Case Study: 30 The Bond

Address: 30 Hickson Road, Milers Point, Sydney NSW
Owner: DBRREEF
Project Team: Lend Lease Development (developer); Bovis Lend Lease (project management); Bovis Lend Lease (construction management); Lend Lease Design (architectural design); Peddle Thorp Walker (architectural design); Advanced Environmental Concepts (environmental design); Lincolne Scott (environmental design).
Total NLA: 2,582 sq.m.
Commercial Office NLA: 2,582 sq.m.

The first CBD base building in Australia to commit to achieving five stars under the Australian Building Greenhouse Rating system, 30 The Bond, owned by DBRREEF, comfortably surpassed its greenhouse emission objectives during the initial 12-month monitoring period.

There is nothing conventional about the $112 million Asia Pacific headquarters of the Lend Lease Corporation. It features the latest in environmental design, achieving 30 per cent lower carbon dioxide emission than a typical office and using between 30 and 40 per cent less power than today’s best-practice buildings.

The interior at 30 The Bond is fitted with sustainable and low-volatile forest timbers. Its carpets and paints do not exude toxins. Conference rooms on the west side of the building are designed as wintergardens, with windows that can be opened and shielded from the sun by automatically controlled external shades.

A stunning backdrop of the building is a four-storey sandstone wall, the longest and oldest convict-hewn sandstone cutting in Sydney, providing natural cooling to the atrium.

Air cooling is based on the chilled beam system, for the first time in Australia used on this scale.

Initiatives such as these have not only helped 30 The Bond and Lend Lease to achieve the first Green Star – Office As Built Certified Rating, but had also resulted in greater comfort and amenity for staff in the building. The 5 Star Green Star - Office As Built v1 Certified Rating was awarded in October 2005.

Management
- Building Users Guide for all tenant employees
- Independent building commissioning and tuning
- Comprehensive post occupancy building tuning
- Over 80% of construction waste recycled and diverted from landfill

Indoor Environment Quality
- 100% fresh air supply - no recirculated component
- Increased fresh air provided at a rate 100% above the Australian Standard requirement
- Active humidity control within the office space
- High thermal comfort performance
- Low level indoor air pollutants from paint
- Automated external Venetian Blinds for daylight glare control
- Over 60% of occupants have external views
- Daylight factor above 2.5% for 30% of the NLA
- Electric lighting levels and high frequency ballasts to improve occupant comfort
- Acoustic comfort maintained with Sound Masking system

Energy (Cont.)
- Automatic external Venetian Blinds for reduced solar gain
- High efficiency cooling plant
- Low energy lighting with single tube T5 light fittings
- Daylight responsive lighting control
- Comprehensive electrical sub metering and monitoring program

Transport
- Convenient access to CBD bus, train and ferry networks

Energy
- First large scale passive chilled beam installation in Australia
- 5 Star + 20% reduction in carbon dioxide emissions
- Naturally ventilated atrium and wintergarden rooms

5 star rating

This rating represents Australian Excellence
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Water
- 3A rated fittings
- Water sub-metering connected to BMS for leak detection
- Sub soil drip irrigation system with moisture control over ride

Materials
- Waste storage areas are provided for the collection for co-mingle, paper and organic waste separation and recycling
- Integrated fitout for over 70% of the building

Land Use & Ecology
- Roof garden with native plants and timber decking
- Remediation of previous contaminated Gasworks site

Land Use & Ecology (Cont.)
- Use of heritage listed sandstone wall as thermal back drop to atrium

Emissions
- Over 90% of refrigerants used have an ozone depletion potential of zero
- Refrigerant leak detection provided
- No light pollution

Innovation
- The Innovation points are awarded to recognise the environmental benefits of the application of the passive chilled beam technology and of the decontamination of a heritage site, as well as to acknowledge the extensive team briefing.

Overall Green Star Building Performance

The Green Building Council of Australia is a national, not-for-profit organisation that is supported by both industry and governments across the country.

Launched in 2002, the Green Building Council’s mission is to develop a sustainable property industry for Australia and to drive the adoption of green building practices through market-based solutions.

Key Objectives
- Drive the transition of the Australian property industry towards sustainability by promoting green building programs, technologies, design practices and operations; and
- Encourage the integration of green building initiatives into mainstream design, construction and operation of buildings.