



*NSF International Standard /  
American National Standard*

## **NSF/ANSI 5 - 2019**

**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  
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## Contents

1	General	1
1.1	Purpose	1
1.2	Scope	1
1.3	Alternate materials, design, and construction	1
1.4	Measurement	1
2	Normative references	1
3	Definitions	2
4	Materials	2
4.1	Conformance with NSF/ANSI 51	2
4.2	External surfaces	2
4.3	Intermediate transfer media	2
5	Design and construction	2
5.1	General sanitation	2
5.2	Equipment mounting	3
5.3	Legs and feet	3
5.4	Temperature regulators	3
5.5	Recirculation systems	3
5.6	Backflow and cross-connection protection	3
5.7	Louvers	4
6	Performance	4
6.1	Temperature regulation	4
7	Product literature	5
8	Installation, operation, and maintenance instructions	5
	Informative Annex 1 Installation recommendations	7
I-1.1	General	7
I-1.2	Qualifications of installer	7
I-1.3	Location and piping	7
I-1.4	Water piping materials	7
I-1.5	Water supply lines	8
I-1.6	Water supply pressure control	8
I-1.7	Dual heater installations	8
I-1.8	Booster pumps	8
I-1.9	Safety measures	8
I-1.10	General purpose water	8
I-1.11	Recirculation by gravity	9
I-1.12	Recirculation by pump	9
I-1.13	Insulation	9
I-1.14	Testing	9
	Informative Annex 2 Technical information	11
I-2.1	Sizing water heaters for dishwashing machines	11
I-2.2	Storage type water heaters	12
	Informative Annex 3 Food Equipment Joint Committee	15

## 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 the following revisions:

### Issue 8

This revision removes the NOTE from Section 5.2.2 that was deemed unnecessary.

### Issue 9

This revision moves the normative language from a NOTE (which is informative) to the body of the paragraph in Section 7.

### Issue 10

This revision updates the year on the American National Standard for Metric Practice reference for IEEE/ASTM SI 10 from 2010 to 2016.

This revision also includes an editorial update to the names of the Annexes within. The Annexes are being changed from alpha characters to numeric, preceded by a 'Normative' or 'Informative'. The table below shows the previous name of the Annex with the corresponding new name of the Annex:

<b>Annexes</b>	
<b>Previously known as:</b>	<b>Now known as:</b>
Annex A	Informative Annex 1 (I-1)
Annex B	Informative Annex 2 (I-2)

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. This Standard is maintained on a Continuous Maintenance schedule and can be opened for comment at any time. 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, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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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 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.