

**ERRATA SHEET FOR
ANSI/ASHRAE STANDARD 30-2017
Method of Testing Liquid Chillers**

April 24, 2024

The corrections listed in this errata sheet apply to ANSI/ASHRAE Standard 30-2017. The first printing of 30-2019 is identified as “Product Code: 86081 11/17” on the outside back cover.

Page **Erratum** (Note: Additions are shown in underline and deletions are shown in strikethrough.)

7 **5.4.2.2.** In the W_{input} equation, change the subscript i to j as shown below.

$$W_{input} = \sum_i W_i + \sum_{\underline{j}} Q_j$$

8 **5.4.4.2.** In both the equation and the table header, correct the variable symbol for pipe roughness to be the lower-case Greek letter epsilon. Change ϵ to ϵ as shown below.

$$f = \frac{0.25}{\left[\log_{10} \left(\frac{\underline{\epsilon} \epsilon / d}{3.7} + \frac{5.74}{Re^{0.9}} \right) \right]^2}$$

| Commercial Pipe, New Condition | ϵ ϵ (rms) | |
|-----------------------------------|-----------------------------|----------------------|
| | ft | m |
| Steel | 1.8×10^{-4} | 5.5×10^{-5} |
| Plastic | 6.0×10^{-6} | 1.8×10^{-6} |

12 **Table 6-1 Requirements for Test Instrumentation.** For Liquid temperature change the Measurement System Accuracy from “(±0.2 Δ°F)” to “(±0.20 Δ°F)” as shown below.

Table 6-1 Requirements for Test Instrumentation

| Measurement | Measurement System Accuracy ^{b,c,d,e} | Measurement Resolution ^{f,g} | Selected, Installed, Operated, Maintained in Accordance with |
|--------------------|--|---------------------------------------|--|
| Liquid temperature | ±0.11 Δ°C <u>(±0.20 Δ°F)</u> | 0.005°C (0.01°F) | ANSI/ASHRAE Standard 41.1 ⁴ |

11 **5.7.7.3.** Revise Section 5.7.7.3 as shown below.

5.7.7.3 When two or more figures fall to the right of the last figure to be retained, they are to be considered as a group in rounding decisions. Thus in 2.4(501), the group “(501)” is considered to be greater than five less than five, while for 2.5(499), “(499)” is considered to be less than five greater than five.

- 15 **6.3.1.4.1.1.** In the first sentence of Section 6.3.1.4.1.1 change the word “optical” to “optional” as shown below.

6.3.1.4.1.1 Units with an optional ~~optical~~-integrated evaporator or condenser liquid pump shall be tested in either of the following two configurations.

- 21 **Table 6-6 Definition of Operating Condition Tolerances and Stability Criteria.** For entering air mean dry-bulb temperature, heating (frosting), change the stability criteria term from “5.6” to “0.56” as shown below.

Heating portion: $s_T \leq \underline{0.56} \text{ } \cancel{5.6} \Delta^\circ\text{C}$ [1.00 $\Delta^\circ\text{F}$]