

# Master Specification: Model SLN

\_\_\_\_\_  
JOB NAME

\_\_\_\_\_  
ENGINEER

\_\_\_\_\_  
REPRESENTATIVE

\_\_\_\_\_  
CONTRACTOR

## GENERAL

Provide a quantity of \_\_\_\_\_ Solar water heater(s) Model No. \_\_\_\_\_ as manufactured by HUBBELL Electric Heater Co., Stratford, CT. The entire unit is to be complete with all operating controls and is ready for plumbing service connections. The tank shall be all welded steel commercial construction designed for 150 psi working pressure and contain \_\_\_\_\_ gallons of storage. The tank is to be lined with seamless Hydrastone cement to a minimum thickness of 1/2" on 100% of all interior tank surfaces and does not require any type of anodic protection. The tank shall be fabricated with non-ferrous copper-silicon threaded tappings and non-ferrous inlet and outlet piping for maximum corrosion resistance. Steel tank tappings shall not be acceptable. The entire tank is to be insulated with a minimum of 2" ( **Optional Specification:** 3") thick polyurethane foam insulation and exceed the latest ASHRAE standard for stand-by heat loss. The complete heater shall be supplied with a high impact colorized composite protective jacket which cannot rust or corrode and does not require painting. The unit shall bear the UL listing mark certifying the entire water heater.

The cold water inlet shall be 3/4" Female NPT ( **Optional Specification:** 1 1/2" Male NPT) and include a non-corrosive strata-flow diffuser which prevents incoming cold water from mixing too rapidly with hot water in the tank. A 3/4" hose connection drain is supplied. The hot water outlet connection shall be 3/4" Male NPT ( **Optional Specification:** 1 1/2" Male NPT) and shall include a factory installed built-in heat trap to prevent water from radiating through the piping during stand-by periods. A separate 3/4" Female NPT tapping is to be provided for relief valve installation. An ASME rated automatic reseating combination temperature and pressure safety relief valve set at 150 psi and 210°F shall be factory supplied.

## HEATING COIL

The tank shall be supplied with a heating coil which transfers heat from the solar panel system to the domestic water. Solar panel water shall be in the tubes, and domestic water in the tank. The heating coil shall be of single wall ( **Optional Specification:** double wall) copper construction for maximum heat transfer efficiency and coil longevity. The heating coil shall be fully removable from the tank to allow for periodic inspection and maintenance without the need to move or lift the storage tank from its installed position. A mounting clip and immersion thermowell are supplied for installation of a thermistor (by others) for sensing the water temperature in the tank.

## OPTION – BACK-UP HEATER

The Solar water heater will be supplied with a back-up heater. The back-up heater shall be a single electric immersion heating element ( **Optional Specification:** 119 gallon models only: a dual upper and lower element) rated at \_\_\_\_\_KW each and designed to operate at \_\_\_\_\_ volts \_\_\_\_\_ phase \_\_\_\_\_ Hz with all necessary operating controls factory mounted wired and tested. The heating element(s) shall be copper or incoloy sheath electric immersion type sized to obtain the rated recovery. Water temperature shall be controlled through an adjustable 110-170°F snap action surface thermostat. An over-temperature manual reset Hi-Limit shall be factory installed to disconnect all conductors to the heating element in the event of an over-temperature condition in the pressure vessel.

## WARRANTY

The water heater manufacturer shall warranty all electrical components against defects in workmanship and material for a period of one (1) year from date of start-up, and the pressure vessel including the heating coil for a full seven (7) years Non Pro-Rated for residential applications and five (5) years for commercial applications from date of start-up, provided that the unit is started within three (3) months of date of shipment and installed and operated within the scope of the tank design and operating capability. Each water heater shall be shipped with a complete set of installation and operating instructions including spare parts list and approved drawings.



*Committed to continuous improvement...*

Continuing research results in product improvement; therefore specifications are subject to change without notice. For the most updated information, consult the factory directly.

