

Energy Efficient Home Building - Checklist

Building a Healthy Home

- ☐ **Pick the right block**
 - An East-West elongated block is the best
- ☐ **Select a reputable builder who can design you an energy efficient home**
 - Find builders who can accommodate energy efficiency in your design to achieve a better star rating than the minimum required 6 stars



If you spend the time to choose a low energy build, you will buffer yourself from rising energy prices in the future and enjoy a lifetime of comfort in your new home

Achieving High Energy Efficiency Rating

- ☐ **House orientation to keep cool in summer and warm in winter**
 - Solar passive orientation
 - Living areas in the North
 - Positioning windows and adjust their size correctly to get the maximum light and less heat
- ☐ **Aim for an 8-10 star NATHERS rating**
 - Spending a little more in your build will equate to big savings overall
 - Get the design assessed by an independent energy auditor
- ☐ **Utilise natural lighting**
 - Sky lights
 - Position windows for best light
- ☐ **Roof colour matters**
 - Light/pale colours are best as they can make your home 5 degrees cooler on a 40 degree day
- ☐ **Eaves are important**
 - Eaves provide shade on North and West facing windows during summer
 - Width should be 45% of the height from the bottom of the window to the outer edge of the eaves
- ☐ **Make your house airtight/draught proof**
 - Seal gaps in doors and windows
- ☐ **Insulation is key**
 - Use products with an R-value of 5.0 or higher
 - Wall cavity insulation makes a big difference
- ☐ **Proper ventilation is important for a healthy home**
 - Position windows and doors to enable cross ventilation.
 - Install exhaust fans and roof ventilation
- ☐ **Protect your windows to stabilise internal temperatures**
 - External blinds / retractable awnings
 - Shading
 - Tinting and/or double glazing
 - Choose the right window covering for you (honeycomb blinds provide insulation too)
- ☐ **Washing line placement**
 - Place in a sunny spot to reduce dryer use

Features for a sustainable home

Go Solar

☐ Install solar panels and battery

- Save money on your energy bills and reduce your environmental footprint by generating onsite solar power

☐ Pool heater and accessories

- Solar pool heaters reduces the cost of pool heating during spring and autumn
- Pool covers help to retain warmth and reduce water loss through evaporation

Appliances

☐ Select the highest energy rating for your appliances

- Fridge
- Freezer
- Washing machine
- Television
- Dryer
- Computer monitors
- Pool pumps

☐ Hot water systems

- Significantly reduce your expenses and greenhouse gas emissions by choosing a:
 - Solar hot water system; or a
 - Heat pump
- Both these options qualify for a Government renewable energy rebate

Landscaping

☐ Minimise the amount of hard/artificial surfaces close to your house

- Avoid artificial turf - it can reach 80 degrees in summer
- Plant deciduous trees/vines on the North - they will block heat in warmer months but let it through when it is cold
- Plant trees/shrubs on the East/West to shade the walls and windows
- Cover metal fences with climbers, or plant hedges close by

Go all electric

☐ Cooking

Some good options include:

- Induction or ceramic cooktops
- Electric oven

☐ Heating and Cooling

- Ceiling fans
- Reverse cycle air-conditioner

☐ Lighting

- Opt for all LED light fittings - which are the most efficient choice and produce the least heat
- Invest in Smart Plugs that allow for scheduled use of appliances and lighting

☐ Switchboard

- Ensure your switchboard is sufficient in size and compatible for EV charging



For more energy efficient building tips visit our website:
switchyourthinking.com

