

KWA IWO

AFRICAN SCHOOL PROJECT
EDUCATION FOR THE FUTURE

FOR THEM IN CHICHEWA

In the aim of creating a school suitable for secondary education in Malawi we have taken into account the geographic emplacement, the climate, the cost of construction and material as well as the space required to school 100 students with the possibility of expansion.

We have decided to organize the layout of the school into five sections;

- Four classrooms, one of which extends onto the laboratory.
- Administrative block, includes eight rooms; the director and secretary's office, the teacher's room, a meeting room, the multipurpose space as well as the library and computers room. Being the largest building, the roof will accommodate fifty square meters (538.2sqft) of solar panels that will supply the whole school complex.
- Dormitories, divided into six buildings, generous rooms of six to eight students per room. Showers are included in the design. Eight dry latrines stalls are set either side of the buildings so as to keep the sexes separate. The dining room is set between the dormitories and the administrative block.
- Residential area, twelve houses for teachers each fully equipped and an individual dry latrine.
- Animal area, located at the north of the property.

The general aspect of our design focuses on the use of wind to cool the buildings, they are oriented so that the central corridor captures the Eastern wind. The curved walls funnel the air into the structures so as to provide fresh air circulation in each room.

To keep a manageable budget and to enable local manual labour each building is built with locally sourced materials such as compressed clay bricks. The framework for the roof structure is in timber and the covering in iron sheets. For the administrative building the roof rises up to let in natural light along the western ridge also encouraging air circulation. On buildings that require access to water, we have placed barrels on the roof and around every structure there is a gutter to allow for drainage during the wet season.

Each building is lined with buttresses so as to give a maximum of shade to the walls and therefore keep the interiors cool.

The walls inside are coated with mosquito repellent paint that is non-toxic for children.

We realised that a common problem in schools in Africa is the lack of space, therefore we set out to maximise the areas, giving 2 square meters (21.5sqft) for each child.