



ADDENDA

**ASHRAE Addendum b to
ASHRAE Guideline 12-2020**

Managing the Risk of Legionellosis Associated with Building Water Systems

Approved by ASHRAE on April 8, 2021.

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(This foreword is not part of this guideline. It is merely informative and does not contain requirements necessary for conformance to the guideline.)

FOREWORD

Addendum b to Guideline 12-2020 includes reference to the potential use of alternate heat sources, such as electric heat trace, alone or as a supplement to recirculation, to maintain hot water throughout the building hot-water system at or above the recommended minimum temperature. The addendum also updates the reference for the Cooling Technology Institute Guideline from the old designation of WTB-148 to the new designation, GDL-159.

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

Addendum b to Guideline 12-2020

Modify Section 5.3.1 as shown. The remainder of Section 5 is unchanged.

5.3.1 Temperature Control

[. . .]

- e. Alternate heat sources, such as self-regulating electric heat trace, can be used alone or as a supplement to recirculation to maintain hot water consistently at or above 120°F (49°C) throughout the building hot-water system, including water in the pipes returning to the water heater. Where an alternate heat source is used,
1. the alternate heat source should include all controls necessary to prevent overheating and to maintain hot water consistently at or above 120°F (49°C) at every point throughout the hot-water system, including during periods when no hot water is drawn from the taps and when there is no hot-water recirculation;
 2. consider the maximum water temperature imparted by the alternate heat source when determining what controls or adjustments are needed at or near the point of use to reduce the risk of scalding and to comply with AHJ discharge temperature requirements, including the maximum water temperature imparted during periods when there is no hot water drawn from the taps and when there is no hot-water recirculation; and
 3. for manufactured alternate heat sources, the alternate heat source system must be installed, operated, and maintained following the manufacturer's instructions.

[. . .]

Modify Appendix A as shown. The remainder of Appendix A is unchanged.

(This appendix is not part of this guideline. It is merely informative and does not contain requirements necessary for conformance to the guideline.)

APPENDIX A BIBLIOGRAPHY

- CTI. 2020. CTI GDL-159, *Legionellosis Guideline: Practices to Reduce the Risk of Legionellosis from Evaporative Heat Rejection Equipment Systems*. Houston, TX: Cooling Technology Institute. ~~2008. Legionellosis Guideline: Best Practices for Control of Legionella. CTI Bulletin WTB-148, Cooling Technology Institute, Houston, TX.~~

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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.

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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.

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