

NUEVO ULTIMA

NUEVO ULTIMA is a fixed-tilt ground mount solution that is designed to cater to a singular tilt angle. NUEVO ULTIMA is specifically designed for installation in vast spaces and can be arranged in various configurations by iterating the structural components and their operative section types. Based on the type of design, Nuevo ULTIMA can be further categorized into

Single Pole structures



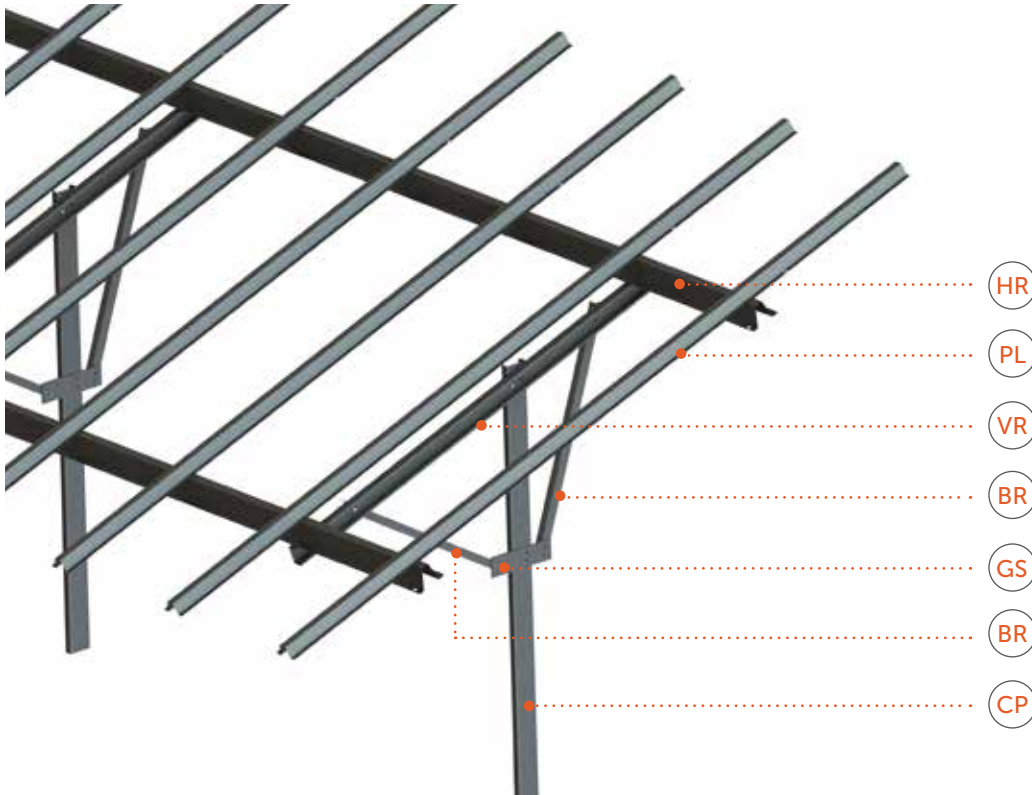
For smaller array sizes with a maximum span of 4 meters in NS direction.

Dual Pole structures



For larger array sizes with a maximum span of 8 meters in NS direction. Owing to lower moments of operative structural loads, dual pole structures are ideal for steeper angles.

Single Pole



Structure Description:

Single pole and Dual pole structures are erected using the following components

- Column post, Vertical Rafter and Bracings form a triangular support for the structure at the required tilt angle.
- Horizontal Rafters run in E-W direction if the required module orientation is landscape.
- Purlins run over the Vertical Rafter/Horizontal Rafter. Solar modules are installed on the purlins.
- Gusset Plates and Bracing pieces are used as auxiliary components and contribute to the triangular support.
- Splice plates and purlin plates are structural components that enable effective connectivity of all major structural members.
- L-Brackets connect the Vertical Rafter to the Horizontal Rafter or the Purlin, as per the design. L-Brackets are used specifically when the interacting components possess C-sections.
- In addition, for C-section purlins or Horizontal Rafters, Tie Rods are utilized to provide necessary support and avoid buckling.



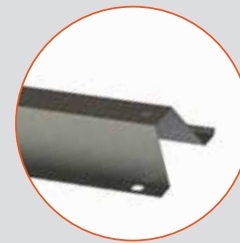
CP Column Post

Post Galvanized MS = 80-120 μ
Yield Strength = 250 - 350 MPa



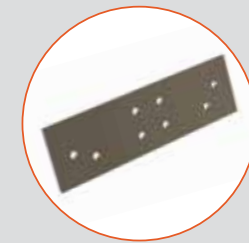
VR Vertical Rafter

Pre Galvanized MS (550 GSM) (or)
Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa



HR Horizontal Rafter (Hat)

Galvalume (150 GSM) (or)
Pre Galvanized MS (550 GSM) (or)
Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa (MS); 550 MPa (Galvalume)

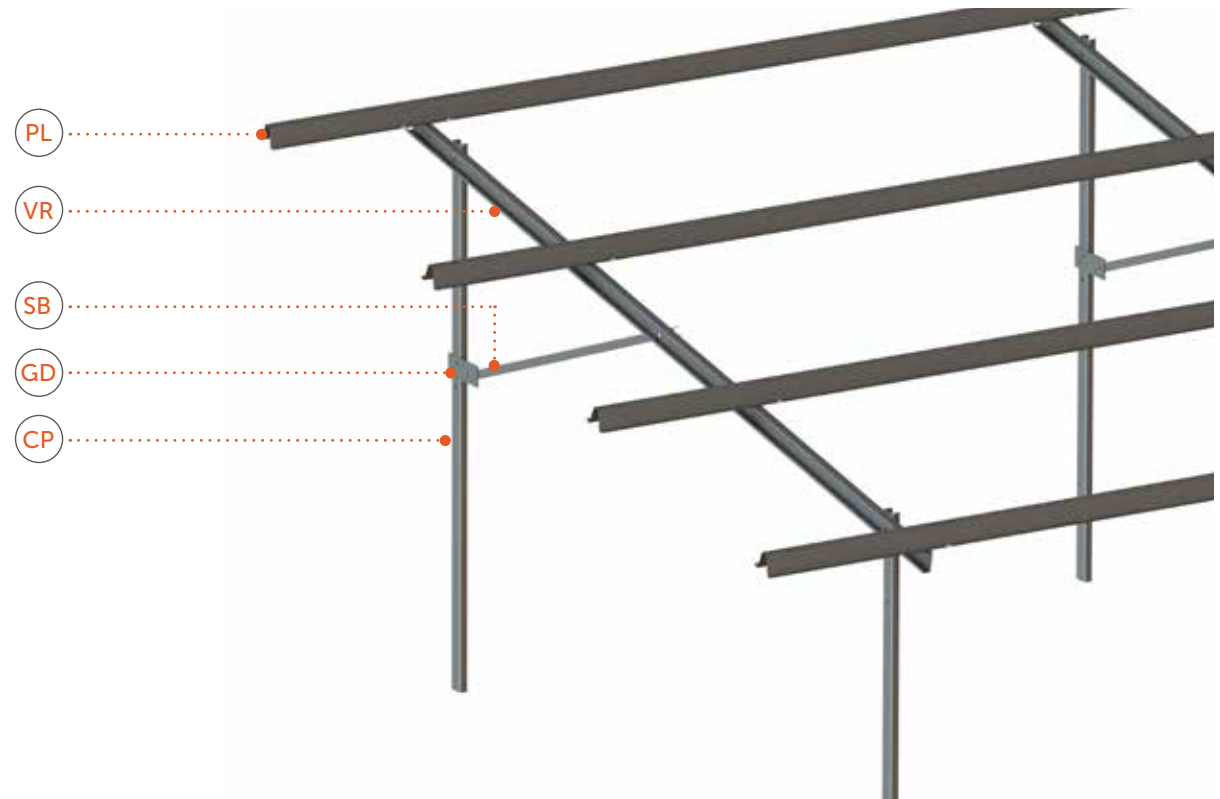


GS Gusset Plate (Single Pole)

Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa

Technical Data

- Design wind speeds: 120- 200 kmph
- Orientation: Portrait / Landscape
- Tilt Angle: Depends on the latitude
- Ground Clearance : 500 - 800 mm
- PV Modules: Crystalline / Thin film
- Approximate Mass of structure excluding the module weight: 5 – 8 kg/m² (Typical)
- Concrete consumption: 80 – 100 m³/ MWp (Typical)



GD Gusset Plate (Dual Pole)

Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa



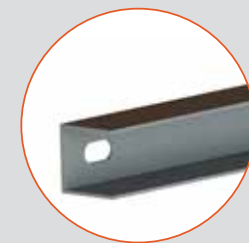
PL Purlin

Galvalume (150 GSM) (or)
Pre Galvanized MS (550 GSM) (or)
Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa (MS); 550 MPa (Galvalume)



BR Bracing

Pre Galvanized MS (550 GSM) (or)
Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa



SB Side Bracing

Pre Galvanized MS (550 GSM) (or)
Post Galvanized MS (80-120 μ)
Yield Strength = 250 - 350 MPa