HOUSE AT 32 Rosco Drive

22608 House - 32 Rosco Drive, Templestowe

Location

32 Rosco Drive TEMPLESTOWE, Manningham City

Municipality

MANNINGHAM CITY

Level of significance

Included in Heritage Overlay

Victorian Heritage Register (VHR) Number

H1312

Heritage Overlay Numbers

HO149

Heritage Listing

Manningham City

Statement of Significance

Last updated on -

The split level open plan Solar House was designed by Cocks and Carmichael, architects, for Landmark Solar Houses Pty Ltd, and constructed by that company for display purposes in 1978- 79, (The Solar House is one of a

group of three different energy conservation houses designed by prominent architects for Landmark's Rosco Drive display village). The Solar House's ducted central heating system and solar powered hot water system (now removed) was designed by Bill Charters, the 1979 President of the International Solar Energy Society. The central heating system comprises roof-mounted solar air collectors, a 4.3m3 bluestone screening thermal storage rock pile located behind and connected to the central open fireplace, and a duct distribution system. Electric booster elements in the ducts can be used when required to supplement the warm air coming from the rock pile. Other energy conservation features include carefully designed orientation and zoning of internal spaces, north facing glazing, sun protection, thermal mass, insulation and selected screen plantings surrounding the building. The house won the 1979 Herald-Housing Industry Association Award, Royal Australian Institute of Architects citations for new housing and energy efficient buildings (1980), and first prize in the 1980 Gas & Fuel Corporation Energy Management Awards.

The Solar House is of historic, technical and architectural importance to the State of Victoria.

The Solar House is historically important as the manifestation of a realisation which emerged during the 1970s that the supply of fossil fuels was exhaustible, that energy conservation was desirable, and that alternative SOURCES of energy, such as the sun, could be commercially viable for heating residential buildings.

The Solar House is technically and architecturally important as the first commercially available solar energy project house in Australia. The integrated building and equipment sysetem was designed to provide approximately 60 percent of the annual heating requirements for the house built in Melbourne - a percentage recognised as the optimum economic level for solar contribution. The Solar House is architecturally important for its innovative energy conservation design characteristics, and is a refined and elegant example of the residential work of Cocks and Carmichael, architects. It is also an important early example of the work of Landmark Solar Houses Pty Ltd a company dedicated to the design construction and marketing of project houses that had an emphasis on energy conservation through active and passive solar energy systems.

Heritage Study/Consultant	Manningham - Manningham Heritage Study Review, Context Pty Ltd, 2006;
Hermes Number	22608
Property Number	

Physical Description 1

The Landmark houses use natural materials, open-planning, private outdoor spaces and consistent aesthetic, low maintenance and particularly, energy conservation. (In this last, they differ from Merchant Builders houses of the 1970s). The post and (often steel) beam structure on a 900mm module, with partition internal walls, allows flexibility in planning. There are four distinct area zones : entry, living and dining, kitchen and family; parents' bedroom, en-suite and study; and children's bedrooms and bathroom.

All houses were tested for thermal performance by Melbourne University's Tempal Computer Simulation Programme, developed by Alan Coldicutt. Landmark claim they use 25% of the energy for heating and cooling of a typical project house of similar size. They have north glazing, battened pergolas, thermal mass, heavily insulated walls, floors and ceilings, sealed doors and pelmets. Landmark claimed their Active Solar Air Heating System as the only commercially successful system of its kind in Australia. It uses solar air collectors and rock pile thermal storage, providing warm air and hot water.

In No.32, the "Solar House", it provided 60% of the annual heating, with auxiliary heating from electric heating elements in the heating ducts and a fireplace which both radiates and stores heat simultaneously. The rock pile can provide partial cooling in Summer. A heat exchange coil heats domestic hot water, which passed over the heat exchanger, can also cool in Summer and also heat a swimming pool.

They are all brick houses with steel deck roofs, with broadly rectangular pavilion plans sited eastwest to maximise exposure to northern sunlight. Two have pergola terraces on this side. The blocks are surrounded on three sides by grassed open space. Two have recessed entrances, protected by a garden walland all have double carports in front. The brockwork of Fasham & Johnson's No.34 has been bagged and painted pale blue with teal and greys. Nos. 30 and 32 have fawn pressed brick, with a light brown stained timber. No.32, the "Solar House" has a clerestory roof, allowing south sun to penetrate further, with solar panels on the north slope for the full length. The long, low profile of No.30, the "Sun House" make optimum use of its site for outdoor recreation. The central access spine is never a wasteful passage. Parents' and childrens' zones are at opposite ends.

No.28 the "Green House", (now called "Kyaara"), has salmon pink wire-cut bricks and fawn stained timber, set in a bush garden. It is designed about a conservatory which emanates soft, natural light, but is also a passive winter heating device and shades in summer. There are active solar and solid fuel heating systems and a thermostatically controlled forced ventilation system. It has a solar hot water heating system by "Somer Sohr", using acrylic domed collector panels, said to be superior to the glass panels at No.32. An electric differential controller prevents boiling or freezing. Thermostatically controlled space gas heating boosts off-peak. Living areas have concrete slabs and internal brickwork, providing thermal mass. Bedrooms have timber floors, for cooler sleeping conditions.[5] No.9 Rosco Drive is a Merchant Builders Pty Ltd house, with some minor alterations.

Comparable to Cocks and Carmichael's house at 18 Summit Drive, Bulleen which is also carefully sited. Also comparable to Merchant Builders estates at 37, 66-70 Olympus Drive, Templestowe Lower and 4-12 Beverley Hills Drive, Templestowe (1987), in particular; but also to Winter Park, 137-141 High Street, Doncaster (1970-75), 412-418 Porter Street (cnr. Blackburn Road)

Templestowe (1989) and 1-3 Exford Place, Donvale (1972).

Integrity

Integrity Not known

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

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