HEAT PUMP HVAC

(SPACE HEATING AND COOLING)

BESO Resilience Upgrade Measure

MEASURE INFORMATION

Credits: 6

Description:

A heat pump HVAC system typically provides both heating and cooling in one highly efficient and all-electric unit, offering year-round comfort. Heat pumps move heat in or out of your home, keeping the home warm in the winter and cool during the summer. By transferring rather than directly generating heat, heat pumps are much more efficient than gas furnaces and electric-resistance systems. Heat pumps also improve indoor air quality by eliminating combustion in the home and are especially valuable during heat waves and wildfire smoke events when sealed windows and reliable cooling are essential. Heat pumps typically have indoor and outdoor components.

Installation Criteria:

Install an electric heat pump HVAC system that provides air heating (and may provide air cooling) to all conditioned areas of the building or unit.

Required Verification Documentation:

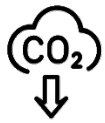
- Permit + approved final inspection – *Include "for BESO compliance" in the scope of work section of your building permit application.*

Equipment Options:

- **Ducted Heat Pumps** – A ducted heat pump consists of an outdoor unit (the heat pump) and an indoor air handler and uses your home's existing or new ductwork to deliver central heating and cooling throughout the house. Ducted systems are ideal for homes that already have ductwork, although some updates may be needed to ensure the ducts are properly sealed, insulated, and sized for efficient heat pump operation.
- **Ductless Heat Pumps** – A ductless heat pump provides efficient heating and cooling without the need for ductwork, using indoor units to deliver zone temperature control in individual rooms or areas. The most common type is a mini-split, which uses small,

wall-mounted indoor units connected to an outdoor compressor. Ductless systems are ideal for homes without existing ducts, additions, or spaces that need targeted comfort.

Benefits:



Reduce Emissions


Improve Comfort


Increase Health & Safety

ADDITIONAL RESOURCES

Bay Area Air District Zero NOx Appliance Rules:

To improve regional air quality and reduce the amount of NOx and particulate matter emissions, the Bay Area Air District has adopted zero NOx emissions standards for natural gas fired furnaces and water heaters. When your gas furnace reaches the end of its life, you'll need to replace it with a zero NOx alternative, such as an electric heat pump HVAC system.

For more information, see the Air District's Fact Sheet and Frequently Asked Questions on the zero NOx appliance rules. Completing this measure helps you comply with BESO and gets you ready for the new Bay Area District Zero NOx Appliance requirements.

Permitting Resources:

- For information about the permit process, including permit types and requirements, visit the City's permitting webpage. If you're new to the process or have questions, you can also schedule an appointment with a permit specialist for personalized guidance.

Rebates and Incentives:

- Check the Switch Is On for available incentives and rebates.
- Thinking of going all-electric? You could be eligible for **more than $4,000 in incentives** are currently available through the California Energy-Smart Homes program by replacing all gas appliances—such as the water heater, HVAC, stove/oven, and dryer—with electric alternatives.