BIOSPHERE
INSTITUTE OF THE BOW VALLEY

Green Buildings Open House Tour 2024

Sat, June 1, 11 am - 4 pm

SILVER SPONSORS

SUSTAINABLE & PASSIVE HOMES
HSS
DESIGN BUILD

SOLAR CLUB™

BRONZE SPONSORS

BOW VALLEY GREEN ENERGY COOPERATIVE

ROCKY MOUNTAIN COMMUNITY ENERGY

MUNICIPAL DISTRICT of BIGHORN

MAC FANS AND FURNACES

TOWN OF Banff

Town of CANMORE

Homesteads - NZ Passive House

SITE OVERVIEW

Tour Day: June 1st, 2024

Address: 3 Van Horne, Canmore, AB, T1W 2X7

Hosts: Architect and project team

Parking: On the street

Key Attractions:

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

BIOSPHEREINSTITUTE.ORG/GREENBUILDINGS

BIOSPHERE
INSTITUTE OF THE BOW VALLEY

Green Buildings Open House Tour 2024

Homesteads, NZ Passive House

Sat, June 1, 11 am - 4 pm

WHY IS THE HOMESTEADS PROPERTY ON THE TOUR?

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.

WHAT WILL PEOPLE SEE & LEARN ABOUT AT THIS PROPERTY?

- Electric Vehicle ownership and charging
- Fire-resistant construction materials
- FireSmart principles
- Net zero homes and 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
- Rainwater harvesting

WHAT OTHER SUSTAINABILITY FEATURES ARE SHOWCASED?

- Rain barrels
- Electric vehicles - Mustang Mach E & Chevy Bolt

WHAT ENERGY EFFICIENT FEATURES ARE SHOWCASED?

- 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

- Smart technology
- Electric vehicle charging

BIOSPHEREINSTITUTE.ORG/GREENBUILDINGS