

# HEAT PUMP WATER HEATER

## *BESO Resilience Upgrade Measure*

### MEASURE INFORMATION

**Credits: 6**

**Description:**

A heat pump water heater is a highly efficient way to heat water. It works by pulling warmth from the surrounding air instead of generating heat directly. It can significantly lower energy use compared to standard gas or electric models. These systems are best located in garages, basements, or utility rooms with good airflow and mild temperatures because they rely on a steady supply of temperate, ambient air to extract heat. Adequate space and ventilation help the unit operate effectively and prevent the surrounding area from getting too cool. Like a traditional water heater, heat pump water heaters come in a variety of tank sizes depending on the home's hot water needs. Some heat pump water heaters can be programmed to preheat water during off-peak hours to help save money on electricity bills. Heat pump water heaters can produce some noise so consider placement or adding soundproofing.



**Installation Criteria:**

Install an electric heat pump water heater that supplies hot water to the entire building or unit.

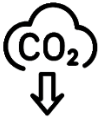
**Required Verification Documentation:**

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

**Equipment Options:**

- **120v Models** – Most heat pump water heaters run on 240 volts, which typically requires a dedicated circuit and may need an electrical panel upgrade if your home doesn't already have capacity. However, 120-volt models are now available and can plug into a standard household outlet, making installation easier and often avoiding the need for electrical upgrades.

### Benefits:



Reduce  
Emissions



Improve  
Air Quality



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 water heater reaches the end of its life, you'll need to replace it with a zero NOx alternative, such as an electric heat pump water heater.

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:

- [Water Heater Earthquake Bracing](#)
- 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.