ADDENDA

ANSI/ASHRAE Addendum b to
ANSI/ASHRAE Standard 15-2016

Safety Standard for Refrigeration Systems

Approved by the ASHRAE Standards Committee on June 23, 2017; by the ASHRAE Tech Council on June 28, 2017; and by the American National Standards Institute on June 29, 2017.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE website (www.ashrae.org) or in paper form from the Senior Manager of Standards.

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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

The Senior Manager of Standards of ASHRAE should be contacted for

a. interpretation of the contents of this Standard,
b. participation in the next review of the Standard,
c. offering constructive criticism for improving the Standard, or
d. permission to reprint portions of the Standard.

(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

Addendum b makes several relatively small changes to the standard.

- *Removes a restriction on higher-flammability refrigerants where used in small, portable-unit systems. The use of higher-flammability refrigerants is restricted only by the total refrigerant charge in the self-contained system (limited to 0.331 lb [150 g] of Group A3 refrigerants).*
- *Defines "low-probability pumps" and provides requirements pertaining to their use. Recognition of low-probability pumps acknowledges the superior leak resistance of these pumps and encourages their use to increase safety. The approach is modeled after current allowances for low-probability systems. Because low-probability systems are inherently more resistant to atmospheric releases than high-probability systems, Standard 15 permits more widespread use of low-probability systems. With respect to pumps, experience has shown that pump leaks are typically associated with failed seals on rotating (dynamic) parts, which can result in events ranging from a simple nuisance release to a hazardous condition requiring an emergency response. This addendum encourages the use of liquid pumps that are hermetically sealed or similar in lieu of pumps that rely on dynamic seals to contain refrigerant. This change is consistent with the 2018 IMC (changes proposed) and with IIAR 2.*
- *Eliminates a requirement for industrial occupancies and refrigerated rooms pertaining to floor area per occupant While the requirement has been in place for some time, upon re-examination by the committee, there is no logical reason for this section to establish a maximum occupancy limit based on providing a minimum floor area per occupant simply because someone is in a refrigerated area. This change is consistent with the 2018 IMC (changes proposed) and IIAR 2.*

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) unless the instructions specifi-

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Modify Section 3 as shown.

low-probability pump: a pump that (a) is permanently sealed to prevent atmospheric release of the pumped fluid, (b) incorporates a static seal to prevent atmospheric release of the pumped fluid, or (c) incorporates not less than two sequential dynamic shaft seals and automatically shuts down upon failure of any seal to prevent atmospheric release of the pumped fluid.

Modify Section 7 as shown.

7. RESTRICTIONS ON REFRIGERANT USE

[. . .]

7.2.2 Industrial Occupancies and Refrigerated Rooms.

[. . .]

~~c. The floor area per occupant is not less than 100 ft2 (9.3 m2).~~

~~**Exception:** The minimum floor area shall not apply where the space is provided with egress directly to the outdoors or into approved building exits.~~

[. . .]

g. All refrigerant-containing parts in systems exceeding 100 hp (74.6 kW) compressor drive power, except evaporators used for refrigeration or dehumidification, condensers used for heating, control and pressure-relief valves for either, low-probability pumps, and connecting piping, are located either in a machinery room or outdoors.

[. . .]

7.5.3 Higher-Flammability Refrigerants. Group A3 and B3 refrigerants shall not be used except where approved by the AHJ.

Exceptions:

1. This restriction does not apply to laboratories with more than 100 ft^2 (9.3 m^2) of space per person.
2. This restriction does not apply to industrial occupancies.
3. This restriction does not apply to listed ~~portable unit~~ self-contained systems containing no more than 0.331 lb (150 g) of Group A3 refrigerant, provided that the equipment is installed in accordance with the listing and the manufacturer's installation instructions.

[. . .]

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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