### **ELEMENTS - LADY BAY**

## OFF GRID ACCOMMODATION IN TASMANIA'S FAR SOUTH

This is an owner builder project which took a few years to complete. Elements is a small two-bedroom house situated in Lady Bay overlooking the Southern D'Entrecasteaux Channel and Bruny Island. The house was designed and almost completely built by the owners (Steve and Barbara).

This passive solar house aims to be as energy efficient as possible. The rammed earth wall is not just a feature but acts as thermal mass. The long design aims to capture as much sun as possible with the large windows in the living area facing due north. The house is well insulated with double stud walls in the timber section, extra roof insulation and the rammed earth wall is insulated in the centre.

For the cladding Macrocarpa timber was sourced from Tasmanian windfall trees which were milled in Tassie as well.

The double-glazed cedar timber windows were manufactured by Trimview in Kingston to BAL 29 standard. The windows have low reflection which is important in Swift Parrot Habitat. We've have also avoided large continuous areas of glass to minimise bird strike. Trimview is one of the last timber window manufacturers in Tasmania.

All rocks used for the gabion walls were collected on site.

Due to the remoteness of the location much of the build was completed with hand tools which is the way Steve prefers to build.

The beautiful rammed earth wall was built by Andy and his team at Unique Earth.

One of the big and very tedious jobs was the shadow lines in the ceiling plastering. However, this design aspect was certainly worth it resulting in a beautiful crisp and unfussy look.

Following is a picture diary of the building process.

#### Digging foundations



# Strip foundations





First section of the rammed earth wall going up. You can see the insulation inside the wall:





Mixing the material for the rammed earth walls







Floor joists are in



Yellow tongue sheet flooring being installed



Stud frame installation and LVL main beam being installed:





Frame completed



Windows going in



Bracing ply installed. Roof wrapped with foil adhered blanket insulation.



Plastering and tiling is done, preparing for timber floor. Painting plaster ceiling and walls.



Deck installation



## Making sure flu is vertical



Solar panels are up



## House completed in 2021



