

CASE STUDY

Ikunu's Cosy Cottage



PRODUCTS USED

Earthwool® glasswool
R-3.2 Wall Segments
Earthwool glasswool
R-5.2 Ceiling Segments

PROJECT

Ikunu Wolf Residence

BUILDER

River Valley Builders Ltd.

COMPLETION DATE

2014

"I wanted insulation without any harsh chemicals and with very good thermal insulation properties as well as durability. I installed the Earthwool glasswool insulation myself and found it very easy to handle and install."

Ikunu Wolf, Building Designer



CHALLENGE

The project is the first stage of a residential development, owned and built by Ikunu Wolf, a building biologist who has emigrated to New Zealand from Germany. The residence is located in the hills in the beautiful South Head, Hellensville, with wide sea views. The project required high performance with regards to thermal efficiency and choosing products that had proven environmental performance. This was the main reason for choosing Earthwool® glasswool insulation.

The house is designed in accordance with the building biology principal of using natural, where possible untreated products and fulfilling attributes of stringent European building standards.

SOLUTION

The home's structure is made from 140x45mm timber wall framing and a 240x45mm skillion roof with a wide 850mm overhang to protect the cladding. It features solid exposed

Macrocarpa beams and posts, as well as untreated Eucalyptus Saligna flooring upstairs to create a natural feeling interior. The home has air-tightness membranes and two internal brick walls with earth-plaster to regulate temperature and humidity. It utilises double glazed timber window joinery and aluminium longrun roofing due to its coastal location. The wood burner doubles as a cooking and heating source and a solar hot water system was installed.

Earthwool glasswool insulation was chosen thanks to its high sustainability credentials, which includes a revolutionary manufacturing process. Earthwool glasswool is made using recycled glass bottles and with ECOSE® Technology. ECOSE Technology is a revolutionary, formaldehyde-free binder technology based on rapidly renewable materials instead of petro-based chemicals. It contains no added phenols, acrylics or artificial colours. It also reduces the impact on the environment through lower embodied energy.

From the outset Ikunu's ambition was to create a home that ranked highly in terms of sustainability and Earthwool glasswool was an obvious choice when it came to specifying insulation.

Explaining her preference for Earthwool glasswool, Ikunu said: "I wanted insulation without any harsh chemicals and with very good thermal insulation properties as well as durability. I installed the insulation myself and found it very easy to handle and install."

Earthwool glasswool R-3.2 wall batts were installed in the timber frame walls in order to provide thermal and acoustic insulation and in the skillion roof Earthwool glasswool R-5.2 ceiling batts were installed in order to provide high thermal performance in the roof space.

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