



Eco-Solar Home Tour 2021

Saturday 12 June, 1:00 to 1:40 pm

Balmoral NZE Home

4 Elements

www.4Elements.eco



innotech
windows + doors



SkyFireEnergy
Solar Energy Systems

Calgary



SOLAR
CLUB

Tour Day: Saturday 12 June

Time: 1:00 to 1:40 pm

Hosts: Homes by Sorensen

Energuide Rating: 0 GJ/yr

Summary points why people need to see your home

- See the unique wall system with high constructability. The house is hitting the heating demand for a passive house low energy building.



What will people see and learn about at your home?

- How it is constructed.
- All the insulation details
- Air sealing methods and techniques used
- PV system

What are the main things people will see at your home?

- Be able to see the foundation from the inside.
- Mechanical systems
- PV system
- Video and photos of the construction
- Cost analysis of added costs to get home from code built to passive standard

Are there main items that they can't see?

- Insulation details above grade
- Air sealing details
- Wall construction (will have pictures and video to show)



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Why is this home on the tour?

I am submitting this home for the tour because I believe our wall system and construction details are very innovative. We have achieved a design that is hitting the very comfortable heating load standard of a passive house low energy building while being very cost conscious about how we are achieving it with our envelope and mechanicals.

What features save on energy costs?

- <25 kWh/m² per year heating load
- Double stud wall assembly
- SI Construction foundation system
- Net Zero 15.8 kW PV system
- Innotech cool temperate climate passive certified windows.
- Sanden heat pump hot water tank

What features save on water costs?

- Rain Barrels

Are there any other special features you want to highlight?

- Wall assembly construction. We have full continuous insulation from the footing all the way to the roof deck. All structural components are set 9 inches from the outside sheathing.
- This house will be heated passively combined with electric heaters for the coldest and cloudy days.
- House is running entirely on electricity. There is no gas service ran to this property.
- Multi generational single-family home with secondary suite.

