

Beat the HEAT!

The frequency of very hot days over 35 degrees has increased fivefold since 1970 and will continue to rise. Air Conditioning is great but if you need it to sleep the running cost can exceed \$1000 per year.

Passive Solar Design includes simple measures that together can make your house up to 13 degrees cooler in the hottest part of the day and slash A/C costs.

Roof Vents

Louvre vents in gables or rotating roof vents are a simple low cost means to reduce hot air accumulating in the ceiling space.

Insulation

Insulation bats reduce heat from the ceiling space and heat loss in winter. Insulation is not that expensive but use a qualified installer and leave gaps around ceiling embedded down lights.

Aspect Barriers

Northern or western facing walls exposed to the sun adsorb a lot of heat. Deciduous vines like grapes can be trained on a pergola to provide excellent heat

protection in summer within two years of planting.

Radiant Heat

A lot of radiant heat can enter the house through windows or sliding doors. Curtains or blinds with head boxes will help but also reduce natural light. Alternatives include shade sails or awnings. Also avoid outside radiating surfaces like exposed concrete or tiles. Exterior roof sheeting on eaves or verandas will also radiate heat unless lined underneath.

Ceiling Fans

In bedrooms, ceiling fans are much cheaper to buy and run than air conditioners. Reserve A/C for the living area in the hottest part of the day.

Roof Colour

If you need to re-paint a roof then light colours will reflect a lot of heat, more than bare metal and much more than rusted metal sheeting.

Integrated Design

New homes or extensions can use a whole systems approach incorporating techniques such as solar orientation, thermal mass, natural ventilation, wall insulation and eave angles that exclude only summer sun. See <http://www.yourhome.gov.au/passive-design>