



# Structure Types for Solar Installations

This document outlines the commonly used structure types for solar panel installations, based on design, functionality, and roofing integration.

## 1. Solar Mounted Standard Structure

### Description:

The Solar Mounted Standard Structure is the most commonly used support system for photovoltaic (PV) panels. In this setup, solar panels are mounted on a metal framework using aluminium clamps.

### Features:

- Panels are mounted in a tilted angle to optimize solar exposure.
- The structure appears similar to a shelter or canopy but is not fully weather-sealed.
- Offers good airflow beneath the panels, enhancing panel cooling and efficiency.
- Commonly used for both residential and commercial installations where full roof sealing is not required.

### Applications:

- Open rooftops
- Parking shelters
- Ground-mounted arrays









## 2. Solar Roof Structure (Fully Sealed Type)

### Description:

This structure type serves the dual purpose of energy generation and providing a sealed roofing solution. Solar modules are installed in such a way that they completely cover and seal the roofing area, functioning as both a solar array and a weatherproof roof.

### Features:

- Solar panels act as the primary roofing material.
- Eliminates the need for separate roof tiles or coverings.
- Offers full weather protection (rainproof and dustproof).
- Improves aesthetics and reduces the structural load by eliminating redundant roofing layers.

### Applications:

- Carports
- Residential rooftops requiring weather-sealed solutions
- Commercial projects aiming for energy efficiency and design integration







### 3. Structure with Amano Sheets

#### Description:

This structure involves installing Amano (corrugated or flat) metal sheets to create a full roofing surface. Solar panels are then mounted on top of this metal surface using aluminium railings.

#### Features:

- Amano sheets provide the base waterproof roofing.
- Solar modules are attached on top, independent of the sheet structure.
- Durable and cost-effective method for integrating solar systems with existing metal roofing designs.
- Allows for additional insulation or ceiling work underneath the sheet layer.

#### Applications:

- Industrial and warehouse rooftops
- Residential extensions or outdoor structures







### Additional photos of quality work

