## ERRATA SHEET FOR ASHRAE GUIDELINE 12-2020 Managing the Risk of Legionellosis Associated with Building Water Systems

## August 21, 2020

The corrections listed in this errata sheet apply to ASHRAE Guideline 12-2020. The first printing is identified on the outside back cover as "Product code: 86865 4/20". The shaded items have been added since the previously published errata sheet dated May 15, 2020 was distributed.

## Page Erratum

- 11 Table 1 Steps 1 through 5: Factors and Events Leading to Legionnaires' Disease.

  Replace Table 1 as shown in the attached. Also, move Table 1 so it immediately follows Section 4.2.2.3.
- 39 9.1.5.1 Portable Impeller Humidifiers.

(Note: Additions are shown in <u>underline</u>.)

- **9.1.5.1 Portable Impeller Humidifiers.** Portable impeller humidifiers (Figure 6) produce [...]
- **Figure 6 Portable impeller humidifier.** Add Figure 6 as shown in the attached.
- **10. Indirect Evaporative Air Coolers.** Revise Section 10, second paragraph, as shown below.

(Note: Deletions are shown in strikethrough.)

Indirect evaporative cooling (IEC) provides a cool airstream through the use of a heat exchanger that is cooled by the evaporation of water. IEC evaporatively cools one side of a heat exchanger, which transfers heat to the primary airstream as shown in Figures 6 and 7. [...]

**41 Figure 7 Indirect evaporative air coolers.** Add Figure 7 as shown in the attached.

| Table 1 Steps 1 through 5: Factors and Events Leading to Legionnaires' Disease                     |   |   |  |                          |
|--|---|---|--|--------------------------|
| 1  | 2   | 3   | 4  | 5                        |
| Entry (Legionella entering building water systems)   | Growth (A significant increase in the numbers of Legionella)  | Transmission (Aerosols from faucets, shower heads, cooling towers, fountains, spa, etc.; aspiration; direct introduction) | Exposure of Susceptible Human Host (Multiply in human host)  | Legionnaires'<br>Disease |
| Factors  • Disinfectant residual level in water supply to the building  • water supply disruptions | Factors  Temperature Disinfectant residual System design Dirt/sediment Nutrients Microbial associations | Factors  Temperature  Humidity  Aerosol Production  Distance from Source  Microbial Associations                          | Factors  • Ability of bacteria to cause disease  • Virulence  • Age  • Disease  • Immunodeficiency |                          |

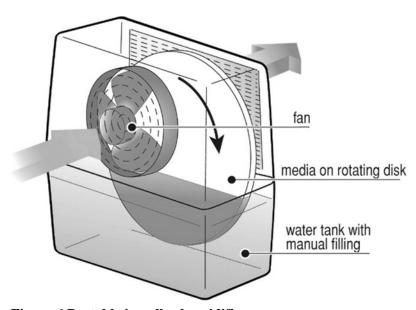
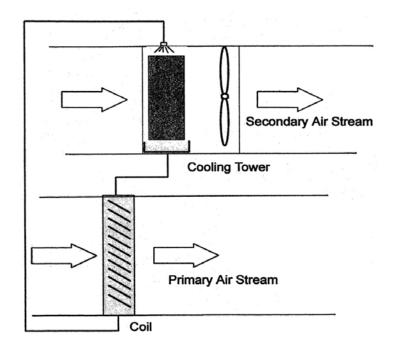


Figure 6 Portable impeller humidifier.



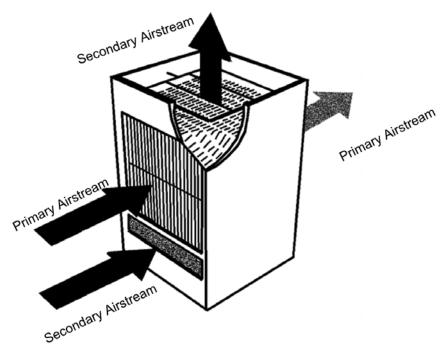


Figure 7 Indirect evaporative air coolers.