

SAMOEL ENERGY SOLUTIONS LLP

Make A Planet Greener

Installation Manual

Registered Office

19, Gyan Nagar.,
Co Op h Soc Ltd,
Nanpura, B/H Old Jail.,
Surat-395001, India

Contact

Ph. 0091 9727 710388

Ph. 0091 8140 333360

www.isolarpro.in

info@isolarpro.in

Heating System Installation

- ▶ **Introduction** - The “iSolarPro™ Basic Solar Domestic Water Heater” is a pre engineered “packaged” residential solar water heater that will provide abundant quantities of domestic hot water to meet the needs of a typical family.
- ▶ The iSolarPro™ Basic Solar Domestic Water Heater can serve as a point of departure for more versatile solar energy systems. Useful supplements such as iSolarPro™ underfloor heating, solar-assisted gardening, snow melting, pool heating and passive cooling applications can be added to the basic system either initially or in the future. For clarity, however, this manual refers only to the basic water heating system. The reader is encouraged to consult with the Samoel Energy Solutions LLP for appendices and other information about the supplemental uses.
- ▶ Prior experience with solar heating installation is not essential. The installation of a solar heating system is a series of sub steps.

- ▶ who has wired a simple control, or who has attached something to the roof without a leak may be well qualified to do solar heating work even if he or she has never done it before. Worker attributes such as attention to detail, a willingness to read the manual, the selection and use of proper tools and a commitment to quality work are important. Most building contractors or professional trades people will find this to be just another project.
- ▶ **Disclaimers** - This manual provides *general information*, but every project is a little different. The application of this general information to any specific project requires care, diligence and the consideration of all relevant factors. In particular, it is important to consult and comply with any applicable codes.

INSTALL THE SOLAR COLLECTORS

► Orientation

Solar collectors are usually placed facing due South and at a tilt from the horizontal equal to the latitude + 10 degrees for balanced solar energy reception throughout the year. It is important to understand that significant deviations from this so called “ideal” may be completely acceptable.

Safety

- 1. Hard hats** - The worksite is a hard hat area while work is being done on the roof. There are a number of hazards, and tools or other materials could be dropped accidentally. Rope off the area beneath the roof and consider posting a sign saying that the area is a hard hat area. Keep onlookers at a safe distance.
- 2. Do not work underneath an unsecured solar panel.**
- 3. Gloves** - Solar panels get hot when bright sunlight is shining upon them and nothing is taking away the heat (stagnation). Wear gloves. Avoid working with solar panels in the middle of the day. Cover the panels with part of the shipping carton or with a tarpaulin.
- 4. Sunglasses** - Wear sunglasses when working with solar panels on sunny days. The glare reflecting from solar collector in bright light is uncomfortable and distracting to the point of causing a safety problem. Workmen who do not wear sunglasses are likely to go home early with a headache.

PLANNING

1. Plan and locate the position of the Collector with chalk lines so that their appearance can be visualized. Solar Collector are generally more attractive if they are placed at or below the midline of the roof area.
2. The location of the panels should be approved before the work begins.
3. Coordinate with the General Contractor. Make sure that he or she understands that solar panels will be placed
4. In the solar work area until the solar work is roughed in and pressure tested.
5. Start in the middle of the roof and work outward. That way, you can be certain that the work will be centered on the roof.
6. Anticipate and plan for everything that needs to be done before starting work. Read the entire manual before starting.

INSTALLING THE SOLAR MECHANICAL PACKAGE

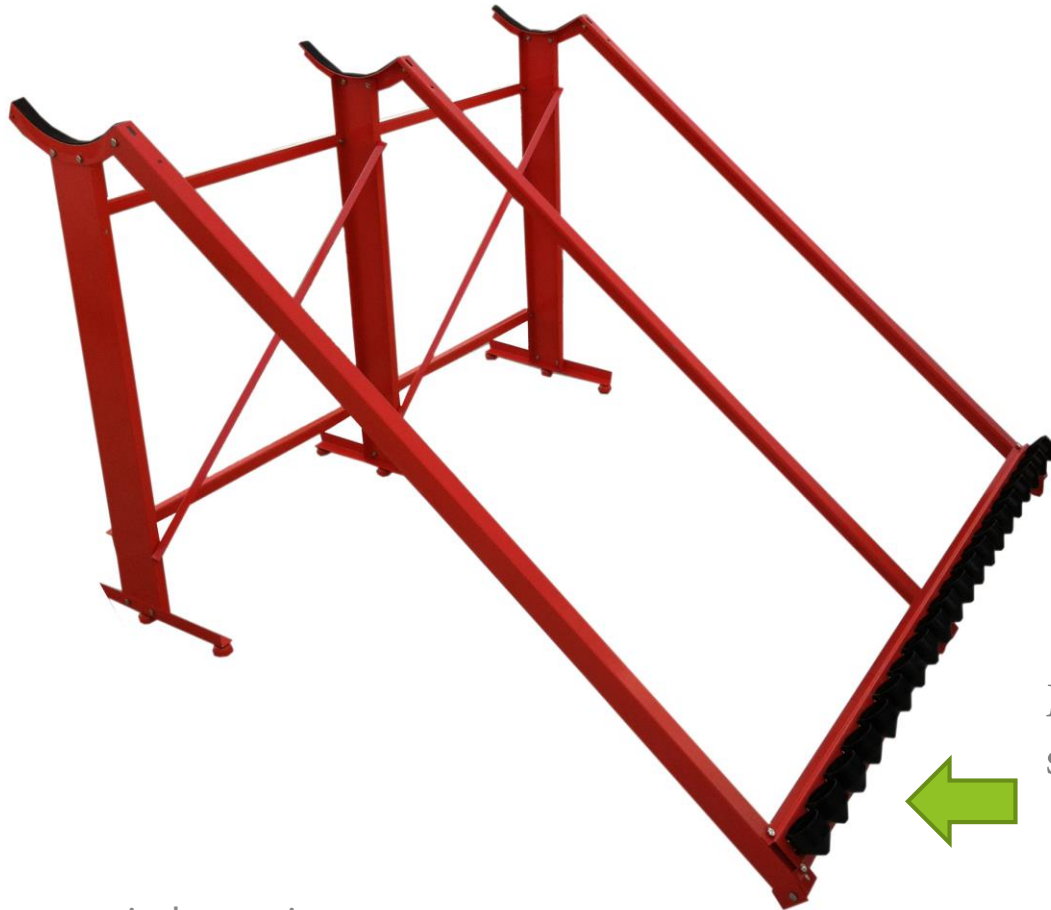


Fasten a four nut & bolt as show in picture

Make joint with his legs/support of stand as shown in figure



Insert / Press tube holder cup into
Bracket of solar stand one by one



Make final arrangement of stand
step by step as shown in picture



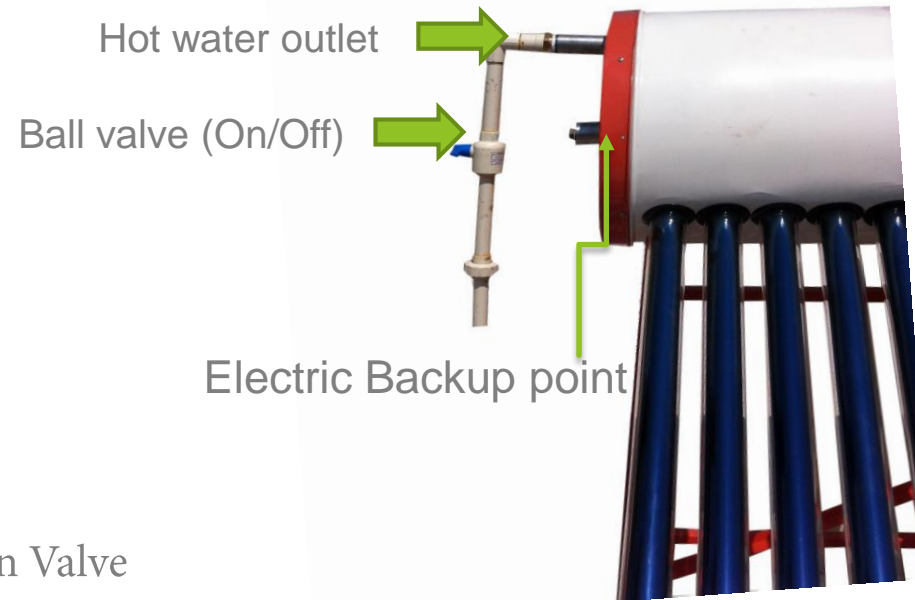
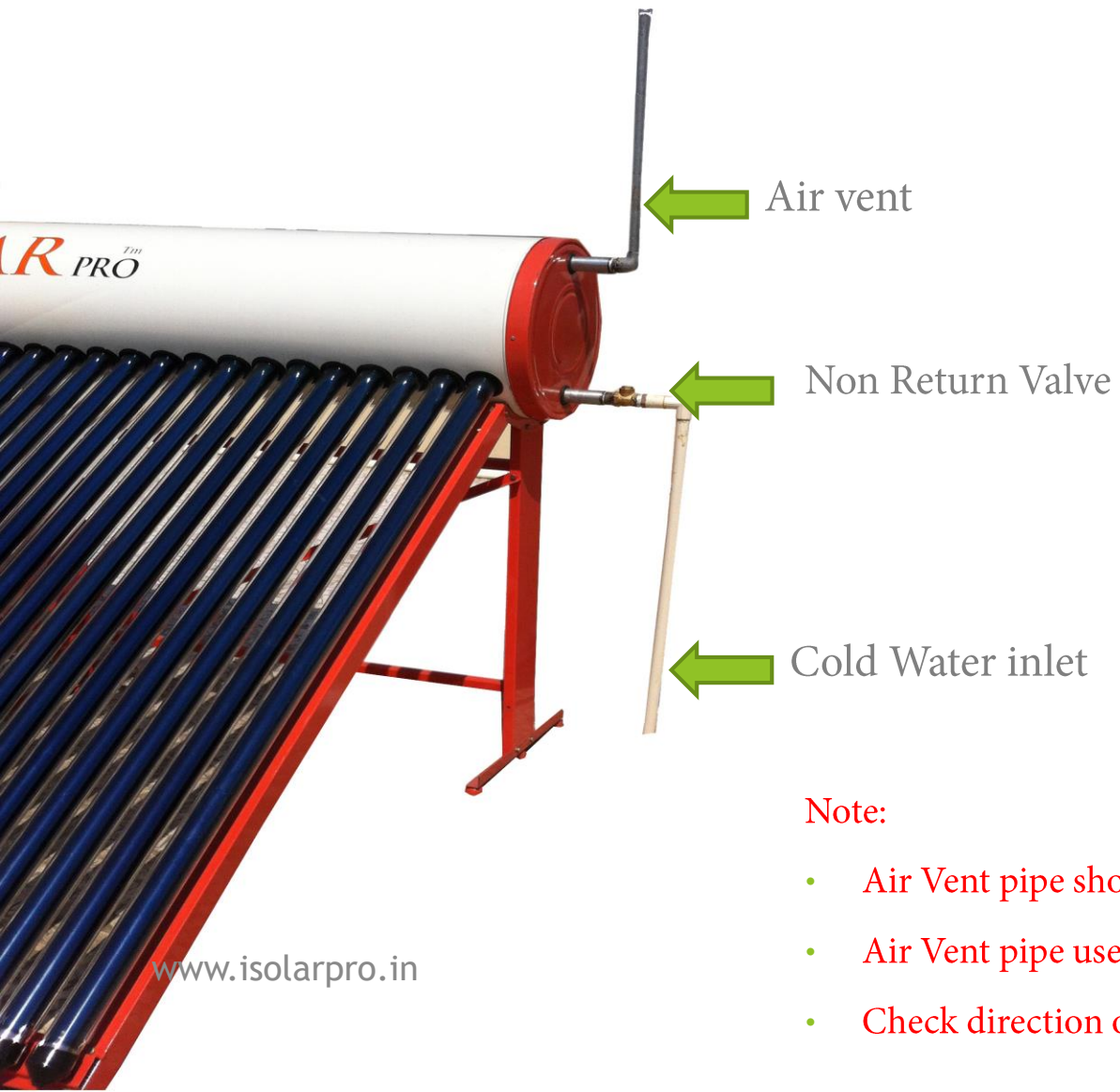
Put Water tank on Stand



Insert Glass tube into hole of tank and
Opposite cup of stand and

Finalize installation of solar

Move next step of connection



Note:

- Air Vent pipe should upper from Storage tank
- Air Vent pipe use GI metal to reduce tilting problem due to wind
- Check direction of Non Return valve