



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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Cognizant TCs: 10.1, Custom Engineered Refrigeration Systems, and 9.1, Large Building Air-Conditioning Systems

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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 ~~striking through~~ (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 60335-2-89⁷/CSA C22.2 No. 60335-2-89⁸ 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 $0.141 \times LFL$ (lb) ($4 \times LFL$ [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 $9.2 \times LFL$ (lb) ($260 \times LFL$ [kg]). Releasable charges greater than $9.2 \times LFL$ (lb) ($260 \times LFL$ [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.

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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.

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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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