STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

May 2018

Log No. _____

1. State Building Code to be Amended:

- ☐ International Building Code
- ☐ ICC ANSI A117.1 Accessibility Code
- ☐ International Existing Building Code
- ☐ International Residential Code
- ☐ International Fire Code
- ☐ Uniform Plumbing Code
- ☒ International Mechanical Code
- ☐ International Fuel Gas Code
- ☐ NFPA 54 National Fuel Gas Code
- ☐ NFPA 58 Liquefied Petroleum Gas Code
- ☐ Wildland Urban Interface Code

For the Washington State Energy Code, please see specialized energy code forms

Section(s): **2021 IMC Sections 1109.2.5, 1109.3.2, 1109.4.2, and Chapter 15 Definitions**

Title: **Chapter 11 and ASHRAE 15**

2. Proponent Name (Specific local government, organization or individual):

Proponent: **Eric Vander Mey, PE**
Title: **Principal**
Date: **9/9/2025**

3. Designated Contact Person:

Name: **Eric Vander Mey**
Company: **Delta E Consulting**

Cell: **(206) 321-1677**
E-Mail: **ericv@deltaeconsulting.com**

4. **Proposed Code Amendment**. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code, additional pages may be attached.

   Clearly state if the proposal modifies an existing amendment or if a new amendment is needed. If the proposal modifies an **existing amendment**, show the modifications to the existing amendment by underlining all added language and striking through all deleted language. If a new amendment is needed, show the modifications to the **model code** by underlining all added language and striking through all deleted language.

   Code(s) **2021 International Mechanical Code (IMC)**
   Section(s) **1109.2.5, 1109.3.2, 1109.4.2, and Chapter 15 Definitions**

   Enforceable code language must be used.
   Amend section to read as follows:

Base language in black text is from 2021 WSMC Emergency Rule
See revisions proposed below with track changes in blue text

1109.2.5 Refrigerant pipe shafts. Refrigerant piping that penetrates ~~two or more~~ multiple floor/ceiling assemblies shall be permitted to be enclosed in a fire-resistance-rated shaft enclosure. The fire-resistance-rated shaft enclosure shall comply with Section 713 of the *International Building Code*. Refrigerant pipe shafts that are naturally or mechanically ventilated shall be constructed as exterior building envelope walls with thermal insulation and air barrier construction required by the *Washington State Energy Code*.

Exceptions:
1. *Refrigeration* systems using R-718 refrigerant (water).
2. Piping in a direct *refrigeration* system where the refrigerant quantity does not exceed the limits of Table 1103.1 for the smallest occupied space through which the piping passes.
3. Piping located on the exterior of the *building* where vented to the outdoors. Natural ventilation openings shall be distributed vertically along the enclosure to prevent containment of refrigerant piping leaks and be located a minimum of 3 feet (914 mm) from operable openings into the building. Mechanical ventilation of exterior enclosures to comply with Section 1109.3.2.
4. Continuous refrigerant pipe or tube, including joints and connections, that have been tested in accordance with the more stringent requirements of Section 1110.1 or ASHRAE 15 Section 9.13.

Commented [EV1]: Clarify code language to correlate to ASHRAE 15-2024 Addendum b. See attached for details.

Commented [EV2]: Add exception 4 based on ASHRAE 15-2024 Addendum a clarifications. See attached for details.

1109.3.2 Shaft ventilation. Refrigerant pipe installed within a fire-resistance-rated shaft~~s~~ enclosure with systems using Group A2L or B2L refrigerant shall be naturally or mechanically ventilated. The shaft natural ventilation discharge outlet and mechanical ventilation discharge exhaust outlet shall comply with Sections 501.3.1 and 1105.7. Naturally ventilated shafts shall have a pipe, duct or conduit not less than 4 inches (102 mm) in diameter that con- nects to the lowest point of the shaft and extends to the outdoors. The pipe, duct or conduit shall be level or pitched downward to the outdoors. A *makeup air* opening shall be provided at the top of the shaft. Mechanically ventilated shafts shall have a minimum airflow velocity in accordance with Table 1109.3.2. The mechanical ventilation shall be continuously operated or activated by a refrigerant detector. *Makeup air* shall be provided at the inlet to the shaft for mechanically ventilated shafts. Systems utilizing a refrigerant detector shall activate the mechanical ventilation at a maximum refrigerant concentration of 25 percent of the lower flammable limit of the refrigerant. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate.

Exceptions:
1. The shaft shall not be required to be ventilated for double-wall refrigerant pipe where the interstitial space of the double-wall pipe is vented to the outdoors.
2. For refrigeration systems complying with ASHRAE 15.2 used in residential occupancies serving only a single *dwelling unit* or *sleeping unit*, shaft ventilation shall not be required where the pipe or tube is continuous without fittings in the shaft.
3. The shaft shall not be required to be ventilated where all the refrigerant pipe or tube is continuous and has been in accordance with the more stringent requirements of Section 1110.1 or ASHRAE 15 Section 9.13.
4. The shaft shall not be ventilated for systems using only Group A2L and B2L refrigerants where there are no hot surfaces exceeding 1290°F (700°C) in the shaft and the pipe, tubes, joints, or connections have been tested in accordance with the more stringent requirements of Section 1110.1 or ASHRAE 15 Section 9.13.

Commented [EV3]: Modify code language to correlate to ASHRAE 15-2024 Addendum b. See attached for details.

Commented [EV4]: Add exceptions from ASHRAE 15-2024 Addendum b. See attached for details.

1109.4.2 Shaft ventilation. Refrigerant pipe installed within a fire-resistance-rated shaft~~s~~ enclosure with one or more systems using any Group A2, A3, B2 or B3 refrigerant shall be continuously mechanically ventilated and shall include a refrigerant detector. The shaft ventilation exhaust outlet shall comply with Sections 501.3.1 and 1105.7. Mechanically ventilated shafts shall have a minimum airflow velocity as specified in Table 1109.3.2. *Makeup air* shall be provided at the inlet to the shaft for mechanically ventilated shafts. The shaft shall not be required to be ventilated for double- wall refrigerant pipe where the interstitial space of the double-wall pipe is vented to the outdoors.

Commented [EV5]: Modify code language to correlate to ASHRAE 15-2024 Addendum b. See attached for details.

Chapter 15—Referenced standards. The following referenced standards are amended or added to Chapter 15.

ASHRAE

15–~~2022~~2024 Safety Standard for Refrigeration Systems. 1101.6, 1104.3.5, 1105.8, 1106.4.2, 1108.1

15.2–~~2022~~2024 Safety Standard for Refrigeration Systems in Residential Ap- plications. 1101.1.1, 1107.4, 1107.5, 1109.2.7, 1109.3.2

34–~~2022~~2024 Designation and Safety Classification of Refrigerants. . . . 202, 1102.2.1, 1103.1

5. **Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

   Clarify IMC requirements to correlate to latest ASHRAE 15-2024 requirements and addenda.

6. **Specify what criteria this proposal meets.** You may select more than one.
   - ☒ The amendment is needed to address a critical life/safety need.
   - ☒ The amendment clarifies the intent or application of the code.
   - ☒ The amendment is needed to address a specific state policy or statute.
   - ☒ The amendment is needed for consistency with state or federal regulations.
   - ☐ The amendment is needed to address a unique character of the state.
   - ☒ The amendment corrects errors and omissions.

7. **Is there an economic impact:** ☒ Yes ☐ No

   If no, state reason:

   Clarifies IMC requirements to correlate to ASHRAE 15 a referenced standard in IMC Chapter 11 that is already required to be complied with.

   Cost savings based on projects not have to use alternate means and methods code alternate request with the Authority Having Jurisdiction to utilize the latest ASHRAE 15-2024 and ASHRAE 34-2024 requirements.

   As the 2021 IMC requires compliance with both IMC Chapter 11 and ASHRAE 15 this resolves conflicts between the code and the standards.

   Removes requirements for rated and vented shafts where continuous refrigerant pipe & tube including joints and connections are installed between refrigeration equipment.

   If yes, provide economic impact, costs and benefits as noted below in items a – f.

   Soft cost engineering and AHJ savings of a minimum of $2,500 per applicable project.

   See details below for construction cost savings.

   a. ***Life Cycle Cost.*** Use the OFM Life Cycle Cost **Analysis tool** to estimate the life cycle cost of the proposal using one or more typical examples. Reference these **Instructions;** use these **Inputs.** Webinars on the tool can be found **Here** and **Here**). If the tool is used, submit a copy of the excel file with your proposal submission. If preferred, you may submit an alternate life cycle cost analysis.

   b. ***Construction Cost.*** Provide your best estimate of the construction cost (or cost savings) of your code change proposal.

      Construction cost savings will be much greater for removing rated shafts with venting. Costs vary based on building height but $5000 to 20,000 per vertical shaft are typical construction cost savings to removed insulated rated shaft with mechanical venting exhaust fans, intakes, and refrigerant leak detection.

For residential projects, also provide construction cost of savings of $200 to $2000/(per dwelling unit or sleeping unit) for not having to install the rated, vented shaft system for mini-split units and not having construct shaft to meet exterior envelope requirements for thermal insulation and air barrier per energy code requirements.

Show calculations here, and list sources for costs/savings, or attach backup data pages

Costs savings will vary based on number of dwelling units or sleeping units served by each rated but unvented refrigerant piping shaft. The more units each rated shaft serves the lower the cost savings per unit.

c. ***Code Enforcement.*** List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

   Utilizes latest ASHRAE 15-2024 addenda.

   Does not require design professional to submit code alternate for AHJ review and approval saving engineering and code official costs.

d. ***Small Business Impact.*** Describe economic impacts to small businesses:
   No impact as this provides cost savings and aligns with ASHRAE 15-2024 Addenda simplifying code compliance.

e. ***Housing Affordability.*** Describe economic impacts on housing affordability:
   Lowers cost for split system air conditioning and heat pump units.

f. ***Other.*** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

   Allows for more cost effective transition to A2L and other refrigerants to meet Washington State Department of Ecology and US EPA requirements.

Please send your completed proposal to: sbcc@des.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

ADDENDA

ANSI/ASHRAE Addendum a to
ANSI/ASHRAE Standard 15-2024

Safety Standard for Refrigeration Systems

Approved by ASHRAE and the American National Standards Institute on May 30, 2025.

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).

The latest edition of an ASHRAE Standard may be purchased on the ASHRAE website (www.ashrae.org) or from ASHRAE Customer Service, 180 Technology Parkway, Peachtree Corners, GA 30092. E-mail: orders@ashrae.org. Fax: 678-539-2129. Telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in US and Canada). For reprint permission, go to www.ashrae.org/permissions.

 ISSN 1041-2336

Approved American National Standard
ANSI
www.ansi.org

SPECIAL NOTE

This American National Standard (ANS) is a national voluntary consensus Standard developed under the auspices of ASHRAE. *Consensus* is defined by the American National Standards Institute (ANSI), of which ASHRAE is a member and which has approved this Standard as an ANS, as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." Compliance with this Standard is voluntary until and unless a legal jurisdiction makes compliance mandatory through legislation.

ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

The Senior Manager of Standards of ASHRAE should be contacted for

a. interpretation of the contents of this Standard,
b. participation in the next review of the Standard,
c. offering constructive criticism for improving the Standard, or
d. permission to reprint portions of the Standard.

(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

Addendum a revises portions of Standard 15 related to refrigerant pipe shafts. The proposed modifications will result in an exemption to requiring a pipe shaft for continuous pipe and tube. This addendum also clarifies Section 7.2.3.1.1 regarding the application of exempt spaces applying to the pipes, tubes, joints, and connections.

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 a to Standard 15-2024

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

7.2.3.1.1 Exempted Spaces. The areas that contain only continuous ~~*refrigerant piping*, or contain only~~ *refrigerant* pipe or tube, including joints and connections that have been tested in accordance with Section 9.13, are exempt from the *effective dispersal volume* calculation unless these areas are part of *connected spaces* per Section 7.2.3.2.

Modify Section 9 as follows. The remainder of Section 9 remains unchanged.

9.12.1.5.1 Shaft Alternative. A shaft enclosure *shall not* be required for the *refrigerant piping* for any of the following ~~*refrigeration systems*~~:

a. Systems using R-718 (water) *refrigerant*
b. *Piping* in a *high-probability system* where the *refrigerant* concentration does not exceed the amounts shown in ASHRAE Standard 34,[3] Table 4-1 or 4-2, for the smallest *occupied space* through which the *piping* passes
c. *Piping* located on the exterior of the building where vented to the outdoors
d. Continuous *refrigerant* pipe or tube, including joints and connections, that have been tested in accordance with Section 9.13

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.

ASHRAE · 180 Technology Parkway · Peachtree Corners, GA 30092 · www.ashrae.org

About ASHRAE

Founded in 1894, ASHRAE is a global professional society committed to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

To stay current with this and other ASHRAE Standards and Guidelines, visit www.ashrae.org/standards, and connect on LinkedIn, Facebook, Twitter, and YouTube.

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ASHRAE offers its Standards and Guidelines in print, as immediately downloadable PDFs, and via ASHRAE Digital Collections, which provides online access with automatic updates as well as historical versions of publications. Selected Standards and Guidelines are also offered in redline versions that indicate the changes made between the active Standard or Guideline and its previous version. For more information, visit the Standards and Guidelines section of the ASHRAE Bookstore at www.ashrae.org/bookstore.

IMPORTANT NOTICES ABOUT THIS STANDARD

To ensure that you have all of the approved addenda, errata, and interpretations for this Standard, visit www.ashrae.org/standards to download them free of charge.

Addenda, errata, and interpretations for ASHRAE Standards and Guidelines are no longer distributed with copies of the Standards and Guidelines. ASHRAE provides these addenda, errata, and interpretations only in electronic form to promote more sustainable use of resources.

5/25

BSR/ASHRAE Addendum b
to ANSI/ASHRAE Standard 15-2024

Second Public Review Draft

Proposed Addendum b to Standard 15-2024, Safety Standard for Refrigeration Systems

Second Public Review (August 2025)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

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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

The model building codes were revised in the 1980s to remove the mandatory requirement for a pipe shaft. A pipe shaft was still permitted as an option, however, the building codes focused on the piping penetrations. At that time Standard 15 chose to not revise similar language and has been out of harmonization ever since. This was partially corrected by Addendum a to Standard 15-2024. However, the committee felt this was patchwork and a more holistic approach was required.

The proposed change will update ASHRAE Standard 15-2024 to be consistent with the model building codes where the primary requirement will be protection for all refrigerant pipe penetrations. The addendum moves language from Section 9.12.3 to Section 9.12.1.5 and lists it first as the primary protection means. Use of pipe shafts remains a design option. The proposed language further clarifies shaft ventilation requirements to mitigate flammability hazards.

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard 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 b to Standard 15-2024

Modify Section 9 as follows. The remainder of Section 9 remains unchanged.

9. DESIGN AND CONSTRUCTION OF REFRIGERATION EQUIPMENT AND SYSTEMS

[…]

9.12 Refrigerant Pipe Installation

9.12.1 Piping Location. […]

[…]

~~9.12.3~~ 9.12.1.5 Refrigerant Pipe Penetrations. ~~In other than *industrial occupancies*, the~~ The annular space between the outside of a *refrigerant* pipe and the inside of a pipe sleeve or opening in a building envelope, wall, floor, or ceiling assembly penetrated by a *refrigerant* pipe *shall* be sealed in an *approved* manner with caulking material, foam sealant, or closed with a gasketing system. The caulking material, foam sealant, or gasketing system *shall* be designed for the conditions at the penetration location and *shall* be compatible with the pipe, sleeve, and building materials in contact with the sealing materials. *Refrigerant* pipes penetrating required *fire-resistance-rated* assemblies or membranes of *fire-resistance-rated* assemblies *shall* be sealed or closed in accordance with the *building code*.

~~9.12.1.5~~ 9.12.1.5.1 Refrigerant Pipe Shafts. *Refrigerant piping* that penetrates ~~two or more~~ multiple floor/ceiling assemblies *shall* be permitted to be enclosed in a *fire-resistance-rated* shaft enclosure. The *fire-resistance-rated* shaft enclosure *shall* comply with the requirements of the *building code*. Other building utilities or *piping* systems *shall* be allowed in the *refrigerant piping* shaft.

*{**Note to reviewer:** This proposed addendum supersedes prior revisions to Section 9.12.1.5.1 of Standard 15-2024 as made by Addendum a.}*

~~**9.12.1.5.1 Shaft Alternative.** A shaft enclosure *shall not* be required for the *refrigerant piping* for any of the following *refrigeration systems*:~~

~~a. Systems using R-718 (water) *refrigerant*~~

~~b. *Piping* in a *high-probability system* where the *refrigerant* concentration does not exceed the amounts shown in ASHRAE Standard 34,[3] Table 4-1 or 4-2, for the smallest *occupied space* through which the *piping* passes~~

~~c. *Piping* located on the exterior of the building where vented to the outdoors~~

~~d. Continuous *refrigerant* pipe or tube, including joints and connections, that have been tested in accordance with Section 9.13.~~

[…]

9.12.2 Installation Requirements for Flammable Refrigerants. […]

[…]

9.12.2.2 Shaft Ventilation. *Refrigerant* pipe installed within a *fire-resistance-rated* shaft~~s~~ enclosure with *refrigeration systems* using only Group A2L or B2L *refrigerants shall* be naturally or mechanically ventilated. *Refrigerant* pipe installed within a *fire-resistance-rated* shaft~~s~~ enclosure with one or more *refrigeration systems* using any Group A2, A3, B2, or B3 *refrigerant shall* be continuously mechanically ventilated and *shall* include a *refrigerant detector*. The shaft ventilation exhaust outlet *shall* comply with the discharge location requirement *specified* in Section 9.7.8.2.

a. Naturally ventilated shafts *shall* have a minimum of a 4.0 in. (102 mm) diameter pipe, *duct*, or conduit that connects at the lowest point of the shaft and connects to the outdoors. The pipe, *duct*, or conduit *shall* be level or pitched down to the outdoors. A *makeup air* opening *shall* be provided at the top of the shaft.

b. When active, mechanically ventilated shafts *shall* have a minimum air velocity in accordance with Table 9-12. *Makeup air shall* be provided at the inlet to the shaft for mechanically ventilated shafts. The mechanical ventilation *shall* either be continuously operated or, for pipe shafts containing only *refrigeration systems* using Group A2L or B2L *refrigerants*, activated by a *refrigerant detector*. *Refrigerant* pipe shafts utilizing a *refrigerant detector shall* have a set point not exceeding the *occupational exposure limit* (*OEL*) of the *refrigerant*. The detector, or a sampling tube that draws air to the detector, *shall* be located in an area where *refrigerant* from a leak will concentrate.

c. The shaft *shall not* be required to be ventilated for double-wall *refrigerant* pipe where the interstitial space of the double-wall pipe is vented to the outdoors in accordance with the discharge location requirements *specified* in Section 9.7.8.2.

d. The shaft *shall not* be required to be ventilated where all the *refrigerant* pipe or tube is continuous and has been tested in accordance with Section 9.13.

e. The shaft *shall not* be required to be ventilated for systems using only Group A2L or B2L *refrigerants* where there are no hot surfaces exceeding 1290° F (700° C) in the shaft and the pipes, tubes, joints, or connections have been tested in accordance with Section 9.13.

~~9.12.4~~ 9.12.3 Stress and Strain. […]

[…]

~~9.12.5~~ 9.12.4 Stop Valves. […]

[…]

~~9.12.5.1~~ 9.12.4.1 Refrigeration Systems Containing More than 6.6 lb (3.0 kg) of Refrigerant. […]

[…]

~~9.12.5.2~~ 9.12.4.2 Refrigeration Systems Containing More than 110 lb (50 kg) of Refrigerant. […]

[…]

~~9.12.5.3~~ 9.12.4.3 Identification. […]

INTERPRETATION IC 15-2022-12 OF
ANSI/ASHRAE STANDARD 15-2022
SAFETY STANDARD FOR REFRIGERATION SYSTEMS

Date Approved: June 13, 2025

Request from: Jeremy Tidd (jtidd@hvac.mea.com), Mitsubishi Electric US, Inc., 1340 Satellite Blvd., Suwanee, GA 30024. (Phone: 404-617-6857)

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 15-2022, Section 7.2.3.1.1, regarding exempted spaces.

Background: Mitsubishi Electric would like clarity on the intent of exempted spaces. Per 7.2.3.1.1, areas or spaces containing continuous refrigerant piping, or containing only joints and connections that have been tested in accordance with Section 9.13, are exempt from the effective dispersal volume calculation unless these areas are part of connected spaces per Section 7.2.3.2. A refrigerant distribution box (branch controller) contains piping and valves to allow refrigerant to be distributed to one or more connected indoor units.

Interpretation: Spaces containing a listed refrigerant distribution box are exempt per 7.2.3.1.1 as long as the entire refrigerant distribution assembly was tested, at the factory and/or in the field, for strength and leakage in accordance with Section 9.13.

Question: Is this Interpretation correct?

Answer: No

Comments:

The intent of Section 7.2.3.1.1 is to allow spaces containing continuous refrigerant tube or pipe, **or** tube or pipe containing only joints and connections tested in accordance with Section 9.13, to be exempted from the EDVC calculation. The refrigerant distribution box described in the background does not meet the exemption for **continuous** refrigerant piping due to the presence of one or more other components, such as valves, within the device.