

WHY US ?

TechRedo Solar is solar division of TechRedo India Private Limited. Team TechRedo has A-Class facility and experience in the field of renewable energy as we delivery many project related to solar in short period of time. this can be proved by our milestones we reached in some years.



We completed total residential projects of 190kW in next 1 year.

2018

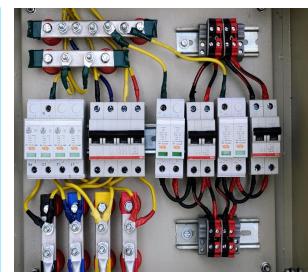
In initial days of company foundation we awarded with solar pump contract of installing 300 solar pumps under MKSPY.



We become the leading competitors of renewable energy market and grow our business at next level.

2019

We launch our own distribution box replacing ACBD and DCDB box with a reach of total 250kW in next year.



We started our pan India service for solar EPC and completed more than 500+ installations so long

2020

We recently awarded the AMC of 50MW Solar Park, Muktinagar of Virescent Infrastructure.



2021

2022

We become the channel for 350+ customers to claim the benifits of approx. Rs. 3 crores Under subsidy of **PM SURYAGHAR YOJNA**



2023

2024

WE AIMED THAT WHENEVER PEOPLE THINK ABOUT SOLAR THEY WILL REMIND TECHREDO SOLAR

WITH OUR TAGLING, YOU THINK WE DO
OUR MOTTO IS CLEAR,
YOU JUST THINK AND WILL FIND
IT'S DONE



TechRedo

ABOUT US

TechRedo India Private Limited founded in 2017 set its foot as an electrical service provider company initially under the name TechRedo Services. The company gain experience in all type of electrical installation programs such as High Voltage Installations, Industrial Installations, Commercial Installation & Residential Installation.

Over the years, the company has earned a reputation for excellence of work and work of professionalism for continuously striving to meet and even exceed standards which set the climate of sustainable business relationship with clients. TechRedo has its expertise in all type of electrical turnkey projects, electrical contracting work, EPC work as we have advance and updated techniques and methodology for providing quality work as always.



Yash Manoj Heda

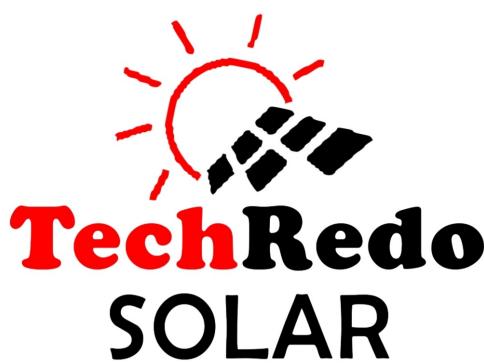
Founder and CEO
TechRedo India Private Limited

Founder of TechRedo and an electrical engineer and have an experience in electrical designing & installation. He completed his engineering as well as diploma in electrical engineering later he work for MAHAGENCO as an intern and had gain the experience in the following field.

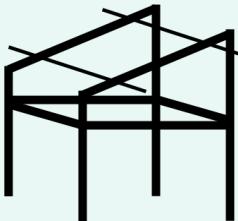
A solar division of TechRedo India Private Limited working for EPC of rooftop ongrid/offgrid photovoltaic solar installation, solar water heater installation, solar EV charging station, solar streetlight installation and as well as development of solar park.

Aiming to bring the revolution in renewable energy TechRedo sets the target of installing 1GW of solar plants till 2025. Till now TechRedo Solar has entrusted many customers with their extreme satisfaction and with the quality staff TechRedo Solar is bonded to continue the legacy.

Solar power is the key to a clean energy future. Every day, the sun gives off far more energy than we need to power everything on earth. That's why we're investing heavily in solar plants and why we are now offering solar kits to our customers

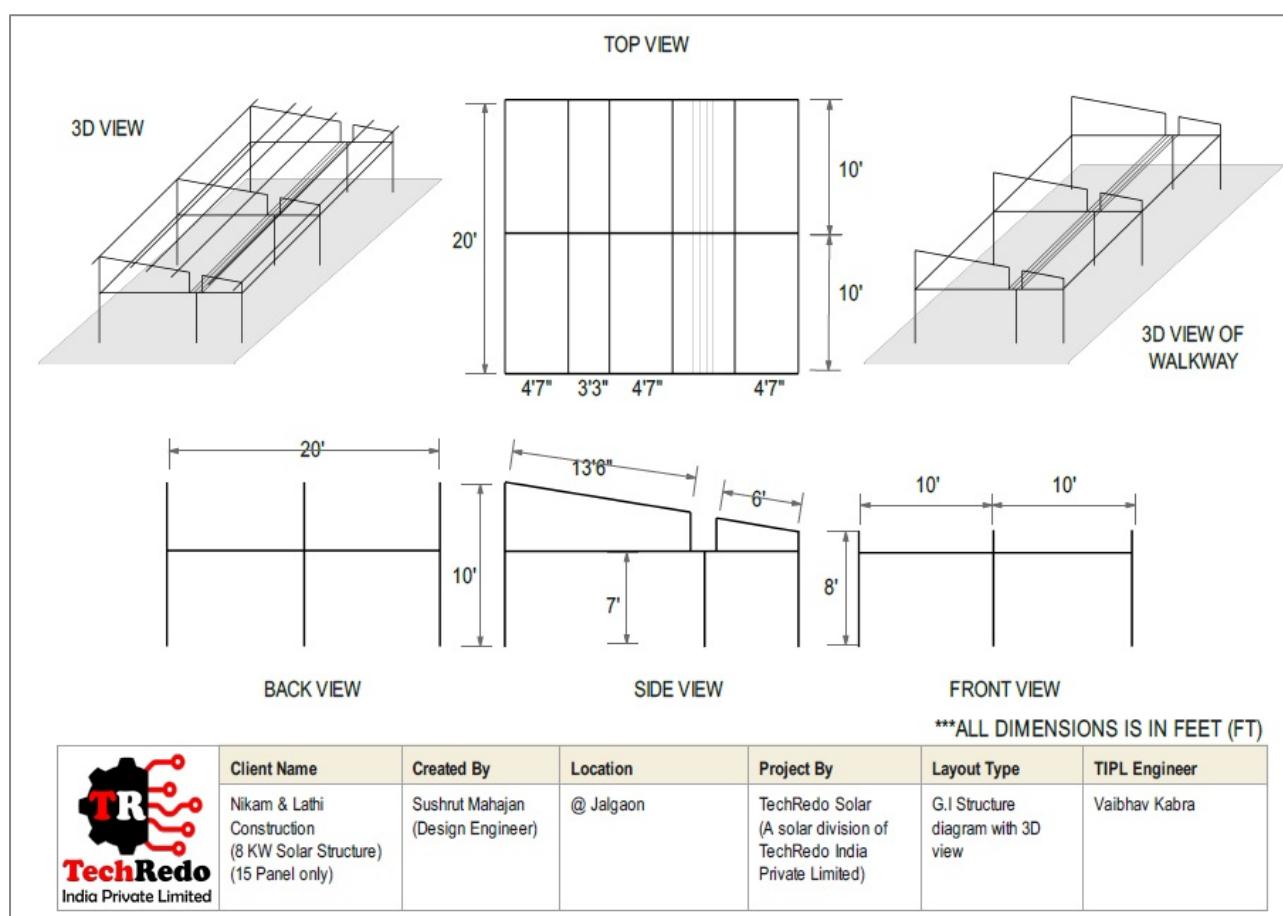


TECHNICAL SPECIFICATION



1. Rooftop Structure

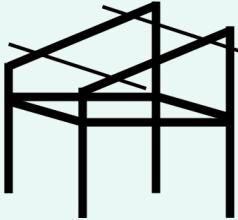
- Structure will be designed under supervision of structural engineer considering speed of wind (150km/hr), weight of panel (Approx. 25kg) and base strength.
- Structure will be in GI/Aluminium nut-bolt folding type with appropriate height of front and back respectively and the welding joints will be coated with zinc compound spray colour for corrosion resistance.
- The Base will be supported by a concrete beam of appropriate height or will be rested on shed structure.



SAMPLE WORKING SHEET FOR STRUCTURE



TECHNICAL SPECIFICATION



ALUMINIUM STRUCTURE MOUNTING



REFERENCE FOR FOLDED STRUCTURE



REFERENCE FOR GROUND MOUNTED GI STRUCTURE



REFERENCE FOR ALUMINIUM COATING ON STRUCTURE



SHUTTERING



CASTING



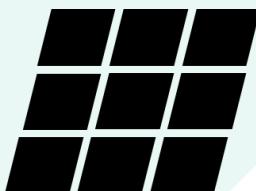
PLASTERING



TILING & COLOURING

REFERENCE FOR CONCRETE CASTED BEAM FOR STRUCTURE





2. Solar PV Panel

- Panels specification will be varied as per datasheets attached below.
- Following Panel will generate 4 Units per Kilowatt averagely and had an outstanding performance of 5 to 5.5 Units per Kilowatt in summer season.

DATA SHEET

MAKE	MODEL	TYPE	RATED POWER	EFFICIENCY
WAAREE® One with the Sun	ELITE SERIES BiN-08	MONO HALFCUT BIFACIAL	535-550 WP	23 %
vikram solar	HYPERSOL TOPCON	MONO HALFCUT BIFACIAL	535-550 WP	23 %
Loom Solar	SHARK SERIES	MONO HALFCUT NTYPE TOCON	560-590 WP	22.80 %
adani Solar	ELAN SHINE SERIES	MONO HALFCUT NTYPE TOCON	560-590 WP	23 %

FOLLOWING PANELS ARE CERTIFIED WITH



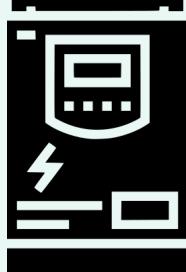
SPECIFICATION

23 % MAXIMUM
EFFICIENCY

12 YEARS PRODUCT
WARRANTY

30 YEARS PERFORMANCE
WARRANTY

**144 CELL
M10 NTYPE** CELL TYPE



3. Solar PV Inverter

- Three Phase Grid Tie Inverter will be provided for high class performance and a warranty of 10 years.
- Following Inverter have inbuilt overvoltage, under voltage protection system.
- RMS will be provided with cloud based for data monitoring and remote sensing the health of plant.

10 YEARS
Standard Warranty

100%
QUALITY
PRODUCT

VSOLE®
TECHNOLOGY BEYOND IMAGINATION

India's 1st Solar PV Inverter with
Latest Standards & Modern Technology



WHY VSOLE

Below mentioned unique features makes our Inverter suitable for "EVERYONE"

Affordable

So more and more people could use them and get clean energy.

Reliable

Our products are made from high grade components to work tirelessly, also they are supported by longer & unique warranty terms.

Sustainable

We understand Inverters upto chip & component level, which stand us apart from the rest in the solar industry.

Dependable

We are driven by a simple idea: "**SOLAR IS FOR EVERYONE**". The future of energy is in Solar energy industry, we plan to fulfill the demands of industry by providing best experience through our product & Services to our distributors, dealers, EPCs players and end users. Our complete local presence across India makes us more **dependable & trustable**.

OUR USP



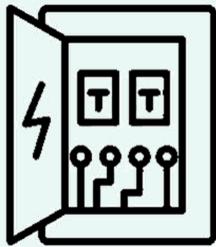
Cost effective & compact design.



24 hours remote service support.



Easy approach & reachability for EPC companies & endusers in India.



4. ACDB DCDB Box

- As an OEM in distribution box TechRedo has design a DB Box for protection and distribution of power from panel to inverter and inverter to grid.
- Following box is fabricated in metal sheet and the box is powder coated with IP6X rating.
- Protection device such as ACB/MCCB/MCB will be of ABB or L&T make and SPD will be of Elmex or Finder or L-tech make.

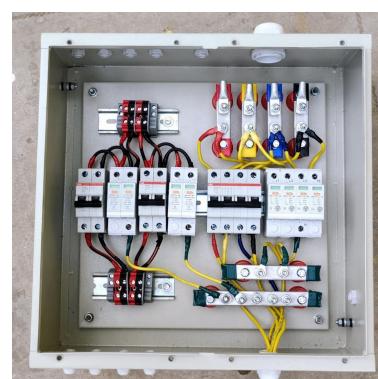


REFERENCE AC/DC DB PANEL WITH MCB AND SPD

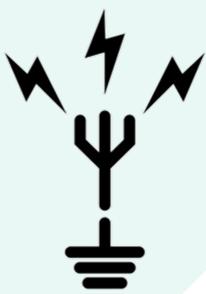
REFERENCE ACDB AND DCDB
PANEL WITH INVERTER



REFERENCE
INDUSTRIAL PANEL
WITH AC/DC MCB
AND AC/DC SPD



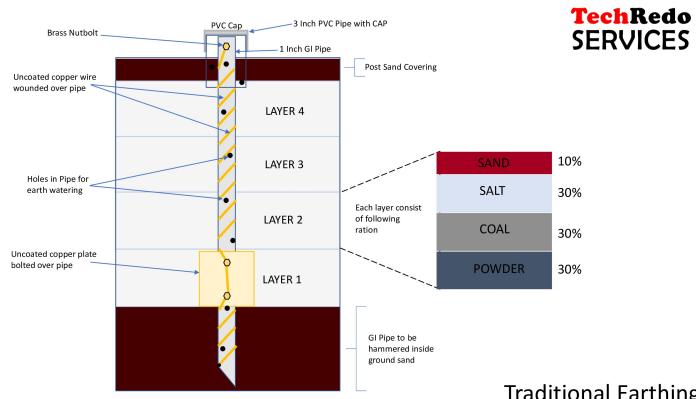
WE DON'T USE
READYMADE PVC
DISTRIBUTION BOX



5. Electrical Earthing and Lightning Arrestor

- Three Earthing in total will be provided, one is AC System another is for DC System and last is for Lightning Arrestor.
- Following earthing is done by considering all technical aspects and norm with proven ground resistance of 3 to 5 ohm as per IS.
- For Lightning Arrestor special 25x3 GI Strip will be provided for grounding lightning surge.
- A high-quality ESE Type LA of Gravity/SG Company will be installed to attract surge of working radius of 50 meters.
- Our industrial grade electrical earthing will perform 3Ω resistance in meger test
- We promise that our earthing will last for 25 years if proper watering is provided

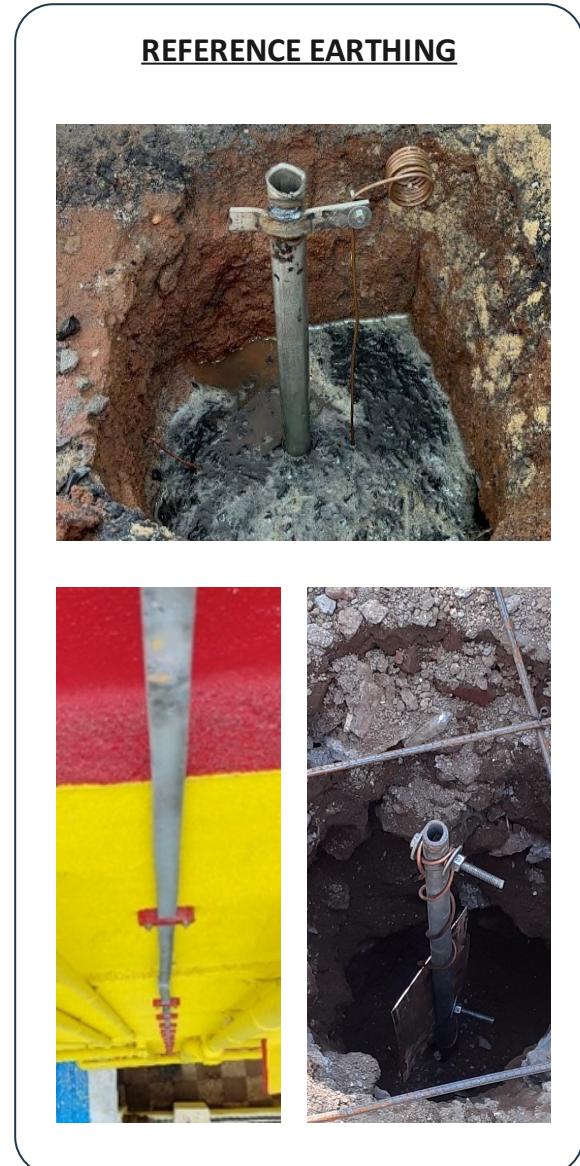
AS PER IS-3043 (1987)



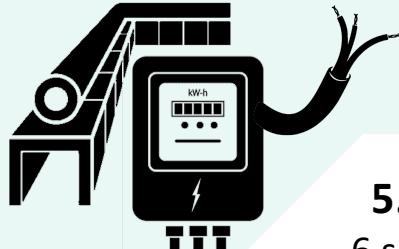
LIGHTNING
ARRESTOR



CONCRETE CASTED EARTH PIT



REFERENCE EARTHING



TECHNICAL SPECIFICATION

5. Electrical Wiring

- 6 sqmm TUV coated DC wire of Polycab/RR Kabel will be used for string connection of PV Panel with DB Box.
- 4 sqmm copper wire will be used from earthing pit to DB Box.
- Special 16 sqmm aluminium wire will be used for structure and body earthing.
- Aluminium armoured cable will be used for connection between DB box and generation meter.

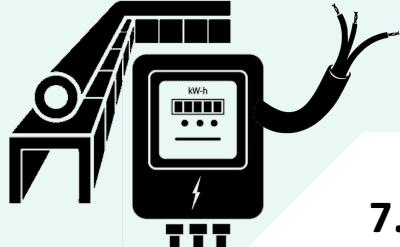
SUGGESTED CABLES/ WIRES FOR CIRCUIT

CIRCUIT	CABLE/WIRE SIZE	CABLE/WIRE TYPE	MAKE
PV PANEL TO DCDB TO INVERTER	4 SQMM SINGLE CORE	TUV COATED COPPER	POLY CAB
INVERTER TO ACDB	AS PER CURRENT RATING	COPPER WIRE	POLY CAB
ACDB TO METER	AS PER CURRENT RATING	XLPE ALUMINIUM ARMOURED	POLY CAB
EARTHING	4 SQMM SINGLE CORE	COPPER WIRE	POLY CAB

6. Wire Arrangement

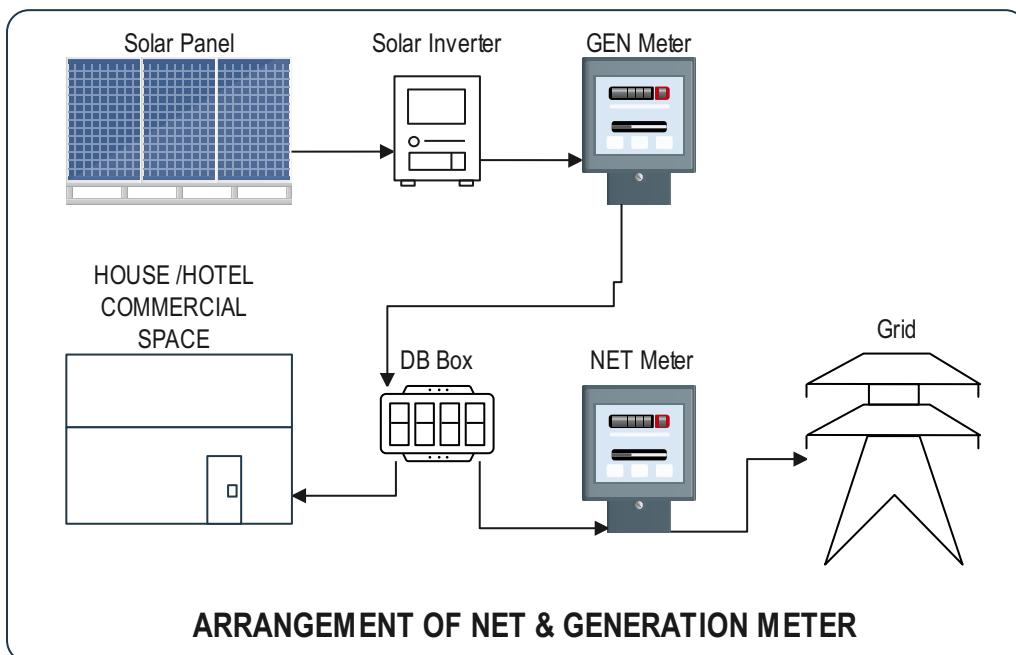
- By the mindset of lasting the system for 25 years, we prefer well organised wiring for the system.
- Generally, we practice mounting of cable tray for sting connection and heavy grade uPVC pipe for wiring.
- GI cable tray will be run throughout the plant for cable laying of solar panels if ground mounted structure





7. Net Meter and Generation Meter

- Net Meter and Generation Meter of Secure and L&T with 05 years guarantee will be provided.
- Following meter are to easy-to-read import and export of power from the grid or to the grid respectively.



 **L&T Electrical & Automation**



L&T Meters®
THE RIGHT MEASURE

8. External Protection (FOR 3 PH SYSTEM)

- Anti-Islanding protection device will be provided between grid and Rooftop solar system for protection against any power fault happens at MSEB side. This protection consists of phase sequence relay with contactor of L&T make.



- UNDER VOLTAGE
- OVER VOLTAGE
- PHASE SEQUENCE
- PHASE LOSS
- OVER/UNDER FREQUENCY
- ASYMMETRY PHASE



SELEC
Creating Best Value

MULTISPAN

**EURO
CONTROLS**


TechRedo
SOLAR