

Solar theme in revamp

THE building on the south east corner of Adelaide Terrace and Bennett Street has recently undergone refurbishing that could be compared with the children's parable of the ugly black duckling that matures into a graceful white swan.

The two-storey structure was built in 1958 by John Roberts of Multiplex fame has had the outward appearance of nothing more architecturally exciting than a black cube.

IBM once occupied the building as its state headquarters but in 1983 the property was purchased by The Australian Pensioners' League of WA as its state office and long term investment.

The League decided to name the building 'The Russell Centre' in honour of Dora Russell, the cur-

rent treasurer and long serving League member.

Early in 1985 the League took advice from its property management agent, Peter Gregory, and decided that to gain anything near maximum rental the building warranted major refurbishment.

The project was to improve its appearance, make the interest more functional and upgrade its overall efficiency.

Enter Tectoprojects' architect, Garry Baverstock, a leading exponent of passive solar energy use in buildings.

His project was to make its operation more cost efficient.

Apart from the exterior colour change to white and heat reflecting grey, the other outer shell difference will be grey Fluoropolymer painted aluminium louvres set at a predetermined angle.

The various width blades are set almost horizontal and allow for maximum summer shading and winter sun penetration for both internal light and heat advantages.

The awnings are mounted on a tubular steel frame set at about 45 degrees.

Views retained

The awnings cover only half the window depth and therefore people standing in the offices retain what views of the city and river that are available.

Decorative glass bricks have been used to close off the Bennett Street access in favour of a truncated dual street entrance on the corner of Adelaide Terrace. A ramp has been incorporated to assist aged and invalid entry.

Internally, the fire hazardous poly styrene ceiling tiles have been removed exposing the concrete of the upper floor which has then been painted white to assist natural lighting.

Another aid to natural lighting has been the replacement of the reinforced obscure glass with clear reinforced glass around the light well in the centre of the original structure.

Further use of this well has been made by providing office worker access to an atrium or eating plaza on the first floor level.

Large skylights have been incorporated into the top floor reduce tenancy dependence on artificial lighting.

"The principle of efficient solar climatic control of a building is to nightly blow or suck out the air heated during the day and replace it with cool evening air so that workers enter a cool clean environment each morning," Mr Baverstock said.

"This eliminates the need to run air conditioning until later in the day thereby reducing energy costs.

Years ahead

According to Mr Baverstock, the building, when complete, will be 10 years ahead of any building of this scale in its energy efficient design systems.

A computer, power or telephone can be located simply by removing carpet tiles and extending flat cabling under the carpet.

A seminar will be held in September to inform building owners, managers and interested members of the building and architecture professions of the building's unusual characteristic.