

## SOLAR CENTRAL WATER HEATER SPECIFICATION FOR NATURAL SYTEM

The advance technology's NOVASUN SOLAR water heaters use a closed circuit of natural circulation. The special thermal fluid, used in the closed circuit, enhances the performance of the heater protects it from the freeze and prevents the slats scale deposition inside the tubes of the collector. The closed circuit (jacket) where the thermal fluid is circulating, is independent and does not communicate with the water storage tank. (See page 6 of Technical Manual).

- For a better choice of the appliance, the local climate conditions must be taken into a serious consideration, as well as your need for hot water.
- The energy saving that you will have with the NOVASUN solar water heater depends on the use of hot water, the use of the electric resistance and the local weather condition. Under favorable weather conditions, the energy saving may reach up to 100%. On sunny days, the power of solar radiation is greater between 10:30am to15:30pm. For this reason it is better schedule your heavy consumption of hot water (washing machine etc.) in the middle of the day.
- During days with low sunshine and low ambient temperature, we suggest you to turn on the electric resistance, in order to have hot water all the time.

Solar Central Water Heater Natural system hall be as detailed below:

- 1. The capacity hot water consumption need for the building shall be calculated and approved by consultant engineer.
- 2. The Solar Central Water Heater Natural system consist of;
  - a. NovaSun Solar Collectors
  - b. NovaSun Storage Tank
  - c. Electrical Element (2kw) with Thermostat
  - d. Thermal liquid
  - e. Accessories

Find below the specification details for each:

### NOVASUN SOLAR COLLECTORS: (See page 4 of Technical Manual)\_

The production process and raw materials are used to produce NOVASUN Solar Collectors,

Able to absorbed high thermal energy efficiency even during periods with insufficient radiation.

- Frame made from anodized aluminum profile

- Back side made of galvanized sheeting -0,6mm
- Back insulation: rock wool 40mm
- Side insulation: glass-wool of 20mm
- Absorber: A unique sheet of copper with selective titanium coating or with black paint/ultrasonic welding or type "omega" (Φ).
- Absorber Tubes: copper pipe  $\Phi$  10mm &  $\Phi$  22mm (risers and headers)
- Cover : solar tempered glass
- Water-tightness: EPDM rubber/ transparent silicone.

# • NOVASUN SOLAR STORAGE TANK: (See page 4 of Technical Manual)\_

- External casing made of anodized aluminum
- Tank's insulation made from polyurethame foam 40-55mm
- Cylinder's materials: galvanized sheeting 3mm
- Jacket's material; low carbon steel 1.5mm
- Cylinder internal Protection; durosmalt 80-120 microns
- Additional protection; magnesium- rod
- Electric resistance; copper
- Thermostat; bipolar of four contacts
- Power rate; available from 0.8kw-4kw

#### • Thermal Liquid

The special thermal fluid, used in the closed circuit, enhances the performance of the heater protects it from the freeze and prevents the slats scale deposition inside the tubes of the collector. The closed circuit (jacket) where the thermal fluid is circulating, is independent and does not communicate with the water storage tank.

#### • <u>Accessories</u>

Consist of:

1. Screw, nut or the support base

- 2. Brackets
- 3. Pipe Union, moly plugs
- 4. Screw-nuts, safety valves Plugs
- 5. Filling funnel of the thermal fluid.

#### Other component in NovaSun Solar System

• The standard power of the electric resistance is 2000W for 230V. Upon a special order, the electric resistance can be offered with power from 800W to 4000W. For power of 110V, the electric resistance is available (upon special order with power from 800W to 2000W.

All parts of NovaSun Central Water Heater System subjected to 5 years guarantee will provided by the manufacturer.

### For MINCOM TRADING LLC

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