



# Renovators Energy Checklist

**REMEMBER:** Small is beautiful!

Use good design to keep floor space down and the mortgage in check.

## **DO**

- Orient living areas to the North (this may mean swapping room function or you may wish to add new rooms with good northern orientation)
- In any new extension consider slab-on-ground construction with edge insulation and northern orientation to add to thermal stability
- Use large windows to the north and reduce window size in other directions where possible
- Plant deciduous trees to the north and shade trees to the east and west of house
- Install high insulation glazing eg double glazing, insulated frames, Argon gas filled (the best you can afford)
- Insulate all walls and ceiling to the current standard or higher (R2 walls, R4 ceiling minimum)
- Use good internal window treatments creating a still air layer between window treatments and window (eg well fitted blackout blinds, blackout curtains down to the floor with pelmets)
- Introduce cross ventilation to your design, if difficult consider some form of vertical ventilation
- For heating or hot water consider gas for its lower cost and much lower greenhouse gas emissions or consider adding solar systems
- If you opt for ducted gas heating, incorporate a 5 star furnace so that you can zone your house more easily (heating only those areas you need to heat)
- If you have or are planning to have a two storey house incorporate a closed stairwell to separate the two floors (this prevents heat drifting upstairs when you don't want it to)
- Seal all leaks, ceiling penetrations, use dampers or self-sealing fans on exhausts fans

## **DON'T**

- Install electric slab heating (highest cost and emissions of any system)
- Install LV downlights (creates air leakage and high energy consumption)
- Overglaze your house (only use large windows to the north)
- Install an electric hot water system (gas instantaneous, storage or solar have lower long term costs and emissions)

