



Eco-Solar Home Tour 2019

Sunday 2 June 10 am to 4:30 pm

Spruce Grove NZE Home

Tour Day: Sunday Jun 2nd

Address:

Spruce Grove

Hosts: Dolce Vita Homes

Parking: Street parking available

Energuides Rating: 35 GJ/yr (before solar)



Summary:

- This Net Zero home is an example of how a synchronized home system can overcome less than ideal lot placement to reduce and offset overall energy use.
- Unique products, some never used in Alberta before, are making their debut in this home

What will people see and learn about at your home?

- This home produces 35 GJ/year of renewable energy.
- Best-in-class products and methods to sealing the building envelope and creating a healthy home with fresh, clean air.
- Reducing the amount of heat loss and using renewable energy sources such as ambient heat in the environment in addition to solar panels.
- Newest technologies to eliminate radon gas within the home.

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

- Solar panel system demonstration
- Mechanical system and high efficient appliances
- Product photos and samples for items that cannot be seen
- Experts on site to answer questions and short video clips throughout the home

Are there main items that they can't see?

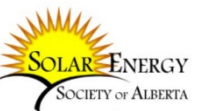
- Photos of the following will be on display:
 - R-80 Attic insulation, ceiling framing technique, R44 wall assembly with high efficient building wrap.
 - ICF Foundation and rim joist spray foam for added sealing.
 - R-16 Under slab insulation and radon system (product samples will be on-hand), Radon Block and Radon Guard.
 - Overall framing techniques.

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Why is this home on the tour?

This Net Zero certified home is a true example of how to build for maximum energy efficiency in any situation. This home was purposely built on a north-facing lot to test our ability maximize solar gain. The entire home system works together in a difficult Albertan climate with limitations of 100 Amps service and a maximum allowance of 24 solar panels.



What features save on energy costs?

- ICF Foundation and R-16 Under slab basement insulation with complete Radon Gas Mitigation system
- R-44 Exterior Wall Assembly and sealed building envelope
- R-80 Ceiling Insulation and advanced framing technique
- Triple Pane Windows with 2 Low e and Multilock Exterior Doors with advanced framing techniques
- ASHP HVAC System with very high efficient HRV
- LED lighting and Smarthome features
- Energy Efficient Appliance
- All Electric, Zero gas emission
- NET ZERO Labelled Home

What features save on water costs?

- High efficient Hybrid electric hot water tank that absorbs ambient heat from the surrounding air
- Drain water Heat Recovery System that assists to pre-heat incoming water supply
- Low-flow plumbing fixtures

Are there any other special features you want to highlight?

- Radon mitigation system which includes Radon Guard™ insulation below the foundation, with Radon Block™, impermeable membrane to significantly reduce heat loss through the basement, effectively reducing radon gas – proven cause of lung cancer - inside the home.
- Learn about ‘super insulated’ exterior walls which achieve an R-44 insulation value. On top of this, ThermalBuck™ is used around windows to eliminate thermal bridging.
- The solar panel system used is installed on a one roof system (no roof penetration required).
- Insulated Concrete Form (ICF) is a unique way to build the foundation of a home. It has an R-28 or higher value. With this method, a frost wall is not required, and significantly reduces heat loss through the foundation wall with better insulating capacity and reduced thermal bridging.