



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

**First Public Review Draft**

# **Proposed Addendum r to Standard 15-2022, Safety Standard for Refrigeration Systems**

**First Public Review (April 2024)  
(Draft shows Proposed Changes to Current Standard)**

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092

(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

*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 US (e.g., Japan and Europe) with those in the US. Based on their research, the authors identified gaps in safety standards in the US and made recommendations to address these gaps. ASHRAE MTG.lowGWP tasked SSPC15 with reviewing the final report of RP-1807 and revising ASHRAE Standard 15 where appropriate. This addendum proposes changes to the standard based on RP-1807.*

**Note:** This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed 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~~ 10.3 Storing Refrigerant.

[ ... ]

~~10.5~~ 10.4 Maintenance.

~~10.5.1~~ 10.4.1 Stop Valves.

[ ... ]

~~10.5.2~~ 10.4.2 Calibration of Pressure Measuring Equipment.

[ ... ]

~~10.5.3~~ 10.4.3 Periodic Tests.

[ ... ]

~~10.6~~ 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 exist<sup>68</sup>. 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 Code<sup>15</sup>, Section VIII, or other pertinent national regulations. For example, in the United States, refer to US DOT regulations at 49 CFR Parts 100–185<sup>68</sup>.

[ ... ]

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

[ ... ]

68. GPO. 2022. 49 CFR 100–185, Pipeline and Hazardous Materials Safety Administration, Department of Transportation. Washington, DC: U.S. Government Publishing Office.

[ ... ]