



Looking to the future

This award-winning home breaks the mould

When building this home in a streetscape that had a lack of uniformity in building type, size and architectural language, it was decided that it would be best to produce a contemporary building that looks to the future, rather than attempt to mimic a past architectural style. The house is the first of its type in the street and hopefully will serve as a catalyst to encourage further commissioning of modern buildings nearby.

The plans developed from sketch designs and addressed the clients' space requirements. The owners' feedback on the house — a three-storey architect-designed home consisting of three bedrooms, an office/guest retreat, three bathrooms plus powder rooms, kitchen, walk-in pantry, double garage, alfresco area, and living and dining area — has been positive.

A number of features were considered to make the building attractive and sit well in its surroundings, including setting the house down from road level to marry it with the scale of the existing streetscape. Side boundary setbacks are 40 per cent more than code requirements for the first floor, and upper levels are stepped back further again, providing exceptional solar access and privacy from the neighbouring properties as well as the new building.

The choice was made to use materials such as



natural stone and hand-formed, standing, natural zinc roofs that are visually softer than other options. These materials break up the external volume of the structure for a balanced street disposition.

The building brief included high-level thermal insulation, natural ventilation and acoustic performance. This was accomplished so that mechanical air-conditioning was dispensed with. The hard wall and floor surfaces reflect sound, which has been successfully countered through integral acoustic absorption panels that form the ceilings.

Structural and decorative timbers used in the

building are certified as being grown on sustainable plantations. Rainwater is captured and flows to large storage tanks under the rear lawn. Reclaimed water irrigates the gardens and supplies the toilets and outdoor taps. Solar hot water provides all requirements during summer and significantly reduces the need to rely on natural gas during winter.

The building has significant thermal insulation — in fact, the levels are higher than what is legally required. Windows are double-glazed, the roof is thermally efficient and even the garage door is insulated.

Polished concrete floors are utilised as a mass heat store with fuzzy logic thermostatic control. No mechanical air-conditioning has been installed as the chimney ventilation and cross-ventilation design are capable of providing turnover of the air volume more quickly than powered mechanical systems, reducing the home's carbon footprint.

The natural lighting of the house, in particular within the living spaces, is vastly affected by the wide, fully glazed roof section that meets a deep, fully glazed clerestory, providing a great glass cornice to the entire first floor on both the eastern and western sides of the building. This has enabled privacy to be maintained by both the new house and the neighbours, while still allowing exceptional natural light throughout.

The project was not without its challenges. On the first day of building, a live, undetected 10,000-volt power line was found on-site, which exposed the owners to additional costs and slowed progress.

The quarry contracted to supply the sandstone, which features extensively throughout the house, shut down without notice just before the stonemasons were about to commence work. Nonetheless, the project was completed within the initial budget and additional time was required only for the stone supply.

MBA AWARDS JUDGES' COMMENTS:

This full-brick home with high ceilings and hard finishes relies only on the ground-floor heated slab to heat the entire home. Acoustic insulating ceiling panels dramatically reduce any excess sound problems. A most interesting project with excellent finishes throughout.

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