

Solar Thermal Product Listing

No./SRCC-16002

Issued: April 06, 2016

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CSI:

DIVISION: 22 00 00 - PLUMBING DIVISION: 23 00 00 - HEATING

Section: 22 33 30.23 - SOLAR DOMESTIC WATER HEATER Section: 23 56 16 - HEATING SOLAR COLLECTORS

SYSTEMS Section: 23 56 16 - PACKAGED SOLAR HEATING EQUIPMENT

PRODUCT LISTING PROGRAM:

The ICC-SRCC Solar Thermal Listing Program is conducted in accordance with the ICC-SRCC Rules for Solar Heating & Cooling Product Listing Reports. The program also includes periodic factory inspections and surveillance of the manufacturer's quality management system.

PRODUCTS: SOLAR THERMAL COLLECTORS

SOLAR WATER HEATING SYSTEMS

PUMP STATIONS FOR SOLAR WATER HEATING SYSTEMS

LISTEE: Heliodyne, Inc. <u>www.heliodyne.com</u>

4910 Seaport Ave. (510)-237-9614

Richmond, CA 94804 USA

COMPLIANCE WITH:

CODES

❖ 2024, 2021 Uniform Plumbing Code® (UPC)*

- 2021 Uniform Solar, Geothermal & Hydronics Code® (USGHC)*
- 2018 Solar Energy Code® (USEC)*
- 2024, 2018 Int'l Plumbing Code (IPC)**
- 2021. 2018 Int'l Green Construction Code® (IgCC)**
- 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)
 - o Maryland Lead-Free Materials Act (HB 372)
 - Reduction of Lead in Drinking Water Act (Section 1417 of the Federal Safe Drinking Water Act (SDWA))
 - NSF/ANSI/CAN 372-2022, Drinking Water System Components – Lead Content**

STANDARDS & CRITERIA

- ICC 900/SRCC 300-2020, Solar Thermal Systems Standard
- ICC 901/SRCC 100-2020, Solar Thermal Collector Standard
- SRCC EM-1, Methodology for Determining Compliance with State and Federal Lead in Plumbing

^{*}Uniform Codes are copyrighted publications and trademarks of the International Association of Plumbing and Mechanical Officials (IAPMO)

^{**}International Codes are copyrighted publications and trademarks of the International Code Council (ICC)

^{***} NSF Standards are copyrighted publications of NSF International.

SOLAR THERMAL COLL	ECTOR MODELS:		
ТҮРЕ	MODEL	SIZES (ft²)	OG-100 CERTIFICATION NO*
Glazed Flat Plate	GOBI HT 410 003	40.15	<u>2012027B</u>
Glazed Flat Plate	GOBI 408 002	32.22	<u>2010116C</u>
Glazed Flat Plate	GOBI 408 001	32.22	<u>2010115D</u>
Glazed Flat Plate	GOBI 406 001	26.94	<u>2010115C</u>
Glazed Flat Plate	GOBI 410 001	40.26	<u>2010115A</u>
ICS	HICS 200 000 000	25.73	10002030

SOLAR WATER HEATI	NG SYSTEM MODELS:		
ТҮРЕ	MODEL	BACKUP	OG-300 CERTIFICATION NO.*
PUMPED	HF 410 G 80 ACS F	Gas Tankless	<u>2010035G</u>
PUMPED	HF 408 G 60 AC S E	Electric Tank	<u>30004351</u>
PUMPED	HPAK 016 1 410 G 80 ACS	Electric Tank	2009034B
PUMPED	HF 1 406 G 40 AC S E	Electric Tank	30004352
PUMPED	HF 1 410 G 80 AC S E	Electric Tank	2001023B
ICS	HICS 200-GT	Gas Tankless	30004229
PUMPED	HPAK 016 1 410 G 80 ACS F	Gas Tankless	2010136G
PUMPED	HPAS 1 410 G 80 AC S F	Gas Tankless	30004248

MODEL	DESCRIPTION
HPAK 016-00X	16 Double Wall Plate Type Heat Exchanger and Pumping Station
HPAK 024-00X	24 Double Wall Plate Type Heat Exchanger and Pumping Station
HPAK 032-00X	32 Double Wall Plate Type Heat Exchanger and Pumping Station
HPAK 048-00X X" represents "0" or "1" to	48 Double Wall Plate Type Heat Exchanger and Pumping Station o indicate the type of pump controller (basic or advanced versions)
X" represents "0" or "1" to	o indicate the type of pump controller (basic or advanced versions)
	o indicate the type of pump controller (basic or advanced versions) Pump Station for 8-16 collectors, single or double wall heat exchanger
X" represents "0" or "1" to	o indicate the type of pump controller (basic or advanced versions)
X" represents "0" or "1" to HCOM 120 00Z HCOM 180 00Z	o indicate the type of pump controller (basic or advanced versions) Pump Station for 8-16 collectors, single or double wall heat exchanger Pump Station for 16-24 collectors, single or double wall heat exchanger

The products listed above 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 Rules for Solar Heating & Cooling Product Listing Reports* and has been listed by the ICC-SRCC to the codes and standards above. This award of listing is subject to all terms and conditions of the *ICC-SRCC Rules for Solar Heating & Cooling Product Listing Reports*, and the documents incorporated therein by reference.

* Current certifications to the ICC-SRCC OG-100 and OG-300 programs are available at http://www.solar-rating.org/directory

INSTALLATION:

Solar thermal collectors, solar water heating systems and pump stations must be installed in accordance with the manufacturer's published installation instruction, the applicable code(s) add this listing. Where differences exist, the instructions in this listing must govern.

Where the product requires periodic examination, adjustment, service and or maintenance it must be easily and safely in accordance with the codes in force at the installation site.

Collectors and supports shall be installed in such a manner that water flowing off the collector will not damage the building or cause premature erosion of the roof. Collectors shall be installed in such a manner as to minimize the accumulation of debris. Ground-mounted collectors shall be at least 6" above ground level.

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.

CONDITIONS OF LISTING:

- 1. Devices and components shall be installed and used in accordance with the manufacturer's published installation instructions and the applicable code(s) and standard(s).
- 2. Systems shall be sized in accordance with the demand, manufacturer's requirement, and local codes.
- 3. System components requiring access for maintenance and inspection shall be installed to provide required access in accordance with manufacturer's instructions and local codes.
- 4. Solar thermal collectors shall be installed in accordance with the requirements of Section 317.6 of the 2024 ISPSC, Section 2606.12 of the 2024 IBC, Section 3139B.1 of the CBC, and Section 607.3 of the 2021 IgCC, as applicable,
- 5. Solar thermal collectors shall only be used with approved fluids per manufacturer's requirements and OG-100 certification conditions.
- 6. Each installation must be pressure-tested for leaks in the presence of the code official or code official's designated representative.
- 7. Penetrations through fire-resistance-rated walls and roof decks shall comply with Section 714 of the 2024 IBC.
- 8. Solar thermal components shall use approved mounting hardware in compliance with the manufacturer's installation instructions and the requirements set forth by the Authority Having Jurisdiction.
- 9. Solar thermal collectors shall be installed to prevent water intrusion into roof assemblies in accordance with the requirements of Section 1503 of the 2024 IBC.
- 10. Pump stations are not listed for installation outdoors and must be installed in a location complying with manufacturer's published installation instructions.
- 11. This listing does not assess electrical safety or compliance with NFPA 70 (National Electrical Code).
- 12. This listing does not assess roof load ratings, structural mounting hardware or racking components for the listed equipment.
- 13. Products are manufactured by Heliodyne, Inc under a quality control program subject to inspection every two years which are conducted in accordance with the requirements of ICC-SRCC.

IDENTIFICATION:

Models listed above are eligible to display the following listing marks as governed by the *ICC-SRCC Rules for Mark and Certificate Use*. Each device or component shall also be permanently marked with the following information as required by the codes and standards listed above.



- 1. Manufacturer's name and model number.
- 2. Maximum operating pressure.
- 3. Compatible heat transfer fluids.

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.

Shawn Martin

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