

**CHANGE  
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CLIMATE**

Edmonton



*Butterwick*



# Eco-Solar Home Tour 2020

Saturday 6 June, Noon to 4:30 pm

## Hazeldean Retrofit Home

**Tour Day:** Saturday 6 June

**Address:**

**Hosts:** Marchand Construction

**Parking:** On street

**Energuides Rating:** 79 GJ/yr

### Summary points why people need to see your home

- Affordable deep energy retrofit of a 1950s bungalow.
- Use of many innovative and sustainable building technologies
- Added a second floor to expand living space

### What will people see and learn about at your home?

- High-performance building envelope
- Airtightness of 0.68 air changes per hour
- Appropriately sized HVAC system
- High-performance windows and doors
- Natural building materials for healthy indoor air quality
- Reclaimed materials from the original home
- Sustainable home with an efficient use of space

### Are there main items that they can't see?

- Insulation in the walls: Havelock Wool insulation, exterior Terrafoam Platinum insulation, exterior air barrier and interior vapour permeable barrier, ThermalBuck ROESE, and AeroBarrier.
- Passive solar heat gain in winter with appropriate shading in summer.





# Eco-Solar Home Tour 2020

## Hazeldean Retrofit Home

### Why is this home on the tour?

Originally built in the 1950s, this family home underwent a significant remodel and deep energy retrofit in 2019 that transformed the home into a highly energy-efficient, comfortable and durable home. Many innovative and sustainable building techniques and materials were used in the remodel, including some firsts for the City of Edmonton. The result is an airtight home that achieved 0.68 ACH50 (air changes per hour) that provides a healthy and comfortable home for the homeowners.



### What features save on energy costs?

- High-performance wall assembly, including:
- 2x4 walls with all-natural Havelock Wool interior insulation
- 3-inch Terrafoam Platinum with graphite exterior insulation
- Total effective R28 wall assembly
- Exterior air barrier by DELTA®-VENT S PLUS
- Interior vapor impermeable barrier by DELTA®-REFLEX
- Canadian-made, multi-point locking, triple glazed windows and doors by Innotech Windows + Doors
- ThermalBuck ROESE on all windows (first project in Canada to use this)
- Additional air sealing provided by AeroBarrier (second project in Edmonton to use this)
- Home design takes advantage of passive solar heat gain
- Right-sized furnace (40,000 BTU) by Dettson

### What features save on water costs?

- Tankless hot water
- Shortened hot water runs
- Front lawn alternative garden

### Other special features

- The home is solar ready
- Flooring is all natural and low-VOC to provide a healthy interior
- Re-used the existing foundation and floor system
- Added a second floor to expand living space

