



SF Green Building Code 2022 Update

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July 8, 2022



Major Changes in California 2022 Codes

CalGreen 2022

Electric vehicle charging: sections • rewritten

California Energy Standards 2022

- **Solar PV** prescriptively required by 2022 ٠ CA Energy Standards for most new buildings
 - Previously only new low-rise residential
 - Enhancing energy efficiency can reduce PV
 - Recognizes taller buildings have less space for PV
- **Building Electrification** ullet
 - 2022 Energy Standards favor heat pumps
 - Improved consistency for multifamily
 - New source energy' metric •

California's EV requirements for 2022 echo SF 2017 EV Ready Ordinance

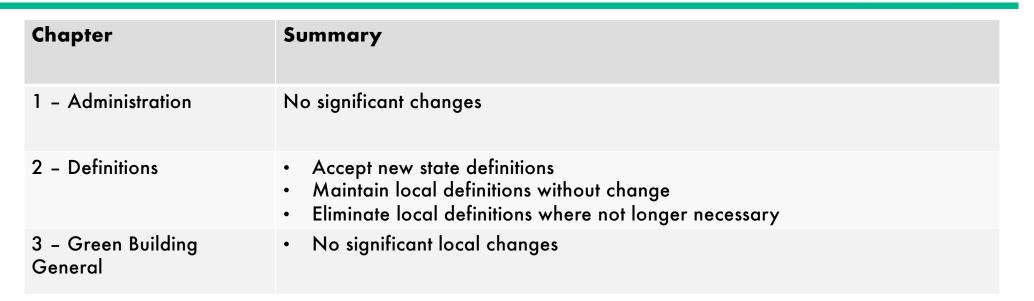
Affects 2016 Better Roofs Ordinance

Progress toward all-electric new construction

Favors electrification/decarbonization



Proposal to Continue Existing SFGBC Provisions



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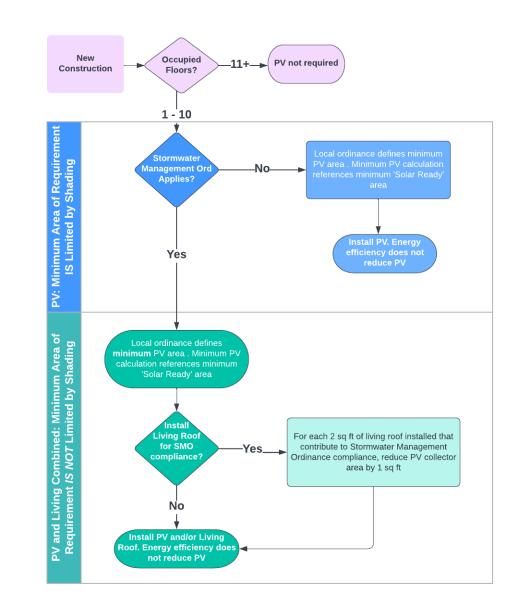
Chapter	Summary
4 - Residential Mandatory Measures	 For residential Major Alterations choosing LEED, reduce requirement to LEEDv4 Silver to match New Construction. (4.103.3.1) EV charging: Adopt CalGreen 2022 section numbering Accept CalGreen 2022 minimum requirements related to EV infrastructure that are stricter than SFGBC 2019 Remove sections superseded by 2022 CalGreen Includes EV-related requirements for residential Major Alterations Retain SFGBC exception establishing specific and testable cost cap on utility infrastructure cost attributable to EV charging. (4.106.4, Exception 1.2) Otherwise maintain local requirements without revision Electric Preferred: If an exception to All-Electric New Construction (SFBC 106A.1.17.1) applies, maintain requirement for energy budget no greater than 90% T24 Energy Standards. (4.201.3) Better Roofs: Maintain option to install living roof and reduce PV. (4.201.2)
	Maintain other local provisions without significant revision.

Revision since June GB Subcommittee Meeting:

Renewable Energy and Better Roofs

SFGBC 2019 Section 4.201.2 (current requirement)

- 2019 CA Energy Standards did not require PV for high-rise residential.
- 2022 CA Energy Standards require PV
- SFGBC relies on local modifications to "Solar Ready" provisions in California Energy Standards

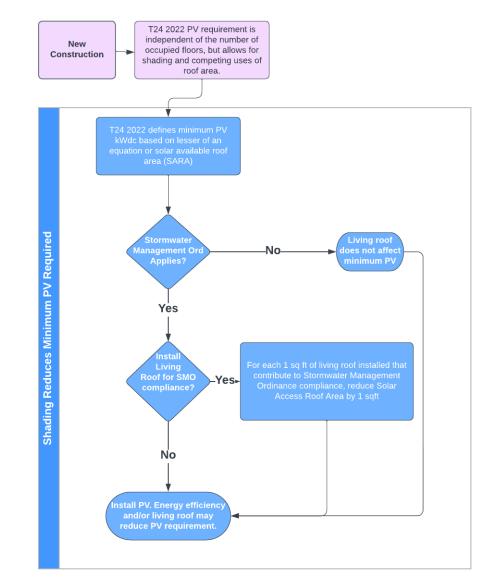


Revision since June GB Subcommittee Meeting:

Renewable Energy and Better Roofs

SFGBC 2022 Section 4.201.2 (Proposed update)

- 2022 California Energy Standards supersede prior local requirements.
- Proposed SFGBC 2022 relies on mandatory method for determining minimum PV prescribed by 2022 Energy Standards
- 2022 CA Energy Standards allow for locally required uses of roof space that reduce area available for PV
- Proposal for SFGBC 2022 is as similar to prior Better Roofs requirement as possible:
 - Allows living roof area contributing to SMO compliance to reduce solar-available roof area (SARA)
 - Compatible with SF Planning Code 149



Proposal to Continue Existing SFGBC Provisions



	Summary
5 – Non-Residential Mandatory Measures	 EV charging: Adopt CalGreen 2022 section numbering Accept CalGreen 2022 minimum requirements related to EV charging that are stricter than SFGBC 2019. Retain EV infrastructure provisions for Major Alterations to A, B, I, M, E occupancy Remove sections superseded by 2022 CalGreen Otherwise maintain local requirements without revision Electric Preferred: If an exception to All-Electric New Construction (SFBC 106A.1.17.1) applies, maintain requirement for energy budget no greater than 90% T24 Energy Standards. (5.201.1.1) Better Roofs: Maintain option to install living roof instead of PV, same as residential. (5.201.1.2) Renewable Electricity: Eliminate requirements for 11+ story new construction. (5.201.1.3) Maintain other local provisions without significant revision.

Upcoming

- Separate ordinance to consider:
 - Close a loophole by expanding All-Electric New Construction requirements to Major Alterations
 - Revise EV charging requirements to align with BAAQMD CEQA threshold: (CalGreen Tier 2 for EV charging only)



