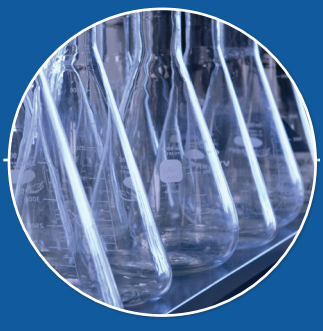
NSF International Standard /
American National Standard

NSF/ANSI 4 - 2016

Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment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NSF International Standard/
American National Standard
for Food Equipment —

Commercial cooking, rethermalization, and powered hot food holding and transport equipment

Standard Developer

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Contents

Foreword[2]

The purpose of this Standard is to establish minimum food protection and sanitation requirements for the materials, design, construction and performance of commercial cooking, rethermalization, and powered hot food holding and transport equipment.

This Standard uses inch-pound units as the primary units with SI (metric) units provided in parentheses for informational purposes. The Joint Committee carried a motion that this convention be adopted in future revisions to this Standard. The SI units provided in parentheses generally represent a hard conversion of the inch-pound units, meaning that the SI value may have been rounded to provide a reasonable and measurable dimension.

This version of NSF/ANSI 4 – 2016 includes the following revisions:

Issue 18:

This issue added new language for Sections 5 and 8 regarding floorless heating compartments. In addition, this ballot proposes the addition of informative Annex D, *Flooring Recommendations for Proofers and Ovens Constructed Without Floors*.

Issue 23:

Section 4.6, regarding Beverage equipment was removed as it is now superseded by the requirement in NSF/ANSI 51 – 2014

Issue 24:

Language was added to the test method in sections 6.2.2.1 and 6.7.2.1 covering open top hot food holding equipment and open heated merchandisers.

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, or c/o NSF International, Standards Department, P.O. Box 130140, Ann Arbor, Michigan, 48113-0140, USA.

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NSF/ANSI International Standard
for Food Equipment —

Commercial cooking, rethermalization, and powered hot food holding and transport equipment

1 General

1.1 Purpose

This Standard establishes minimum food protection and sanitation requirements for the materials, design, construction, and performance of commercial cooking, rethermalization, and hot food holding and transport equipment and their related components. This Standard does not contain safety requirements.

1.2 Scope

Equipment covered by this Standard includes, but is not limited to, ranges, ovens, fat/oil fryers, fat/oil filters, griddles, tilting griddle skillets, broilers, steam and pressure cookers, kettles, rotisseries, toasters, coffee makers and other hot beverage makers, component water heating equipment, proofing boxes and cabinets, hot food holding equipment, rethermalization equipment, and hot food transport cabinets.

Section 7 of this Standard pertains to food handling and processing equipment that has been designed and manufactured for special use purposes. Food equipment designed and manufactured with a security package is utilized in environments such as correctional facilities, mental health facilities, or some schools. For these environments, where both sanitation and security are concerns, 7 contains exceptions to this Standard that shall only be applicable to the splash and non-food zones of food equipment provided with a security package.

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

1.3 Alternative materials, design, and construction

While specific materials, design, and construction may be stipulated in this Standard, equipment that incorporates alternate materials, design, or construction may be acceptable when such equipment meets the intent of the 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 recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

40 CFR § 180.940, *Tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (Food-Contact Surface Sanitizing Solutions)* [3]

ANSI Z97.1 – 2009, *Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test* [4]

ANSI/ASSE 1001 – 2008, *Atmospheric Type Vacuum Breakers* [5]

ANSI/ASSE 1020 – 2004, *Pressure Vacuum Breaker Assembly*[4]

ANSI/ASSE 1022 – 2003, *Backflow Preventer for Beverage Dispensing Equipment*[4]

ANSI/ASSE 1024 – 2004, *Dual Check Backflow Preventers* [4]

ANSI/UL 197 – 2004, *Standard for Commercial Electric Cooking Appliances*[6]

APHA, *Standard Methods for the Examination of Water and Wastewater*, 21st edition[7]

ASSE 1032 – 2004, *Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers – Post Mix Type* [4]

BS857:1967, *Specification for safety glass for land transport*[8]

IAPMO – *Uniform Plumbing Code* 2009[9]

ICC – *International Plumbing Code* 2009[10]

IEEE/ASTM SI 10 – 2010, *American National Standard for Metric Practice*[11]

NSF/ANSI 18, *Manual food and beverage dispensing equipment*

NSF/ANSI 51, *Food equipment materials*

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[3] U. S. Government Printing Office, Washington, DC 20402 www.gpo.gov

[4] American National Standards Institute, 25 West 43rd Street, New York, NY 10036 www.ansi.org

[5] ASSE International Office, 901 Canterbury, Suite A, Westlake, OH 44145 www.asse.org

[6] Underwriters Laboratories, 333 Pfingsten Road, Northbrook, IL 60062 www.ul.com

[7] American Public Health Association, 800 I Street NW, Washington, DC 20001 www.apha.org

[8] British Standard, 389 Chiswick High Road, London W4 4AL United Kingdom www.bsi-global.com

[9] International Association of Plumbing and Mechanical Officials (IAPMO), 5001 E. Philadelphia St., Ontario, CA 91761 www.iapmo.org

[10] International Code Council (ICC), 5203 Leesburg Pike, Suite 600; Falls Church, VA 22041 www.iccsafe.org

[11] ASTM International, 100 Barr Harbor Dr., West Conshohocken, PA 19428 www.astm.org