

## **Cold storage Room Technical specification:**

### **1. Solar System Components**

- **Solar Panels:**
  - 8x monocrystalline panels
  - 580W each (total: 4.64 kW)
  - Mounted on aluminum frame, roof-tilted
- **Battery System:**
  - 1x lithium battery – 10 kWh capacity
  - Wall-mounted on Battery Metal RAK
  - Connected using Battery Cable
- **Inverter:**
  - 1x Hybrid Inverter – 6000W (6kW)
  - Supports solar + battery + optional grid/generator
- **Breakers:**
  - 1x DC Breaker – 500V (for panel/battery protection)
  - 1x AC Breaker – 230V (for load protection)
- **Wiring & Accessories:**
  - Wires: 2x 4mm<sup>2</sup> solar-rated copper wire
  - Connectors: MC4 connectors
- **Cable Management:**
  - Clipper
  - Wire tape
  - Cable trance (tray)
  - Nile clips

### **2. Air Conditioning System (Solar-Powered)**

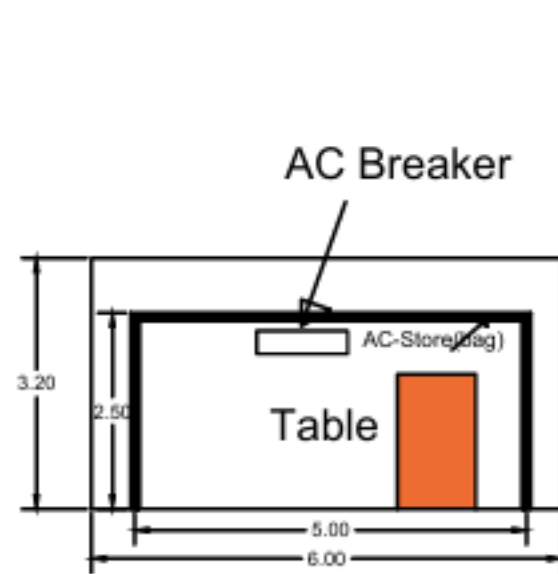
#### **- Air Conditioner:**

- 1.5 Ton wall-mounted split unit (~5.3 kW)
- Installed inside 4x4m solar sub-section
- Powered directly from inverter and battery system

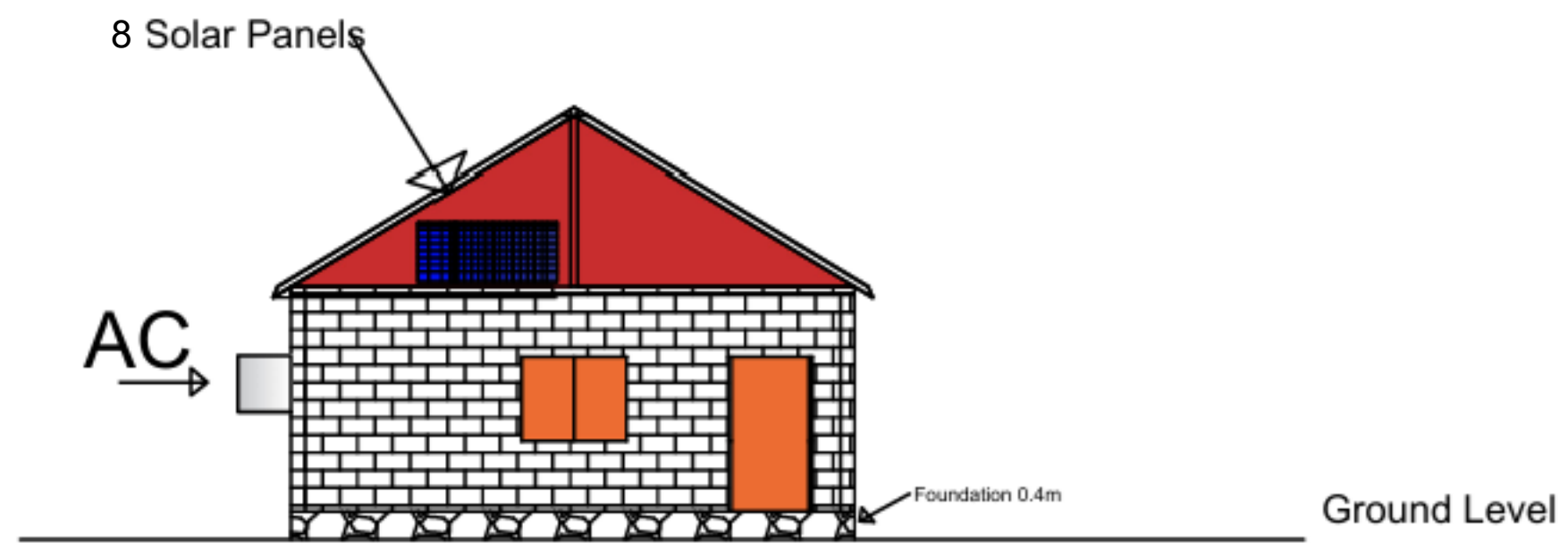
### **3. Installation Summary**

- Solar panels mounted on roof using aluminum frame
- Cable routed with cable trays and clips for safety and organization
- Battery and inverter installed on RAK, mounted on sub-room wall
- Greenhouse Polyethylene Plastic Film, to Keep Cold room temp.
- The air conditioner is integrated into a solar-powered load system.

## Cold storage Layouts



Section A-A



Front Elevation

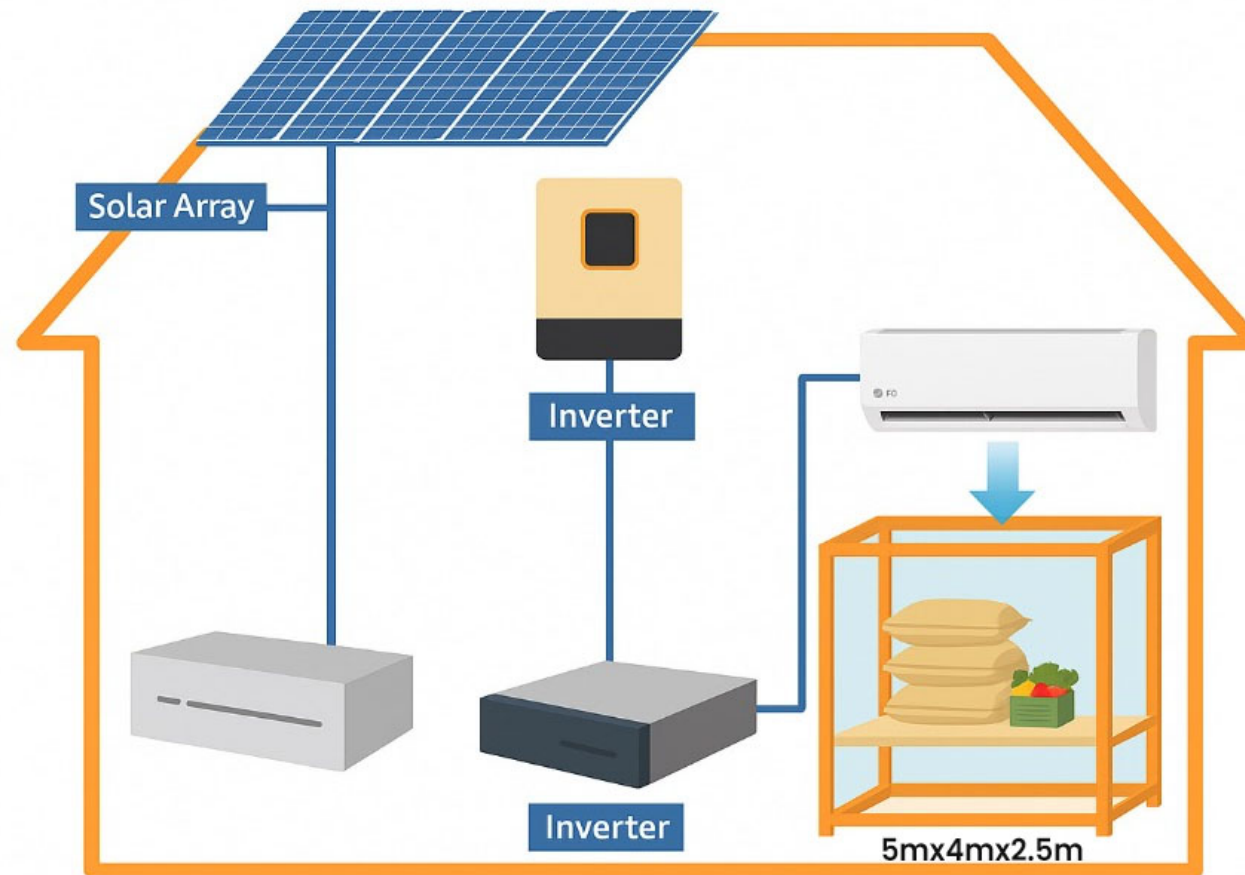
## Information

### Table

Table height=2.5m

Table width=4m

Table length=5m



**6m x 8m STORAGE ROOM**  
for agricultural crop storage

