



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

First Public Review Draft

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

**First Public Review (November 2024)
(Draft shows Proposed Changes to Current Standard)**

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FOREWORD

This addendum revises portions of Standard 15 related to refrigerant pipe shaft ventilation. Ventilation will not be required for continuous pipe or tube that has been tested per the standard. Shaft ventilation will not be required for tested pipes, tubes, joints, or connections using Group A2L or B2L refrigerant in pipe shafts with no hot surfaces exceeding 1290° F (700° C).

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (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.

9.12.2.2 Shaft Ventilation. *Refrigerant pipe shafts with refrigeration systems using only Group A2L or B2L refrigerants shall be naturally or mechanically ventilated. Refrigerant pipe shafts 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 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 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.