

# **ICC 901/ SRCC 100-2020**

## **Solar Thermal Collector Standard**

American National Standard

International Code Council  
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Washington, D.C. 20001

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American National Standards Institute  
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# American National Standard

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Consensus is established when, in the judgement of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

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# FOREWORD

## Introduction

The first version of SRCC Standard 100 was developed in 1981 by the Solar Rating and Certification Corporation (SRCC) as a result of efforts by a consortium including the U.S. Department of Energy, National Renewable Energy Laboratory (NREL), Interstate Renewable Energy Council (IREC), Florida Solar Energy Center (FSEC) and the Solar Energy Industry Association (SEIA). Since that time, the standard has been updated periodically by means of SRCC's standard development process. The consensus process used by SRCC was consistent with ANSI requirements for the development of voluntary consensus standards including balance of stakeholders, transparency and due process.

In 2013, SRCC and ICC agreed to collaborate to develop an updated version of the SRCC 100—2013 *Minimum Standards for Solar Thermal Collectors* and SRCC 600-2013 *Minimum Standard for Solar Thermal Concentrating Collectors* standards through ICC's ANSI-approved Standard Development process to seek designation as an American National Standard (ANS). With direction from ICC's Board of Directors and the SRCC Board of Directors, the ICC Standards Council appointed a consensus committee to develop a single updated standard to establish minimum requirements for safety, performance and testing of solar thermal collectors.

## Development

This is the second edition of the International Code Council (ICC)/Solar Rating & Certification Corporation (ICC-SRCC) Solar Thermal Collector Standard. It is based on the ICC 901/SRCC 100—2015 standard, which was the first edition. The revisions contained in this edition of the standard were developed by the ICC Solar Thermal Standard Consensus Committee (IS-STSC), operating under ANSI-approved ICC Consensus Procedures for the development of ICC standards.

Meetings of the IS-STSC Consensus Committee were open to the public and interested individuals and organizations from across the country participated. Views and objections were solicited through several public comment periods. All views and objections were considered by the consensus committee and an effort was made toward their resolution. A vote by the consensus committee approved this standard.

The requirements in ICC 901/SRCC 100—2020 are a further update to the long-established SRCC 100 and SRCC 600 standards. The latest edition of the standard has been updated to coordinate with the latest model building codes and international standards. It also clarifies design requirements and addresses a number of new technologies used within the solar water heating industry. The resulting document provides appropriate protections for health, safety and welfare while avoiding unnecessary restrictions on the use of new materials, technologies or designs.

## Adoption

ICC 901/SRCC 100—2020, *Solar Thermal Collector Standard* is available for reference and use by jurisdictions in both codes and incentive programs internationally. It represents an update to the ICC 901/SRCC 100—2015 and previous editions of the SRCC Standard 100 and SRCC Standard 600 and is appropriate for use as a successor to those documents. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings establishing the jurisdiction's law.

## Interpretations

Requests for interpretations on the provisions of ICC 901/SRCC 100—2020 should be addressed to: ICC, Central Regional Office, 4051 Flossmoor Road, Country Club Hills, IL 60478.

## Maintenance—Submittal of Proposals

All ICC standards are revised as required by ANSI. Proposals for revising this edition are welcome. Please visit the ICC website at [www.iccsafe.org](http://www.iccsafe.org) for the official "Call for Proposals" announcement. A proposal form and instructions can also be downloaded from [www.iccsafe.org](http://www.iccsafe.org).

ICC, ICC-SRCC, its members and those participating in the development of ICC 901/SRCC 100—2020 do not accept any liability resulting from compliance or noncompliance with the provisions of ICC 901/SRCC 100—2020. Neither ICC nor ICC-SRCC have the power or authority to police or enforce compliance with the contents of this standard. Only the governmental body that enacts this standard into law has such authority.

**International Code Council Solar Thermal Standard Consensus Committee (IS-STSC)**

Consensus Committee SCOPE: The Solar Thermal Standard Consensus Committee (IS-STSC) shall have primary responsibility for minimum requirements to safeguard the public health, safety and general welfare along with minimum performance, and evaluation requirements for solar thermal systems. The requirements contained in the *International Codes* pertaining to these situations shall be coordinated with the standards developed by the IS-STSC Consensus Committee.

This standard was processed and approved for submittal to ANSI by the ICC Solar Thermal Standard Consensus Committee (IS-STSC). Committee approval of the standard does not necessarily imply that all committee members voted for its approval.

Representatives on the Consensus Committee are classified in one of three voting interest categories, General Interest (G), User Interest (U) and Producer Interest (P). The committee has been formed in order to achieve consensus as required by ANSI Essential Requirements. At the time it approved this standard, the IS-STSC Consensus Committee consisted of the following members:

- David Beard** (P), Heliodyne, Richmond, CA
  - Andreas Bohren** (U), SPF Institute for Solar Technology, Rapperswil, Switzerland
  - Adam Chrisman** (P), SunEarth, Fontana, CA
  - John Del Mar, PE** (G), City of Santa Fe, Santa Fe, NM
  - Stephan Fischer, PE** (U), IGTE University of Stuttgart Institute for Building Energetics Thermotechnology, Stuttgart, Germany
  - Kayla Sheraine Gabourel** (G), Ministry of the Public Service, Energy & Public Utilities, Belmopan Cayo, Belize
  - Kevin M. Garbie** (P), Aquatherm Industries, Inc., Lakewood, NJ
  - Robert Grady** (U), LabTest Certification, Inc., Las Vegas, NV
  - Gary L. Hansen, CBO** (G), City of Marion, Marion, IA
  - Kevin D. Kalakay** (G), State of Michigan, Lansing, MI
  - Ramiro Mata** (U), American Society of Plumbing Engineers, Mentor, OH
  - Henry K. Vandermark** (P), Solar Wave Energy, Inc., Cambridge, MA
- Secretary: **Shawn E. Martin**, Vice President of Technical Services, Solar Rating and Certification Corporation (ICC-SRCC), International Code Council Pittsburgh, Pennsylvania

**Voting Membership in Each Category**

Category	Number
General (G)	4
User (U)	4
Producer (P)	4
<b>TOTAL</b>	<b>12</b>

**Interest Categories**

**General Interest:** Individuals assigned to the General Interest category are those who represent the interests of an entity, including an association of such entities, representing the general public, or entities that promulgate or enforce the provisions within the committee scope. These entities include consumers and government regulatory agencies.

**User Interest:** Individuals assigned to the User Interest category are those who represent the interests of an entity, including an association of such entities, which is subject to the provisions or voluntarily utilizes provisions within the committee scope.

These entities include academia, applied research laboratory, building owner, design professional, government nonregulatory agency, insurance company, private inspection agency and product certification/evaluation agency.

**Producer Interest:** Individuals assigned to the Producer Interest category are those who represent the interests of an entity, including an association of such entities, which produces, installs or maintains a product, assembly or system subject to the provisions within the committee scope. These entities include builder, contractor, distributor, laborer, manufacturer, material association, standards promulgator, testing laboratory and utility.

**NOTE—Multiple Interests:** Individuals representing entities in more than one of the above interest categories, one of which is a Producer Interest, are assigned to the Producer Interest. Individuals representing entities in the General Interest and User Interest categories are assigned to the User Interest.

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