

**INTERPRETATION IC 15-2022-7 OF  
ANSI/ASHRAE STANDARD 15-2022  
SAFETY STANDARD FOR REFRIGERATION SYSTEMS**

Date Approved: August 25, 2023

**Request from:** Harshad Inamdar, Rheem Manufacturing, 5600 Old Greenwood Road, Fort Smith, AR 72908.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 15-2022, Section 7.3.4.4, regarding release mitigation controls.

**Background:** Section 7.3.4.4.c states “A *refrigerant detector shall* be located either in all refrigeration equipment serving the spaces or in all spaces served by the release-mitigation-controlled circuit. The *refrigerant detector shall* activate the release mitigation controls and isolate all possible paths of *refrigerant* that can leak into the space(s).”

The usage of the term “spaces” and “space(s)” is unclear.

Since the standard always expects the reader to evaluate each refrigerating system independently, the first phrase referring to “all refrigeration equipment” is confusing.

**Interpretation No.1:** Let us assume a simple case of a multi-zone mini-split with 2 ductless indoor units serving two rooms (one ductless unit serving one room each), which are neither connected per Section 7.2.3.2, nor per Section 7.2.3.3, nor per 7.2.3.4.

The installer elects to install SSOVs in the piping connected to each indoor unit to reduce releasable charge in each room. The refrigerant detector installed in one room senses refrigerant concentration exceeding a set point per Section 7.6.2.4. A signal from that refrigerant detector must only activate the release mitigation controls to isolate that particular indoor unit.

The second indoor unit and associated piping does not require isolation in response to a refrigerant leak in the first room.

**Question No.1:** Is this Interpretation correct?

**Answer No.1:** Yes.

**Comments No.1:** None.

**Interpretation No.2:** Let us assume a simple case of a multi-zone mini-split with 2 ductless indoor units serving two rooms (one ductless unit serving one room each), which are neither connected per Section 7.2.3.2, nor per Section 7.2.3.3, nor per 7.2.3.4. The installer calculates refrigerant quantity limits in accordance with either Section 7.3 or Section 7.6 as applicable, and evaluates compliance with charge limits in accordance with Figures 7-1 and 7-2.

Case 2A: "...in all refrigeration equipment serving the spaces", where spaces is referred to in the plural, means a refrigerant detector must be located in each indoor unit if the evaluation shows that SSOVs are necessary to limit releasable charge in each room.

Case 2B: "...or in all spaces served by the release-mitigation-controlled circuit" means the installer can install a refrigerant detector only in the room served by that particular indoor unit if the evaluation shows that SSOVs are necessary to limit releasable charge in only that one room.

Either of the two cases above comply with Section 7.3.4.4.

**Question No.2:** Is this Interpretation correct?

**Answer No.2:** Yes

**Comments No.2:** None.