

ICC 902/ APSP 902/ SRCC 400-2017

Solar Pool and Spa Heating System Standard

American National Standard

International Code Council
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American National Standards Institute
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Solar Pool and Spa Heating System Standard
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American National Standard

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus and other criteria for approval established by the standard developer are consistent with the ANSI Essential Requirements.

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 the SRCC 300 Solar Thermal System Standard was developed in 1989 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). It was later updated collaboratively with ICC to develop ICC 900/SRCC 300. While ICC 900/SRCC 300 addressed solar energy systems generally for heating, cooling, dehumidification and co-generation, it did not specifically address solar water heating systems used for pool and spa applications. This was due to the specialized nature of pool and spa heating loads and the unique water quality and safety considerations involved with these systems.

In 2015, SRCC, the Association of Pool and Spa Professionals (APSP), and ICC agreed to collaborate to develop a new standard to address solar water heating systems for pools and spas through ICC's ANSI-approved Standard Development process and to seek designation as an American National Standard (ANS). With direction from ICC's Board of Directors and APSP, the ICC Standards Council appointed a consensus committee to develop a new standard to establish minimum requirements for safety, performance and installation of solar pool and spa heating systems.

Development

This is the first edition of the *International Code Council*[®] (ICC[®]) 902/Association of Pool and Spa Professionals[®] (APSP[®]) 902/Solar Rating and Certification Corporation[®] (SRCC[®]) 400 *Solar Pool and Spa Heating System Standard*. It draws some material from the ICC 900/SRCC 300—2015 standard, but adapts it to the unique needs of pool and spa applications. This standard was developed by the ICC Pool Solar Heating and Cooling Standard Consensus Committee (IS-PHSC) that operates under ANSI-approved ICC Consensus Procedures for the development of ICC standards.

The meetings of the IS-PHSC 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 902/APSP 902/SRCC 400—2017 are based on the intent to implement standards for solar water heating systems applied to residential and commercial pools and spas, consistent with the requirements established in ICC and APSP standards for these applications and the *International Pool and Spa Code*. The project specifically sought to bring together subject matter experts from both the pool and solar industries to ensure the proper integration of pool and solar systems to ensure appropriate levels of safety and function. Additionally, the standard includes both well-established solar thermal and emerging solar photovoltaic water heating technologies. The resulting document provides protections for health, safety and welfare while avoiding unnecessary restrictions on the use of new materials, technologies or designs.

Adoption

ICC 902/APSP 902/SRCC 400, *Solar Pool and Spa Heating System Standard* is available for reference and use by jurisdictions in both codes and incentive programs internationally. It establishes minimum standards for solar pool heating systems, which are not addressed within the ICC 900/SRCC 300, *Solar Thermal System Standard*. 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 902/APSP 902/SRCC 400—2017 should be addressed to: ICC, Central Regional Office, 4051 Flossmoor Road, Country Club Hills, IL 60478.

FOREWORD

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 for the official “Call for Proposals” announcement. A proposal form and instructions can also be downloaded from www.iccsafe.org.

ICC, APSP, SRCC, its members and those participating in the development of ICC 902/APSP 902/SRCC 400—2017 do not accept any liability resulting from compliance or noncompliance with the provisions of ICC 902/APSP 902/SRCC 400—2017. Neither ICC, APSP nor 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 Pool Solar Heating and Cooling Consensus Committee (IS-PHSC)

Consensus Committee SCOPE: The Pool Solar Heating and Cooling Standard Consensus Committee (IS-PHSC) 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 pool and spa heating and cooling systems. The requirements contained in the *International Codes* pertaining to these situations shall be coordinated with the standards developed by the IS-PHSC Consensus Committee.

This standard was processed and approved for submittal to ANSI by the ICC Pool Solar Heating and Cooling Standard Consensus Committee (IS-PHSC). 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-PHSC Consensus Committee consisted of the following members:

Georges Roland Amehou, MsC (U), African Development Bank, Abidjan, Cote d'Ivoire

Shirley Ellis (U), Texas A&M University, College Station, Texas

Richard English, CBP (P), English Pool Consulting, San Diego, California

Philip Fairey (P), Florida Solar Energy Center, Cocoa, Florida

William V. Funk (G), Cecil County Government, Elkton, Maryland

Kevin M. Garbie (P), Aquatherm Industries, Inc., Lakewood, New Jersey

Johnny Goetz, CBO (G), Town of Truckee, Truckee, California

Jerry Henderson (U), Solar Integrity, Portland, Oregon

George J. Kelly (U), Sunset Technology, Inc., Mount Airy, Maryland

Edward Kulik (G), Mohave County, Kingman, Arizona

Scott J. Lambiase, CBO (G), Town of Duxbury, Duxbury, Massachusetts

Alex Ward (P), FAFCO, Inc., Chico, California

Secretary: **Shawn E. Martin**, Director of Technical Services, Solar Rating and Certification Corporation (ICC-SRCC), Pittsburgh, Pennsylvania;

Voting Membership in Each Category

Category	Number
General (G)	4
User (U)	4
Producer (P)	4
TOTAL	12

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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