



THE CORAL GREENHOUSE

The Coral Greenhouse sculpture brings into focus diverse fields of study - marine science, coral gardening, underwater and environmental art and architecture - providing a starting point and new perspective for an understanding of the Great Barrier Reef and its ecology.

The design of the greenhouse is biomorphic, its form determined by the forces of nature. As the Greenhouse is slowly colonised and built upon by the reef, it will be gradually absorbed into its surroundings, illustrating an organic architectural philosophy which centres on the unification and connection of designs to their surroundings. The porous skeletal structure provides a space suitable for ever changing marine conditions, a refuge for marine species. It allows for excellent overhead light penetration and dive access.

Specifically designed for the underwater environment, The Coral Greenhouse and surrounding sculptures are made from pH neutral cement compounds and corrosion resistant 316 Stainless steel. Its triangular cross sections are engineered to have a very low centre of gravity for stability. Its extensive cement base and integrated cyclone tethers provide heavy duty protection during adverse weather conditions. The elevated beam sections provide minimal resistance to wave energy, whilst providing an ideal elevated substrate for filter feeding organisms and schooling fish to congregate.

The 165 Ton structure also plays with gravitational elements, as the heavy base is contrasted with light floating spires which oscillate in the prevailing currents, a pioneering technique only feasible in this unique marine setting.

Work benches inside the Greenhouse are a series of practical reef units, each in turn designed to house individual local marine creatures. It contains small intricate matrices for small fish looking to escape predation, and glass enclaves for octopus and sea urchins looking for shelter in the day.



Positioned within a natural inlet of John Brewer Reef, the Greenhouse features surrounding gardens and paving. These lead to a variety of large scale planter boxes of coral and a series of floating trees supported by buoyancy devices. The trees are all based on local terrestrial species such as eucalyptus and umbrella palm.

Access to the Greenhouse is provided by three large two-metre entrances points and expansive floor space allows for divers to rest and view the artworks.

The internal spaces of the Greenhouse are populated with a series of figurative sculptures cast from children from local and international schools. The children study and tend to planted coral cuttings. Thus they are tending to their future, building a different relationship with our marine world, one which recognises it as precious, fragile, and in need of protection. Our children are the guardians of the Great Barrier Reef.

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