

Automatic ice making equipment

**NSF International Standard/
American National Standard**

NSF/ANSI 12 – 2003



NSF International, an independent, not-for-profit, non-governmental organization, is dedicated to being the leading global supplier of public health and safety-based risk management services 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:

Chairperson, 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
Web: <http://www.nsf.org>

NSF International Standard/
American National Standard
for Food Equipment —

Automatic ice making equipment

Standard Developer

NSF International

Adopted July 3, 2003

NSF International

Designated as an ANSI Standard

July 3, 2003

American National Standards Institute

i

Prepared by
The NSF Joint Committee on Food Equipment

Recommended for Adoption by
The NSF Council of Public Health Consultants

Adopted by
NSF International
June 1964

Revised July 1972
Revised November 1977
Revised November 1984
Revised November 1992
Revised March 2003

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 12-2003."

Copyright 2003, 1992, 1984, 1977, 1972, 1964 NSF International

All rights reserved.

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 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.

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. As such, 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 blank.

Contents

Foreword	vii
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 ANSI/NSF 51	2
4.2 Solder	2
5 Design and construction	3
5.1 General sanitation	3
5.2 Internal angles and corners, food zone	3
5.3 External corners and angles	4
5.4 Joints and seams	4
5.5 Fasteners	4
5.6 Insulation	5
5.7 Reinforcing and framing	5
5.8 Inspection and maintenance panels	5
5.9 Doors	5
5.10 Door tracks and guides	5
5.11 Handles and pulls	5
5.12 Hinges	6
5.13 Covers	6
5.14 Edges and nosings	6
5.15 Openings to food zones	7
5.16 Louvers	7
5.17 Entry ports	7
5.18 Gaskets	7
5.19 Breaker strips	7
5.20 Equipment mounting	7
5.21 Legs and feet	8
5.22 Veneers	8
5.23 Casters, rollers, and gliders	8
5.24 Protection of breakable fixtures	8
5.25 Refrigeration coils and tubing	9
5.26 Drains	9
5.27 Ice pans and bins	9
5.28 Backflow prevention	9
5.29 Dispensing actuation mechanisms	10
5.30 Instruction plate	10
5.31 Equipment labeling	10
6 Performance – Cleaning and sanitization procedures	10
6.1 Performance requirement	10
6.2 Test method	11
6.3 Acceptance criteria	12
7 Installation, operation, and maintenance instructions	12

This page is intentionally blank.