

NUEVO TILT

NUEVO TILT is a ground mount structure solution that is designed to accommodate various tilt angles. Optimum generation output can be achieved by changing the structural tilt angle atleast twice during the year. On the basis of the deisgn and operative components, NUEVO TILT can be classified into

Curved Slot



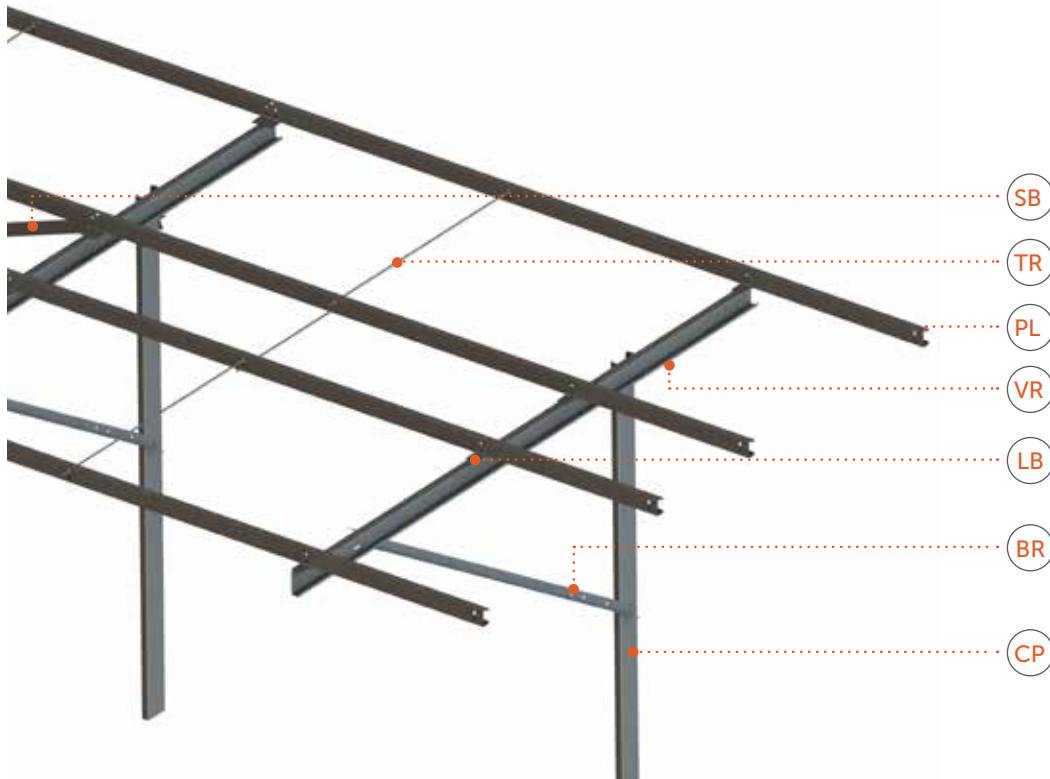
In-built machining of curved slots into vital components permits the tilting of the structure for various angles.

Hinge Mechanism



Composed of welded assemblies, the hinge mechanism is built for robustness, ready to weather the most extreme conditions.

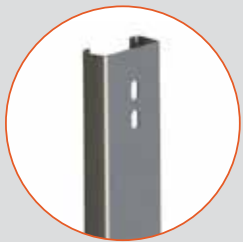
Curved Slot



Structure Description:

NuevoTILT structures are composed of the following components

- Column Post, Vertical Rafter and Bracing form a triangular support for the structure at the required tilt angle.
- Bracings have the provision of multiple holes, each hole corresponding to a specific tilt angle.
- Horizontal Rafters run in E-W direction if the required module orientation is landscape.
- Specifically for a hinge requirement, the hinge mechanism consists of adopter plates and hinges welded in a manner permitting mating of the hinges and free rotational movement along a single axis.
- Purlins run over the Vertical Rafter/Horizontal Rafter on which solar modules are installed.
- With purlins of C cross-sections, L-brackets will be utilized to connect the purlin to the Vertical Rafter, or to the Horizontal Rafters, as permitted by the design.
- In addition, for C-section purlins, 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



TR Tie Rod

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



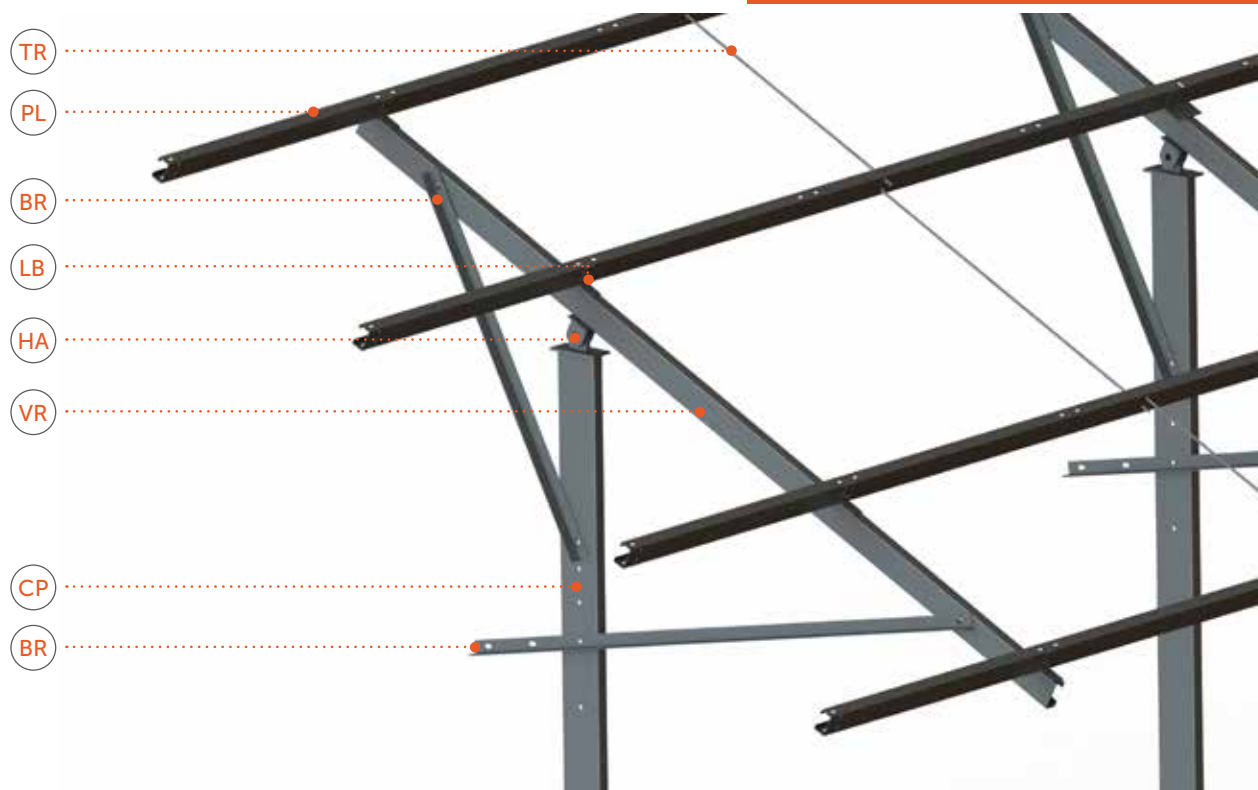
LB L Brackets

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

Hinge Mechanism

Technical Data

- Design wind speeds: 120- 200 kmph
- Orientation: Portrait / Landscape
- Tilt Angle: Optimal tilt angles determined via PVSyst.
- 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)



HA Hinge Assembly

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



PL Purlin (C Type)

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