

# Third Party Verification



# Labels/Third Party Verification

- Valuable second opinion
- Adds credibility
- Adds value on resale
- Keeps you honest

# Labels/Third Party Verification

- Energuide
- R2000/ 5 Star Plus
- HERS
- LEED
- Passive House
- Net Zero
- Net Zero Ready
- Near Net Zero

# LEED

- Good brand recognition and protection
- Very comprehensive, includes location and material evaluation
- Not rigorous enough with regard to energy
- Mandatory review and update of standards
- Rigorous process with lots of paperwork



# Energuide Rating System

- Focuses entirely on energy
- Affordable \$300 to \$500 including the blower door
- Very simple, minimal paperwork- Uses Hot 2000.
- Universally recognized and understood in Canada- similar to appliance ratings
- Is the basis for evaluating performance

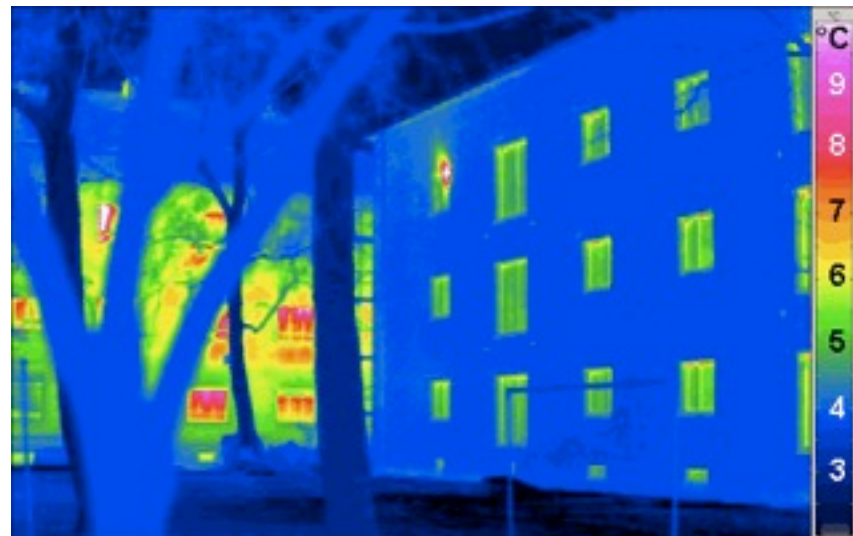
# Passive House

- World wide gold standard for energy efficiency practices
- 30000 built and certified in Europe
- Very tough standard - emphasis on conservation and simple systems
- Very similar to the approach we used in the Belgravia NZE and Mill Creek NZE and Parkland NZE
- Our NZE houses fall short of this standard
- Passive House Planning Package (PHPP) is conservative and realistic
- Coming fast to North America



# A few things we learned at the Passive House course

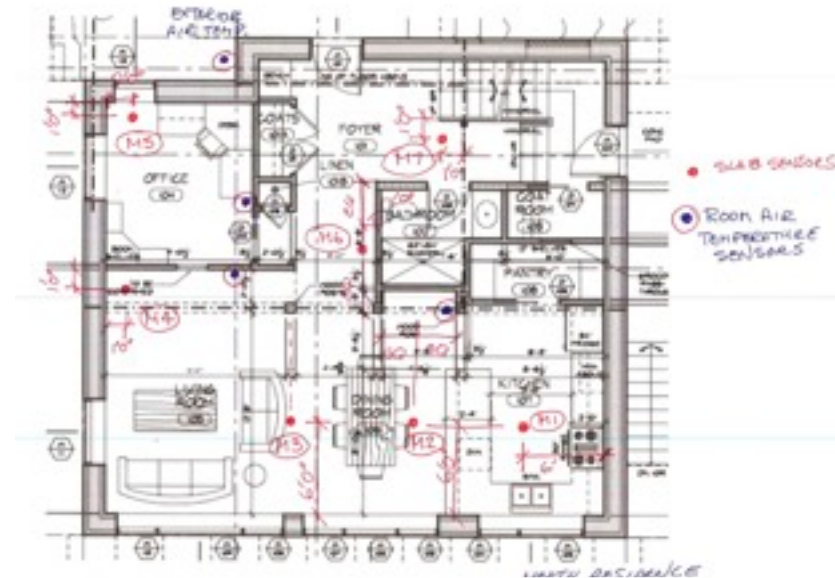
- More comprehensive, cautious and realistic modelling
- Better windows and window installation details
- Better, more permanent, air tightness techniques, cool air sealing tapes
- Better thermal bridging control
- Better HRV's
- Better Ventilation



# Monitoring

## Does this stuff work?

- Riverdale is being monitored for a year by CMHC. PV and solar thermal production, heating, DHW, and LAME energy, are being measured.
- At Mill Creek total energy consumption and PV production are being measured using a TED5000 and posted online
- Belgravia has 60 thermocouples measuring the concrete slab temperatures. Heating energy, water, DHW, and PV production are also being measured
- Parkland will have monitoring similar to Belgravia, but also has thermocouples in the basement slab
- Etherbee





[riverdalenetzero.ca](http://riverdalenetzero.ca)

[greenedmonton.ca/MillCreekNetZeroHome](http://greenedmonton.ca/MillCreekNetZeroHome)

[habitat-studio.com](http://habitat-studio.com)