



**BSR/ASHRAE Addendum I  
to ANSI/ASHRAE Standard 15-2019**

**Third Public Review Draft**

**Proposed Addendum I to  
Standard 15-2019, Safety Standard  
for Refrigeration Systems**

**Third Public Review (May 2022)  
(Draft shows Proposed Independent Substantive  
Changes to Previous Public Review Draft)**

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(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

*This proposed addendum 1 to ANSI/ASHRAE Standard 15-2019 modifies portions of the document to incorporate requirements for commercial refrigeration applications with the use of A2L, A2, and A3 refrigerants. The text developed is in response to CMP 0004-001 based on information and requirements in conjunction with proposed product safety standard UL/CSA 60335-2-89, as well as research performed in collaboration of AHRI, ASHRAE, the U.S. Department of Energy, California Energy Commission.*

*The proposed change in this 3<sup>rd</sup> Publication Public Review (PPR) Independent Substantive Change (ISC) was inadvertently excluded from the 2<sup>nd</sup> PPR-ISC draft; this ISC draft makes changes to the text of the 1<sup>st</sup> Publication Public Review draft of this proposed addendum.*

**Note:** This public review draft of addendum 1 makes proposed independent substantiative changes to the previous public review draft. These substantive changes to the previous public review draft and related changes to Standard 15-2019 are indicated by blue-colored text with double-underlining (for additions) and red-colored text with ~~strikethrough~~ (for deletions), except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard shown in blue or red text 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 1 to Standard 15-2019

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

## 7. RESTRICTIONS ON REFRIGERANT USE

[ ... ]

**7.5.3 Higher-Flammability Refrigerants.** Group A3 and B3 refrigerants shall not be used except where approved by the AHJ.

### Exceptions to 7.5.3:

- ~~1. This restriction does not apply to laboratories with more than 100 ft<sup>2</sup> (9.3 m<sup>2</sup>) of space per person.~~
- ~~2. This restriction does not apply to industrial occupancies.~~
- ~~3. This restriction does not apply to listed self-contained systems containing no more than 0.331 lb (150 g) of Group A3 refrigerant, provided that the equipment is installed in accordance with the listing and the manufacturer's installation instructions.~~
- 1.4. This restriction does not apply to equipment listed to UL 60335-2-89/CSA C22.2 No. 60335-2-89 containing no more than  $0.459 \times LFL$  (lb), where  $LFL$  is in pounds per 1000 ft<sup>3</sup> ( $13 \times LFL$  [kg], where  $LFL$  is in kg/m<sup>3</sup>) of Group A3 refrigerant, provided that the equipment is installed in accordance with the listing and the manufacturer's installation instructions. Refrigeration systems containing more than  $0.141 \times LFL$  (lb) ( $4 \times LFL$  [kg]) in an independent circuit shall not be installed within 20 ft of an open flame.
- 2.5. This restriction does not apply to equipment listed to UL 60335-2-40/CSA C22.2 No. 60335-2-40 containing no more than  $0.106 \times LFL$  (lb) ( $3 \times LFL$  [kg]) of Group A3 refrigerant, provided that the equipment is installed in accordance with the listing and the manufacturer's installation instructions.
3. This restriction does not apply to refrigeration systems located in machinery rooms or outdoors.