

**INTERPRETATION IC 15-2013-5 OF
ANSI/ASHRAE STANDARD 15-2013
SAFETY STANDARD FOR REFRIGERATION SYSTEMS**

Date Approved: March 20, 2018

Request from: Jerry Parle, The Wittern Group Inc. / Vending Machine Mfg., 8040 University Blvd., Clive, IA 50325.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 15-2013, Sections 7.5.1.2 and 7.5.3, regarding R290, an A3 refrigerant, in vending machines.

Background: There is an interest in the application of vending machines that use flammable A3 refrigerants, specifically R290. Vending machines are frequently located in lobbies and corridors of buildings. Vending machines are cord connected unit systems with a refrigerant charge that is typically less than 150 g.

ASHRAE 15 Requirements: **Section 7.5.3 Exception 3** permits the use of Group A3 refrigerants in listed self-contained systems containing no more than 150 g of refrigerant if installed in accordance with the listing and the manufacturer's instructions. **Section 7.5.1.2b** permits the installation of unit (self-contained) systems with a charge less than the values given in **Table 7.4**. **Table 7.4** contains the statement that unit systems are installed "In other than public hallways or lobbies" and gives charge limits based on occupancy classification.

Interpretation: **Section 7.5.3 Exception 3** permits the installation of vending machines containing not more than 150 g of A3 refrigerants when installed in accordance with the listing and the manufacturer's installation instructions. Self-contained systems that meet the requirements of this exception may be installed in corridors and lobbies, and without regard to the occupancy classification. Is this interpretation correct?

Answer: No.

Section 7.5.3 and Section 7.5.1.2 are contained in **Section 7.5 Additional Restrictions**. All provision of Section 7.5 must be satisfied as per Section 7.5.1. **Section 7.5.3 Exception 3** does not provide relief from the provisions of **Section 7.5.1.2 (Table 7.4)** regarding installation of equipment in corridors and lobbies.

Comments: This interpretation applies to the 2013 and the 2016 editions of the Standard 15 including all published addenda.

For more information, see also UL 541 regarding product listing requirements for vending machines that use flammable refrigerants.