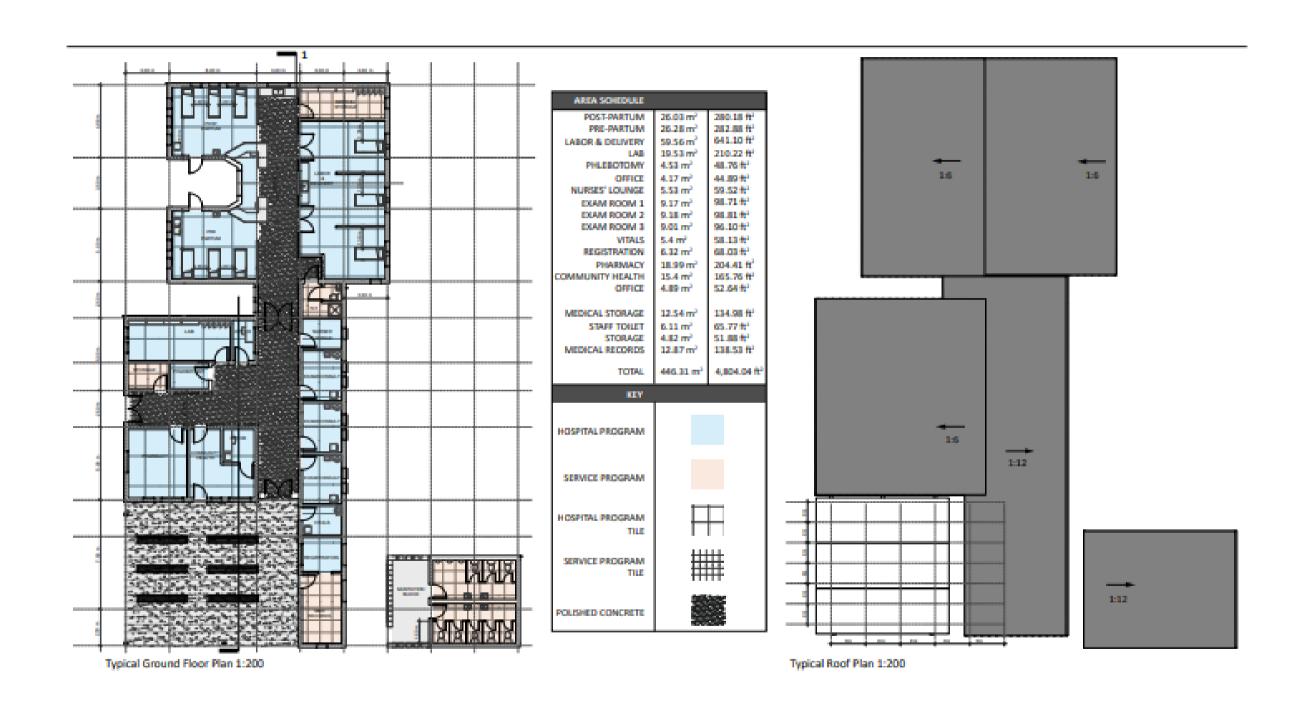
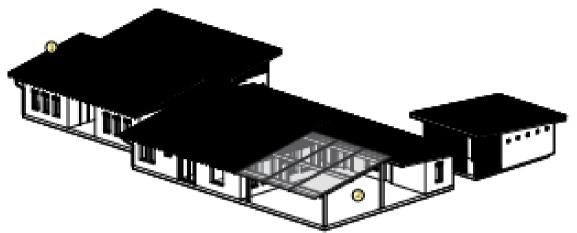
## **DESIGN PROTOTYPE**



## **ROOF OPTION A**



- Wall Construction
   Thick masonry walls with stabilized earth to increase thermal control
- Windows Windows set on the interior of the masonry walls to increase passive shading strategies

- - Water Collection
    Gutters line low points of the pitched roofs, directing water to a collection system

Perforated sections of wall allow for cross ventilation

Option to place solar panels on pitched roofs

Brick Pattern



Student Dormitory in Kampala, Uganda (Terrain Architects / 2015)

Roof Construction

Entry

pitched steel beams

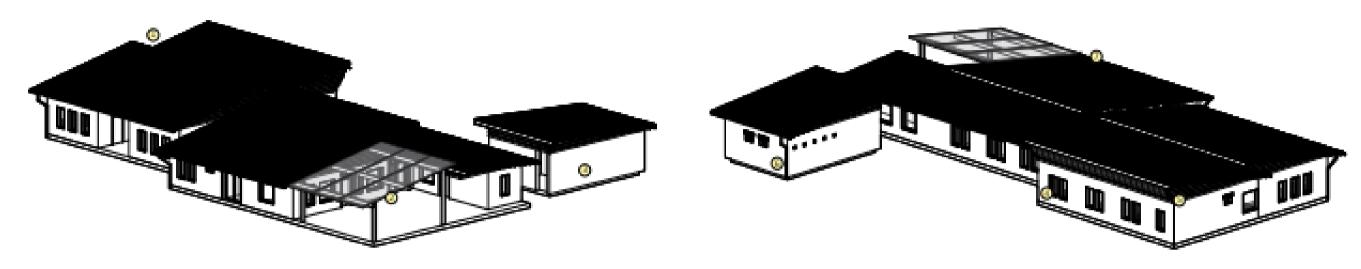
Aluminum IBR roof sheeting supported by exposed,

Translucent Polygal sheet for roofing over entry



Multipurpose Centre in Uganda (Michele Verdi, Francesca Tafi / 2014)

## **ROOF OPTION B**



- Roof Construction
   Aluminum IBR roof sheeting supported by steel trusses
- Entry Translucent Polygal sheet for roofing over entry

- Wall Construction
   Thick masonry walls with stabilized earth to increase thermal control
- Windows
   Windows set on the interior of the masonry walls to
   increase passive shading strategies

- Louvers
   Louvers cover the structural steel trusses in the roof,
   allowing for cross ventilation
- Water Collection Gutters line low points of the pitched roofs, directing water to a collection system
- Solar Collection
   Option to place solar panels on pitched roofs



Ludwig Pavillion Tuberculosis Hospital in Port-au-Prince, Haiti (MASS Design Group / 2015)

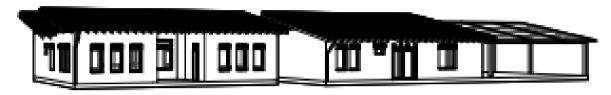


## PROPOSED PROTOTYPE

#### ROOF OPTION A



South Elevation 1:200



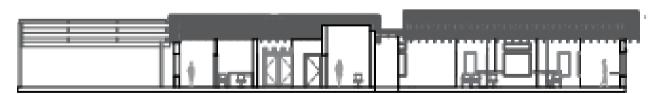
Side



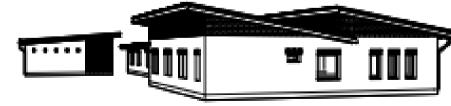
East Elevation 1:200



Entrance



Section 1 1:200

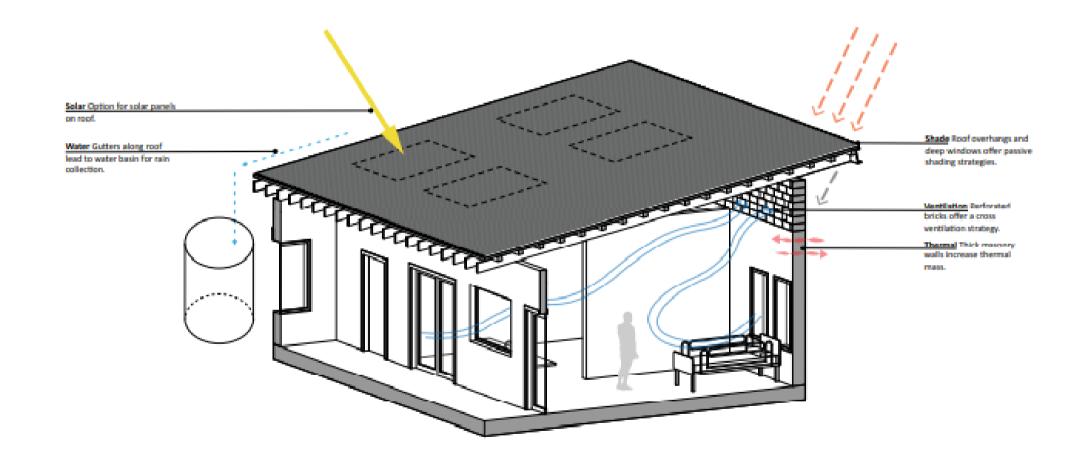


Bear

# **ARTISTIC IMPRESSION**



## **SUSTAINABILITY RENDERING**



# **MATERIALS ANALYSIS**

