



SOLAR RATING
& CERTIFICATION
CORPORATION

ICC-SRCC™ LISTING

ICC-SRCC™ Solar Thermal Listing Program

Listing Number: SRCC-16007

Effective Date: November 14, 2018

This listing is subject to re-examination in one year.

www.solar-rating.org (888) 422-7233 ICC-SRCC
3060 Saturn Street
Suite 100
Brea, CA 92821

A Program of the ICC Evaluation Service (ICC-ES) – www.icc-es.org

CSI:

DIVISION: 22 00 00 – PLUMBING
Section: 22 35 00 – Domestic Water Heat Exchangers
Section: 22 33 30 26 – Residential, Collector-to-Tank, Heat-Exchanger-Coil, Solar-Electric Domestic Water Heaters

DIVISION: 23 00 00 – HEATING
Section: 23 57 19 – Liquid-to-Liquid Heat Exchangers
Section: 23 56 16 – Packaged Solar Heating Equipment

Product certification program:

The ICC-SRCC Solar Thermal Standard Listing Program is conducted in accordance with the latest version of the ICC-SRCC™ *Solar Thermal Listing Program Guidelines*. The program includes evaluation of the manufacturer's quality assurance systems to assess continued compliance with applicable codes and standards.

Products: Heat Exchangers and Resistive Heating Elements for Use in Solar Thermal Systems

Listee: Butler Sun Solutions, Inc. www.butlersunsolutions.com
1545 S. La Cienega Blvd. (800) 983-1323
Los Angeles, CA 90035

Compliance with the following standards and criteria:

- ❖ SRCC EM-1, Methodology for Determining Compliance with State and Federal Lead in Plumbing Laws for Solar Heating and Cooling Equipment, 10/28/2015. Shows compliance with:
 - Reduction of Lead in Drinking Water Act, California Health and Safety Code § 116875
 - Vermont Lead Reduction Law (Vermont Act 193)
 - Louisiana Reduction of Lead Act (Louisiana Act 362)
 - Maryland Lead-Free Materials Act (HB 372)
 - Reduction of Lead in Drinking Water Act (Section 1417 of the Federal Safe Drinking Water



SOLAR RATING
& CERTIFICATION
CORPORATION™

- Act (SDWA))
 - NSF 61-2017, Drinking Water System Components – Health Effects*
 - NSF 372-2010, Drinking Water System Components – Lead Content*
- ❖ 2015 Uniform Solar Energy and Hydronics Code (USEHC)**
- ❖ IAPMO PS-92-2010, Material and Property Standard for Heat Exchangers and Indirect Water Heaters

* NSF 61 and 372 are copyrighted publications of NSF International.

** USEHC and PS-92 are copyrighted publications of the International Association of Plumbing & Mechanical Officials (IAPMO)

Models:

The solar thermal products listed below have been evaluated by the Solar Rating & Certification Corporation (ICC-SRCC™), an ISO/IEC 17065 accredited and EPA recognized Certification Body, in accordance with the *ICC-SRCC Solar Thermal Listing Program Operating Guidelines*, and has been listed by ICC-SRCC to the codes standards listed above. This award of this listing is subject to all terms and conditions of the *ICC-SRCC Solar Thermal Listing Program Agreement* and the documents incorporated therein by reference.

Solar Thermal System Components

Product Type	Component Name	Included within ICC-SRCC OG-100 Collector Certification(s)*	Included within ICC-SRCC OG-300 System Certification(s)*
Heat Exchanger	Solar Wand Vented Double Wall Twisted Tube	NA	30004360 , 30004257 , 30004271 , 30004272 , 30004273 , 30004274
Resistive Heating Element	Solar E-Wand Immersion Heater Element	10001979 , 10001980	30004153 , 30004156

* Certifications to the ICC-SRCC OG-100 & OG-300 programs are available on the ICC-SRCC website at www.solar-rating.org

Installation:

Solar thermal components must be installed in an OG-300 certified solar water heating system listed above in accordance with the manufacturer’s published installation instruction, the applicable code(s) and this listing. Where differences exist, the instructions in this listing must govern.

Conditions of Listing:

1. Devices and components shall be installed in accordance with the manufacturer’s published installation instructions and the applicable code(s) and standard(s).
2. Replacement parts contacting potable water installed within the listed collectors shall comply with NSF 61, NSF 372 and Federal Safe Drinking Water Act requirements for lead content. The lead content of replacement parts shall not cause the component assembly’s lead content to exceed the specifications of the standards that are the subject of this listing.
3. Devices and components are manufactured by Butler Sun Solutions, Inc. in Los Angeles, CA under a quality control program with surveillance inspection every other year conducted in accordance with the requirements of ICC-SRCC.
4. Heat exchangers and heating elements for use in the ICC-SRCC OG-300 certified solar water heating systems listed above shall



SOLAR RATING
& CERTIFICATION
CORPORATION™

- be installed in accordance with the requirements of Chapter 3, 4 and 5 of the IAPMO USEHC.
5. All components of heat exchangers and heating elements for use in the ICC-SRCC OG-300 certified solar water heating systems listed above shall be compatible with contacting fluids.
 6. Heat exchangers and heating elements must be installed on a tank-type gas water heater listed to ANSI Z21.10.1/CSA 4.1 and the water heater must be installed in accordance with the manufacturer's published installation instructions and applicable code(s).

Marking:

Models listed above were evaluated to the codes and standards listed in accordance with *the ICC-SRCC Solar Thermal Listing Program Guidelines* and are eligible to display the following mark as governed by the *ICC-SRCC Solar Thermal Listing Program Agreement* and the *ICC-SRCC Trademark Certification Mark and Certificate Use Policy*.



Listings 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 listing 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 listing, or as to any product covered by the listing. This document must be reproduced in its entirety.