

**IAPMO/ANSI S1001.1-2013**

**Design and Installation  
of Solar Water Heating  
Systems**



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# Preface

This is the first edition of IAPMO/ANSI S1001.1, *Design and Installation of Solar Water Heating Systems*. The Florida Solar Energy Center Standard FSEC Standard 104-10 was used in the development of this Standard.

This Standard was developed by the IAPMO S1001 Technical Subcommittee and approved by the IAPMO Solar Standards Committee in accordance with the *ANSI Essential Requirements: Due process requirements for American National Standards and IAPMO Policies and Procedures for Consensus Development of American National Standards*. This Standard was approved as an American National Standard on November 26, 2013.

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- (2) *This standard was developed in accordance with the IAPMO procedures accredited as meeting the criteria for American National Standards and it is an American National Standard. The IAPMO Standards Committee that approved this Standard was balanced to assure that individuals from competent and concerned interests had an opportunity to participate. During its development, this Standard was made available for public review, thus providing an opportunity for additional input from industry, academia, regulatory agencies, and the public at large.*
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*and*
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# *IAPMO S1001.1-2013*

## *Design and Installation of Solar Water Heating Systems*

### **1 Scope**

#### **1.1**

This Standard specifies requirements for the design and installation of pre-engineered solar water heating systems intended to be installed as stand-alone systems or in conjunction with auxiliary water heaters, including component selection and sizing criteria.

#### **1.2**

This Standard does not cover

- (a) existing water heating equipment;
- (b) systems engineered for discrete or site-specific applications;
- (c) performance and durability testing of collectors or solar water heating system components; and
- (d) design and installation of solar photovoltaic systems.

#### **1.3**

The requirements of this Standard are not intended to prevent the use of alternative materials or methods of construction, provided such alternatives meet the intent and requirements of this Standard.

#### **1.4**

In this Standard,

- (a) “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy to comply with the standard;
- (b) “should” is used to express a recommendation but not a requirement;
- (c) “may” is used to express an option or something permissible within the scope of the standard; and
- (d) “can” is used to express either a possibility or a capability.

Notes accompanying sections of the Standard do not specify requirements or alternative requirements; their purpose is to separate explanatory or informative material from the text. Notes to tables and figures are considered part of the table or figure and can be written as requirements.

#### **1.5**

SI units are the primary units of record in global commerce. In this Standard, the inch/pound units are shown in parentheses. The values stated in each measurement system are equivalent in application but each unit system is to be used independently. Combining values from the two measurement systems can result in non-conformance with this Standard.