



# ADDENDA

**ANSI/ASHRAE Addendum e to  
ANSI/ASHRAE Standard 147-2013**

# **Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems**

Approved by ASHRAE on March 26, 2018, and by the American National Standards Institute on March 27, 2018.

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. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE website ([www.ashrae.org](http://www.ashrae.org)) or in paper form from the Senior Manager of Standards.

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**Cognizant TC: 3.8, Refrigerant Containment**  
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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

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- b. participation in the next review of the Standard,
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## FOREWORD

*Addendum e requires the user and manufacturer to specify and use materials that will address the issue of known harsh, corrosive environments where the evaporator and/or condenser may be located.*

**Note:** In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

### Addendum e to Standard 147-2013

*Revise Section 4.4.1.1 as shown.*

#### **4.4.1 Air-to-Refrigerant Condensers and Evaporators.**

These components shall be designed for the ability to withstand stress, vibration, and corrosion under normal operation and during transport. Tubing supports shall be designed to minimize vibration, provide protection against abrasion due to movement, and allow for thermal expansion.

**4.4.1.1** The user or the user's designated agent shall specify select materials or options that will prevent corrosion failure in the installed environment. Equipment manufacturers are responsible for ensuring that any equipment that is marketed for a known corrosive environment, such as deli service cases or ripening rooms, offers options necessary to make said equipment suitable for the listed application by default.

#### **4.4.2 Liquid-to-Refrigerant Condensers and Evaporators**



## **POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES**

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.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

### **About ASHRAE**

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration, and sustainability. Through research, Standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

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