

CITY OF PALO ALTO'S REACH CODE AND GREEN BUILDING REQUIREMENTS

EXISTING CODE REQUIREMENTS (to be extended)

- 1. Continue to <u>require</u> Tier I and Tier II CALGreen provisions (that are <u>optional</u> under State code) for new construction, with city-specific exceptions
 - Link: CHAPTER 3 GREEN BUILDING, 2019 California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement | ICC Digital Codes (iccsafe.org)
- 2. Require all-electric new home construction (both single-family and multi-family). Link: 16.17.100 Subchapter 7 - Low-rise residential buildings - mandatory features and devices. (amlegal.com)
- Continue to require 100% of residential parking spaces in multifamily building to be Level 2 EV ready or have EVSE installed
 - 16.14.440 Expedited permitting process for electric vehicle charging stations. (amlegal.com)
- 4. Continue to require a 20% reduction in indoor water use from the CALGreen baseline for nonresidential new construction projects
 - Link: APPENDIX A5 NONRESIDENTIAL VOLUNTARY MEASURES, 2019 California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement | ICC Digital Codes (iccsafe.org)
- 5. Continue to require dual plumbing for new nonresidential projects > 10,000 sf if recycled water service is available and new nonresidential projects > 50,000 sf if recycled water is not available Link: 16.14.300 (amlegal.com)
- 6. Continue to require 80% diversion rate in construction waste for projects exceeding \$25,000 and 65% diversion rate for projects less than \$25,000
 - Link: 16.14.260 Section A4.408.1 Enhanced construction waste reduction. (amlegal.com)
- 7. Require minimum MERV 13 air filtration media in new nonresidential buildings

 Link: CHAPTER 5 NONRESIDENTIAL MANDATORY MEASURES, 2019 California Green Building Standards

 code, Title 24, Part 11 with July 2021 Supplement | ICC Digital Codes (iccsafe.org)

PROPOSED NEW CODE REQUIREMENTS (becoming effective Jan 2023, pending CPA adoption)

- 1. Require covers for all new pools and spas (no exceptions)
- 2. Require newly constructed cooling towers to achieve maximum number of cycles to optimize process water use
- 3. Adopt low-carbon concrete standards for all new construction projects
- 4. Require new detached Accessory Dwelling Unit (ADU) to be all-electric
- 5. Require all new, non-residential construction to be all-electric
- 6. Require heat pump water heaters when water heaters are replaced as part of a residential addition and/or alteration project

City of Palo Alto

Proposed Energy and Green Building Code updates

- 7. Prohibit new gas infrastructure for outdoor equipment such as pools, spas, and grills in existing residential buildings
- 8. Expand the City's EV charging infrastructure requirements for new construction above the State minimum requirements
- 9. Adopt a definition for substantial remodel that will trigger Green Building requirements for new construction projects

CONSIDERED BUT NOT RECOMMENDED AT THIS TIME

1. Demand Hot Water Recirculation System with Manual Control

Reasoning: Limited water savings

2. Drain Water Heat Recovery

Reasoning: Limited water savings

3. Graywater Dual Drainage plumbing in renovations

Reasoning: Requires additional system elements to functional

4. Use of recycled water for landscape

Reasoning: Potential high costs for infrastructure. Unknown timeline of recycled water

availability

5. Greater than MERV 13 filtration

Reasoning: Limited air quality benefits, higher energy demands for fans, difficult to achieve

6. MERV 13 filtration for residential buildings

Reasoning: Variation in system types prevents universal applicability. Room units may be more

cost effective.

7. Require graywater valve when laundry room is renovated

Reasoning: Benefits conditional on user behavior and landscape water demands.

8. Higher efficiency indoor water fixtures

Reasoning: Efficiency goals managed through a percent reduction target rather than prescriptive

measures. Limited options of lower flow fixtures (beyond CALGreen baseline)

9. HERS Verified Energy Measures (beyond those already required by code)

Reasoning: Requires a cost-effectiveness study

10. Battery Storage

Reasoning: 2022 State Code beginning to address this. Would require cost-effectiveness

11. Life Cycle Assessment Modeling

Reasoning: Expensive and very uncommon currently. Would not produce any savings, just

estimates.

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12. Efficiency & electrification requirements for alterations/addition of existing single-family homes
Reasoning: Cost-effectiveness of energy efficiency measures is dependent on the building
vintage and whether prior upgrades have been made (based on the cost
effectiveness study for existing single family residential building upgrade completed
in August 2021.) Most electrification measures remain not cost effective. If the City
adopts an efficiency upgrade ordinance for single family homes, there will be many
exceptions which makes enforcement challenging.

