



ICC-SRCC™ OG-400 CERTIFIED SOLAR POOL HEATING SYSTEM

MANUFACTURER:

Magen eco-Energy US
 950 Sunshine Lane
 Altamonte Springs, FL 32714 USA
www.mageneco.com/us

Brand:

SUNSTAR

Model/Family:

SUNSTAR

Certification Number:

40000004

Original Certification Date:

August 29, 2019

Renewal Expiration Date:

December 01, 2024

REFERENCE STANDARD:

ICC 902/APSP 902/SRCC 400-2017

The solar pool and/or spa heating system listed has been evaluated and certified by the Solar Rating & Certification Corporation (ICC-SRCC™) in accordance with the ICC 902/APSP 902/SRCC 400 Solar Pool & Spa Heating Systems standard and the ICC-SRCC Rules of Procedure for Solar Heating & Cooling Product Listing Reports. ICC-SRCC is an ISO 17065-accredited Third-Party Certification Body. This award of certification is subject to all terms and conditions of the ICC-SRCC Rules of Procedure for Solar Heating & Cooling Product Listing Reports and the documents incorporated therein by reference. This document must be reproduced in its entirety.

| SYSTEM INFORMATION | |
|---------------------------------------|---|
| System Type: | Active, Direct |
| Collector Type(s): | Unglazed |
| Collector Heat Transfer Fluid: | Pool Water |
| Freeze Protection: | Automatic drain down and/or recirculation freeze protection |
| Freeze Tolerance: | 2 °C, 35°F (Specified by manufacturer, not independently verified by ICC-SRCC.) |
| Control Type: | Manual or Automatic Operation |
| Approved Application | Swimming Pools, Spas |

| APPROVED COMPONENTS | | | |
|---|--|---------|---------------------------|
| Only the listed components are approved for this system family, where included. | | | |
| COLLECTORS | | | |
| No. | Mfg. | Model | ICC-SRCC OG-100 Cert. No. |
| 1 | Magen eco-Energy US | Sunstar | 10001888 |
| 2 | | | |
| PIPING | | | |
| Solar Loop: | CPVC or PVC | | |
| Pool Connection: | CPVC or PVC | | |
| PUMP | | | |
| Pool pump and may include solar booster pump | | | |
| VACUUM RELIEF VALVE | | | |
| Vacuum relief valve must comply with ANSI Z21.22 | | | |
| CONTROLLER (OPTION) | | | |
| Where provided, see condition of certification section 7 | | | |

INSTALLATION:

Collectors and solar pool and spa heating systems must be installed in accordance with the manufacturer’s published installation instruction, the applicable code(s) and this certification. Where differences exist, the instructions in this certification must govern.

All individual components of the system which may require periodic examination, adjustment, service and or maintenance must be easily and safely accessible by the owner in accordance with the codes in force at the installation site. Access shall be provided to all valves, filters, controls, for operation and maintenance in accordance with manufacturer's instructions and local codes.

Structural supports shall be selected and installed in such a manner that thermal expansion of the collector and piping will not cause damage to the collector, structural frame or building. Neither wind loading (including uplift) nor the additional weight of filled collectors shall exceed the live or dead load ratings of the building, roof, roof anchorage, foundation or soil. Collector supports shall not impose undue stresses on the collectors. The design load shall be as specified by the codes in force at the installation site and shall include an additional load due to snow accumulation for applicable locations.

Roof mounted collectors shall be installed in accordance with the manufacturer's instructions to prevent the intrusion of water and vermin.

CONDITIONS OF CERTIFICATION:

1. System must be installed in accordance with all applicable local codes and manufacturer's instructions.
2. System must not diminish the operation or ability of the pool or spa to function safely, as defined by applicable codes and regulations in force at the installation site and the pool or spa manufacturer's requirements.
3. System must not reduce the flowrate within a pool or spa's recirculation system during any operational condition, to a level below the turnover rate required by the authority having jurisdiction or the pool or spa manufacturer.
4. System must not weaken or impair the safe operation of buildings or structures in accordance with local codes.
5. Only the components and heat transfer fluids listed above are approved for this system.
6. System must provide suction entrapment avoidance for pools and spas in accordance with APSP/ICC 7 and APSP/ICC 16, where applicable.
7. Controllers and any associated wiring and terminals governing the operation of the solar system shall meet the requirement of 2017 ICC 902/APSP 902/SRCC 400- Solar Pool and Spa Heating System Standard Section 409
 - a. Controller shall be listed to UL 60730-1, UL 873 or CSA E60730, as applicable
 - b. Controller shall be prohibited from bypassing or overriding safety functions
 - c. If controller is plugged into an outlet, the plug shall be labeled with a warning that the controller shall not be unplugged
 - d. Control circuit wiring and terminal shall be identified, sensors wire shall be temperature and fire rated, sized, secured and supported in accordance with NFPA 70 or CA C22.1

MARKING:



This solar heating system been certified by ICC-SRCC as meeting the minimum standards for testing, installation, operation, maintenance, performance, reliability and safety as specified in the ICC_SRCC OG-400 program and are eligible to display this mark as governed by the *ICC-SRCC Rules for Solar Heating & Cooling Product Listing Reports*.

Certifications are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the certification or a recommendation for its use. There is no warranty by the Solar Rating and Certification Corporation, express or implied as to any finding or other matter in this certification, or as to any product covered by the certification. This document must be reproduced in its entirety.

Shawn Martin
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