6 star rating

green star Office Design v2

*green building council australia

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TREVOR PEARCEY HOUSE

GREEN BUILDING COUNCIL AUSTRALIA OVERVIEW

The Green Building Council of Australia's mission is to define and develop a sustainable property industry in Australia and to drive the adoption of green building practices through market-based solutions.

The Council's objective is to promote sustainable development and the transition of the property industry to implementing green building programs, technologies, design practice and operations. To do this, it advances and promotes the creation of a green building rating tool, economic incentives, government initiatives and programs, new technologies and industry knowledge.

CONTACT US

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GENERAL PROJECT DESCRIPTION

Trevor Pearcey House, the new head office of Australian Ethical Investment, is a leading example of sustainability in the refurbishment of an existing building. The original two-storey, 1100 m2 (GFA) building is 20 years old and is part of a body corporate. The refurbishment covered base building and fitout and has involved a complete overhaul with a focus on simple, passive systems and reuse of materials.

Significant improvements have been made to the building fabric such as external wall insulation, upgraded roof insulation, operable double opening double-glazed windows, upgraded external shading, exposed internal mass and addition of thermal chimneys. These features allow the building to utilise natural ventilation for space conditioning and significantly reduce the need for heating or cooling. Energy savings compared to the original building are estimated at 75%.

Substantial water savings (estimated at over 80%) have also been achieved through the upgrading of sanitary fixtures and capture of rainwater to supply toilets. A major feature of the project has been the amount of material reused. The existing internal fitout was carefully deconstructed and then adaptively reused in the refurbishment. Reused items included carpet tiles, doors, joinery, ceiling tiles, metal studs, plasterboard, glass blocks, structural steel, insulation and miscellaneous fittings including cabling, power points, etc. One of the features is artwork created from old computer floor tiles. New items installed were predominantly recycled such as, entry mats made from old car tyres, recycled timber floor and wall boarding, recycled carpet tiles and pin boards from recycled newspaper.

The refurbishment was delivered on a conventional budget ($1700/m2) and demonstrates that significant environment improvement can be achieved in our existing building stock and that simple, passive systems can deliver comfortable and productive work spaces.

TREVOR PEARCEY HOUSE

Address:
Traeger Court, Bruce, ACT

ESD/Green Star Consultant:
Warren Overton, Viridis E3

Architecture, Interiors & Environmental Design :
Collard Clarke Jackson, Canberra

Architect:
Kevin Miller

Interior Designer:
Katy Mutton

Mechanical/Electrical/Fire:
Bassett

Hydraulics/Structural:
Hughes Truman

Construction Manager:
Cobul Constructions

Landscape:
Red Box Design Group

Acoustics:
Heggies

Commissioning Agent:
Sustainable FX

TREVOR PEARCEY HOUSE

MANAGEMENT
- Comprehensive commissioning of all services
- Extensive reuse and recycling of waste

INDOOR ENVIRONMENT QUALITY
- High levels of natural ventilation
- Natural daylight with effective external shading
- Individual control of comfort systems for over half of users
- Avoidance of VOC emitting materials
- Reduction in formaldehyde emissions using recycled or E0 board

ENERGY
- Greenhouse emissions 47% lower than 5 star ABGR
- Extensive energy and tenancy submetering
- High efficiency (T5) lighting system with local switching

TRANSPORT
- Minimised car parking with small car spaces
- Dedicated cyclist facilities
- Close proximity to public transport

WATER
- Dual flush toilets, low flow showers and water efficient urinals
- Rainwater capture for toilet flushing
- Air-cooled chillers (no cooling towers)

MATERIALS
- Reuse of existing façade and structure
- Fully integrated fitout
- Recycled steel and sustainable timber

LAND USE AND ECOLOGY
- Reuse of existing built land (refurbishment)
- No topsoil removed from site

EMISSIONS
- Zero ODP refrigerants
- Retrofit of pollutant traps to existing stormwater system

OVERALL GREEN STAR BUILDING PERFORMACE