



BSR/ASHRAE Standard 72-2018R

Public Review Draft

Method of Testing Open and Closed Commercial Refrigerators and Freezers

**Second Public Review Draft (April 2022)
(Draft Shows Proposed Independent Substantive
Changes to Previous Public Review Draft)**

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).

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Background. The first 72-2018R Publication Public Review (PPR1) that ended on June 28, 2021, had a total of 7 public review comments comprised of 6 substantive comments and 1 supportive comment. The SSPC 72 voting members voted to accept all proposed responses to substantive public review comments during the SSPC 72 Interim Virtual Meeting on December 3, 2021. The proposed responses to the substantive public review comments were subsequently uploaded into ASHRAE’s Online Comment Database, then all proposed responses to substantive public review comments were “resolved.” This 2nd 72-2018R Interdependent Substantive Change (ISC) public review draft consists of the responses to the substantive and supportive first public review comments.

This is a review of Independent Substantive Changes to normative text made since the last public review. Text that was removed from the Public Review Draft is provided for reference but is shown in ~~strikeout~~, and text that has been added is shown with underlines.

Only these changes are open to comment at this time. All other material is provided for context only and is not open for Public Review comment except as it relates to the proposed changes.

Section 8.4: edit units for specific heat.

C_{p_p} = secondary coolant specific heat evaluated at the average entering coolant temperature during the running cycle(s) within Test B, ~~J/(Kg·°C) (Btu/lb·°F)~~ J/(Kg·°C) (Btu/(lb_m·°F))

Appendix A: update values to more reasonable value

Dry Bulb Temperature Gradient Std 41.1

~~<0.6 °C per 305mm~~ < 0.8 °C per meter

(< 1.0 °F per foot)

Figure 2: Add additional sentence for clarification

"The hatched area is the net usable volume cross section."

Remove Informative Appendix B

For INFORMATIVE APPENDIX B: ILLUSTRATIONS FOR MEASURING USABLE VOLUME AND DISPLAY AREA, our understanding is that the committee had agreed to remove this appendix. Recommend removing as usable volume and display area are not metrics measured in the test standard.

Sections 7.3.3, 8.3, 10: Editorial changes as noted below.

- In Section 7.3.3, Lighting Occupancy Sensors and Controls, “hours” is misspelled at the end of the section.
- In Section 8.3, Calculation of Direct-Expansion Refrigeration Load, the definition of “*h_v*” is missing the word “properties” in the second sentence as shown below.

Refrigerant properties shall be obtained from NIST Reference Fluid Thermodynamic and Transport Properties Database (REFPROP)² or from the refrigerant supplier.

- In Section 10 REFERENCES, the titles for all of the ASHRAE standards should include the year as shown below.

10 REFERENCES

1. ASHRAE. 2020. ANSI/ASHRAE Standard 41.1-2020, *Standard Method for Temperature Measurement*. Section on “Temperature Measurements.” Atlanta: ASHRAE.
2. ASHRAE. 2022. ANSI/ASHRAE Standard 41.2-2022, *Standard Methods for Air Velocity and Airflow Measurement*, Atlanta: ASHRAE.
- ~~3. ASHRAE. 1997 (RA2002) 1987 (RA1992). ANSI/ASHRAE Standard 41.2, *Standard Methods for Laboratory Airflow Measurement*, Atlanta: ASHRAE.~~
34. ASHRAE. 2014. ANSI/ASHRAE Standard 41.3-2022, *Standard Methods for Pressure Measurement*, Atlanta: ASHRAE.
45. ASHRAE. 2014. ANSI/ASHRAE Standard 41.6-2021, *Standard Method for Humidity Measurement*, Atlanta: ASHRAE.

- In Section 4.2, ASHRAE Method of Measurement Standards, change Item b. as shown below.
- b. ~~Airflow~~ Air Velocity: ASHRAE Standard 41.2-2022. ~~and the legacy multiple nozzle chamber geometries in ASHRAE Standard 41.2-1997 (RA2002)~~