

4 star rating



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151 PIRIE STREET

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

151 Pirie Street is a nine storey office building on the south east corner of Pulteney and Pirie Streets with excellent views to the Adelaide Hills, Hindmarsh Square and the city. The building provides desirable large open floor areas serviced by a non-invasive core on the western side.

The top two floors are set back three metres from the boundary façade in order to provide an outdoor deck whilst satisfying a Council requirement, and the ground floor is set back to form a shopping colonnade.

Financial audit, tax and advisory firm KPMG pre-committed to the top three floors (including the entertainment deck) which was economically achieved as an integrated fit out.

The overall project was conceived as a piece of "urban joinery" made up of frames, vertical tubes, horizontal and vertical plates. The design team concentrated heavily on energy efficient building services and water saving techniques whilst considering the importance of building occupant comfort. 151 Pirie Street building has achieved a 4.5 Star ABGR Commitment Agreement (first in South Australia, but not required for Green Star assessment) by the culmination of extensive computer simulation and energy modelling of the building engineering systems. The potential for energy efficiency can also be attributed to the building and façade design in relation to the effect of insulation, glazing and shading on air conditioning performance and natural lighting levels.

The air conditioning strategy utilises a variable air volume system with low temperature low airflow supply through specially selected swirl diffusers. Control is achieved by variable speed air delivery and modulated water temperature to the multiple air handling units (7 per floor).

151 PIRIE STREET

Address:

151 Pirie Street, Adelaide SA 5000

Developer/Owner:

Pivot Group Pty Ltd and Charter Hall Pty Ltd

Design:

DesignInc (Architect); Bassett Consulting Engineers (Mechanical, Electrical, Fire Protection & Hydraulic Engineers); Wallbridge & Gilbert (Structural & Civil Engineers); Rider Hunt (Cost Consultant)

ESD Consultant:

Bassett Consulting Engineers

Construction:

Bassett Consulting Engineer

Total NLA:

12,651m²

Commercial Office NLA:

11,615m²

MANAGEMENT

- Green Star Accredited Professional involved throughout concept, design and construction phases
- Commitment to greater than 80% recycling of construction waste
- Environmental Management Plan in accordance with the NSW Environmental Management System guidelines
- Extensive commissioning and commitment from all subcontractors to quarterly reviews and final re-commissioning after twelve months
- Independent Commissioning Agent involved from design stage to practical completion

INDOOR ENVIRONMENT QUALITY

- Carbon dioxide monitoring and outside air control system for all air handling units
- Improved daylight levels with external views to greater than 60% of the NLA
- Comfortable noise levels throughout the whole building including noise from building services plant
- The use of low-VOC and low-formaldehyde materials throughout the building

ENERGY

- Highly efficient VAV air conditioning system incorporating economy cycle coupled with energy conscious façade design resulting in a predicted 4.5 star ABGR rating
- Extensive sub-metering on all major energy uses and all tenants throughout the building
- Extensive lighting design modelling to achieve minimal energy consumption

TRANSPORT

- Enhanced opportunities for alternatives to car-based commuting
- Extensive cyclist facilities including secure basement bike spaces, showering and changing facilities for 5% of the building occupants

- Visitor bike spaces conveniently located adjacent to main entry
- CBD location allows frequent bus and train services to and from most of the greater Adelaide and hills areas of the city

WATER

- Water saving fixtures used throughout the building whilst maintaining amenity standards suitable for building occupants
- Water sub-meters for the major water uses in the building
- Reduced cooling tower water consumption through effective water management

MATERIALS

- Extensive recycling strategy including recycled waste storage and sorting area
- Construction waste minimisation through 30% of NLA delivered as an integrated fitout
- High percentage of structural steel with a post-consumer recycling content of over 50%

LAND USE AND ECOLOGY

- Building development on a site previously occupied by a 3 storey retail/office building
- The ecological value of site not diminished by the development

EMISSIONS

- Zero ODP refrigerants and insulants used throughout the building
- Extensive lighting design and simulation resulting in no light pollution from the site

OVERALL GREEN STAR BUILDING PERFORMANCE

