

OVERVIEW OF ELECTRIC READINESS AND A/C TO HEAT PUMP REQUIREMENTS

Background

- To improve health and safety and respond to climate change, Alameda's <u>Climate Action and Resiliency Plan</u> (CARP) calls for the City to reduce greenhouse gas (GHG) emissions that come from burning natural gas in buildings.
- In 2022, the Bay Area Air Quality Resources Board (BAAQMD) <u>adopted Rules 9-4 and 9-6</u> which limit the sale of residential natural gas-fueled water heaters by 2027 and natural gas-fueled space heaters by 2029.
- In 2023, the City Council adopted the <u>Equitable Building Electrification Plan</u> which calls for development of ordinances and policies for existing building upgrades.
- Alameda amended the 2025 California Green Buildings Standard Code and Energy Code and to
 prepare homes to comply with BAAQMD rules and to reduce retrofit costs of electrifying
 appliances in the future. The proposed measures are cost effective over the life of the project.
- Alameda Municipal Power (AMP) and the State of California provide rebates for the installation of heat pump and electric appliances to help offset the cost of installation of electrical appliances, further improving the cost effectiveness of these measures. Visit switchison.org to learn more.

Requirements - Beginning January 1, 2026

- Air Conditioning. When installing, altering, or replacing an air conditioning unit in single-family
 homes, duplexes and townhomes, it must either include a heat pump space conditioner as the
 primary heating system or install specific energy efficiency measures.
 - EXCEPTION 1: Where the electrical panel capacity is insufficient to meet the load of a heat pump.
 - EXCEPTION 2: Where the heat pump would need to be sized more than 12,000 Btu/hr (1 ton) over the air conditioner that would be installed to meet the heating load.
 - There are also exceptions to the duct sealing and airflow requirements that specify alternative methods of compliance. All applicable exceptions in the California Energy Code apply.
- Electric Readiness. When additions or alterations in single family homes, duplexes and townhomes include electrical permitted work around existing gas equipment, electric-ready components must be installed:
 - Cooking Range

- Install a 125-volt 20-amp receptacle OR pathway for a 240-volt 50-amp circuit for a future electric cooktop
- Clothes Dryer
 - Install a 125-volt 20-amp receptacle OR pathway for a 240-volt 30-amp circuit for a future electric clothes dryer
- Water Heating
 - Install a 125-volt 20-amp receptacle OR pathway for a 240-volt 30-amp circuit for a future heat pump water heater
 - Pathway for a condensate drain
 - Reserve physical space for a future heat pump water heater (2.5' x 2.5 x 7')
- Outdoor Appliances
 - Install conduit
 - Reserve breaker space and physical space for future electric appliance
- o Exceptions to Requirements
 - Repairs and safety improvements
 - Electrical permit is not otherwise required for the project other than for compliance with this section
 - Panel capacity is not required to exceed the existing utility electrical service to the building to meet the requirements of this section
 - Mobile homes, manufactured housing, factory-built housing
 - Emergency housing
 - ADUs conversions pursuant to Government Code 66323
 - Hardship exemptions shall be provided at the discretion of the Building Official for economic hardship or another infeasibility not covered above.
- **Electric Power Upgrades.** When electrical infrastructure capacity serving a building is proposed to be increased as part of a permitted project, the applicant should submit calculations demonstrating that upgrades to electrical power infrastructure are required. Only documentation of calculations is required, and it does not require the installation of any power management devices. The purpose of this requirement is to educate contractors and the industry on ways to minimize panel upgrades when electrifying equipment.