

This is a preview of "NSF/ANSI 25-2009". [Click here to purchase the full version from the ANSI store.](#)



*NSF International Standard /
American National Standard*

NSF/ANSI 25 - 2009

Vending Machines for
Food and Beverages



NSF International, an independent, not-for-profit, non-governmental organization, is dedicated to being the leading global provider of public health and safety-based risk management solutions while serving the interests of all stakeholders.

This Standard is subject to revision.
Contact NSF to confirm this revision is current.

Users of this Standard may request clarifications and interpretations, or propose revisions by contacting:

Chair, Joint Committee on Food Equipment
NSF International
789 North Dixboro Road, P.O. Box 130140
Ann Arbor, Michigan 48113-0140 USA
Phone: (734) 769-8010 Telex: 753215 NSF INTL
FAX: (734) 769-0109
E-mail: info@nsf.org
Web: <http://www.nsf.org>

NSF/ANSI 25 – 2009

NSF International Standard/
American National Standard
for Food Equipment –

Vending machines for food and beverages

Standard Developer

NSF International

NSF International

Designated as an ANSI Standard

April 22, 2009

American National Standards Institute

Prepared by
The NSF Joint Committee on Food Equipment

Recommended for Adoption by
The NSF Council of Public Health Consultants

Adopted by
The NSF Board of Directors
August 1968

Revised July 1971
Revised December 1980
Revised November 1987
Revised November 1990
Revised July 1997
Revised July 2000
Revised September 2002
Revised September 2005
Revised April 2007
Revised April 2009

Published by

NSF International
P. O. Box 130140, Ann Arbor, Michigan 48113-0140, USA

For ordering copies or for making inquiries with regard to this Standard, please reference the designation "NSF/ANSI 25 – 2009."

Copyright 2009 NSF International
Previous editions © 2007, 2005, 2002, 2000, 1997, 1990, 1987, 1980, 1971, 1968

Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from NSF International.

Printed in the United States of America.

Disclaimers¹

NSF, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of NSF represent its professional judgment. NSF shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. NSF shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

NSF Standards provide basic criteria to promote sanitation and protection of the public health. Provisions for mechanical and electrical safety have not been included in this Standard because governmental agencies or other national standards-setting organizations provide these requirements.

This Standard was revised to include the relocation of all definitions from section 3 to NSF/ANSI 170 – *Glossary of food equipment terminology*. Many editorial changes were made to clarify requirements and to achieve consistency with the “boilerplate” language in the NSF food equipment standards. Normative references were also updated.

Participation in NSF Standards development activities by regulatory agency representatives (federal, local, state) shall not constitute their agency’s endorsement of NSF or any of its Standards.

Preference is given to the use of performance criteria measurable by examination or testing in NSF Standards development when such performance criteria may reasonably be used in lieu of design, materials, or construction criteria.

The illustrations, if provided, are intended to assist in understanding their adjacent standard requirements. However, the illustrations may not include **all** requirements for a specific product or unit, nor do they show the only method of fabricating such arrangements. Such partial drawings shall not be used to justify improper or incomplete design and construction.

Unless otherwise referenced, the annexes are not considered an integral part of NSF Standards. The annexes are provided as general guidelines to the manufacturer, regulatory agency, user, or certifying organization.

¹ The information contained in this Disclaimer is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI’s requirements for an ANS. Therefore, this Disclaimer may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

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 to NSF/ANSI 51	3
4.2	Zone-specific materials requirements	3
5	Design and construction	3
5.1	General sanitation	3
5.2	Internal angles and corners	4
5.3	External angles and corners	4
5.4	Fasteners	4
5.5	Joint and seams	4
5.6	Reinforcing and framing	5
5.7	Inspection and maintenance panels	5
5.8	Cabinet doors	5
5.9	Door tracks and guides	5
5.10	Openings to food zones	5
5.11	Covers	5
5.12	Hinges	6
5.13	Door gaskets	6
5.14	Shelving	7
5.15	Entry ports	7
5.16	Ventilation openings	7
5.17	Louvers and flaps	7
5.18	Service connection openings and other openings through the exterior wall	7
5.19	Equipment mounting	8
5.20	Legs and feet	9
5.21	Casters, rollers and gliders	9
5.22	Temperature control	9
5.23	Temperature-indicating devices	9
5.24	Refrigeration components	10
5.25	Opening devices	10
5.26	Vending stage openings	10
5.27	Storage compartments for single service articles	11
5.28	Water supply	11
5.29	Plumbing connections	11
5.30	Backflow prevention on carbonated beverage vending machines	12
5.31	Water filters	12
5.32	Ice making equipment	12
5.33	Drains, drain pans and outlets	12
5.34	Waste containers and controls	12

6	Performance	13
6.1	Cleaning and sanitizing procedures	13
6.2	Temperature performance.....	14
6.3	Temperature recovery (open door test).....	15
6.4	Automatic cut-off controls (abnormal operations test).....	17
Annex A	A1
A.1	Summary	A1
A.2	Equipment	A1
A.3	Microorganism.....	A1
A.4	Supplies.....	A1
A.5	Reagents	A1
A.6	Safety precautions and hazards.....	A2
A.7	Growth medium	A2
A.8	Culture of <i>E. coli</i>	A3

Foreword²

The purpose of this Standard is to establish minimum food protection and sanitation requirements for the materials, design, construction, and performance of dispensing freezers and related components.

Issue 8 – Boilerplate Revisions

This Standard was revised to update the normative references and figures where applicable and achieve consistency with the “boilerplate” language in the NSF food equipment standards in heading of Section 5, Joints and seams (5.5), Openings into Food Zones (5.10), Equipment mounting (5.19.2), and Temperature Indicating Devices (5.23).

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, c/o NSF International, Standards Department, 789 N. Dixboro Road, Ann Arbor, Michigan 48105, USA.

² The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this Foreword may contain material that has not been subjected to public review of a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

NSF/ANSI Standard
for Food Equipment –

Vending machines for food and beverages

1 General

1.1 Purpose

This Standard establishes minimum food protection and sanitation requirements for the materials, design, construction, and performance of vending machines for food and beverages and their related components.

1.2 Scope

This Standard contains requirements for food and beverage vending machines, including those that vend packaged food and beverages and those that vend food and beverages in bulk.

Vending machine materials and components covered under other NSF or NSF/ANSI Standards or Criteria shall also conform to 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, vending machines that incorporate alternate materials, design, and construction may be acceptable when such equipment meets the applicable requirements herein.

1.4 Measurement

Decimal and SI conversions provided parenthetically shall be considered equivalent. Metric conversions 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.

ANSI/ASSE 1001– 2002. *Performance Requirements for Atmospheric Type Vacuum Breakers*³

ANSI/ASSE 1020 – 2004. *Performance Requirements for Pressure Vacuum Breaker Assembly*³

³ ASSE International Office, 901 Canterbury, Suite A, Westlake, OH 44145 www.ansi.org