

Commercial refrigerators and freezers

**American National Standard/
NSF International Standard**

Requirements for Food Store Refrigeration
were developed in collaboration with the
Commercial Refrigerator Manufacturers Association



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American National Standard/
NSF International Standard
for Food Equipment —

**Commercial refrigerators
and freezers**

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Foreword²

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

In this revision, the Standard has been restructured. Sections 1 – 5 include minimum requirements that apply to all refrigerators and freezers. The minimum requirements for specific types of refrigerators and freezers have been divided into five sections: section 6, Storage refrigerators and freezers and refrigerated food transport carts; section 7, Refrigerated buffet units and refrigerated food preparation units; section 8, Prefabricated walk-in and roll-in refrigerators and freezers; section 9, Display Refrigerators and Freezers; and section 10, Rapid pull down refrigerator and freezers. This Standard has been revised to include editorial changes to clarify requirements, achieve consistency with the “boilerplate” language in the NSF food equipment standards, and 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.

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The Commercial Refrigerator Manufacturers Association (CRMA) was founded in 1933 as a national trade association dedicated to advancing the common interests of the commercial refrigeration industry. In April 2000, CRMA merged with the Air Conditioning Refrigeration Institute (ARI) to form the Commercial Refrigerator Manufacturers Division/Air Conditioning Refrigeration Institute. CRMD/ARI continues to target three primary objectives:

- to showcase technical and business information to help solve common problems and promote growth in industry.
- to represent the collective voice of the industry with any government organization addressing policies or issues affecting the industry.
- to support high voluntary standards for quality in equipment design and performance.

CRMD/ARI is a not-for-profit corporation of leading businesses meeting international demands for increasingly specialized and efficient refrigeration equipment. CRMD/ARI members serve a wide range of markets, including supermarkets, food stores, convenience stores, restaurants, hotels, motels, food processing establishments, and hospitals.

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ANSI/NSF International Standard for Food Equipment —

Commercial refrigerators and freezers

Commercial refrigerators and freezers

1 General

1.1 Purpose

This Standard establishes minimum food protection and sanitation requirements for the materials, design, manufacture, construction, and performance of commercial refrigerators and freezers and their related components.

1.2 Scope

This Standard contains requirements for refrigerators and freezers used to store and/or display cold food. The types of refrigerators and freezers covered by this Standard include, but are not limited to: storage refrigerators (e. g., reach-in, under counter, walk-in, roll-in); storage freezers (e. g., reach-in, under counter, walk-in, roll-in); rapid pull-down refrigerators and freezers; refrigerated food transport cabinets; refrigerated buffet units; refrigerated food preparation units; display refrigerators; beverage coolers; and ice cream cabinets.

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.

Refrigerator and freezer components and materials 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 unit 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 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 sub-