

**ERRATA SHEET FOR
ANSI/ASHRAE STANDARD 30-2019
Method of Testing Liquid Chillers**

April 24, 2024

The corrections listed in this errata sheet apply to ANSI/ASHRAE Standard 30-2019. The first printing of 30-2019 is identified as “Product Code: 86087 5/19” on the outside back cover. Shaded items have been added since the previously published errata sheet dated May 18, 2023 was distributed

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.

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

Commercial Pipe, New Condition	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

12 **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.

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

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

- 31** **11. Normative References.** Change the date on Reference 2 in Section 11 from 1999 to 2001 as shown below.

2. ASHRAE. 2001~~1999~~. *Develop Design Data on Pressure Loss of Large Pipe Fittings*. Final Report RP-1034. Atlanta: ASHRAE