ADDENDA

ANSI/ASHRAE Addendum z to
ANSI/ASHRAE Standard 15-2024

Safety Standard for Refrigeration Systems

Approved by ASHRAE and the American National Standards Institute on October 31, 2025.

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. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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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 z better aligns the requirements on refrigerant charge limits and ventilation for Group A2L refrigerants in Sections 7.6 and 7.7.

Informative 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 specifically mention some other means of indicating the changes.

Addendum z to Standard 15-2024

Modify Section 7.7 as follows. The remainder of Section 7.7 remains unchanged.

7.7* High-Probability Commercial Refrigeration Systems Using Group A2L Refrigerants. *High-probability systems* using Group A2L *refrigerants* for commercial refrigeration applications within the scope of UL 60335-2-89 [7]/CSA C22.2 No. 60335-2-89 [8] *shall* comply with this section.

7.7.1 Refrigerant Charge Limits. *Refrigerant* charge *shall* be limited as follows:

a. Refrigeration systems containing a *releasable refrigerant charge* more than 0.141 × *LFL* (lb) (4 × *LFL* [kg]) in an *independent circuit shall not* be installed within 20 ft (6 m) of an open flame.

[. . .]

7.7.2 Refrigerant ~~Concentration~~ Quantity Limits

~~**7.7.2.1** *Occupied spaces shall* comply with Section 7.3.~~

~~**7.7.2.2** Non-*occupied spaces* with *refrigerant*-containing equipment, including but not limited to *piping* or tubing, *shall* comply with Section 7.3 except as permitted by Section 7.7.5.~~

7.7.2.1 Where a *high-probability* refrigeration system using Group A2L *refrigerants* has either *air circulation* initiated by a *refrigerant detector* in compliance with Section 7.6.2.4 or continuous *air circulation*, *EDVC* shall be calculated in accordance with Section 7.6.1.1. Control of continuous *air circulation shall* be performed by the *listed* equipment and *shall* operate continuously other than for short periods for maintenance and service.

7.7.2.2 For any *high-probability* refrigeration system not meeting the requirements of Section 7.7.2.1, *EDVC* shall be calculated in accordance with Section 7.3.1. The floor area used to calculate the value of *effective dispersal volume*, V_{eff}, used in Equations 7-3a and 7-3b *shall* be the smaller of 2691 ft^2 (250 m^2) or the actual floor area of the space into which *refrigerant* disperses.

7.7.2.3 Mechanical ventilation for *refrigerant* safety mitigation *shall* comply with section 7.6.4.

[. . .]

~~**7.7.5 Compressors and Pressure Vessels Located Indoors.** For refrigeration *compressors* and *pressure vessels* located in an indoor space that is accessible only during service and maintenance, it *shall* be permissible to exceed maximum *refrigerant* charge calculated in accordance with Section 7.3, provided a mechanical ventilation system is used to prevent exceeding the *RCL* and all of the following provisions are met:~~

~~a. The *releasable refrigerant charge* of the largest *independent circuit shall not* exceed 9.2 × *LFL* (lb) (260 × *LFL* [kg]). Releasable charges greater than 9.2 × *LFL* (lb) (260 × *LFL* [kg]) *shall* comply with the *machinery room* requirements of Section 8.11.~~

~~b. A mechanical ventilation system *shall* be provided that will mix air with leaked *refrigerant* and remove it from the space where the equipment is located. The space *shall* be provided with an exhaust fan. The exhaust fan *shall* remove air from the space where the equipment is located in accordance with Section 8.11.11.4.~~

~~c. The space and mechanical ventilation system is in compliance with Section 7.6.4(b) through (e) and Section 7.6.4(i).~~

~~d. Electric motors driving fans *shall not* be placed inside the exhaust *ducts*; fan rotating elements *shall* be nonferrous or nonsparking, or the casing *shall* consist of or be lined with such material.~~

[. . .]

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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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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