



ADDENDA

**ANSI/ASHRAE Addendum r to
ANSI/ASHRAE Standard 15-2022**

Safety Standard for Refrigeration Systems

Approved by ASHRAE and the American National Standards Institute on July 31, 2024.

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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ISSN 1041-2336



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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FOREWORD

ASHRAE RP-1807 investigated best practices for the handling, transportation, and storage of flammable refrigerants and the installation, servicing, and decommissioning of HVAC&R equipment containing flammable refrigerants. The investigators compared requirements in safety standards outside the U.S. (e.g., Japan and Europe) with those in the U.S. Based on their research, the authors identified gaps in safety standards in the U.S. and made recommendations to address these gaps. ASHRAE MTG.LowGWP tasked SSPC15 with reviewing the RP-1807 final report and revising ANSI/ASHRAE Standard 15 where appropriate. Addendum r makes changes to the standard based on RP-1807.

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 r to Standard 15-2022

Modify Section 3 as follows. The remainder of Section 3 remains unchanged.

3. DEFINITIONS

3.1 Defined Terms

[...]

container (refrigerant): a cylinder or drum used for the transportation or storage of refrigerant.

[...]

internal gross volume: the volume as determined from internal dimensions of the container or pressure vessel with no allowance for the volume of internal parts.

[...]

Modify Section 10 as follows. The remainder of Section 10 remains unchanged.

10. GENERAL REQUIREMENTS

10.1 Signs and Identification.

[...]

10.1.3 Each entrance to a refrigerating machinery room shall be provided with a legible permanent sign, securely attached and easily accessible, reading “Machinery Room—Authorized Personnel Only.” The sign shall further communicate that entry is forbidden except by those personnel trained in the emergency procedures required by Section ~~10.6~~ 10.5 when the refrigerant alarm, required by Section 8.9.5, has been activated.

[...]

10.2* Charging, Withdrawal, and Disposition of Refrigerants. No service *containers shall* be left connected to a system except while charging or withdrawing *refrigerant. Refrigerants* withdrawn from *refrigerating systems shall* be transferred to *approved containers* only. Except for discharge of *pressure relief devices* and *fusible plugs*, incidental releases due to leaks, purging of noncondensables, draining oil, and other routine operating or maintenance procedures, no *refrigerant shall* be discharged to the atmosphere or to locations such as a sewer, river, stream, or lake.

Exception to 10.2: Service containers in accordance with Section 9.7 shall be permitted to be permanently connected to the refrigeration system with piping in accordance with Section 9.12.

[...]

~~**10.3 Containers.** Containers used for refrigerants withdrawn from a refrigerating system shall be as prescribed in the pertinent regulations of the U.S. Department of Transportation and shall be carefully weighed each time they are used for this purpose, and containers shall not be filled in excess of the permissible filling weight.~~

~~10.4 Storing Refrigerant.~~

***10.3 Storing Refrigerant.**

[...]

~~**10.5 Maintenance.**~~

10.4 Maintenance.

~~**10.5.1 Stop Valves.**~~

10.4.1 Stop Valves.

[...]

~~**10.5.2 Calibration of Pressure Measuring Equipment.**~~

10.4.2 Calibration of Pressure Measuring Equipment.

[...]

~~**10.5.3 Periodic Tests.**~~

10.4.3 Periodic Tests.

[...]

~~**10.6 Responsibility for Operation and Emergency Shutdown.**~~

10.5 Responsibility for Operation and Emergency Shutdown.

[...]

Modify Informative Appendix A as follows. The remainder of Informative Appendix A remains unchanged.

[...]

Section 10.2

Containers used for transportation of refrigerants withdrawn from a refrigerating system during servicing should be as prescribed in the pertinent national regulations or regulations of the U.S. Department of Transportation where no other such national regulations exist⁶⁸. Containers should be weighed each time they are used for this purpose and should not be filled in excess of the permissible filling weight.

Section 10.3

Storage containers should be designed, fabricated, tested, and marked with the specifications of manufacture and maintained in accordance with either the ASME Boiler and Pressure Vessel Code¹⁵, Section VIII, or other pertinent national regulations. For example, in the United States, refer to U.S. DOT regulations at 49 CFR Parts 100–185⁶⁸.

[...]

Modify Informative Appendix B as follows. The remainder of Informative Appendix B remains unchanged.

[...]

68. U.S. DOT. 2022. Title 49 CFR 100–185, *Pipeline and Hazardous Materials Safety Administration, Department of Transportation*. Washington, D.C.: U.S. Government Publishing Office.

[...]

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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.

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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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