

NSF/ANSI 37 – 2007

# **Air curtains for entranceways in food and food service establishments**

---

**NSF International Standard/  
American National Standard**

NSF/ANSI 37 – 2007



*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  
c/o 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](mailto:info@nsf.org)  
Web: <http://www.nsf.org>

NSF/ANSI 37 –2007

NSF International Standard/  
American National Standard  
for Food Equipment –

## **Air curtains for entranceways in food and food service establishments**

Standard Developer  
**NSF International**

Adopted April 3, 2007  
**NSF International**

**Designated as an ANS Standard**  
April 3, 2007  
**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**  
**July 1970**

Reaffirmed July 1980  
Reaffirmed July 1985  
Revised November 1992  
Revised March 2002  
Revised July 2005  
Revised April 2007

Published by

**NSF International**  
**PO 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 37 – 2007."

Copyright 2007 NSF International  
Previous editions © 2005, 2002, 1992, 1985, 1980, 1970

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.

## Disclaimers<sup>1</sup>

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 safety requirements.

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.

---

<sup>1</sup> 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.

## Contents

Foreword .....	vi
1 General .....	1
1.1 Purpose .....	1
1.2 Scope .....	1
1.3 Alternative materials, design, and construction .....	1
1.4 Measurement .....	1
2 Normative references .....	1
3 Definitions .....	2
4 Materials .....	2
4.1 Corrosion resistance .....	2
4.2 Smoothness and cleanability .....	2
4.3 Coatings .....	2
4.4 Gaskets .....	2
5 Design and construction .....	2
5.1 General design and construction requirements .....	2
5.2 Specific equipment design and construction .....	4
6 Performance .....	4
6.1 Service window air curtains .....	4
6.2 Customer entry air curtains .....	5
6.3 Service entry air curtains .....	6
6.4 Automatic activation air curtain test .....	7
7 Labeling .....	7
Annex A .....	A1

## Foreword<sup>2</sup>

The purpose of this Standard is to establish minimum public health and sanitation requirements for the materials, design, construction, and performance of air curtains for entranceways in food and food service establishments.

This Standard uses inch-pound units as the primary units with equivalent decimal and SI (metric) conversions provided in parentheses. The Joint Committee carried a motion that this convention be adopted in future revisions to this Standard.

This Standard was revised to update the normative references.

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

---

<sup>2</sup> 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 or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

This page is intentionally left blank.

## NSF/ANSI International Standard for Food Equipment —

# Air curtains for entranceways in food and food service establishments

## 1 General

### 1.1 Purpose

This Standard establishes minimum sanitation and performance requirements for the materials, design, construction, and performance of air curtains and their related components.

### 1.2 Scope

Equipment covered by this Standard includes, but is not limited to, air curtains for entranceways in food and food service establishments (e. g., service and customer entries, service windows, cooler and cold storage entries). Housing, air moving equipment, air directional regulating devices, and other appurtenances to the air curtain are included.

This Standard does not establish equipment installation requirements. While the requirements of this Standard are intended to ensure that equipment may be installed in a sanitary manner, proper installation of equipment shall be governed by the applicable codes.

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 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.