



Eco-Solar Home Tour 2019

Sunday 9 June Noon to 4:30 pm

Altadore NZE Home

4 Elements

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SkyFireEnergy
Solar Energy Systems

CHE
POWER STRUCTURES



Tour Day: Sunday June 9th

Address:

Hosts: Avalon Master Builder

Parking: On street

Energide Rating:

Summary:

- LEED Platinum home
- Rainwater re-use system
- Green wall in living room
- Passive solar features

What is the most unique thing about your home?

The rain water re-use system was created by the SAIT Green Building Technologies team in conjunction with City of Calgary to create a rain water reuse manual. All laundry and toilet water is captured rain and snow melt. Many active and passive energy conservations systems are employed creating exposure to many technologies in one stop.

What will people see and learn about at your home?

- Many features found in a typical zero energy home will be seen, in addition to items not typically encountered due to the home being used as a lab to further green building technologies
- Rain Water Re-use
- Atypical Solar PV install
- Spray foam/wool insulation combo wall
- Passive solar heating with active zone transfer

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

- Living wall originally design to filter rain water
- Rain water capture system
- Central automation system

Are there items that they can't see?

- Combo insulation system
- Solar PV – it's up on the roof
- Passive solar transfer





Altadore NZE Home

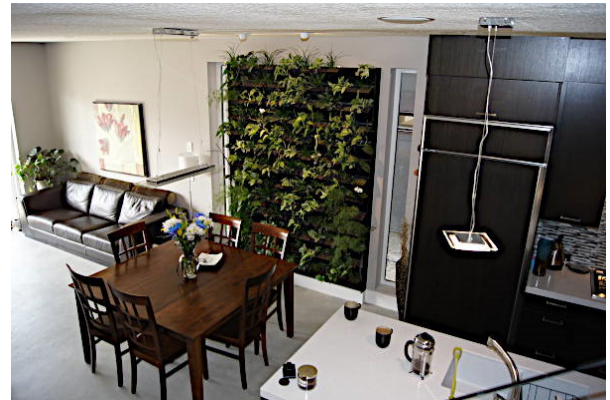
Why is this home on the tour?

The 5th home in Avalon's Discovery series of demonstration homes is a LEED Platinum home that focused on Net Zero energy and water conservation; however most importantly, was a teaching home. The home was built in collaboration with SAIT ARIS' Green Building Technologies team, and constructed on SAIT's campus. The home features a rain water reuse system, multiple energy recovery systems, and also technology common to zero energy homes.



What features save on energy costs?

- PV – mounted in multiple orientations to prove labor/hardware cost savings over optimal orientation – SAIT student capstone project
- Solar Thermal capture
- Passive Solar transfer between slab heat zones
- Solar pre-heat and solar chimney (cooling)
- Drain Water Heat Recovery with direct connection to active hot water supply



What features save on water costs?

- 15,000-litre rain water cistern (laundry, toilets, outdoor watering)
- Low water consumption landscaping with storm run-off collection
- Living wall water treatment (inactive now, SAIT lab initiative)

Are there any other special features you want to highlight?

- Reclaimed hardwood floors
- Stair treads from trees grown on original plot of land (incomplete)
- Electric car

