

Julatten Log Home

Project type: Residential

Location: Julatten, QLD, Australia
Year completed: 1985

Simplicity, ingenuity and use of locally available materials and resources

The house is energy and cost efficient

OVERVIEW

This project was initiated in 1984 and completed in 1985. It was not originally conceived as an ecological or sustainable dwelling. However, the open design, the use of readily available materials on the property, and the topographical location resulted in the construction lending itself to be upgraded to an efficient sustainable and comfortable house design.

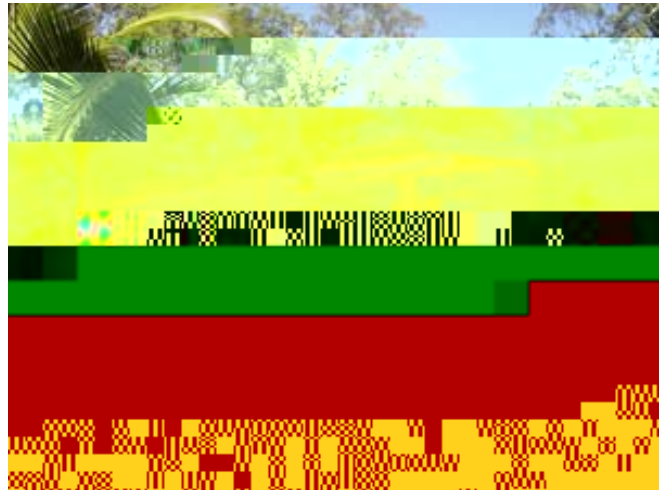
PLANNING AND MANAGEMENT

Over a period of time the owners managed their own renovation and retrofitting project. Custom designed systems and innovation were key to the success.

A new roof was built that included insulation throughout. Timber ceilings were added to the verandas and eaves. All of the log construction was re sealed. Screens were installed throughout. The owners custom designed and installed their own PV system, donkey wood hot water system and grey water recycle filter system.

SITE

The house site is located on the <https://www.ghost.com.au/projects/730TD.07ghst>



MATERIALS

Exterior walls and structure are hardwood logs. Interior double walls are sawn 100mm wide planed Kauri Pine planking.

The floor is concrete. The master bedroom, bathroom and kitchen floors are tiled; the remainder is linoleum.

The roof is galvanised sheet over batt insulation. Doors are solid double planked Kauri Pine.

Interior and exterior paints are water based excluding verandas posts and beams which are treated.

ENERGY

Gas is used for cooking and running one refrigerator. A donkey wood hot water system has capacity for a two day supply on one firing.

The electrical system is a standalone 1500W PV system with 1500 Amp battery storage. A 5KVA backup generator is also available, but never required even during long spells of wet weather. The main purpose for the generator is for running machinery when undertaking repairs or building maintenance.

batt

OWNERS/USERS STATEMENT

"In one word: 'simplicity'. The house affords excellent insulation. During winter we regularly register a difference of up to 12°C higher temperature inside against outside without any additional heating. Just by closing the windows and doors as the sun starts setting and temperature dropping.

In summer it works in reverse though only to about 6°C to 7°C. The log construction also offers good sound insulation. The climate obviously contributes, but we do not require air conditioning or heating.

We do have a single small floor stand fan which at most we have used three or four times in a year and some years never. The house is energy efficient and cost efficient.

Maintenance is very low due to the robust construction. It was constructed to cyclone standards.

We have no power or water bills and we are very comfortable. The house also offers numerous opportunities to further improve sustainability. It has twice featured in Sustainable house day."

Brian Lambert

PROJECT TEAM

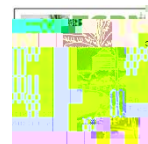
Designer and builder: Robert Luis

Photographs courtesy of Brian Lambert

For more information visit:

www.jcu.edu.au/tsd

www.greenbuild.com.au



The project has been funded by JCU Sustainability Fund and