

# Green Buildings Open House Tour 2023

Sat, June 3, 11 am - 4 pm

## SILVER SPONSORS



## Homesteads - NZ Passive House



## BRONZE SPONSORS



## SITE OVERVIEW

Tour Day: June 3rd, 2023

Address: [REDACTED]

Parking: On the street

Key Attractions:

- Prefabricated mass-timber structural panels
- Passive House Net Zero Building
- Geothermal Ground-Source Heat Pump
- Under construction

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**Homesteads, NZ Passive House**

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## WHY IS THE HOMESTEADS PROPERTY ON THE TOUR?

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This is a net-zero Passive House under construction atop a reclaimed coal mine. The high-performance building envelope was assembled from offsite-fabricated panels. The windows and doors are Passive House Cold Climate certified and feature exterior motorized shades. Heating and cooling are provided by a Ground-Source Heatpump. A Heatpump Water Heater provides domestic hot water. The house exterior was designed to provide increased wildfire resilience. The decking is made from fire-resistant bamboo composite.

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## WHAT WILL PEOPLE SEE & LEARN ABOUT AT YOUR PROPERTY?

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- Electric Vehicle ownership
- E-bike ownership
- Fire-resistant construction materials
- FireSmart principles
- Net zero home
- Passive House principles
- Geothermal and Heat pump systems
- Cold climate-certified windows and doors
- Smart home technology
- Prefabricated mass-timber structural panels
- High-performance building envelope design
- Rain water harvesting



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## WHAT ENERGY EFFICIENT FEATURES ARE SHOWCASED?

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- Low embodied-carbon Insulation
- Airtightness
- High-efficiency appliances
- Energy recovery ventilator (ERV)
- Energy efficient windows
- Solar generation
- Passive solar
- Ground-source heat pump (vertical closed-loop system)
- Exterior motorized shades

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## WHAT OTHER SUSTAINABILITY FEATURES ARE SHOWCASED?

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- Rain barrels
- Electric vehicle
- E-bike
- Smart technology
- Electric vehicle charging