

COMFORTABLE, ECO-FRIENDLY AND SMART DESIGN STATEMENT

33-41 Blaxland Rd, Rhodes, NSW

ENJOY COMFORTABLE LIVING WITH ENERGY-EFFICIENT AND HEALTHY SOLUTIONS

At Baia Residences your apartment has been specially designed to meet and exceed energy efficiency and water saving standards. This ensures that residents and visitors experience enhanced comfort while benefitting from lower energy billsⁱ.

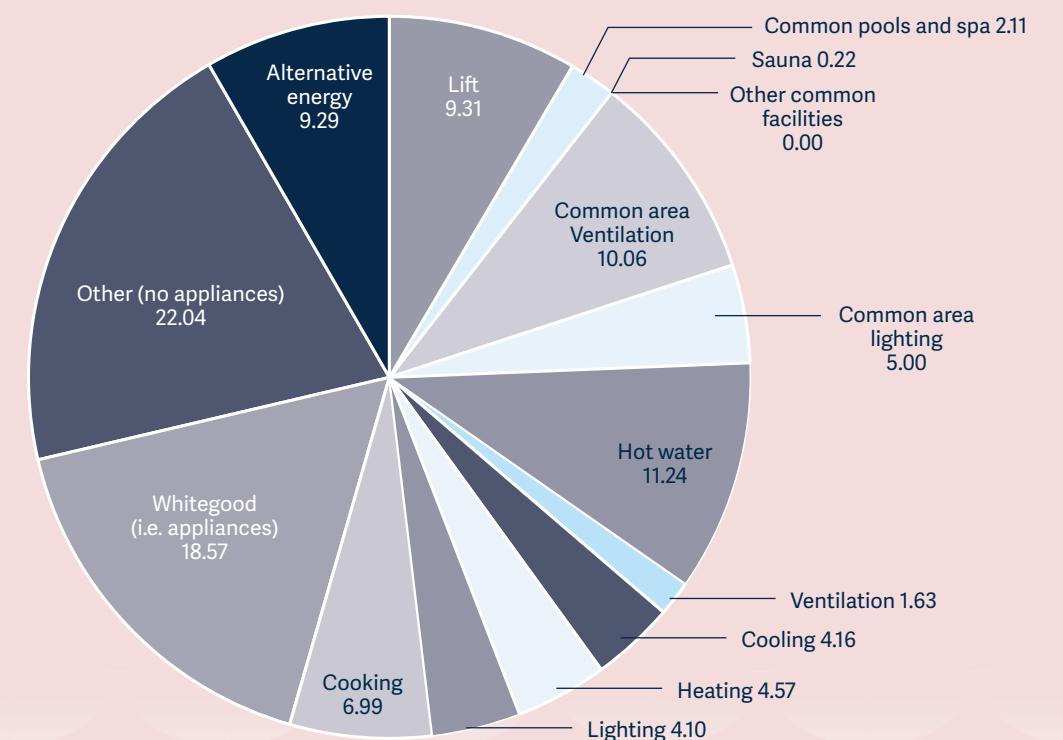
Comfort level and passive design - an average 6.5 star NatHERS rating has been achieved across the project under the National Home Energy Rating Scheme.

- ~ This outcome comes down to great design and inclusions – it requires that key components of the building are targeted for comfortable living conditions including:
 - ~ The building shell and insulation – hot and cold conditions are managed passively by clever design, insulation, and materials on the façade of the building, within common walls and against concrete slabs.
 - ~ Windows – this project includes high-performance double glazed window systems designed to achieve exceptionally high thermal performance for occupants while preserving stunning views.
 - ~ Air tightness and ventilation – the building is specially designed to ensure the circulation of fresh air throughout the premises. This is achieved through a combination of features, including awning windows and mechanical systems, while also employing a close-fitting design to effectively manage and minimize unwanted air leaks.

Energy efficiency – a BASIX score of 40% carbon emissions savings exceeding a 25% compliance standard. This means a total CO2 saving against a reference building of over 760 tonnes of CO2 each year.

- ~ Comfortable, modern, and highly efficient air conditioning systems that will produce four times the heating and cooling energy for every unit of energy going in. This means comfort with comparatively lower electricity costsⁱⁱ and lower costs to the environment - savings can be in the order of 30% compared to lower efficiency systems.
 - ~ Lighting is designed to be comfortable and functional whilst also being efficient - energy efficient LED globes are used extensively, and use of timers and motion sensors turns many lights on and off when not required such as in basement car parking areas.
 - ~ Super efficient appliances are provided:
 - ~ New generation 'heat pump condensing' clothes dryers, which are 8 star rated and around three times as efficient as regular dryersⁱⁱⁱ, are provided to reduce energy consumption and minimize moisture penetration into apartments.
 - ~ Washing machines are planned to be efficient 4-star models, further contributing to energy efficiency within the building.
 - ~ Dishwashers are rated 4.5 stars at the upper end of efficiency ratings.
 - ~ Pool heating systems utilize highly energy-efficient electric heat pumps, which are over three times more energy efficient compared to gas pool and spa heating. This approach not only reduces environmental impact but also leads to significantly lower strata costs over time.
- Lifts are high speed, comfortable and 'A Class' energy rated using energy regeneration, efficient hoisting, efficient lighting and with the ability to power down when on standby.
- ~ Common area and car park ventilation technologies are being implemented to reduce and reuse energy, also ultimately resulting in reduced strata costs.

Percentage contribution to energy score



Renewable electricity from roof top solar systems.

- Roof top solar panel systems will be incorporated on the roof of each building where possible with a target for total system size of 80kW.
- A system this size would produce in the order of 111,000 kWh of electrical energy per year minimizing greenhouse gas emissions by about 75 tons CO2 per annum^v and further reducing strata costs.
- The electrical energy supply from the solar panel systems would be used primarily to provide power to common area services such as hot water, pool heating and car park lighting and ventilation.

The energy network is carefully managed by an ‘embedded network operator’ – Meriton Energy. Meriton Energy aims to manage the buildings’ energy demands efficiently and to make sure residents and tenants get affordable and hassle-free power that’s better for the planet.

WATER SMART

Water efficient – a BASIX potable water saving of 60% exceeding a 40% compliance standard. This means a drinking water saving of 85,000L per day compared to a reference building.

Fixtures and appliances that use valuable drinking water are all highly rated under the independent Water Efficiency Labelling System (WELS). This means that the right flow of water for the activity is provided but without unnecessary wastage – water savings compared to regular lower rated fixtures are in the order of 10-25%^{vi} benefitting the environment and lowering water bills.

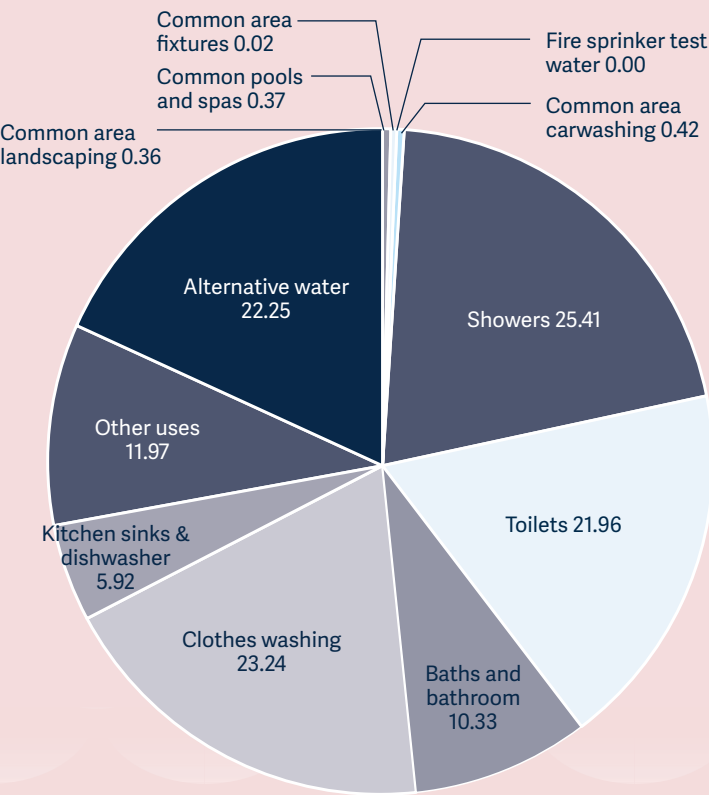
- Taps are rated 5 star.
- Washing machines are rated 4 star.
- Showers are rated 4 star.
- Dishwashers are rated 4 star.
- Toilets are rated 4 star.

An innovative grey water recycling system saves unnecessary use of drinking water

The project includes a grey water recycling system to collect reusable water for non-potable and safe water use activities.

- Grey water will be captured and stored from suitable sources such as washing machines, showers, baths, and basins.
- The grey water will go through multiple treatment steps to ensure safe reuse and will then be used to supplement up to 20kl of the water supply per day for toilets, washing machines and landscape irrigation, helping to replace drinking water with an alternative water source that is safe and fit for purpose.

Percentage contribution to water score



CONNECTED AND SUSTAINABLE TRANSPORT - ACTIVE AND GREEN TRAVEL OPTIONS

The connected location of Baia Residences means that you can leave your car at home for much of the time if you choose – and if you are excited about bike riding and EVs then we have you covered!

Commuting using public transport.

- Baia Residences is only 150m to Rhodes station on the Sydney T9 rail line. This frequent rail service will provide easy public transport access to the Sydney CBD (peak services every 6-10 minutes) and connection to the wider Sydney Trains network via Strathfield station.
- Frequent bus services also connect to important cross Sydney working destinations such as Chatswood (533 service) and Macquarie Park (410 service).

Non-motorised transport.

- Direct easy walking access is available to a new major supermarket and retail services at Rhodes.
- A quick and easy walk to large green spaces along Rhodes waterfront.
- Convenient bike and walking connections to the massive Sydney Olympic Park recreation spaces.

Provision for low emission and shared vehicles

- Provision is being made so that every apartment can store two bikes and can install an electric vehicle (EV) charger when required^{viii} meaning that you can benefit from carbon emissions free commuting and driving in the future (assuming renewable electricity is supplied to chargers).
- Car share schemes will be available to residents with the provision of over 10 dedicated car share parking spots meaning that the need to own a car really is an option and not a necessity!

RESPONSIVE TO HEALTH, COMMUNITY AND THE LOCAL CLIMATE

Baia Residences provides multiple wellbeing options for residents and visitors – matched to the local environment and with a view to responsible and sustainable choice of materials.

- ~ Healthy indoor air quality will be supported by investigating materials with very low unhealthy air emissions (such as volatile organic compounds in paints and formaldehyde in engineered timbers).
- ~ Sustainability considerations extend to the investigation of building materials and suppliers with sustainable material ratings, such as timber certified by the Forest Stewardship Council (FSC) and with Environmental Product Disclosures (EPDs).
- ~ The project has integrated landscape design for areas over 1,300sqm incorporating c.325 sqm of grassed areas for residents and c.387 sqm of deep soil landscaping to support canopy trees on the site.
- ~ Extensive communal gathering areas will be provided in rooftop landscaped spaces with over 1,000 sqm of green landscaping. These spaces will take advantage of stunning district views and include raised planting beds, seating areas and outdoor cooking options.
- ~ A new medical centre, childcare centre and retail facilities will be created on the ground and lower levels of the buildings for ultimate convenience of residents reducing wasted travel time and reducing the need to use a car for these services.

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- i. 'Lower energy bills' assumes that average 6.5 star NatHERs thermal comfort ratings and proposed modern energy efficient appliances allow the typical occupant to live comfortably with less energy consumption compared to similar projects delivered historically with lower energy efficiency regulatory requirements.
 - ii. Assumes air conditioning provided by VRV or ducted/split DX systems with 4.5/5 star ratings versus 2.5 star ratings (comparison from Energy Rating calculator)
 - iii. Assumes 8kg heat pump dryer rated at 8 stars versus standard dryer rated at 2 stars (comparison from Energy Rating calculator)
 - iv. Derived from BASIX certificate outputs
 - v. Assumes PV array net output average of 3.8x installed capacity per day and 0.68kg CO2 per kWh saved from avoiding grid sourced electricity (NGER NSW factor 2023)
 - vi. Assumes 5 star versus 4 star taps, 4 star versus 3 star showerheads and 4 star versus 3 star toilets (WELS approximate average product comparisons for water consumption)
 - vii. Derived from BASIX certificate outputs
 - viii. Electric vehicle charging in the future may be restricted to time of day use and electrical load management conditions for the buildings with the ideal time to charge electric vehicles expected to be throughout the night

