



**Summary of Substantive Changes
between the 2013 and the 2014 editions of
SRCC Standard 100, “Minimum Standards for Solar Thermal Collectors”**

Presented to the IAPMO Standards Review Committee on July 13, 2015

General: The changes to this standard will have an impact on currently listed products. Multiple tests were added changed or revised from the previous edition of the standard.

Section 4.0, Referenced Standards *and Organizations*: The referenced standards were updated as follows:

ISO 9806:2013, Solar energy — Solar thermal collectors — Test methods, International Organization for Standardization, Geneva, Switzerland. <http://www.iso.org>

ANSI/ASHRAE Standard 93-2010, "Methods of Testing to Determine the Thermal Performance of Solar Collectors," The American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., Atlanta, GA 30329. <http://www.ashrae.org>

ISO 9806-1:1994, Test methods for solar collectors — Part 1: Thermal performance of glazed liquid heating collectors including pressure drop, International Organization for Standardization, Geneva, Switzerland. <http://www.iso.org>

ISO 9806-2:1995, Test Methods for solar collectors — Part 2: Qualification test procedure, International Organization for Standardization, Geneva, Switzerland. <http://www.iso.org>

ISO 9806-3:1995, Test methods for solar collectors — Part 3: Thermal performance of unglazed liquid heating collectors (sensible heat transfer only) including pressure drop, International Organization for Standardization, Geneva, Switzerland. <http://www.iso.org>1.0, Purpose: Removed the SRCC

Section 5.0, Test Methods for Solar Collectors: Revised the test methods specified for evaluation of solar collectors including addition of new tests, an allowance of some alternative test sequences and inclusion of a new Table 1 to list the test description and applicable sections of ISO 9806 employed for testing.

Section 5.5, Exposure Test: Former Section 5.4 was changed from specifying the test procedure within this standard to requiring testing in accordance with Section 11 of ISO 9806.

Section 5.6, External Thermal Shock/Water Spray Test: Former Section 5.5 was revised to update the standard referenced for testing from ISO 9806-2, Section 8 to ISO 9806, Section 12.

Section 5.7, Internal Thermal Shock/Cold Fill Test: Former Section 5.6 was revised to update the standard referenced for testing from ISO 9806-2, Section 9 to ISO 9806, Section 13.

Section 5.8, Internal Pressure Test: Former Section 5.3, *Static Pressure Test* was changed from specifying the test procedure within this standard to requiring testing in accordance with Section 6 of ISO 9806.

Section 5.12, Thermal Capacity and Time Constant Test: Former Section 5.9, *Collector Time Constant* was revised to update the standard referenced for testing from ISO 9806-1, Section 10 and ISO 9806-3, Section 10 to ISO 9806, Section 26.



Section 5.13, Thermal Performance Test: Former Section 5.10 was revised to update the standard referenced for testing from ISO 9806-1 and ISO 9806-3 to ISO 9806, Section 24.

Section 5.14, Collector Incident Angle Modifier: Former Section 5.11 was revised to update the standard referenced for testing from ISO 9806-1 and ISO 9806-3 to ISO 9806, Section 27.

Section 5.15, Pressure Drop Test: Former Section 5.8 was revised to update the standard referenced for testing from ISO 9806-1 and ISO 9806-3 to ISO 9806, Section 28.

Section 5.18, Impact Resistance Test: Former Section 6.1, *Cover* was revised to update the standard referenced for testing from ISO 9806-2, Section 12 to ISO 9806, Section 17.

Section 5.19, Disassembly and Final Inspection: Former Section 5.12 was changed from specifying the requirements within this standard to requiring inspection in accordance with Section 18 of ISO 9806.

The following tests were added:

[5.3 High Temperature Resistance Test](#)

[5.4 Stagnation Temperature](#)

[5.9 Leakage Test](#)

[5.10 Rupture and Collapse Test](#)

[5.11 Freeze Resistance Test](#)

[5.16 Rain Penetration Test](#)

[5.17 Mechanical Load Test](#)

Section 6.2 Pressure Test Results: Former Section 6.3 was changed from specifying the requirements within this standard to requiring testing in accordance with Section 6.4 of ISO 9806.

The following section was added:

[6.6 Photovoltaic - Thermal Collectors](#)

[When a photovoltaic module is incorporated into the solar collector, the photovoltaic module shall be certified to UL 1703.](#)