



# ADDENDA

**ANSI/ASHRAE Addendum c to  
ANSI/ASHRAE Standard 188-2018**

# Legionellosis: Risk Management for Building Water Systems

Approved by ASHRAE and the American National Standards Institute on April 30, 2021.

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 (<https://www.ashrae.org/continuous-maintenance>).

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- offering constructive criticism for improving the Standard, or
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## FOREWORD

*Addendum c clarifies language and provides consistency between Standard 188 and Guideline 12.*

**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 c to Standard 188-2018

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

## 5. BUILDING SURVEY

[ . . . ]

**5.2** The building shall be surveyed to determine whether ~~if~~ the building is characterized by one or more of the following factors that relate to legionellosis:

*Modify Section 7 as shown. The remainder of Section 7 is unchanged.*

## 7. REQUIREMENTS FOR BUILDING WATER SYSTEMS

[ . . . ]

**7.2.1 Equipment Siting.** Prior to the beginning of construction of new or replacement open-circuit cooling towers, closed-circuit cooling towers, or evaporative condensers, construction documents shall be reviewed and the following items shall be addressed:

- a. Potential for contamination from building systems or other sources ~~facility processes to be drawn into the equipment~~
- b. Potential for ~~equipment aerosol~~ discharge into occupied spaces, trafficable areas, pedestrian thoroughfares, outdoor air intakes, and building openings
- c. ~~Potential for equipment siting that inhibits a~~ Access to the conduct equipment for the required maintenance and inspection consistent with following the manufacturer's instructions ~~and guidelines~~
- d. The impact of external heat sources that are not part of the cooling system design heat load on cooling system water temperature
- e. The impact of external airflow restrictions or obstructions in addition to those addressed by the manufacturer's installation instructions on cooling system water temperatures

[ . . . ]

**7.3.3.1 Cartridge ~~(and Canister)~~ Filters.** The Program documents shall include procedures and schedules for inspection and replacement of cartridge and canister types filters, pressure gages, valves, and related equipment.

[ . . . ]

**7.4.1 Equipment Siting.** Prior to beginning construction of a ~~new or replacement~~ ornamental fountain or other water feature, construction documents shall be reviewed and the following items shall be addressed:

[ . . . ]

**7.5.1 Equipment Siting.** Prior to beginning construction or installation of new or replacement aerosol-generating misters, atomizers, air washers, or humidifiers, construction documents shall be reviewed and the following items shall be addressed:

- a. The potential for contamination from building systems, facility processes, or other sources

- b. Access to ~~pumps, filters, and treatment~~ conduct equipment ~~for~~ maintenance and inspection following the manufacturer's instructions
- c. ~~The potential for~~ The impact of external heat sources and reduced airflow ~~that cause on~~ aerosol-generating mister, atomizer, air washer, or humidifier water temperatures ~~favorable to the growth of Legionella~~

***Modify Section 8 as shown. The remainder of Section 8 is unchanged.***

## **8. REQUIREMENTS FOR DESIGNING BUILDING WATER SYSTEMS**

[ . . . ]

### **8.2 ~~Final Installation~~ As-Built/Record Documents**

**8.2.1** ~~Upon completion of the construction, as-built/record~~ Drawings and documents of for the building water systems of new construction, renovation, refurbishment, replacement, or repurposing of a facility ~~actual installation~~ shall be provided to the building owner or designee and shall include

[ . . . ]

**8.4 Commissioning.** Instructions for commissioning of all building water systems shall be provided to the building owner or designee. Commissioning shall include the following:

- a. Procedures for flushing and disinfection
  1. Procedures shall meet the requirements of AWWA C651 <sup>2</sup> or AWWA C652 <sup>3</sup> or comply with all applicable national, regional, and local regulations.
  2. Disinfection and flushing shall be completed ~~within~~ no more than three weeks ~~prior to~~ before whole or partial beneficial occupancy.

## **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.

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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.

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