

NEW HOMES



■ ABOVE: The conventional family residence has been orientated for maximum solar benefits. ■ RIGHT: The kitchen has well-screened, generous work benches.



Five stars for a solar design

By Frank Platell

BENEFITS from passive solar principles are winning increasing recognition at the top end of the housing market, for the bonuses in year-round living comfort and energy savings.

But the perception that it costs a lot extra has retarded its acceptance by people in the main volume areas of new homes.

A family residence on the coastal plain below Armadale shows this need not be the case.

The added cost was negligible because it is basically a conventional house, but correctly orientated to maximise the solar benefits.

"Look at this power bill that I've just paid," said owner Frank Purdy. "Just \$10, and it has been less."

"Not only is the cost now minimal but I have the enjoyment of year-round living comfort. The only additional structure to the house has been the solarium which traps the winter warmth, and makes the house comfortable early on a cold day.

"Living spaces stay in the comfort zone between 18C and 26C year-round. This is a lot better than the high 30s in my old project home built about 25 years ago.

"It was a hot box in summer and quite cold

ON DISPLAY

Armadale

- **Price:** On application
- **Address:** On application
- **Agent:** Garry Baverstock, architect
Phone 474 2770
- **Open:** By appointment

indoors in winter. My life has changed with the total comfort of my new home, and my visiting grandchildren appreciate it, too."

The passive solar principles caught Mr Purdy's imagination 20 years ago and he was determined to have such a house if ever possible. When the opportunity came, he approached architect Garry Baverstock for a solution in a family home.

The result is a residence that harmonises so well with a big, almost one-hectare block, that you can drive by and not notice it. Masonry walls have the texture of a rammed-earth structure and the roof is the colour of the numerous eucalypt trees carefully retained.

It has generous areas to cater for visitors, even to a double garage that can double as an extension of play areas for the grandchildren. And it has been given a five-star rating for energy efficiency.

The architect departed from the standard four-bedroom, two-bathroom thinking to have just three sleeping areas, but all generous. The emphasis was on big rooms, rather than a lot of them.

The main feature of the residence is the open-plan living, dining and kitchen areas in a space that is about 9m x 8m overall. A table setting of eight, that could be 10, goes into a bay window area, and caters for all occasions, any overflow spilling to the nearby snack bar off the kitchen.

There is the correct amount of glass to the north elevation which allows the sun to penetrate well indoors in winter and completely excludes it at this time of the year.

There is some glazing to the east, which is the street elevation, and this provides for an outlook to the bush setting which screens the property.

This front elevation has a low-profile veranda that keeps the morning sun off the glass from soon after 7 o'clock. There are no windows to the west and the glazing to the south caters for cross ventilation of the house at night by the cool sea breeze.

Being in a semi-rural area influenced the decision to have a full security system, even to an electronically-controlled door to the double garage. There are two doors into the house from the garage, again with deadlocks, but for visitors the main entry is obvious.

The hall and related central passage give direct access to all main rooms while maintaining privacy. The main space beckons where all the indoor living activities take place and this has direct access to the solarium, for sun basking on cold days.

The kitchen is part of the living zone but with generous work benches well screened by 40cm-high upstands that can double as serveries. Storage space is ample with a corner pantry and fittings include a wall oven, microwave, electric hotplates and a designer, double-bowl sink.

The solarium off the living room has a glass wall to the north and a glass roof, protected by a specially designed slatted pergola. Here the louvres are at a 35-degree angle, completing blocking the summer sun but allowing the full winter warmth to penetrate well indoors.

The laundry is more of a utility space with its work benches, inset trough and a linen press. The passage to the bedrooms has a skylight with adjustable louvres to maximise the natural illumination without sunlight.

All three bedrooms have either a built-in or walk-in wardrobe. The main bedroom has an en suite and there is a family bathroom with a generous space.

The solar home is not open for inspection but can be seen by appointment with the architect.