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EARTH HOUSE

WINNER

Building Design of the Year

Maxa Design

- + Nestled into the earth like it belongs there; a beautifully considered design response
- + Well-sited for private and open perspectives
- + Seamless separation of public and private internal spaces
- + Introspective but still open to the environment
- + Excellence in Passive House design
- + Stunning, simple, sustainable, offering a great quality of life. What else could you want!?

WINNER

New House \$1M-\$3M

Maxa Design

- + Earthy materials and leading-edge techniques
- + Shows you don't have to lose out on anything to have a sustainable home
- + Simply lovely - this is a house you'd love to live in.

WINNER

Best Environmentally Sustainable Design

Maxa Design

- + Clearly a winning sustainable project
- + Pushing the boundaries
- + Every element of this home and site have been considered for holistic sustainable design, materials and performance, to Passive House and beyond.





Designer

Maxa Design

Web

maxadesign.com.au

Builder

CarbonLite

Interior Designer

Hunter & Richards

Landscape Designer

Jo Henry

Structural Engineer

R. Bliem & Associates

Building Surveyor

Watershed Building Consultants

Soil Testing

Statewide Geotechnical

Passive House Consultant

Williams Energy Design

BAL consultant

Terramatrix

Design Review Committee

Paul Haar Architect

Passive House Certifier

Detail Green - Luc Plowman

Energy Rater

Floyd Energy

Photographer

Chris Neylon Photographer



Designed as an environmentally conscious modernist home, this compact, three-bedroom project delivers sustainable outcomes from the ground up and exudes quality down to the finest detail.

The house may be small in footprint – 183m² plus garage and store, on a 1204m² block – but it delivers world-leading outcomes.

This unique home nestles into the site and contextually delivers a very high standard of living for the occupants. Being an air-tight home, a heat recovery ventilation unit has been installed, supplying fresh filtered air to all habitable rooms meaning occupants enjoy year-round comfort of 20 to 25 degrees Celsius.

The home is located in the pioneering eco residential community of Mullum Creek in Melbourne's leafy Donvale, where the central aim is to set, trial and demonstrate new standards of environmentally sensitive design.

Homes designed for Mullum Creek are required to adhere to 65 Ecologically Sustainable Development (ESD) principles including energy efficiency and solar power, water conservation, sustainable building materials, and best-practice construction techniques.

Each aspect of the home has been carefully considered, not only for its aesthetic and sustainability outcomes, but for its ability to achieve the stringent requirements of the German Passivhaus Plus standard.

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As a 'certified' Passivhaus, the quality assurance of this project far exceeds local requirements through a series of independent tests, certification and commissioning reports, photographic evidence of detail compliance and 3rd party certifier reviews.

The modernist home is effectively divided into two 'wings', with the east-west 'living' wing partially covered by a green roof and northern wing containing three bedrooms and associated bathrooms. The northern wing is bound by a subtle curving insulated rammed earth wall that matches the alignment of the western street boundary.

Utilising the slope of the site to create an earth berm and green roof on the south of the home afforded a significant insulation boost along with acoustic and visual privacy from vehicles travelling down the hill towards the dwelling.

The living areas open to the north and east sides, with additional privacy provided by the western, rammed-earth wall and associated bedroom 'wing'.

The home is semi-submerged into the landscape, on the south, reducing the impact and visual bulk of the building by integrating it into the existing topography.



Through an approved waste management plan, 90 per cent of all construction waste was recycled during construction and due to the prefabricated wall and roof system, site waste was further reduced compared to typical construction methods.

Site sediment and run-off were contained using strawbales to the north and eastern boundaries. Even irrigation pipes excavated on site are being sculpted for public spaces to reflect the orchardist history of the estate.

As a timelessly styled and low-energy home, this project will be as relevant in 100 years' time, as it is now - such is the integrity of the structure and overall building performance.

