



**Solar Rating & Certification  
Corporation**

500 New Jersey Avenue, NW  
Sixth Floor  
Washington, DC 20001  
t: 888.ICC.SAFE (422.7233)  
t: 202.370.1800  
f: 202.783.2348  
[www.solar-rating.org](http://www.solar-rating.org)

# **ICC-SRCC™ TESTING LABORATORY PROGRAM POLICY**

**February 21, 2017**

© 2017 Solar Rating & Certification Corporation™. All Rights Reserved. This document is the exclusive property of the Solar Rating & Certification Corporation, and ICC-SRCC™ Testing Laboratory Program

## 1.0 Policy Purpose

- 1.1 This document sets forth the Solar Rating and Certification Corporation (ICC-SRCC) Testing Laboratory Program Policy (the Policy). SRCC certifies products based on compliance with appropriate standards and testing information received from laboratories participating in the ICC-SRCC Testing Laboratory Program, and with the cooperation of product manufacturers and suppliers.
- 1.2 ICC-SRCC certifies products based on safety, design, and performance criteria, as set forth in this Policy, including Section 7.0 Test Procedures.
- 1.3 The provider of the product to be tested provides physical product and product information to the testing laboratory. Upon completion of laboratory testing according to the criteria set forth in this Policy, and any other requirements established by ICC-SRCC, the laboratory shall transmit completed documentation directly to ICC-SRCC for product review and certification.
- 1.4 ICC-SRCC does not provide product or laboratory testing services.
- 1.5 This Policy is intended to:
  - 1.5.1 Implement appropriate requirements for laboratory testing of products addressed by ICC-SRCC Certification Programs;
  - 1.5.2 Adopt appropriate standards for participation in the ICC-SRCC Testing Laboratory Program; and,

## 2.0 Policy Scope

- 2.1 The criteria, requirements, and procedures contained in this Policy serve as the primary means for evaluating an applicant's Laboratory Testing Program to assure, at a minimum, the laboratory's ability to conduct specific tests of solar products in accordance with ICC-SRCC certification requirements, as set forth in Policy Section 7.0 Test Procedures and other ICC-SRCC policies. Among other conditions of ICC-SRCC Approval, each applicant laboratory must adhere to the following requirements:
  - 2.1.1 All product evaluation and testing shall be conducted in a technically competent and professional manner;
  - 2.1.2 All product evaluation and testing shall be free from influence or conflicts of interest that could affect the laboratory's objectivity or ability to provide unbiased test results; and,
  - 2.1.3 All product evaluation and testing shall be in compliance with the requirements of the test procedures authorized by this Policy and accepted scientific practice.

- 2.1.4 All product evaluation and test reports shall be transmitted directly to ICC-SRCC for evaluation. No product evaluation or test reports will be accepted unless transmitted directly from the laboratory or testing facility which conducted the tests or evaluation of the product for which ICC-SRCC certification is sought.
- 2.2 ICC-SRCC certifies solar equipment of various types, which are tested under several different protocols, as identified in Policy Section 7.0 Test Procedures and other ICC-SRCC policies.
- 2.3 A laboratory may apply for Approval of one or more specific Testing Programs to conduct solar equipment evaluations according to the applicable Test Procedure, or any combination of Test Procedures, so long as all Test Procedures are identified and approved pursuant to the laboratory's ISO/IEC Standard 17025 approval. Approval is granted based on the laboratory's ability to conduct one or more of the Test Procedures identified in Section 7.2 of this Policy.
- 2.4 Any laboratory, regardless of its geographic location, may apply for ICC-SRCC Approval of its Testing Program, so long as it meets the requirements of this Policy.
- 2.5 The applicant laboratory must demonstrate, and provide evidence, that it has been approved under ISO/IEC Standard 17025 by an authorized ISO approval authority as defined below in 4.1.1.

The ICC-SRCC Laboratory Testing Program Approval Committee may consider other factors relevant to laboratory Approval when reviewing an application, including, but not limited to, the following: geographic location; weather conditions; facility conditions; and, personnel availability at the laboratory location. ICC-SRCC may, at its sole discretion, choose to limit, place conditions on, or deny ICC-SRCC Approval for a laboratory's Testing Program.

### 3.0 Policy Definitions

Approval: Formal evaluation and notification by the ICC-SRCC that a Testing Program operated by a laboratory has met the criteria and standards set forth in this Policy to perform the specific tests identified in the ICC-SRCC Approval for the purpose of providing test data to support requests for solar equipment certification.

Approved Testing Program: A Laboratory Testing Program that has been granted ICC-SRCC Approval.

Product Certification: A formal, written notice issued by ICC-SRCC, representing that the identified Solar Collector, Solar System, or other solar product has been certified to be in compliance with all applicable ICC-SRCC certification standards and specifications. ICC-SRCC certification includes the determination that the required product testing information was obtained from a laboratory operating an ICC-SRCC Approved Testing Program, pursuant to this Policy.

Approval Committee: The Laboratory Testing Program Approval Committee of the Solar Rating and Certification Corporation. This Committee is an ICC-SRCC Standing Committee, whose members are appointed by the ICC-SRCC Chair, and which has the responsibility of evaluating laboratory testing program Approval applications, granting testing program Approval, and determining the disposition of Laboratory Testing Program Approval matters.

Laboratory: An organization or part of an organization engaged in the activities of solar equipment testing and/or inspection, and approved under ISO/IEC Standard 17025.

Quality: The totality of features and characteristics of a product or service which bear on its ability to satisfy a given need.

Test: The measurement of physical, chemical, or functional characteristics of materials, systems, or components under a predetermined set of conditions, to a specific standard and/or procedure as specified by ICC-SRCC.

ISO/IEC Standard 17025: International Organization for Standardization (ISO) Standard 17025 establishes appropriate operational criteria for testing laboratories. The Standard is intended to implement a quality system for improving a laboratory's ability to consistently produce valid results, and serves as the basis for ISO Approval by an authorized ISO accrediting body. Like other ISO Standards, Standard 17025 provides technical specifications and other specific criteria for the operation of laboratories, in order to ensure that materials, products, processes, and services are fit for the intended purpose.

IEC: The International Electrotechnical Commission (IEC) is the primary global organization responsible for the preparation and publication of international standards for electrical, electronic, and related technologies. IEC Standards serve as a basis for national standardization, and as important industry references.

## 4.0 ICC-SRCC Laboratory Testing Program Approval

4.1 In addition to other Policy requirements, a laboratory testing program must satisfy the following conditions of ICC-SRCC Approval:

4.1.1 Laboratory accreditation to the most current version of ISO/IEC Standard 17025; "*General requirements for the competence of testing and calibration laboratories*," by an entity recognized as an ISO/IEC accrediting organization in the laboratory's sphere of influence where testing services are offered to ICC-SRCC certification applicants. Such ISO accrediting organization must be a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA).

4.1.2 Appropriate documentation evidencing that the laboratory's current Scope(s) of accreditation to ISO/IEC Standard 17025 include the tests for which the laboratory seeks ICC-SRCC Approval.

4.1.3 Complete and accurate Approval Application information and materials;

- 4.1.4 All other documentation required in, or related to, the Approval Application;
- 4.1.5 Payment of all applicable Approval Application fees and other charges;
- 4.1.6 Satisfaction of all ICC-SRCC Laboratory Testing Program criteria as determined by ICC-SRCC; and,
- 4.1.7 Completion and submission of all ICC-SRCC Testing Program Approval documentation as required by this Policy or the SRCC Approval Committee.
- 4.1.8 Approval from the ICC-SRCC Laboratory Testing Program Approval Committee

## 5.0 Application for Approval

- 5.1 A laboratory seeking Testing Program Approval must submit a complete ICC-SRCC Laboratory Testing Program Approval Application to ICC-SRCC, and satisfy all requirements of ICC-SRCC policies. An application for Approval is provided on the ICC-SRCC Internet site, located at [www.solar-rating.org](http://www.solar-rating.org).
- 5.2 Among other information, a complete Approval Application must include the following:
  - 5.2.1 A valid and current copy of the laboratory's ISO/IEC Standard 17025 accreditation documentation, including a scope showing the tests for which the laboratory seeks ICC-SRCC Approval; and,
  - 5.2.2 The accurate identification of the individual tests for which the laboratory is seeking ICC-SRCC Approval.
- 5.3 Upon receipt of an Approval Application, ICC-SRCC shall perform a preliminary review of the Application and notify the applicant of any identified or potential deficiencies. ICC-SRCC reserves the sole and exclusive right and discretion to determine whether an applicant has satisfied the applicable standards and requirements necessary for ICC-SRCC Laboratory Testing Program Approval.
- 5.4 A laboratory may reapply for testing program Approval where: an Approval Application has been rejected or denied; or, an Application has been withdrawn.

## 6.0 Fees and Charges

- 6.1 The ICC-SRCC Executive Director shall establish and regulate all fees and charges related to the Laboratory Testing Approval Program, which may be modified from time to time as appropriate.
- 6.2 In order to be processed and reviewed, an Approval Application must be accompanied by the complete payment of all application fees and related ICC-SRCC

charges, as set forth in the ICC-SRCC Testing Laboratory Program Approval Application.

6.3 Approval Application fees and charges are not refundable to the applicant laboratory.

## **7.0 Test Procedures for Which Approval May Be Granted**

- 7.1 The ICC-SRCC Executive Director in consultation with the ICC-SRCC Technical Director, shall determine and identify each test procedure for which ICC-SRCC will grant Testing Program Approval. In its sole discretion, the Executive Director may add or remove approved test procedures.
- 7.2 The following test procedures are eligible for Laboratory Testing Program Approval.
  - 7.2.1 Qualification Tests in accordance with ICC 901/ICC-SRCC Standard 100 as referenced in the current ICC-SRCC OG-100 Operating Guideline document.
  - 7.2.2 Glazed and Unglazed Liquid-Heating Collector Efficiency in accordance with ICC-SRCC Standard 100 as referenced in the current ICC-SRCC OG-100 Operating Guideline document.
  - 7.2.4 Air-heating collector, including open and closed loop and transpired, in accordance with ICC 901/ICC-SRCC Standard 100 as referenced in the current ICC-SRCC OG-100 Operating Guideline document.
  - 7.2.5 ICS and Thermosiphon Collectors in accordance with ICC 901/ICC-SRCC Standard 100 as referenced in the current ICC-SRCC OG-100 Operating Guideline document.
  - 7.2.6 Concentrating Solar Collectors in accordance with ICC-SRCC Standard 600
  - 7.2.7 PV Water Heating Collectors in accordance with in accordance with ICC-SRCC TM-1 as referenced in the current ICC-SRCC OG-100 Operating Guideline document.
  - 7.2.8 Heat Capacitance and Heat Loss of storage tanks in accordance with ICC-SRCC TM-1
  - 7.2.9 Effectiveness of Heat Exchangers in accordance with ICC-SRCC TM-1
- 7.3 A ICC-SRCC Approved Laboratory Testing Program shall conduct tests in accordance with one or more Test Procedures identified in Section 7.2. Approved Laboratory Testing Program Reports shall not be accepted by ICC-SRCC unless the Test Procedure protocols set forth in the Laboratory's ICC-SRCC Testing Program Approval Application are followed in their entirety.

## 8.0 Approval Conditions and Maintenance

- 8.1 Evidence of Approval: ICC-SRCC Approval of a Laboratory Testing Program shall be evidenced by a letter or certificate of Approval from ICC-SRCC, which shall be posted in the laboratory.
- 8.2 ISO Accreditation Maintenance: ICC-SRCC Laboratory Testing Program Approval shall terminate in the event that the laboratory's ISO/IEC Standard 17025 accreditation expires or is otherwise terminated. Approval to conduct tests in accordance with one or more Test Procedures identified in Section 7.2 shall be withdrawn if that test procedure(s) is removed from the laboratory's ISO/IEC Standard 17025 scope.
- 8.3 Compliance with Legal Requirements: A laboratory providing approved ICC-SRCC Testing Program services shall satisfy all local, state, and federal legal requirements pertaining to the operation and administration of such services and other laboratory activities.
- 8.4 Period of Approval/Fees: An ICC-SRCC Testing Program Approval shall remain in force as long as the laboratory complies with the conditions of this Policy, and remits all annual Approval and any site inspection fees and charges.
- 8.5 Inspection of Laboratories: In order to assure initial compliance with the conditions of Testing Program Approval, ICC-SRCC must conduct a laboratory site inspection. In order to assure continued compliance with the requirements for Approval, a laboratory providing ICC-SRCC approved testing programs shall grant ICC-SRCC, or its authorized representative, the right to conduct subsequent inspections of the laboratory and its record-keeping facilities, subject to the provisions of this Section. The laboratory shall cooperate with any ICC-SRCC inspection in all aspects.
- 8.5.1 ICC-SRCC shall provide a four (4) calendar day minimum notice of inspection to the laboratory holding the Testing Program Approval.
- 8.5.2 During an inspection, a laboratory providing ICC-SRCC approved testing program services shall make available all records as described in the notice of inspection, including, but not limited to:
- 8.5.2.1 Equipment calibration records;
  - 8.5.2.2 Solar collector test records; and,
  - 8.5.2.3 Personnel records regarding responsibility for tests.
- 8.5.3 During an inspection, the laboratory shall be represented by the Laboratory Director or Testing Laboratory Supervisor.
- 8.5.4 During the inspection, the laboratory shall make available individual testing personnel, as requested by the ICC-SRCC.



8.6 Approval Procedure: The Laboratory Committee shall review a third party testing laboratory's application for approval as an ICC-SRCC approved laboratory after the initial inspection of the testing facility and assess the laboratory based on the following criteria:

- The laboratory is 17025 accredited and in good standing.
- The laboratory's accredited scope states the test method(s) and standards the laboratory is seeking approval for.
- The laboratory fulfills the requirements of a legal entity
- The laboratory is independent from all solar collector and system manufacturers.
  - o Any association such as being owned partly or in full, associated to, or an entity of another organization may indicate a conflict of interest.
- The laboratory commits itself to conduct testing activities in a manner that complies with ICC-SRCC's policies and procedures as well as in accordance to ICC-SRCC certification program requirements.
- The laboratory has the capability to conduct the tests for which it wants to be approved by ICC-SRCC.
- The laboratory provides sufficient evidence to the Approval committee for consideration during the approval process.

The Approval Committee shall come to a final conclusion within 30 days after a testing laboratory has been inspected and shall notify the laboratory of its decision.

8.7 Use of Authorized ICC-SRCC Marks: An authorized ICC-SRCC mark and/or logo may be used by a laboratory conducting an ICC-SRCC Approved Testing Program, as long as all current Approval fees and charges owed by the laboratory have been paid when due, and the Laboratory Testing Program Approval by ICC-SRCC has not been revoked, suspended or terminated by ICC-SRCC, and all terms of this Policy are met.

8.8 Termination or Suspension of Approval: In the event that a laboratory fails to satisfy the Approval requirements of this Policy, or other ICC-SRCC policies, the Approval of the Laboratory Testing Program may be terminated, revoked, or suspended at the sole discretion of ICC-SRCC.

## 9.0 Renewal of Approval for Testing Program

9.1 Approval renewal may be granted by the Approval Committee if the applicant continues to satisfy all of the requirements and conditions of Approval set forth in this Policy, and otherwise directed by ICC-SRCC. Among other conditions of Approval renewal:

9.1.1 The laboratory must submit to ICC-SRCC evidence of renewal of its accreditation to ISO/IEC Standard 17025 within thirty (30) calendar days of expiration of such ISO accreditation.

- 9.1.2 The laboratory must comply with all ICC-SRCC policies and procedures regarding Approved Testing Programs;
- 9.1.3 The laboratory must make payment of Laboratory Approved Testing Program fees and charges when due, as billed by ICC-SRCC, and;
- 9.1.4 The laboratory must demonstrate compliance with any other specific requirements set forth in the letter or certificate of Approval, or otherwise directed by ICC-SRCC.
- 9.1.5 The laboratory must notify ICC-SRCC if any test procedure that ICC-SRCC has approved is removed from its ISO/IEC 17025 scope.
- 9.1.6 The laboratory must provide ICC-SRCC a copy of proof of liability insurance.
- 9.2 In order to be eligible for Testing Program Approval renewal, a laboratory must provide to ICC-SRCC all requested verifications of compliance with any legal or organizational requirement which may affect the laboratory's ability to safely and legally continue business operations.

## 10.0 Voluntary Termination of Testing Program Approval

- 10.1 A testing laboratory may voluntarily terminate an ICC-SRCC Testing Program Approval by providing written notice of its intent to ICC-SRCC. The notice shall state the effective termination date and the reasons for the termination.
- 10.2 Any ICC-SRCC Testing Program fees and charges paid by a laboratory are non-refundable in the event of a voluntary termination of ICC-SRCC Approval.

## 11.0 Deficiency and Resolution

- 11.1 Notice of Deficiency and Resolution Process: In the event that a laboratory operating an Approved Testing Program violates, or otherwise does not comply with, the provisions of this Policy or other ICC-SRCC requirements, the Approval Committee shall issue a Notice of Deficiency and Violation (Notice) to the laboratory. Upon receipt of such Notice, the laboratory shall: respond to each identified deficiency and/or violation; provide all relevant information and materials; and, otherwise satisfy all requirements set forth in the Notice. Following the timely submission of such response to the Notice, all deficiency and violation matters shall be resolved pursuant to the ICC-SRCC Certification and Approval Appeal Policy (Appeal Policy) and this Policy Section.
- 11.2 Failure to Respond: In the event that the laboratory does not provide a timely and complete response to a Notice, the Approval Committee may issue any sanction(s) or corrective action(s) authorized by this Policy, the Appeal Policy, or other

applicable ICC-SRCC Policy. The laboratory shall comply fully with all sanctions and/or corrective actions issued by the Committee.

11.3 Grounds for Sanction and Corrective Actions: Among other grounds, the Approval Committee may issue Approval sanctions and/or corrective actions under the following circumstances:

11.3.1 An Approval Application contains a material misrepresentation;

11.3.2 A laboratory makes a public misrepresentation concerning its activities, operations, or a tested product;

11.3.3 A laboratory fails to comply with a condition of the Approval;

11.3.4 A laboratory violates an ICC-SRCC Policy;

11.3.5 A laboratory fails to remit required Approval fees and charges to ICC-SRCC consistent with the terms; or,

11.3.6 Where other good and reasonable cause exists and supports the issuance of sanctions or corrective actions.

11.4 Deficiency and Violation Decision: Based on the information available, the Approval Committee, in its sole discretion, shall determine whether a deficiency or violation exists, or dismiss the Notice. Upon the finding of any deficiency or violation, the Approval Committee shall review the record, determine the severity of such deficiency(ies) or violation(s), and issue a Deficiency/Violation Decision. In its sole and exclusive discretion, the Committee may issue one or more of the following actions:

11.4.1 Private or Public Reprimand.

11.4.2 Conditions of Continued Approval.

11.4.3 Approval Probation. The term of a probationary period shall be in one month increments through an initial six (6) months. The Committee may determine the duration of the Probationary Period within this six (6) month time frame.

11.4.4 Approval Suspension. The term of a suspension shall be in six (6) month increments, as determined by the Committee.

11.4.5 Approval Revocation. After revocation of Approval by ICC-SRCC, a laboratory may apply for Approval after two (2) years following the date of the revocation.

## 12.0 Deficiency and Violation Decision Appeals

A laboratory may appeal an adverse Deficiency Violation Decision, or any part thereof, to the ICC-SRCC Appeals Committee, pursuant to the terms of the ICC-SRCC Appeal Policy.

## 13.0 Reinstatement and Reapplication Procedures

- 13.1 Probation/Reinstatement: Following the expiration of a final probation decision issued under this Policy, the Approval Committee shall determine whether the laboratory has satisfied the terms of the probation, including any related conditions. If the laboratory has satisfied the terms of probation in full, the Committee shall verify that the probation has been completed and reinstate the laboratory to active Approval status. If the laboratory has not satisfied the terms of probation in full, the Committee shall notify the laboratory of the failure to satisfy the terms of probation and may take the following actions: continuation of the probation; and/or, issuance of additional disciplinary or remedial actions concerning the probation terms.
- 13.2 Suspension/Reinstatement: Following the expiration of a final suspension decision issued under this Policy, the Approval Committee shall determine whether the laboratory has satisfied the terms of the suspension, including any related conditions. If the laboratory has satisfied the terms of the suspension in full, the Committee shall verify that the suspension has been completed and reinstate the laboratory to active Approval status. If the laboratory has not satisfied the terms of the suspension in full, the Committee shall notify the laboratory of the failure to satisfy the terms of the suspension and may take the following actions: continuation of the suspension; and/or, issuance of additional disciplinary or remedial actions concerning the suspension terms.
- 13.3 Revocation/Reapplication: Two (2) years after the issuance of a final termination issued under this Policy, the laboratory may submit to the Approval Committee a Request for Permission to Reapply for Approval status (Reapplication Request). Subject to the time restriction above, the Committee shall consider a Reapplication Request from a laboratory whose status has been terminated. Reapplication Requests must include the following information: (a) The date that the final Deficiency Violation Decision was issued; (b) A statement of the reasons that the laboratory believes support or justify the acceptance of the Reapplication Request, including a statement explaining why the laboratory should now receive Approval status and why the compliance action no longer applies to the laboratory; and, (c) Copies of any relevant documents or other materials upon which the laboratory relies in support of the Reapplication Request. Within ninety (90) days after the submission of a complete Reapplication Request, or as soon after as practical, the Approval Committee shall review the information presented by the laboratory and any other relevant information. The Committee shall then determine the final outcome of the Reapplication Request by majority vote in closed session.
- 13.4 Approval Committee Reapplication Request Decisions: Following the Approval Committee's review of a Reapplication Request, or as soon as practical, the Committee, by the Committee Chair, shall transmit its decision with respect to the Reapplication Request. The final Committee decision shall indicate whether the Request is granted, denied, or continued to a later date. If appropriate, the decision may include any Program participation conditions that the Committee has required. Copies of the Approval Committee decision shall be sent to the parties, via U.S. mail,