



Surry Hills Library

a sustainable building

Description

The need for a new community facility was recognised in 2004. This City took this opportunity to deliver an iconic new facility reached top sustainability and design standards. In 2005 architects FJMT, led by Richard Francis-Jones, were awarded the project.

The building has a unique air quality system using the natural filtering properties of plants. Air is naturally cooled under the building, reducing the need for artificial cooling by 50%. Air is drawn in at the top of the atrium and passed through special plants acting as 'passive' filters. The air then flows under the building where its temperature is conditioned by a thermal labyrinth - a series of high thermal-mass rock baskets. From here, the filtered and cooled air flows throughout the different levels of the building.

The building is also designed to minimise energy consumption. The green roof reduces energy consumption by insulating the building and keeping solar panels on the roof at an optimal temperature.

Rainwater is collected, treated and re-used for flushing toilets and irrigation, and for watering the atrium plants and Collins Street Reserve lawn.



Details

Name	Surry Hills Library and Community Centre
Address	Crown Street, Surry Hills
Type	Extensive green roof
Size (m²) total	Building envelope: 25.28 m ² Building: 2,497 m ² Landscaping: 770m ²
New / retrofit	New
Year installed	Finished 2009
Height (storeys)	Three storeys
Slope (%)	1 degree
Soil depth / mix / type	300mm
Plant types	Indicative planting list: <ul style="list-style-type: none"> • Eragrostis elongata 'Elvera' (Lavender Grass) • Microlaena stipoides (Weeping Grass) • Themeda australis 'Mingo' (Dwarf Blue Kangaroo Grass) Heath plants <ul style="list-style-type: none"> • Baeckia virgata 'Clarence River' (Prostrate Form) • Banksia integrifolia (Prostrate form) • Grevillea banksii (Prostrate Red Form) • Kunzea capitata (Prostrate Form) Sedges <ul style="list-style-type: none"> • Baumea rubiginosa (Wetland Sedge) • Isolepis nodosa (Knobby Club Rush) • Juncus usitatus (Common Rush)

Client	City of Sydney
Building owner	City of Sydney
Accessibility (private / public)	Public building Green roof is not accessible
Designer / landscape architect	Francis-Jones Morehen Thorp (FJMT) Landscape architect: Matthew Todd, Mark Brandon Structural / fascade engineers: Taylor Thomson Whitting
Installer	Builder: WBHO Pro Build
Motivation for installation	Meets the Sustainable Sydney 2030 Vision objectives Meets the needs and desires of local residents
Maintenance	Irrigation installed but not routinely used
Water source (tank, recycled, potable)	The roof is irrigated from recycled rain water when needed
Contact	Gillian Elliott Surry Hills Library and Community Centre 02 9356 4977 or reception@shnc.org
References (web, research etc)	Detailed information about building finishes and products: archdaily.com/57339/surry-hills-library-and-community-centre-fjmt
Awards / recognition / Green star rating	Australian Institute of Architects - Public Architect Award Milo Dunphy Award for Sustainable Architecture John Verge Award for Interior Architecture