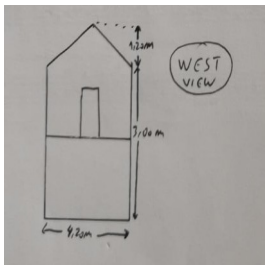
INTRO

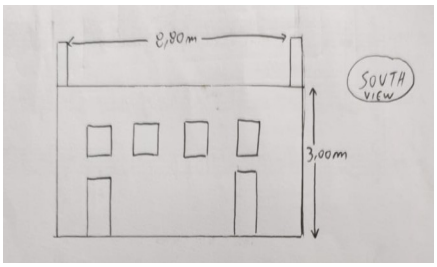
There was a need to create a temporary, fast and cheap solution for a roofless ruin to shelter us from rain during the gathering events.

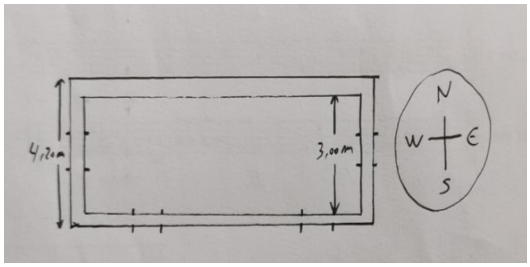
MEASUREMENTS

The distances between the walls of the ruin are about 8,8x3m, being the thickness of the walls about 0,7m.

The ruin had originally a gable roof but to make such a structure would require more time and material, therefore we decided to make a temporary shed roof.







STRUCTURE

As for the structure we searched in the surroundings for straight trees that would have at least a 15cm diameter and that were 4,5 meters long. In the Azores most of the wild trees don't have one single main trunk, creating thick ramifications from a very low section of the tree. This said the task was not easy, but we managed to find 10. We selected trees that are invasive like *Acacia Melanoxylon* and *Pittosporum Undulatum*, locally known as Acacia and Incenso. With this trees we made the main beams and connected them with the leftovers from a local sawmill. All this leftovers are from the most common wood to build around the Azores: *Cryptomeria Japonica*, locally known as Criptomeria. At the sawmill they trow away the rounded ends from the outside of the trees, locally called Costaneiras, which are not thick enough to cut a standard wooden plank out of it. Many locals use this leftovers to build temporary shelters for tools, animals and for other purposes. The third part of the structure were very thick Acacia logs, with more than 50cm diameter and about 50cm heigh placed on the top of the north facing wall to elevate the north part of the roof, so the rain could flow towards south.

The beams were placed about 88cm apart from each other with the north facing end siting on the thick Acacia Logs, after this we connected the main beams with the Costaneiras placed on an alternated form as you can see in some of the pictures:

COVER

We had two tarps (8x5m) and (5x4m) to cover the structure but since one of them had some wholes we decided to buy an agriculture black plastic to place between the structure and the tarps so any rain that would pass through the tarp would not pass trough the plastic. This black plastic measured 6x10m in order to cover as well the exposed walls from the previous gable roof being nailed with long wooden planks to the beams at each extremity, East and West. After this we fixed the tarps to the structure with ropes passing thought its rings and firmly tightening it to the beams, since we had two tarps for the whole roof, we had to fold the ends that connected to each other around two long beams (that were not attached to the roof and then overlapped one over the other so the wain wouldn’t pass through the connection. The ropes were all used ropes.

TOOLS

Bellow the list of the main tools we used:
- Chainsaw for cutting down trees and some last minute adjustments on the structure;
- Hand saw for cutting wooden planks;
- Leveling tool and measuring tape to make sure the distances and angles were right;
- Hammer to nail the nails;
- Driller to open wholes where the bigger nails would go to avoid cracking the fresh wood;
- Ladder to reach higher places;
- Wooden pallets to use as a Scaffold.

COSTS

- Black plastic (6x10m): 20€
- Nails (1Kg): 5€
- Tarp (5x4m): 20€

BETTER OPTIONS

Starting on the structure, the best would have been to use all Criptomeria wood, which is very light to transport, easy to cut and it handles very well the extreme humidity of the Azores. With more time we could have scout for a land where trees were being cut for the lumber mill and ask for the thinner trunks, that they don't use industrially (less than 30cm diameter) and leave them drying for 3-4 months for then use them as main beans. Acacia is a very strong wood, but it takes more than 1 year to dry completely, it is very heavy to lift and hard to find a long straight tree.

As for the wooden planks, what we used is a good solutions and it is free, still, it would have been best to not leave gaps in between the planks and cut the round parts to fit the beams better.

The tarps could have been replaced for a single one that measures 10x6m and costs about 55€. Avoiding the need to make a connection between the two tarps, making the roof weaker.