



ADDENDA

**ANSI/ASHRAE Addendum c to
ANSI/ASHRAE Standard 15-2019**

Safety Standard for Refrigeration Systems

Approved by ASHRAE and the American National Standards Institute on September 1, 2020.

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 (<https://www.ashrae.org/continuous-maintenance>).

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ASHRAE Standing Standard Project Committee 15

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

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- c. offering constructive criticism for improving the Standard, or
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FOREWORD

Addendum c proposes changes to allow the use of equipment using small amounts of non-A1 refrigerants only if they are listed to appropriate product safety standards. The proposal is consistent with research findings and the published requirements of product safety standards such as UL 484 and UL 60335-2-40.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum c to Standard 15-2019

Modify Section 7 as follows. The remainder of Section 7 remains unchanged.

7. RESTRICTIONS ON REFRIGERANT USE

[...]

7.2 Refrigerant Concentration Limits

[...]

Exceptions to 7.2:

1. Listed equipment ~~in locations other than public corridors and lobbies~~ containing not more than 6.6 lb (3 kg) of *refrigerant*, regardless of its *refrigerant* safety classification, is exempt from Section 7.2, provided the equipment is installed in accordance with the listing and with the *manufacturer's* installation instructions.

7.5 Additional Restrictions

[...]

7.5.1.2 Corridors and Lobbies. ~~Refrigerating~~ Refrigeration systems installed in a public corridor or lobby shall comply with the following:

- a. Refrigeration systems shall be limited to *unit systems*.
- b. The refrigerant charge shall be limited based on the RCL, as specified in Section 7.2.
- c. Refrigeration systems containing Class 2L, 2, or 3 refrigerants shall be listed, and the refrigerant charge shall be limited for each unit system, calculated in accordance with the following equation:

$$m_{max} = 0.106 \times LFL \quad (I-P)$$

$$m_{max} = 3 \times LFL \quad (SI)$$

where

m_{max} ≡ maximum charge quantity, lb (kg)

LFL ≡ lower flammability limit per ASHRAE Standard 34, pounds per 1000 ft³ (kg per m³)

0.106 ≡ a constant with units of 1000 ft³

3 ≡ a constant with units of m³

~~containing not more than the quantities of Group A1 or B1 refrigerant indicated in ASHRAE Standard 34², Table 4-1 or 4.2.~~

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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