

STRUCTURE OF SOLAR PANEL



Types of Solar Panel:

MONOCRYSTALLINE



THIN-FILM

POLYCRYSTALLINE

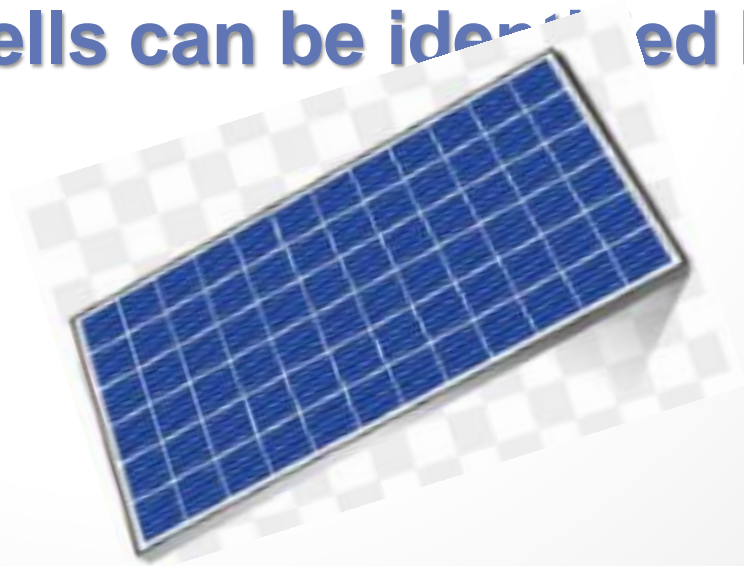
Monocrystalline

- ❖ **Monocrystalline Solar Panels are made from single (Mono) crystal silicon solar cells.**
- ❖ **Monocrystalline cells are more expensive, tend to last longer, and have higher efficiencies.**



Polycrystalline

- ❖ Polycrystalline cells are made from many (Poly) fragments of silicon crystal melted together.
- ❖ Polycrystalline solar panels have a lower efficiency and short lifespan.
- ❖ Polycrystalline cells can be identified by their blue finish.



Thin Film

- Thin-film solar panels are thin, flexible, and low in profile. This is because the cells within the panels are roughly 350 times thinner than the crystalline wafers used in monocrystalline and polycrystalline solar panels.
- Thin-film solar panels tend to have lower efficiencies and power capacities compared to crystalline panels.



INSTALLATION PROCEDURES OF SOLAR PANEL

Installation Procedures of Solar Panel:

- **Step-1: Mount Installation**
- **Step 2: Install the Solar Panels**
- **Step-3: Do Electrical Wiring**
- **Step-4: Connect the System to Solar Inverter**
- **Step-5: Connect Solar Inverter, and Solar Batteries**
- **Step: 6: Start Solar Inverter**

Quick Solar Facts

- **China is the world leader in solar energy generation.**
- **The United States is the third-largest solar energy market and generator in the world.**
- **India stands 4th globally in Renewable Energy Installed Capacity (including Large Hydro), 4th in Wind Power capacity & 4th in Solar Power capacity.**
- **Russell Ohl created the first photovoltaic cell in 1941.**



How to calculate the Energy Consumption of your home

How to Calculate Power ?