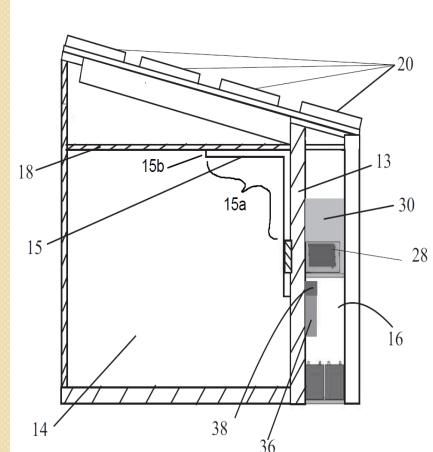




## Background: ColdShed Schematic Diagram and the Real One Built in India



Lloyd SolerCool

14: Cold room

16: Utility room

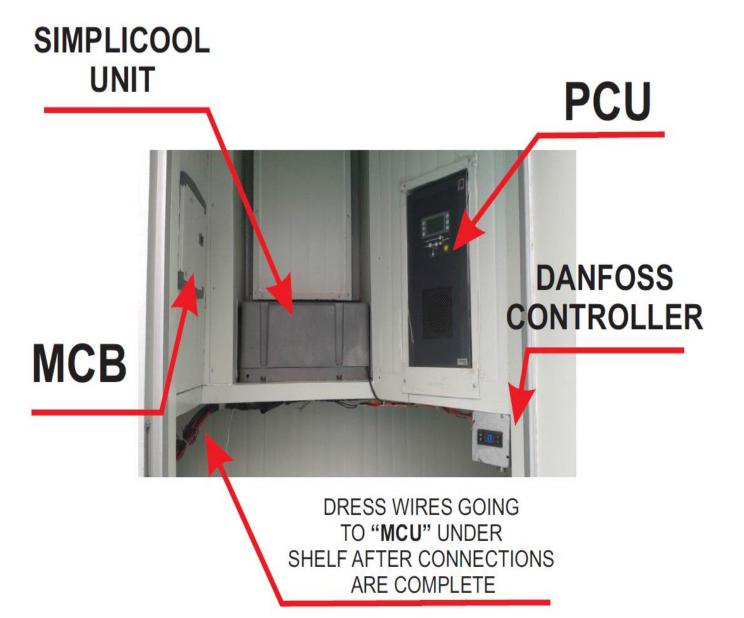
20: Solar Panels

28: CUBE

36: Power Conditioning Unit (PCU)

Mission Statement: SolerCool's mission is to develop and market affordable, environmentally friendly, temperature controlled work and storage spaces that use renewable energy sources to improve the lives and businesses of people in areas of the world without reliable sources of power.

## Background: Component Identification in the Utility Room of the ColdShed





- Efficiency of the cooling unit called CUBE and the efficiency of the entire system design (no other system in the world is as efficient meaning no other system can cool 500 cubic feet of space with so few solar panels).
- Ability to work with solar power as primary DC source and grid power or gas generator power as secondary AC source with automatic switch (no human intervention is required to operate this dual-power system from one to other).
- Ability to operate 24 hours a day and 12 months a year in any weather (battery backup and dual-power operation means the patent-pending system can be used year-round for storage of many perishable products and goods).
- Ability to function as a rapid-chilling system as well as long-term refrigeration system to cool stored items down to between 7 and 17°C.
- Location coverage and unlimited size-scalability of the system functioning at temperatures up to 60 C (because the system is modular and efficient, we can build any required size and place it at any location outdoor or indoor).
- Design of the system with the utility room as part of the structure with a separate lockable door meaning that the electrical equipment is secure.
- Remote control and monitoring system by a smartphone app containing fire and open-door alerts, system monitors, ability to set temperature, etc.
- **Ease of maintenance** means the system is very reliable and, if and when maintenance is required, it can be done quickly on location by replacing critical components almost as easily as replacing your printer cartridge!