



V STAR SOLAR ENERGY

POWER OF SUN



V STAR SOLAR ENERGY
POWER OF SUN

About Us

V STAR SOLAR ENERGY specializes in Planning, Designing, Detailing, Manufacturing of solar mounting structure & Different type roll forming section And hot-dip galvanizing service. The organization is a clear leader in providing quality Structures to its prestigious clients in line with the International standards. dedicated and Experiences team for manufacturing of solar panel mounting structure & roll forming section (C,Z,L,HAT,W) and project designing, project installation and services. We have never compromised of the quality We believe in keeping the customers happy and providing them with products at a very competent price.



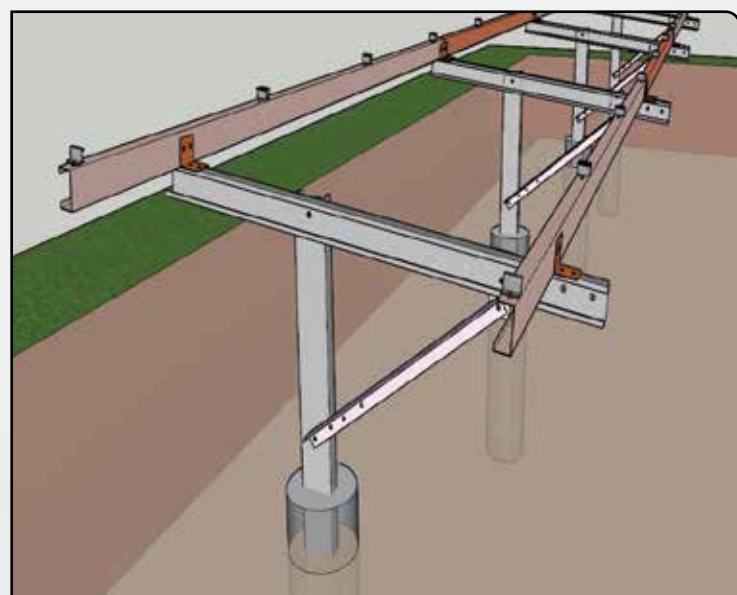
Our Vision & Mission

Our vision To be recognized as the leader for manufacture, design, Supply of all type structure and supply to best quality material and creating value with our customer and demonstrating high ethical standards.

Our mission To deliver world class products at competitive price and to create new possibilities in the field of all type our service with all most satisfaction to our customers.

Ground Mounting Structure

We are specialization in solar ground mounting structure manufacturing. Also different type design available in ground mounting structure like fix type structure, seasonal structure and auto tracking structure. Structure made from roll formed steel profile that are use material hot dip galvanized & AZ-150 and posmac. We are providing customized solution. We can providing rage to 1 mw in 25 ton to 38 ton with high stability with study report.



Solar Carport Structure



Residential and commercial solar carport is configured with one or two car spaces between two columns support, it can design single, double or continue as your need. It can be implicated for commercial or residential installation. The whole structure is made of high strength galvanized steel and the fastener is 304SS. Solar carport structure accessories is hot dip galvanized steel rail, rail clamp, solar clamp and steel column support.

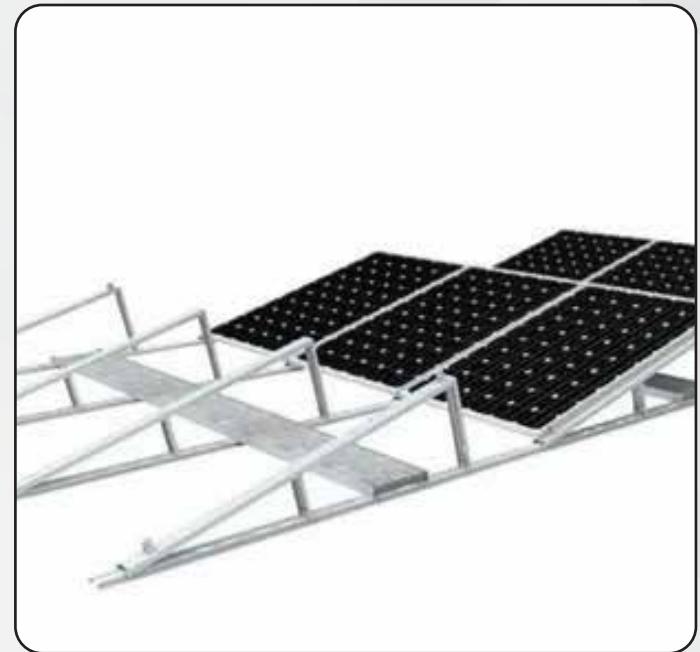
Standard structure for RCC



Flat RCC roof in use two type structure single-tier and two-tier. This type structure use in square pipe (40*40, 40*80) & stud channel and clip channel with SS nut bolt and American fastener. Standard structure required foundation (concrete, cement). Designed to withstand wind gusts of 150 kmh.

Ballast Type Structure

Low cost compact structure suitable for flat roofs and small to mid size installation (1kw to 500kw) Structure is made of roll formed GI profiles (c channels and angles) Between 50-70 kg per kw, based on latitude Use stainless steel nut bolt No welding and foundation required Designed to withstand wind gusts of 120 kmh Tilt adjustable to latitude Use ballast 30 to 35 kg.



Single Axis Auto Tracking Solar Structure (Block type)



Feature:

- Easy installation High reliability
- Single-axis trackers are cheaper than dual-axis trackers because they have a simple mechanism and operate at a low cost.
- Through tracking, there will be increased exposure of the panel to the sun, making it have increased power output.

Component:

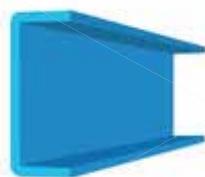
Columns | Rotter pipe | Purlin (holder) | Puling pipe | Bearing | Warm Gear motor | Controller

Roll Forming Section

V STAR SOLAR ENERGY assembling, providing and manufacturing and extensive an extensive variety of C & Z & Hat And Stud Purlins that are broadly utilized in Pre-engineered steel buildings and solar panel ground mounting structure. These purlins are fabricated utilizing premium quality steel sourced from solid and reliable manufacturing. Our able group of specialists fabricate them in strict adherence with set modern standards and benchmarks. Usage of C and Z purlins results in cost saving up to 40 % in structural steel as compared to



traditional rolled section (Like Angle /I beam/ c beam) and hollow sections like (Round Pipes and square pipe.). It is available in custom lengths, thus there is no need of any fabrication, cutting or welding at the site. Hence there is no material wastage or fabrication cost. It is also available in various thickness and sizes.



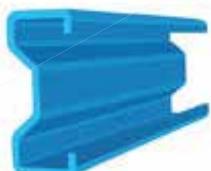
C-Channel



Z-Purlin (45 Lip)



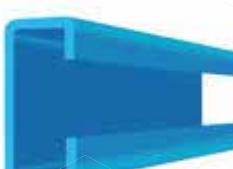
Equal Angle (90)



Sigma Section



Top Hat



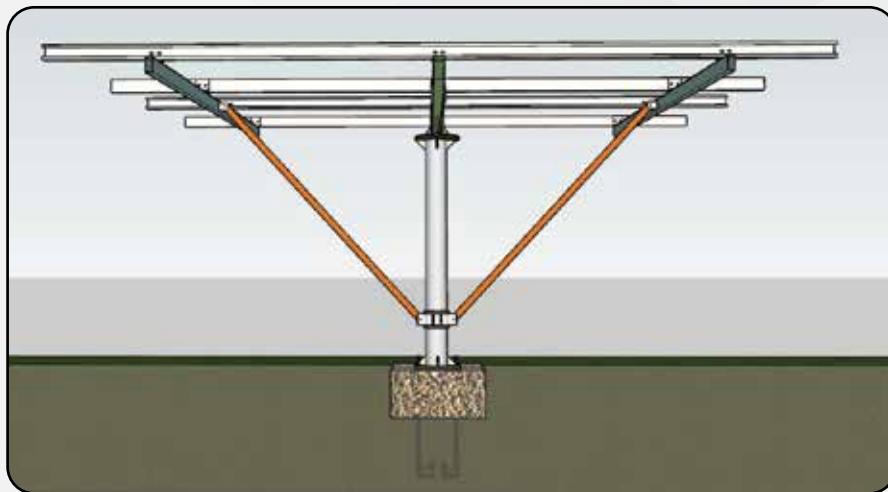
C-Purlin



Z-Purlin (90 Lip)



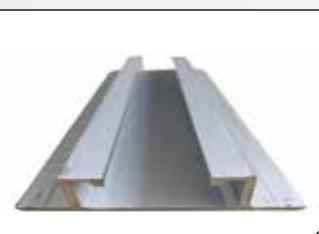
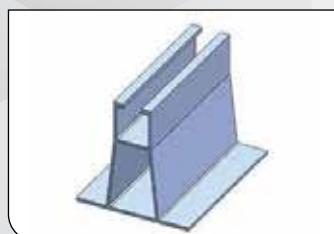
Strut Channel



Solar Pump Structure

Our Structure will be fully Hot Deep Galvanized. Suitable for 6 Modules & 8 Modules AND 10 MODULE We have given slots in all components so On Site Installation will be trouble free and time saving. We have provide Rotation of structure so single person can easily rotate the structure and Manual Seasonal Tilt Degree Changing with Rotating (360 Degree) type Structure. (Dual Axis)

Aluminium Mono Rail



Material :	Aluminium
Wind Resistance :	44 m/s
Coating :	anodized
Galvanizing :	NA
Snow Load :	1.5
Wind Rating :	35 m/s
Work Time :	25 years
Yield Strength :	350
Thickness :	2.5
Color :	regular
Packaging Details :	Carton Box, Pallet

Solar Panel End Clamp / Mid Clamp

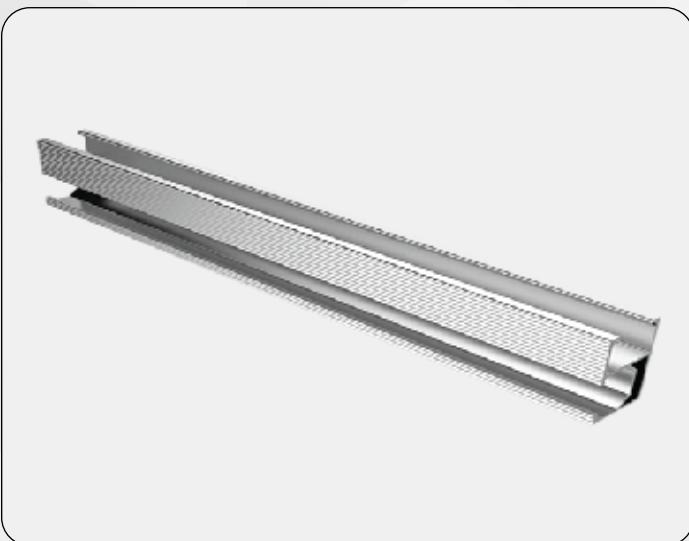


Packaging Type : Corrugated Box
Clamp Wall Thickness : 3mm
Clamp Thickness: 3mm
Tensile Strength : 550
Corrosion Resistance : yes

Surface Treatment : Anodized
Surface Finish : Silver
Hardness : 70bhn
Dimensions : 30, 32, 35mm



Double Side Mounting Rails



Size : Standard
Color : Silver
Brand : VSTAR
Material : Aluminium
Thickness : 2 - 3mm

EPDM Rubber

EPDM Rubber Sheet

Commonly Used Solution

- UV Resistance.
- High Temperature Resistance.
- Excellent Water Resistance.
- Both sides of tapes are Adhesive.



Thermal Properties of EPDM

Property	Value
Coefficient of thermal expansion, linear	160 $\mu\text{m}/(\text{m.K})$
Maximum service temperature	150° C
Minimum service temperature	-50° C
Glass transition temperature	-54° C

Rivet



Rivet Type : No preference. Blind. Drive. Plastic. Push

Head Style : No preference. Brazier. Cone/Pan. Countersunk. Dome/Button.

Material : No preference. Aluminium. Brass. Bronze/Copper Base. Alloy. Copper

Finish : No preference. Galvanized. Tin. Zinc Plated.

Faster Standards : No preference. ASME/ANSI. DIN. ISO.



D Nut

Material :	Stainless Steel
Grade :	SS304
Surface Finish :	Zinc Plated
Head Shape :	Round
Corrosion Resistance :	Yes
Thread :	Full

Micro Rail Solar Panel Structure



Material :	Aluminium
Wind Resistance :	44m/s
Coating :	Anodized
Galvanizing :	NA
Snow Load :	1.5
Wind Rating :	35m/s
Work Time :	25 years
Yeild Strength :	350
Thickness :	2.5
Color :	Regular
Packaging Details :	Carton Box, Pallet



Allan cap Bolt

Material :	Stainless Steel
Grade :	SS304
Surface Finish :	Zinc Plated
Head Shape :	Round
Corrosion Resistance :	Yes
Thread :	Full

Walkway

Material :	MILD STEEL
Wind Resistance :	44m/s
Coating :	HDGI
Work Time :	20 to 25 years
Yeild Strength :	250 mpa
Thickness :	1.6mm
Packaging Details :	Bunch Type strip roll



Non Penetrating Solar Panel Mounting Structure

Material :	Aluminium
Application :	Home, Industrial
Panel Bearable Wind Speed :	130 mph
Output Voltage :	220 V
Input Voltage :	2KW, DC48V



Crash barrier



Residential and commercial solar carport is configured with one or two car spaces between two columns support, it can design single, double or continue as your need. It can be implicated for commercial or residential installation. The whole structure is made of high strength galvanized steel and the fastener is 304SS. Solar carport structure accessories is hot dip galvanized steel rail, rail clamp, solar clamp and steel column support.

11kv and 33 KV Cross Arms



In line with clients' various requirements, we bring forth a distinguished collection of Fabricated Structural Steel Items like V Cross Arm, Top Hamper, Back Clamps, Guarding Channel, Cross Arm, LT Cross Arm, HT Cross Arm, DO Fuse Mounting Channel, HG Fuse Mounting Channel, Belting Angle, Bracing Angle, Transformer Mounting Structure etc. All structures are manufactured at our avant-garde manufacturing unit using the superb

quality raw materials and progressive technology in conformance with defined quality norms. Being a quality-oriented firm, we assure our clients that this hardware is exceptional on counts of durability and quality.

Features: As per Indian standard (IS:2062 or relevant) | Sturdy Structure | Durability | Fine Finish

'C' Clamp

By utilizing skills of our adroit workforce, we are offering a comprehensive assortment of Back Clamp. We manufacture this clamp by employing best quality raw materials and sophisticated technology in adherence to the set industrial quality standards. It is used for the purpose of fastening and fitting of pipes in several industrial utilities. Owing to features like high strength and best quality, our offered range clamp has been able to earn a lot of popularity in the market.



Features: Sturdiness | Easy installation | Rust

Double Pole Transformer M.S. Structure



Based on the skills of our adroit professionals and creative workers, we bring forth an extensive range of Double Pole Transformer Structure (DP Structure). Owing to features like durability and high quality, the offered structure is widely demanded in the market. A team of our skillful professionals, with hard-earned knowledge, manufacture the offered structure using high grade raw

materials. The offered structure is available with us in different sizes, shapes and other related specifications.

Features: Precisely Design | Durability | Anti Corrosive

Gi Earthing Flat



Under the strict supervision of our experienced professionals, we are offering an innovative collection of GI Earthing Flat. Our offered flat is availed in a variety of sizes and other such specifications to choose from. The offered flat is precisely designed at our highly developed manufacturing unit following industry defined guidelines. The offered flat can also be availed from us at the industry leading prices.

Features: Sturdiness | Durability | Compact Design

Solar Drainage Water Clamp



Why used Solar Panels Drainage Water Clamps?

- Solar Panel Drainage Water Clamps, which is used to drain water from the solar. It prevent water and dust accumulation by draining the stagnant water from the solar panels. It takes a few seconds to install and stay fit on any size of solar frame.
- Long Lifespan: Auto Remove Stagnant Water, Increase power generation prove the lifespan of solar panels.
- Usage of Clamp: Solar Panel Cleaning Clamp is a rectangular self-adhesive strip, which contains a water-inducing agent.
- Installation: First, make the whole surfaces of the PV panels clean, and clasped the water clip to the bottom edge of the panels, and don't tilt it. There is no need to make any adjustments to the components.

Helical Anchor

What's a Helical Anchor?

A helical anchor, also known as a screw pile, screw anchor, or helical pile, is an extendable foundation system which consists of helically shaped steel plates that are attached to a central steel shaft with a round or square cross-section. The steel plates' thickness, number, diameter, and helices position are determined by the restrained or supported structure's minimum design life, the environmental corrosion and geotechnical parameters, and the design load requirements. Helical anchors are installed via rotation into the ground using hydraulic rotary attachments fitted to earth moving equipment.

When are Helical Anchors used?

Helical anchors can be used to secure new foundations or repair existing ones. They're used for lighthouses, roads, rail, telecommunication, and in many other industries that require fast installation or building near existing structures. Signs, retaining structures, and masts are other common uses since they're suitable for compression as well as tensile loads. The anchors can also be used to repair your property's existing foundation and cracked or leaning walls.

When are Helical Anchors used?

Helical anchors can be used to secure new foundations or repair existing ones. They're used for lighthouses, roads, rail, telecommunication, and in many other industries that require fast installation or building near existing structures. Signs, retaining structures, and masts are other common uses since they're suitable for compression as well as tensile loads. The anchors can also be used to repair your property's existing foundation and cracked or leaning walls.



Our Valuable Clients

Clients are the most important entities in any domain. Thus, mactech believes in delivering products that cater to specific customer requirements. This has helped us to develop and retain business relationship with the following clients in India and abroad.





Head Office :

**Office No. 1103, R K World Tower Near Shital park, 150 Feet Ring Road,
Rajkot(Gujarat) india-360005**

Factory 1 :

**Plot-9, Nr. Pyor Pet Industries, Opp. Marshal Techno cast, SIDC Road,
Shapar-Veraval, Rajkot-360024**

Factory 2 :

**Near Deepjyot Engineering Village Padavala, Ta Kotdasangani, Dist.
Rajkot(Gujarat) India-360024**



mktvstarsolar@mail.com



www.vstarsolar.co.in

Our Group of Companies



**IV SQUARE STRUCTURE
INDIA PVT LTD**

