















## **Further Info**

My house is located at Blackmans Bay, Tasmania, standing on an elevation with a complete view of the beach scenery. The temperature of this site ranges between 5-7°C during the winter and 20-22°C during the summer with an average wind speed of 14.3km/h. It's a contemporary beach home with many abstract and irregular shapes inspired by the elements of the surrounding natural environment such as the waves and puddles of the beach. These round asymmetrical forms allow for the structure to blend and complement its surroundings, working together with the local landscape while giving character to the home and evocating the style of Niemeyer and Burla Max. The goal of this project was to create a home where the clientele could create a multitude of positive memories and experiences with their family and a true reflection of their values and personality. The two primary materials of concrete block and timber cladding were used to articulate the forms of the home while linking back to the natural environment. Through the use of these raw organic materials, the creation of a patina will be evident as the home ages, allowing for the ageing of the home together with the family

When first entering the home, you are immediately greeted by a compelling wave staircase which acts as a conversation starts while blending the different levels into a single fluid form. The large vertical space of the entire home allows for the house to feel more connected and spacious while encouraging healthy airflow and better ventilation. To accommodate the clientele's passion for music, a room was dedicated to accommodating their many instruments with sliding glass soundproof doors. As the father is a professional chef who enjoys cooking for his family, a large well-equipped kitchen was included along with a sizable pantry where a wide variety of ingredients can be stored and easily accessible. The large floor-to-ceiling sliding glass doors can be opened up to connect the inside with the outside and allow for a flow of space. The large decking area also provides a space where the kids can release their energy with a large roof overhang protecting the space beneath from the elements. Many gathering spaces were included to promote family activities along with all necessities and internal facilities such as 2 bathrooms, 3 toilets and a laundry room. However, in consideration of the parents, the master suite along with an office was placed on the third floor dedicated to providing a guiet space where they could relax and recharge. Furthermore, the inclusion of a greenhouse acts as a giant terrarium where you are hit with the smell of moisture upon entering, stimulating the olfactory and making it feel as though you were in the tropics.

To take advantage of the natural heating of the sun, large triple-paned windows were installed on the northern facade of the home to absorb heat during the winter while deflecting it during the summer through the use of adjustable aluminium louvres and deciduous trees. The addition of a split roof allows for added sunlight to warm the home while allowing hot stuffy air to escape out the windows through the stacking effect. Through the installation of pelmets, heat loss can also be kept to a minimum by avoiding contact between the warm interior air and the cooler glass. Via the thermal mass of the thick concrete walls, heat is also absorbed during the daytime and slowly radiated back out during the nighttime and further reducing heat loss, the walls, foundations, and slabs of the home were insulated with polyurethane foam to avoid thermal bridges. Finally, the integration of equipment such as solar panels and a rainwater collector provides a clean source of energy to the home, reducing its overall energy footprint. Overall,

through careful consideration of the many factors including the needs of the clientele and energy efficiency, a sustainable home can be realised to best fulfil the wishes of the clientele.