

| <b>DOCKETED</b>         |                                                             |
|-------------------------|-------------------------------------------------------------|
| <b>Docket Number:</b>   | 22-BSTD-07                                                  |
| <b>Project Title:</b>   | Local Ordinance Applications Exceeding the 2022 Energy Code |
| <b>TN #:</b>            | 266521                                                      |
| <b>Document Title:</b>  | City of Menlo Park Staff Report                             |
| <b>Description:</b>     | Plain text of City of Menlo Park staff report               |
| <b>Filer:</b>           | Anushka Raut                                                |
| <b>Organization:</b>    | California Energy Commission                                |
| <b>Submitter Role:</b>  | Commission Staff                                            |
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| <b>Docketed Date:</b>   | 10/13/2025                                                  |



## STAFF REPORT

### City Council

Meeting Date:

8/26/2025

Staff Report Number:

25-128-CC

### Consent Calendar:

**Waive the second reading and adopt an ordinance to amend Chapters 12.16 and 12.18 of Title 12 (Buildings and Construction) of the Menlo Park Municipal Code to adopt local amendments to the 2022 California Building Standards Code**

## Recommendation

Staff recommends that the City Council waive the second reading, accept the findings that the proposed local amendments to the California Energy Code are cost-effective based on the 2022 Cost-Effectiveness Study: Existing Single Family Building Upgrades, 2025 Cost-Effectiveness Study: Single Family AC to Heat Pump Replacements, and the Application of the 2022 Studies to the 2025 Energy Code: Existing Single Family Building Upgrades, attached as Attachment C, and adopt an ordinance making local amendments to the 2022 California Building Standards Code in Chapter 12.16 and 12.18 of the Menlo Park Municipal Code (Attachment A).

## Policy Issues

One of the General Plan's Guiding Principles is Sustainable Environmental Planning, which supports Menlo Park to be a leader in efforts to address the climate crisis. Furthermore, the Land Use Element establishes Green and Sustainable Building goals and policies (LU-1, LU-7, LU-7.9) to promote the implementation and maintenance of sustainable development. In 2019, the City Council declared a climate emergency (Resolution No. 6535) committing to catalyze accelerated climate action implementation. Climate action has been a top City Council priority since 2020 and continues to be a City Council priority for fiscal year 2025-26. In July 2020, the City Council adopted the 2030 Climate Action Plan (CAP) with a bold goal to be zero carbon by 2030. CAP strategy No. 1 to electrify 95% of existing buildings was prioritized in 2021 (Resolution No. 6621) and building code amendments to support this strategy were included in the 2025-2030 CAP implementation scope of work (Resolution No. 6933), adopted Aug. 27, 2024. Additionally, Sept. 24, 2024, the City adopted its first General Plan Environmental Justice (EJ) Element in alignment with Senate Bill 1000 (2016). The EJ Element identifies priority activities to improve indoor air quality, which can be achieved by electrifying home appliances used for space heating, water heating, cooking and clothes drying. The adoption of local amendments to the CBSC supports CAP and EJ policies by requiring enhanced energy efficiency and encouraging electrification of existing buildings. The ordinance presented also prepares homes for compliance with the Bay Area Air District's Rules 9-4 and 9-6, which limit the sale of natural gas-fueled building appliances beginning in 2027.

## Background

On Aug. 12, the City Council voted 4-1 to introduce and waive the first reading of an ordinance to adopt local amendments to the 2022 California Building Standards Code in Chapters 12.16 and 12.18 of the Menlo Park Municipal Code (Attachment B). The ordinance promotes future-ready buildings by ensuring

electrical infrastructure and energy efficiency measures are installed at a time that makes sense for the property owner while reducing greenhouse gas emissions and advancing the City's CAP goals.

## Analysis

The ordinance will be in effect 30 days after the second reading and upon filing with the California Building Standards Commission (CBSC). Sections needing the CEC's approval, which include the AC to HP and flex path but not the pre-wiring expansion, will be enforceable after the CEC's approval. Staff will file the ordinance with the CBSC as soon as the adopted ordinance is executed by the signatories.

The documentation supporting the findings of cost effectiveness as indicated in the ordinance per §1.B are in Attachment C. Since the introduction, staff made non-substantive, and typographical and grammatical edits to the ordinance and updated the attachments to include an additional cost effectiveness analysis (Attachment C.3).

## Impact on City Resources

The adoption of the proposed local amendment will require staff time to file the ordinance with the state, develop compliance tools including an unreasonable hardship application, and update the online permitting system and City website.

## Environmental Review

The adoption of the proposed local amendment is not a project that has the potential for causing a significant effect on the environment and therefore is not subject to review under the California Environmental Quality Act (CEQA).

## Public Notice

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

## Attachments

- A. Ordinance to amend Chapter 12.18 of Title 12 (Buildings and Construction) of the Menlo Park Municipal Code to adopt local amendments to the 2022 California Building Standards Code
- B. Hyperlink – Aug. 12 Staff Report #25-117-CC: [menlopark.gov/files/sharedassets/public/v/1/agendas-and-minutes/city-council/2025-meetings/20250812/h1-ordinance-amend-chapter-12-muni-code.pdf](https://menlopark.gov/files/sharedassets/public/v/1/agendas-and-minutes/city-council/2025-meetings/20250812/h1-ordinance-amend-chapter-12-muni-code.pdf)
- C. Cost effectiveness studies:
  - C.1. 2022 Cost-Effectiveness Study: Existing Single Family Building Upgrades, April 25, 2024 [localenergycodes.com/download/1222/file\\_path/fieldList/Single%20Family%20Retrofits%20CostEff%20Report.pdf](https://localenergycodes.com/download/1222/file_path/fieldList/Single%20Family%20Retrofits%20CostEff%20Report.pdf)
  - C.2. 2025 Cost-Effectiveness Study: Single Family AC to Heat Pump Replacements, June 9 [localenergycodes.com/download/2034/file\\_path/fieldList/2025%20Single%20Family%20AC%20to%20HP%20Cost-eff%20Study.pdf](https://localenergycodes.com/download/2034/file_path/fieldList/2025%20Single%20Family%20AC%20to%20HP%20Cost-eff%20Study.pdf)
  - C.3. Application of the 2022 Studies to the 2025 Energy Code: Existing Single Family Building Upgrades, Aug. 15: [localenergycodes.com/download/2081/file\\_path/fieldList/2022+to+2025+FlexPath+Memo.pdf](https://localenergycodes.com/download/2081/file_path/fieldList/2022+to+2025+FlexPath+Memo.pdf)

Report prepared by:

Ron La France, Retired Annuitant – Assistant Community Development Director

Rachael Londer, Sustainability Manager

Report reviewed by:

Deanna Chow, Community Development Director

**ORDINANCE NO. XXXX****ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MENLO PARK TO AMEND CHAPTERS 12.16 and 12.18 OF TITLE 12 [BUILDINGS AND CONSTRUCTION] OF THE MENLO PARK MUNICIPAL CODE TO ADOPT LOCAL AMENDMENTS TO THE 2022 CALIFORNIA BUILDING STANDARDS CODE**

WHEREAS, the City of Menlo Park ("City") is required, pursuant to state law, to enforce the 2022 Building Standards Code, Title 24 California Code of Regulations, as adopted by the California Standards Building Commission, subject to such local amendments as may be adopted by the City in accordance with applicable law; and

WHEREAS, California Health and Safety Code §§17958.5, 17958.7 and 18941.5 provide that the City may make changes or modifications to the building standards contained in the California Building Standards Code based upon express findings that such changes or modifications are reasonably necessary because of local climatic, geological or topographical conditions; and

WHEREAS, Public Resources Code §25402.1(h)2 establishes a process which allows local amendments to the energy standards that are more stringent than the California Energy Code, provided that such local standards are cost effective and will require buildings to be designed to consume less energy than permitted by the California Energy Code;

WHEREAS, studies commissioned by the California Codes and Standards Reach Code Program, including the 2022 Cost-Effectiveness Study: Existing Single Family Buildings Upgrades, 2025 Cost-Effectiveness Study: Single Family AC to Heat Pump Replacements, and the Application of the 2022 Studies to the 2025 Energy Code: Existing Single Family Building Upgrades, have determined that the proposed energy standards are cost effective and will result in designs that consume less energy than they would under the 2022 California Energy Code; and

WHEREAS, the City has made a commitment to accelerate climate action implementation and has adopted the 2030 Climate Action Plan with a bold goal to be zero carbon by 2030; and

WHEREAS, the proposed local amendments support the Climate Action Plan goal by requiring that certain additions or alterations to existing single family buildings include additional energy efficiency measures; and

WHEREAS, the proposed local amendments support the Climate Action Plan goal by requiring that the replacement or addition of an air conditioner in an existing single family building is a heat pump space conditioner or additional energy efficiency measures; and

WHEREAS, the proposed local amendments support the Climate Action Plan goal by requiring that residential additions or alterations that include certain electrical work or extensions of gas piping to outdoor appliances include measures to make gas appliances ready for conversion to electric appliances to avoid the greenhouse gas emissions that come from natural gas-powered equipment; and

WHEREAS, this ordinance is exempt from California Environmental Quality Act (CEQA) under §15061(b)(3) on the grounds that these standards are more stringent than the State energy standards, there are no reasonably foreseeable adverse impacts and there is no possibility that the activity in question may have a significant effect on the environment.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MENLO PARK:

**Section 1. Findings and determinations.** The City Council of the City of Menlo Park hereby finds the following:

- A. Pursuant to Health and Safety Code section §§17958.5, 17958.7 and 18941.5, the amendments, additions and deletions to the California Energy Code contained in this ordinance are reasonably necessary because of the local climatic, geological or topographical conditions described below.
  1. Climatic: The City is located in Climate Zone 3 as established in the 2022 California Energy Code. Climate Zone 3 incorporates mostly coastal communities from Marin County to southern Monterey County including San Francisco. The City experiences precipitation ranging from 13 to 20 inches per year with an average of approximately 15 inches per year. Ninety-five percent of precipitation falls during the months of November through April, leaving a dry period of approximately six months each year. Relative humidity remains moderate most of the time. Temperatures in the summer average around 80 degrees Fahrenheit and in the winter in the mid 50 degrees Fahrenheit. Prevailing winds in the area come from the west with velocities generally in the 12 miles per hour range, gusting from 25 to 35 miles per hour. These climatic conditions along with the greenhouse gas emissions generated from structures in both the residential and non-residential sectors requires exceeding the energy standards for building construction established in the 2022 California Buildings Standards Code. In 2020, City Council adopted a Climate Action Plan (CAP) that outlines strategies to achieve a 90% reduction in carbon dioxide equivalent emissions (CO<sub>2</sub>e) from 2005 levels and elimination of the remaining 10% of CO<sub>2</sub>e through direct carbon removal measures by 2030. To achieve and maintain the CAP emissions reductions goal, the City needs to adopt policies and regulations that reduce the use of fossil fuels, including natural gas consumed in buildings and used to generate electricity, that contributes to climate change. Burning natural gas releases greenhouse gases, which warms the planet and causes rising sea levels which negatively affects the City's shoreline and infrastructure.
  2. Geologic: The City of Menlo Park is subject to earthquake hazard caused by its proximity to two faults. The San Andreas Fault runs from Hollister, through the Santa Cruz Mountains—epicenter of the 1989 Loma Prieta earthquake—then up the San Francisco Peninsula, then offshore at Daly City near Mussel Rock—the approximate location of the epicenter of the 1906 San Francisco earthquake. The other fault is the Hayward Fault. This fault is about 74 miles long, situated mainly along the western base of the hills on the east side of San Francisco Bay. Both faults are considered major Northern California earthquake faults, which may experience rupture at any time. This potential for rupture of natural gas piping during a seismic event increases the risk of fire.
  3. Topographic: The City of Menlo Park is contiguous with the San Francisco Bay, resulting in a natural receptor for storm and wastewater run-off. The City is also located in an area that has relatively high liquefaction potential given its proximity to the Bay. The surface condition consists mostly of stiff to dense sandy clay, which is

highly plastic and expansive in nature. This potential for rupture of natural gas piping during a flooding or a seismic event increases the risk of fire.

- B. Cost Effectiveness Findings: It is determined, at a regular public meeting of the City Council of the City of Menlo Park, that the energy standards are cost effective and will require buildings to be designed to consume less energy than permitted by the California Energy Code.
- C. CEQA Findings: The City of Menlo Park finds that the adoption of this Ordinance is exempt pursuant to Section 15061(b)(3) of the CEQA Guidelines.

**Section 2. Amendment of energy code.** Chapter 12.16 of Title 12 [Buildings and Construction] of the Menlo Park Municipal Code is hereby amended as follows:

Chapter 12.16  
California Energy Code Amendments

**Sections:**

12.16.030 is hereby added to the City of Menlo Park Municipal Code to amend Section 150.2(a) Energy Efficiency Standards For Additions And Alterations To Existing Single-Family Residential Buildings

12.16.040 is hereby added to the City of Menlo Park Municipal Code to amend Section 150.2(b) Energy Efficiency Standards For Additions And Alterations To Existing Single-Family Residential Buildings

**12.16.030 - ENERGY EFFICIENCY STANDARDS FOR ADDITIONS AND ALTERATIONS TO EXISTING SINGLE-FAMILY RESIDENTIAL BUILDINGS** is hereby added to the City of Menlo Park Municipal Code to amend §Section 150.2(a) of Section 110.10 of the California Energy Code, Part 6 of the California Building Standards Code (California Code of Regulations Title 24) as follows (additions in underline, deletions in ~~strike through~~):

Section 150.2(a), **Additions**, prior to Section 150.0(a) 1, is amended to read as follows:

- (a) **Additions.** Additions to existing single-family residential buildings shall meet the requirements of Sections 110.0 through 110.9; Sections 150.0(a) through (n), (p) and (q); ~~and either~~ Section 150.2(a)1 or 2; and as follows:

An addition to a single-family building originally constructed prior to 2011, with a stated project valuation of \$100,000 or more, is required to submit documentation that two items from the following list of energy efficiency measures are included in the scope of work, in addition to any requirements imposed under California Energy Code section 150.2.

**Note:** The amount of \$100,000 shall be automatically adjusted for inflation annually on January 1 of each year beginning in 2025 based upon the California Construction Cost Index published by the California Department of General Services from data produced by the Engineering News Record.

**Energy Efficient Measures and Electrification:**

- A. Install R-49 attic insulation and apply air sealing practices in all accessible areas of the building. Seal ducts to meet the requirements of Section 150.2(b)1.E of the 2022 California Energy Code.
- B. Install R-15 wall insulation on exterior walls, where the studs are exposed as part of the work scope, to meet the requirements of Section 150.0(c) of the 2022 California Energy Code.
- C. Install R-19 insulation at raised floor assemblies meeting standards of 2022 California Energy Code Section 150.0(d).
- D. Install R-3 insulation on all accessible hot water piping. Install R-6 insulation to the exterior of existing residential tank storage water heaters.
- E. Replace all screw in incandescent and CFL lamps with lamps of an efficiency of 45 lumens per watt or greater in all light fixtures per 2022 California Energy Code Section 150.0(k).
- F. Replace fuel gas furnace with an electric heat pump system meeting the Requirements of the 2022 California Energy Code Section 150.2(b)C or with another high efficiency electric space heating system if approved by the Building Official.
- G. Replace fuel gas water heater with a heat pump water heater meeting the requirements of 2022 California Energy Code Section 150.2(b)H.iii.(b) or 150.2(b)H.iii.(c), or with other high efficiency electric water heating system per approval of the Building Official.
- H. Implement one or more recommendations specified in a Home Energy Score or Home Energy Audit report that has been completed within the last five years and that is submitted with the application for a building permit, with the approval of such a recommendation by the Building Official.

**Exceptions:**

- 1. A Home Energy Score Report for the single family building, completed within the last 5 years, demonstrating that the building already has a minimum Home Energy Score of 7, is submitted to the Building Official.
- 2. The Building Official shall not require the installation of Energy Efficient Measures and Electrification Measures F and/or G if one or more of the following conditions apply:
  - a. An existing space heating system is not required to be replaced when the unique features of the construction of the single-family building structure, including, but not limited to existing heating and/or cooling system(s) that are not configured for conversion to forced air systems preclude installation of those measures.
  - b. The installation of the measures is not commensurate with the project's scope and budget, as determined by the Building Official, because the cost of those measures would exceed 20% of the total project cost or require substantial construction in areas of the residential structure that would otherwise not be part of the project.
  - c. Requiring the installation of measures is otherwise prohibited by other applicable laws.

**Exception 1 to Section 150.2(a):** Additions of 300 square feet or less are exempt from the roofing requirements of Section 150.1(c)11.

**Exception 2 to Section 150.2(a):** Existing inaccessible piping shall not require insulation as defined under Section 150.0(j)1.

**Exception 3 to Section 150.2(a): Space-conditioning system.** When heating or cooling will be extended to an addition from the existing system(s), the existing heating and cooling equipment need not comply with Part 6. The heating system capacity must be adequate to meet the minimum requirements of CBC Section 1204.1.

**Exception 4 to Section 150.2(a): Space-conditioning system ducts.** When any length of duct is extended from an existing duct system to serve the addition, the existing duct system and the extended duct shall meet the applicable requirements specified in Section 150.2(b)1Di and 150.2(b)1Dii.

**Exception 5 to Section 150.2(a):** Additions 1,000 square feet or less are exempt from the ventilation cooling requirements of Section 150.1(c)12.

**Exception 6 to Section 150.2(a):** Photovoltaic systems, as specified in Section 150.1(c)14, are not required for additions.

**Exception 7 to Section 150.2(a): Space heating system.** A new or replacement space heating system serving an addition may be a heat pump or gas heating system.

**12.16.050 – ENERGY EFFICIENCY STANDARDS FOR ADDITIONS AND ALTERATIONS TO EXISTING SINGLE-FAMILY RESIDENTIAL BUILDINGS, is hereby added to the City of Menlo Park Municipal Code to amend §Section 150.2(b) of Section 110.10 of the California Energy Code, Part 6 of the California Building Standards Code (California Code of Regulations Title 24), as follows (additions in underline, deletions in strikethrough):**

Section 150.2(b), **Alterations**, prior to Section 150.2(b)1, is amended to read as follows:

- (b) **Alterations.** Alterations to existing single-family residential buildings or alterations in conjunction with a change in building occupancy to a single-family residential occupancy shall meet either item 1 or 2 below and comply with the requirements below:

An alteration to a single-family building originally constructed prior to 2011, with a stated project valuation of \$100,000 or more, is required to submit documentation that two items from the following list of energy efficiency measures are included in the scope of work, in addition to any requirements imposed under California Energy Code section 150.2.

**Note:** The amount of \$100,000 shall be automatically adjusted for inflation annually on January 1 of each year beginning in 2025 based upon the California Construction Cost Index published by the California Department of General Services from data produced by the Engineering News Record.

**Energy Efficient Measures and Electrification:**

- A. Install R-49 attic insulation and apply air sealing practices in all accessible areas of the building. Seal ducts to meet the requirements of Section 150.2(b)1.E of the 2022 California Energy Code.
- B. Install R-13 wall insulation on exterior walls, where the studs are exposed as part of the work scope, to meet the requirements of Section 150.0(c) of the 2022 California Energy Code.
- C. Install R-19 insulation at raised floor assemblies meeting standards of 2022 California Energy Code Section 150.0(d).
- D. Install R-3 insulation on all accessible hot water piping. Install R-6 insulation to the exterior of existing residential tank storage water heaters.
- E. Replace all screw in incandescent and CFL lamps with lamps of an efficiency of 45 lumens per watt or greater in all light fixtures per 2022 California Energy Code Section 150.0(k).
- F. Replace fuel gas furnace with an electric heat pump system meeting the Requirements of the 2022 California Energy Code Section 150.2(b)C or with another high efficiency electric space heating system if approved by the Building Official.
- G. Replace fuel gas water heater with a heat pump water heater meeting the requirements of 2022 California Energy Code Section 150.2(b)H.iii.(b) or 150.2(b)H.iii.(c), or with other high efficiency electric water heating system per approval of the Building Official.
- H. Implement one or more recommendations specified in a Home Energy Score or Home Energy Audit report that has been completed within the last five years and that is submitted with the application for a building permit, with the approval of such a recommendation by the Building Official.

**Exceptions:**

- 1. A Home Energy Score Report for the single family building, completed within the last 5 years, demonstrating that the building already has a minimum Home Energy Score of 7, is submitted to the Building Official.
- 2. The Building Official shall not require the installation of Energy Efficient Measures and Electrification, Measures F and/or G if one or more of the following conditions apply:
  - a. An existing space heating system is not required to be replaced when the unique features of the construction of the single-family building structure, including, but not limited to existing heating and/or cooling system(s) that are not configured for conversion to forced air systems preclude installation of those measures.
  - b. The installation of the measures is not commensurate with the project's scope and budget, as determined by the Building Official, because the cost of those measures would exceed 20% of the total project cost or require substantial construction in areas of the residential structure that would otherwise not be part of the project.
  - c. Requiring the installation of measures is otherwise prohibited by other applicable laws.

**Section 3. Amendment of green building standards code.** Chapter 12.18 of Title 12 [Buildings and Construction] of the Menlo Park Municipal Code is hereby amended as follows:

Chapter 12.18  
California Green Building Standards Code Amendments

**Sections:**

**12.18.015 is hereby added to the City of Menlo Park Municipal Code to amend Section 301.1 Scope of the California Green Building Standards Code**

**12.18.043 is hereby added to the City of Menlo Park Municipal Code to add of Section 4.106.5 Electrical readiness requirements of the California Green Building Standards Code**

**12.18.044 is hereby added to the City of Menlo Park Municipal Code to add Section 4.106.5.1 Addition of electrical raceway within three feet (3') of a gas appliance and reservation of breaker space, of the California Green Building Standards Code**

**12.18.045 Amendment of Section 4.106.5.2 Prewiring requirements, of the California Green Building Standards Code**

**12.18.046 is hereby added to the City of Menlo Park Municipal Code to amend Section 4.507.2 Heating and air-conditioning system design of the California Green Building Standards Code**

**12.18.047 is hereby added to the City of Menlo Park Municipal Code to add Section 4.507.3 Single-family residential additions, alterations and accessory dwelling unit conversions, of the California Green Building Standards Code**

**12.18.015 – Amendment of §301.1 Scope, is hereby added to the City of Menlo Park Municipal Code to amend section 4.106.5.2 of the California Green Building Standards Code, Part 11 of the California Building Standards Code, California Code of Regulations Title 24, as follows (additions in underline, deletions in strikethrough):**

**301.1 Scope.**

Buildings shall be designated to include the green building measures specified as mandatory in the application checklist contained in this code. All outdoor gas burning appliances shall comply with Section 4.106.5.1.3 of this code. Voluntary green building measures are also included in the application checklist and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county or city and county as specified in Section 101.7.

**301.1.1 Additions and alterations.**

**[HCD]** the mandatory provisions of Chapter 4 shall be applied to additions and alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.

**301.1.1.1 Additions and alterations to parking facilities.**

The mandatory provisions of Section 4.106.4.2 shall apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.

NOTE: Repairs including, but not limited to, resurfacing, restriping, and repairing or maintaining existing lighting fixtures are not considered alterations for the purposes of this section.

**301.1.2 Additions and alterations to main electrical panel and/or spaces that contain a gas fired appliance.**

The mandatory provisions of section 4.106.5 shall apply to additions or alterations of existing residential buildings and their accessory structures/ADU that includes:

- a) The replacement of the main electric panel; or
- b) The addition of branch circuits within three feet of an existing gas appliance.

See Section 4.106.5 for application.

**12.18.043 –§4.106.5 Electrical readiness requirements is hereby added to the City of Menlo Park Municipal Code to amend section** 4.106.5.2 of the California Green Building Standards Code, Part 11 of the California Building Standards Code, California Code of Regulations Title 24, as follows (additions in underline, deletions in ~~strike through~~):

**Section 4.106.5 Electrical readiness requirements.**

**12.18.044 –§4.106.5.1 Addition of electrical raceway within three feet (3') of a gas appliance and reservation of breaker space, is hereby added to the City of Menlo Park Municipal Code to amend section** 4.106.5.1 of the California Green Building Standards Code, Part 11 of the California Building Standards Code, California Code of Regulations Title 24 as follows (additions in underline, deletions in ~~strike through~~):

**4.106.5.1 Addition of electrical raceway within three feet (3') of a gas appliance and reservation of breaker space.**

All additions or alterations to existing one- and two-family residential buildings and their accessory structures/ADU and/or accessory dwelling unit conversions that do not exceed the limits of repair or remodel as established in the section 12.08.040 of the Menlo Park Municipal Code and where the addition or area under alteration contains a gas fired appliance(s) shall comply with Sections 4.106.5.1.1, 4.106.5.1.2 and/or 4.106.5.1.3 as applicable.

**Exception:** Where the existing main electric panel does not have sufficient capacity to accommodate the physical breaker size and or electrical capacity to support the electrical loads associated with the requirements of this section, branch circuits for the appliance will be added to the maximum extent practicable. In all cases, the raceway shall be provided.

**4.106.5.1.1 Kitchen alteration.**

All alterations to existing kitchens where the installation or continued use of a gas appliance is being proposed, a pathway for a future 240 volt 50 amp minimum branch circuit that shall consist of either conductors or raceway from the main electrical service panel shall be installed. The main electric panel shall have space reserved to allow for the installation of a double pole

circuit breaker for future electric range, oven, cooktop and/or other gas fired cooking appliance. The reserved space shall be permanently marked as "For Future 240V use". The raceway or conductors shall terminate at a junction box within three feet of the appliance. The blank cover shall be identified as "240V ready".

#### **4.106.5.1.2 Laundry facilitation.**

All alterations to existing laundry areas where the use of a gas clothes dryer is being proposed, a pathway for a future 240 volt 30 amp minimum branch circuit that shall consist of either conductors or raceway from the main electrical service panel shall be installed. The main electric panel shall have space reserved to allow for the installation of a double pole circuit breaker for future electric clothes dryer installation. The reserved space shall be permanently marked as "For Future 240V use". The raceway or shall terminate at a junction box within three feet of the appliance. The blank cover shall be identified as "240V ready".

#### **4.106.5.1.3 Outdoor gas appliance.**

Where a gas line is added to any pool water heater, spa water heater, sauna, fireplace, outdoor cooking appliance, or outdoor heating system, a conduit and an electrical receptacle or junction box designed to serve a future electric appliance(s) with the same function shall be installed within three feet of the appliance and be accessible with no obstructions. The conduit and electrical receptacle or junction box shall be sized in accordance with the California Electrical Code according to the number and size of conductors required to serve a future electric appliance(s) with the same function. Label both ends of the unused conduit or conductors "For Future Electrical Appliance".

**12.18.045 – Amendment of §4.106.5.2 Prewiring requirements.** Section 4.106.5.2 of the California Green Building Standards Code, Part 11 of the California Building Standards Code, California Code of Regulations Title 24, is hereby amended as follows (additions in underline, deletions in ~~striketrough~~):

#### **4.106.5.2 Residential additions, alterations and accessory dwelling unit conversions.**

All residential construction additions, alterations, repairs, and/or accessory dwelling unit conversions that do not meet the definition of new residential construction that include the replacement/upgrade to the main electric panel shall comply with the following:

1. The replacement/upgrade to the main electric panel shall have:
  - a. The electrical capacity for and reservation of breaker space in the panel to accommodate the existing single family electrical load and the future electrification of:
    - i. An electric stove and oven if the current stove and/or oven are gas;
    - ii. An electric clothes dryer if the current clothes dryer is gas;
    - iii. One Level 2 Electric Vehicle (EV) charger
    - iv. Photovoltaic system (PV) size based on §150.1(c)14 of the 2022 California Energy Code; and
  - b. All reserved breaker spaces shall be permanently marked as "For Future EV charger, PV and heat pump water heater use."
  - c. Electrical capacity for and reservation of breaker space in the panel to accommodate a dedicated 240-volt branch circuit for a heat pump water heater. Electrical conductors for the branch circuit shall be installed within three (3) feet from the existing water heater location and shall be rated at 30 amps minimum. Both ends of the unused conductor shall be labeled with the word "spare" and be identified as 240-volt ready.

**Exceptions:**

1. Multifamily buildings as defined in §15.10.030 of the California Building Standards Code where the water heaters are located in each dwelling unit.
2. ~~Single family and multifamily homes can designate a space at least 2.5 feet by 2.5 feet wide and 7 feet tall with access to hot and cold water suitable for the future installation of a heat pump water heater (HPWH) at location at discretion of building official. When approved by the Building Official, single- and multi-family homes and ADU's can designate an alternate location that provides a space of at least 2.5 feet by 2.5 feet wide and 7 feet tall with access to hot and cold water suitable for the future installation of a heat pump water heater (HPWH).~~

**12.18.046 – Amendment of §4.507.2 Heating and air-conditioning system design.** Section 4.507.2 of the California Green Building Standards Code, Part 11 of the California Building Standards Code, California Code of Regulations Title 24, is hereby amended as follows (additions in underline, deletions in ~~strikethrough~~):

**4.507.2 Heating and air-conditioning system design.**

Heating and air-conditioning systems shall be sized, designed and have their equipment selected using the following methods:

1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J-2016 (*Residential Load Calculation*), ASHRAE handbooks or other equivalent design software methods.
2. Duct systems are sized according to ANSI/ACCA 1 Manual D-2016 (*Residential Duct Systems*), ASHRAE handbooks or other equivalent design software methods.
3. Select heating and cooling equipment according to ANSI/ACCA Manual S-2014 (*Residential Equipment Selection*), or other equivalent design software methods. All cooling equipment installed in newly constructed single-family residential homes as defined in Section 12.08.040 of the Menlo Park Municipal Code shall use heat pump equipment.

**Exceptions:**

Heat pump equipment is not required when one of the conditions below is met:

1. When the differential cost between an air conditioning condensing unit and a heat pump condensing units exceed 20% of the cost of construction, the heat pump is not required to be installed, or
2. Unless already required by the 2022 California Energy Code due to the proposed work scope, an air conditioning condensing unit can be used when the following requirements are met:
  - a. Systems with existing duct distribution system: The system shall meet the airflow and refrigerant charge verification requirements of Section 150.2(b)1Fii; or
  - b. Systems with entirely new or complete replacement duct distribution system: R-8 duct insulation shall be installed for all new ducts located in unconditioned space

**12.18.047 – Addition of §4.507.3 Single-family residential additions, alterations and accessory dwelling unit conversions, is hereby added to the City of Menlo Park Municipal Code to amend section** 4.10 of the California Green Building Standards Code, Part 11 of the

California Building Standards Code, California Code of Regulations Title 24, as follows (additions in underline, deletions in ~~strike through~~):

**4.507.3 Single-family residential additions, alterations and accessory dwelling unit conversions.**

All single-family residential construction additions, alterations, repairs, and/or accessory dwelling unit conversions that include the installation of a replacement or upgrade of an existing air conditioning condensing unit shall be replaced with a reverse cycle air conditioning condensing unit (heat pump).

**Exceptions:**

1. When the differential cost between an air condition condensing unit and a heat pump condensing units exceed 20% of the cost of construction, the heat pump is not required to be installed, or
2. Unless already required by the 2022 California Energy Code due to the proposed work scope, an air conditioning condensing unit can be used when the following requirements are met:
  - a. Systems with existing duct distribution system: The system shall meet the airflow and refrigerant charge verification requirements of Section 150.2(b)1Fii; or
  - b. Systems with entirely new or complete replacement duct distribution system: R-8 duct insulation shall be installed for all new ducts located in unconditioned space
  - c. The duct system measured air leakage shall be equal to or less than 5% percent of the system air handler airflow as confirmed through field verification and diagnostic testing, per the requirements in Title 24, Part 6, Reference Residential Appendix Section RA3.1.4.3.1. If it is not possible to meet the duct sealing requirements, all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified ECC-Rater utilizing the methods specified in Reference Residential Appendix Section RA3.1.4.3.5;

Note: This is not required when documentation is provided verifying the existing duct systems are constructed, insulated or sealed with asbestos by a licensed asbestos abatement contractor.

- d. Install a system thermostat that conforms to the specifications in Section 110.12 of the California Energy Code.

**Section 4: Effective Date**

This ordinance shall be in effect thirty (30) days after the date of adoption, and implemented upon the California Energy Commission's approval, as applicable.

**Section 5: Severability**

If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the remainder of the ordinance and the application of such provision to other persons or circumstances shall not be affected thereby.

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INTRODUCED on the twelfth day of August 2025.

PASSED AND ADOPTED as an ordinance of the City of Menlo Park at a regular meeting of said City Council on the \_\_\_ day of \_\_\_, 2025, by the following votes:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

\_\_\_\_\_  
Drew Combs, Mayor

ATTEST:

\_\_\_\_\_  
Judi A. Herren, City Clerk