\_RCVCalculations.xls](http://hcd.ca.gov/codes/calgreen/Table1_RCVCalculations.xls)

**11. Question: 4.507.2 ACCA Manual S: If air conditioning is installed, Manual S calculations must be provided showing the selected equipment total cooling capacity is not more than 115% of total calculated cooling load (or next available size above 100%, or the smallest available size - 1.5 tons). If installing AC, provide AHRI number of matched indoor and outdoor cooling coils. If no AC is installed, Manual S calculations**

**must be provided showing the selected equipment total heating capacity is not more than 140% of total calculated heating load (or smallest available size- 40 but). Will Palo Alto be expecting enforcement of these limits? Can we use the Build It Green verification sheets to show compliance?**

Answer: Yes. The code language specifies in 4.507.2 that “Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods” and Manual S is listed as the third requirement. Yes, you may use the Build It Green compliance sheets.

**12. Question: What can the Green Building Special Inspector do and not do?**

Special Inspectors Can:

- Work on LEED for Homes projects
- Be Green Point Raters
- Be HERS raters
- T-24 Calculations- Special Inspectors can be the documentation author, but cannot design
- Be the General Educator by providing information and scenarios, but CANNOT design or recommend anything
- Provide contract assistance but can only provide general industry knowledge
- Provide permitting support services but cannot verify something they worked on or completed

Special Inspectors Cannot:

- Design HVAC systems (Manual J, D, and S)
- Design any elements or recommend
- Be the General Project Management
- Verify something they worked on or completed

**13. Question: Can the Green Building Special Inspector lead a training in compliance with Supervision and education? [PAMC 16.14/ A4.104.1]**

Answer: No, the training must be led by a third party or another Green Building Special Inspector.

**14. Question: My project includes a whole house graywater system. How does this affect my Green Building electives?**

Answer: Under the 2019 GBO, a whole house graywater system installed in compliance with the California Plumbing Code, shall count as 3 electives.

**15. Question: I have a project that triggers CALGreen Mandatory. Will I be required to hire a Green Building Special Inspector (GBSI)?**

Answer: No, only projects subject to Tier 1 or Tier 2 require a GBSI.

## **Energy Reach Code**

**16. Question: Does the gas ban for low-rise residential (excluding ADUs) go into effect the 1st of the year? Will my project be subject to the requirements if it is submitted in January?**

Answer: Palo Alto's local 2019 Energy Reach Code has an effective date of April 1, 2020. Projects that are submitted prior to April 1<sup>st</sup> are subject to California standards per the 2019 California Energy Code, Title 24, Part 6.

**17. Question: How is the Energy Budget for new residential construction calculated?**

Answer: The Energy Budget for newly constructed buildings is expressed in terms of the Energy Design Rating, which is based on TDV energy. The Energy Design Rating (EDR) has two components, the Energy Efficiency Design Rating, and the Solar Electric Generation and Demand Flexibility Design Rating. The Solar Electric Generation and Demand Flexibility Design Rating shall be subtracted from the Energy Efficiency Design Rating to determine the Total Energy Design Rating. The Proposed Building shall separately comply with the Energy Efficiency Design Rating and the Total Energy Design Rating.

**18. Question: How do I know which code cycle my project falls under?**

Answer: The applicable code cycle for a project is determined by the date that the project submits for building permit. Whichever code is in effect during time of building permit submittal shall be complied with, as applicable to the scope of work for the project.

**19. Question: If applicable, which reach code does my project need to follow before the April 1, 2020 mark? Will the project need to follow the 2016 Energy Reach Code?**

Answer: If submitted for building permit between January 1, 2020 and March 31, 2020, the project is not subject to any reach code, and only needs to follow California standards per the 2019 California Energy Code, Title 24, Part 6. If submitted during the 2016 code cycle, which began January 1, 2017 and ended December 31, 2019, only then will the project be subject to the 2016 Energy Reach Code.

**20. Question: What is the new Certified Energy Analyst (CEA) requirement, which projects does it apply to, and when does it go into effect?**

Answer: The CEA requirement is effective April 1, 2020 for residential and non-residential energy models for new construction projects using the performance approach to show compliance. The Certificate of Compliance shall be prepared and signed by a Certified Energy Analyst along with the Tier 2 GB-1 sheet, and the energy budget for the Proposed Design shall be no greater than the Standard Design Building.