

Green Buildings Open House Tour 2023

Sat, June 3, 11 am - 4 pm

SILVER SPONSORS













BRONZE SPONSORS















Larch - Deep Energy Retrofit



SITE OVERVIEW

Tour Day: June 3rd, 2023

Address:

Hosts: HSS Design Build **Parking:** On the street

Key Attractions:

- Deep Energy Retrofit to Passive House principles
- Deep well Geothermal system and Heat Pump
- Solar photovoltaic array
- Electric Vehicle and charging

BIOSPHEREINSTITUTE.ORG/GREENBUILDINGS



Green Buildings Open House Tour 2023

Larch, Deep Energy Retrofit Sat, June 3, 11 am - 4 pm

WHY IS THE LARCH RETROFIT ON THE TOUR

This home is an example of a Deep Energy Retrofit with a renewable heating source. The existing 1997 two-storey home, which already had solar PV and solar hot water, got a major energy efficiency upgrade. The retrofit has been designed with passive house principles in mind. The gas line was abandoned, and a deep well geothermal system and heat pump were installed for the heating and cooling. The Post-Retrofit EnerGuide Assessment provided the home with an energy rating of 7 GJ/year, down from 127 GJ/year.



- · Larssen Truss system
- Near-net zero home
- Deep energy retrofit
- Passive house principles
- · Geothermal and Heat pump systems
- · Solar hot water
- Electric vehicles paired with solar energy





WHAT FEATURES ARE SHOWCASED AT THIS PROPERTY?

ENERGY EFFICIENCY

- Insulation
- Heat recovery ventilator (HRV)
- Energy efficient windows
- Solar generation
- Passive solar

HEATING & COOLING

- Solar hot water
- Ground-source heat pump
- · Geothermal heating
- · Geothermal cooling

SUSTAINABILITY

- Electric vehicle
- · Electric vehicle charging