ADDENDA

ANSI/ASHRAE Addendum t to
ANSI/ASHRAE Standard 15-2022

Safety Standard for Refrigeration Systems

Approved by ASHRAE and by the American National Standards Institute on May 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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FOREWORD

Addendum t introduces the new concept of a "group controller" as an optional compliance path for mitigating the hazards of flammable refrigerants. The changes address situations where multiple refrigeration systems serve the same space, especially in critical applications where stopping operation of all refrigeration systems may cause significant disruption of operations within a building. Where meeting certain conditions, some refrigeration systems may be allowed to continue operation while others are stopped due to an event causing release of the refrigerant charge.

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 t to Standard 15-2022

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

3. DEFINITIONS

3.1 Defined Terms

[. . .]

group controller: an electrical or electronic control system that monitors and responds to distinct signals from two or more refrigeration systems.

[. . .]

safety shutoff valve (SSOV): an automatically controlled *refrigerant* valve for the purpose of limiting the amount of *refrigerant* released into a space when a *refrigerant* leak is detected.

[. . .]

3.2 Acronyms, Abbreviations, and Initialisms

[. . .]

SSOV *safety shutoff valve*

[. . .]

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

7. RESTRICTIONS ON REFRIGERANT USE

[. . .]

7.3.4.4 Release Mitigation Controls. Release mitigation controls used to limit the *releasable refrigerant charge (m_{rel}) shall* comply with the following:

a. Release mitigation systems *shall* […]

[. . .]

h. *Safety shutoff valves shall* be accessible to authorized personnel.

i. Where applied to standby or redundant refrigeration systems, *safety shutoff valves shall* be in the closed position for both standby mode and off mode.

[. . .]

7.6 Group A2L Refrigerants for Human Comfort.

Refer to Addendum e to Standard 15-2022 for changes to Section 7.6. The section title is revised to "High-Probability Air Conditioners, Heat Pumps, and Dehumidifiers Using Group A2L Refrigerants".

[. . .]

7.6.2.5* Mitigation Action Requirements. The following *mitigation actions shall* be completed in not more than 15 seconds after the initiation of the output signal of Section 7.6.2.4(g), and *shall* be maintained for at least 5 minutes after the output signal has reset:

a. Energize the *air circulation* fan(s) of the equipment per the *manufacturer*'s instructions.
b. Open zoning dampers, or set zone dampers to full airflow set point, that are installed in the *air ducts* connected to the *refrigeration system*.
c.* Activate mechanical ventilation if required by Section 7.6.4.
d. De-energize electric resistance heat installed in the *air duct* that is connected to the *refrigeration system*.
e.* Activate *safety shutoff valves* utilized to reduce *releasable refrigerant charge*.
f.* De-energize potential ignition sources, including open flames and unclassified electrical sources of ignition with apparent power rating greater than 1 kVA, where the apparent power is the product of the circuit voltage and current rating.

Where *SSOV*s have the ability to be automatically reset, it *shall not* be permissible for the *SSOV*s to be automatically reset until the *refrigerant detection system* has not detected a concentration of *refrigerant* above the set point of Section 7.6.2.4(a) for at least two (2) hours.

7.6.2.6* Group Controllers. Utilization of a *group controller* for multiple refrigeration systems serving the same space or *connected spaces shall* comply with the following:

a. The *refrigerant detection system* for each refrigeration system *shall* provide a signal to notify the *group controller* when *mitigation actions* of Section 7.6.2.5 are required.
b. Where a *group controller* determines that a signal is provided by one or more specific refrigeration systems, it *shall* be permissible for the *group controller* to require only those specific refrigeration systems activate or deactivate *mitigation actions* required by Section 7.6.2.5.
c. Where a *group controller* cannot determine the specific source of a signal, the *group controller shall* require all refrigeration systems serving the same space or *connected spaces* to activate *mitigation actions* in accordance with Section 7.6.2.5.
d. A *group controller shall not* deactivate *mitigation actions* where a *refrigerant detection system* outputs a signal to require *refrigerant detector* replacement.

[. . .]

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

INFORMATIVE APPENDIX A
EXPLANATORY MATERIAL

Sections of the standard with associated explanatory information in this appendix are marked with an asterisk "*" after the section number.

[. . .]

Section 7.6.2.6

The optional use of a *group controller* may permit one or more appliances or refrigeration systems serving a space or *connected spaces* to continue operation during a *refrigerant* release event from another appliance or refrigeration system. However, the minimum requirements for each of the applicable *mitigation actions* must still be met. The *refrigerant detection system* output signal or the *group controller* may also notify the user or operating personnel.

[. . .]

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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.

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