

Proposed Health Center for Sierra Leone

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Goal:

Design a health center for general health to be built in various locations in Africa. It needs to be easy to clean so viruses can not be spread by contact with the surfaces. It needs to have a friendly atmosphere so patients are not scared to come and get treated. Ebola patients will be treated else where.

Africa Information:

Lowest Recorded Temperature in Africa: -11°F

Highest Recorded Temperature in Africa: 131°F

Wind Speeds: 0-10 mph

SIERRA LEONE:

Average Temperature: 73-88 °F

Ranges between tropical and savannah climate conditions

Rainfall: 110inches/year

Humidity: 80-91%



Ebola Basics:

- Symptoms: Fever, sore throat, muscle pain and headaches then, vomiting, diarrhea and rash
- Signs and symptoms typically start between two days and three weeks after contracting the virus.
- The virus is acquired by contact with blood or other body fluids of an infected human or animal.
- Can be spread by coming in contact with recently contaminated item or surface.
- Kills between 25% and 90% of those infected with the virus, averaging out at 50%.
- **No known treatment**

Materials

- Mud Brick
- Corrugated Steel
- Windows
- Wood Doors
- Wood
- Concrete
- Plastic Netting
- Sealant
- Thatch
- Nails
- Screws
- Concrete



Room Purpose:

Sterilization Room:

- Room used to treat patients that are sick.

Observation Room:

- A place where doctors see patients and determine what treatment they need.

Storage:

- Store all scrubs, medical equipment, medication, cleaning supplies

Meeting Room:

- A place for medical personnel to meet and discuss plans of action.
- Hold records of patients and those who have passed away

PT Room:

- Rehabilitation place for patients to work on strength and cardio

Design

- Water runoff inside for easy cleaning
- Patient friendly image
- Sealed concrete and mud brick
- Thatch roof to maintain indoor temperature
- Sealed concrete floors

Furnishings:

Sterilization and Treatment Room:

- Hazardous Waste Bin
- Trash Can
- Doctor's Table
- Counter
- Sink



Observation Room:

- Doctor's Table
- Sink
- Counter

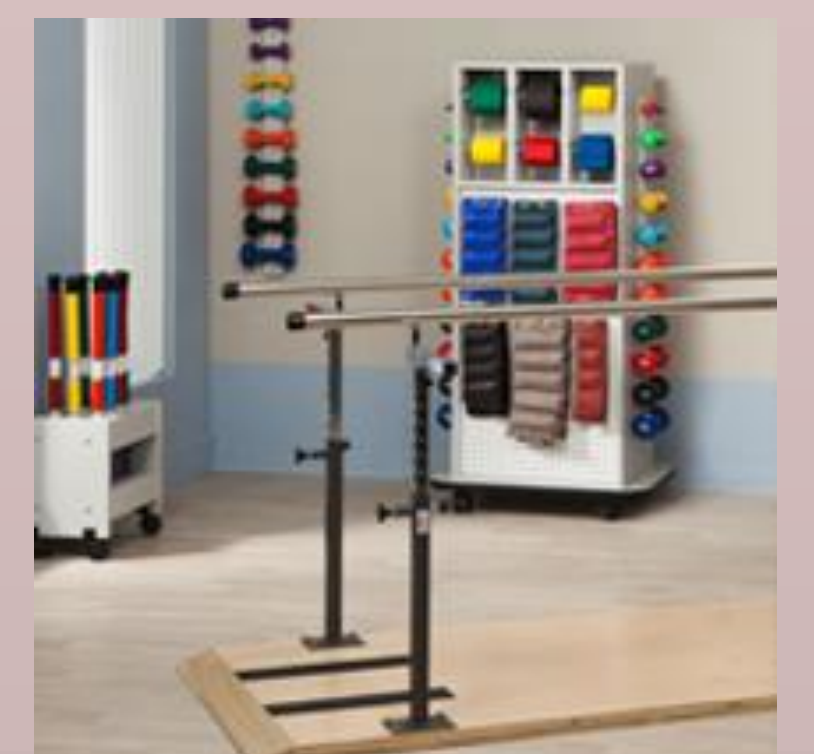


Storage:

- Cabinets
- Shelves
- Scrubs Closet

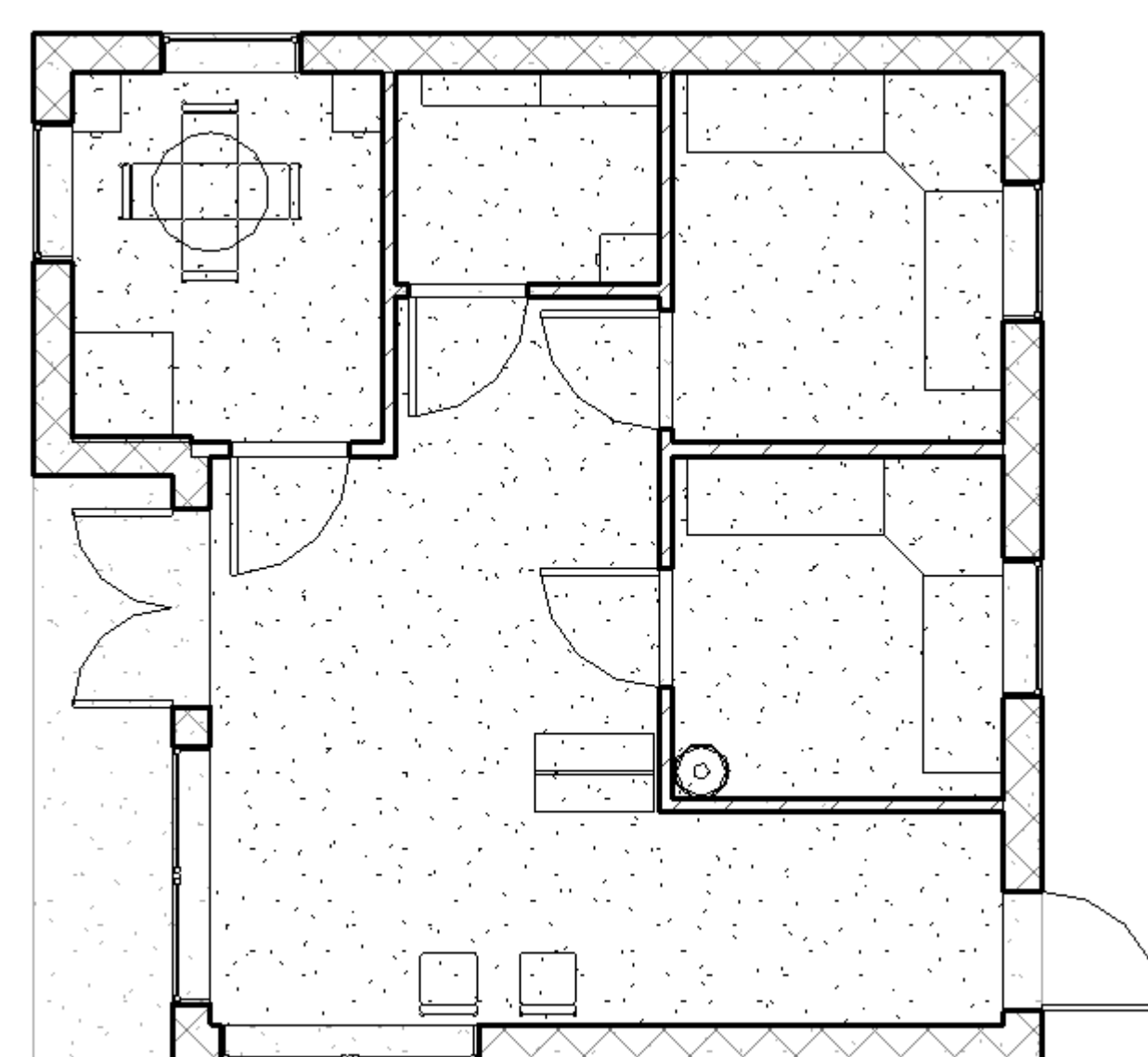
Meeting Room:

- Meeting Table
- Chairs
- File Cabinets

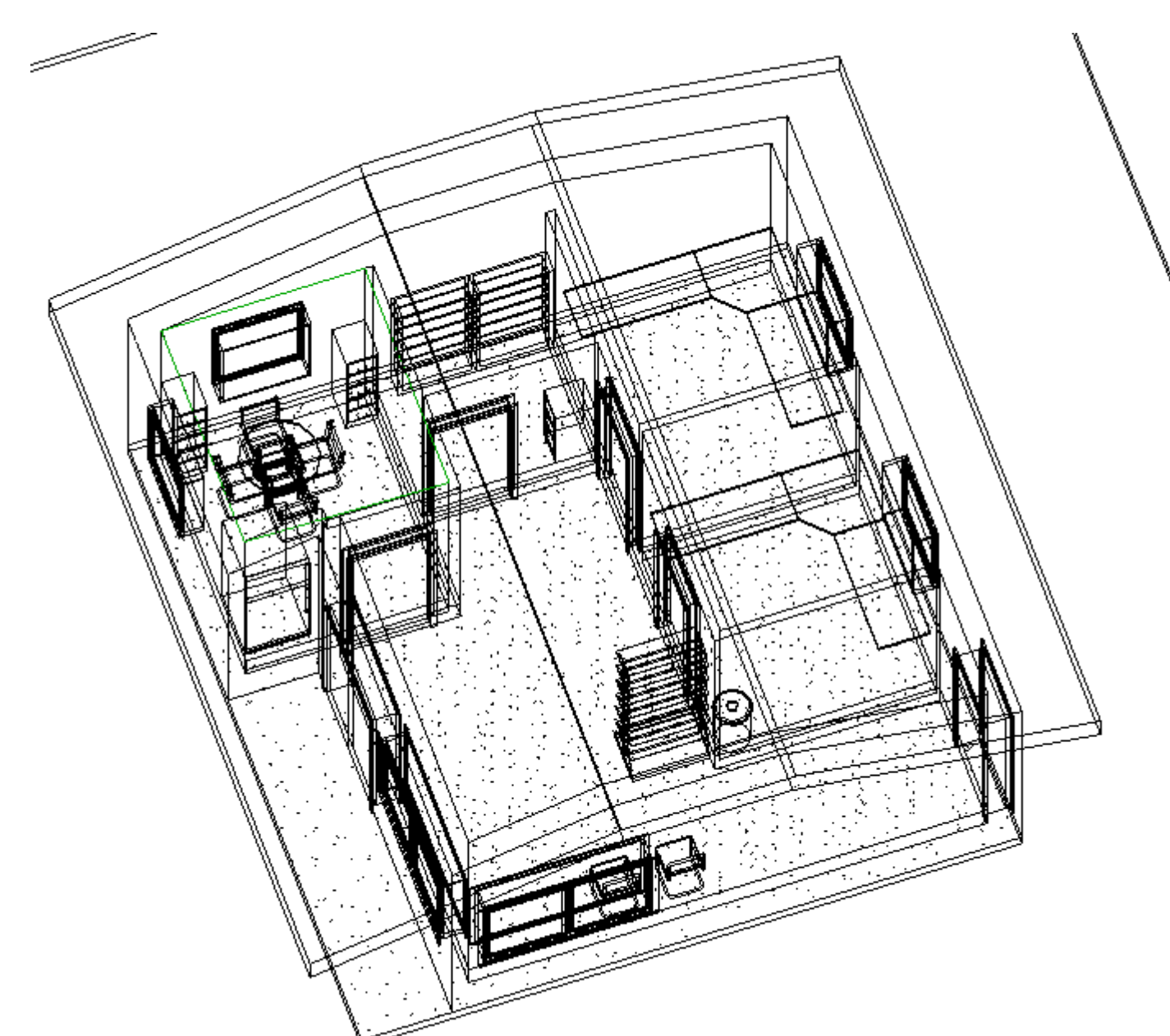


PT Room

- Fans
- Water Filtering System
- Work-Out Machines
- Mats
- Railings
- Small Weight Rack



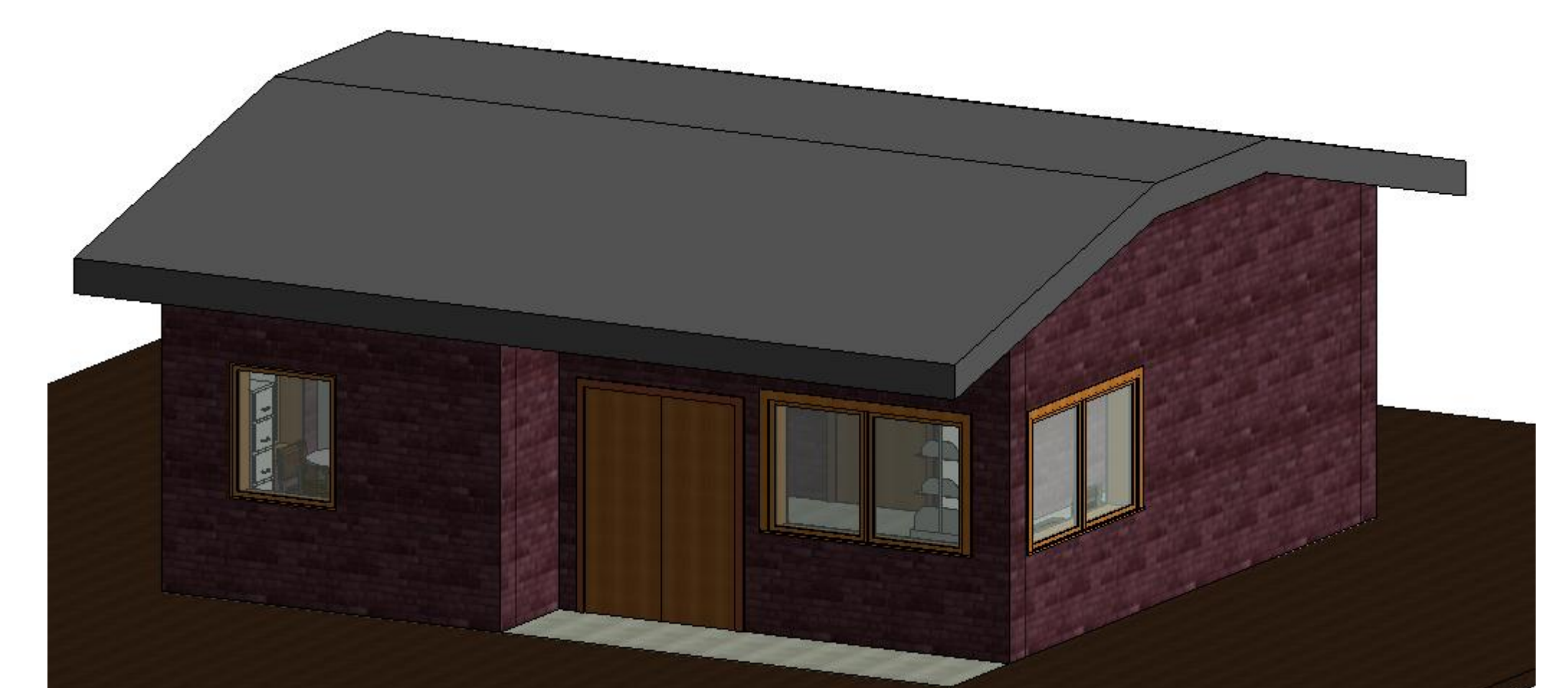
Basic Floor Plan



3D Wire Frame View



Interior View



Exterior View