



## Five-star energy rating

**A FIVE-STAR rating, the highest possible score given by the Nationwide House Energy Rating Scheme, has been achieved in this colonial-style home which exploits solar aspects on what most would regard as a difficult block.**

The owners of the home, who lived in the same street for a year before moving into their new house, say the passive solar benefits have helped them cut their energy bills by as much as 60 per cent.

They say they use the open gas log fire for only two weeks in the winter and in summer they only turn the ceiling fans on to help circulate the air. This translates to a reduction of about 18 per cent in greenhouse gases from the residence.

The house faces east and has a deep veranda on the front and down the southern side of the home. It is set back from the northern boundary to maximise the benefit from the winter sun and to overcome the difficulties of shadowing from a two-storey residence next door.

Most of the windows and glass doors are on the north side with only small windows to the front.

But what most helps this home keep warm in winter and cool in summer is the specially angled, timber louvre panels to the northern pergolas. The solar pergolas are 100 per cent opaque in summer, 50 per cent in spring and autumn and 10 per cent in winter. In winter sunlight penetrates up to 3m indoors on the lower level of the home and in the cedar-clad upstairs retreat.

Living areas dominate this northern side and are light and airy with voids to the retreat and cathedral ceilings that reach up to 6m at the apex allowing for good air circulation in the summer.

The main entrance is at the side of the home where the doors and fan lights provide additional cross ventilation.

Also on the northern side, at the back of the home, is a sitting area where indoor plants thrive under a conservatory with louvred glass panels. This is a lovely bright room in the winter and it seems hard to believe that in summer it does not require any window treatments to keep out the heat.

The main bedroom is on the southern boundary and has rectangular windows on the east and west walls for cross ventilation in summer.

An ergonomically-designed kitchen in a U shape upholds the environmental thinking behind the home with plantation-grown timber cabinets rather than timber from old growth forests. This is also true of the floorboards and the staircase which are complemented by ceramic tiles in the open-plan lounge, dining room and meals area.

Other energy-saving devices include insulation in the walls and the steeply-pitched iron roof, a solar hot water system, boxed pelmets on the windows to keep in the warmth and gardens that include deciduous trees and wisteria that provide shade in summer and allow light through in winter.

SUE SNOWDEN



WA HOUSING AWARDS 1999

**CATEGORY:** Energy Efficient Housing  
**DESIGNER:** Baverstock, Murphy & Associates  
**BUILDER:** Colin Challener  
**CONTACT:** 9276 2214