



*NSF International Standard /  
American National Standard*

## NSF/ANSI 5 - 2016

Water Heaters, Hot Water Supply  
Boilers, and Heat Recovery Equipment



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NSF International Standard/  
American National Standard  
for Food Equipment –

**Water heaters, hot water  
supply boilers, and heat  
recovery equipment**

Standard Developer

**NSF International**

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## Foreword<sup>2</sup>

The purpose of this Standard is to establish minimum food protection and sanitation requirements for the materials, design, construction, and performance of water heaters, hot water supply boilers, and heat recovery equipment.

This edition of the Standard contains numerous editorial and format changes intended to promote uniform interpretation of the Standard. Many changes reflect an effort to achieve consistency with other NSF Food Equipment Standards. The style and format of this Standard have been modified for consistency with the guidelines published by the American National Standards Institute.

This edition of the Standard contains the following revision:

### Issue 6:

This revision eliminated redundancy and potential conflicts with the U.S. Department of Energy (DOE) Rules and Regulations and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHAE) requirements.

This Standard was developed by the NSF Joint Committee on Food Equipment using the consensus process described by the American National Standards Institute.

Suggestions for improvement of this Standard are welcome. Comments should be sent to Chair, Joint Committee on Food Equipment at [standards@nsf.org](mailto:standards@nsf.org), or c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan, 48113-0140.

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## NSF/ANSI Standard for Food Equipment –

# Water heaters, hot water supply boilers, and heat recovery equipment

## 1 General

### 1.1 Purpose

This Standard establishes minimum public health and sanitation requirements for the materials, design, construction, and performance of commercial water heaters, hot water supply boilers, and heat recovery equipment. This Standard does not contain safety requirements.

### 1.2 Scope

This Standard contains requirements for heat recovery equipment and equipment intended to provide hot water heated by electricity, gas, steam, or oil. The types of equipment covered by this Standard include, but are not limited to: automatic storage water heaters, circulating water heaters, hot water supply boilers, and steam heat exchangers. Instantaneous water heaters used to heat water other than for beverages are covered under this Standard. Boilers used for space heating are not covered under this Standard.

Materials and components covered under other NSF or ANSI Standards or Criteria shall also comply with the requirements therein. This Standard is not intended to restrict new design, provided that such design meets the minimum specifications described herein.

### 1.3 Alternate materials, design, and construction

While specific materials, design, and construction may be stipulated in this Standard, equipment that incorporates alternative materials, design, and construction may be acceptable when such equipment meets the intent of applicable requirements herein.

### 1.4 Measurement

Decimal and SI conversions provided parenthetically shall be considered equivalent. Metric conversions and significant figure rounding have been made according to IEEE/ASTM SI 10.

## 2 Normative references

The following documents contain provisions that, through reference, constitute provisions of this NSF/ANSI Standard. At the time this Standard was balloted, the editions listed below were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the most recent edition of the documents indicated below. The most recent published edition of the document shall be used for undated references.