

Errata for 2012 Uniform Plumbing Code – 8th Printing

The following are changes that we found after the eighth printing of the 2012 Uniform Plumbing Code. These changes may apply to your code book. Thank you.

Appendix I

IS 5 – Table 1 Revise table to correct the temperature unit conversions.

TABLE 1 THERMAL EXPANSION TABLE							
Chart Shows Length Changes in Inches vs. Degrees Temperature Change Coefficient of Linear Expansion: $e = 5.5 \times 10^{-5} \frac{\text{in}}{\text{in } ^\circ\text{F}}$							
LENGTH (feet)	40°F	50°F	60°F	70°F	80°F	90°F	100°F
20	0.528	0.660	0.792	0.924	1.056	1.188	1.320
40	1.056	1.330	1.584	1.848	2.112	2.376	2.640
60	1.584	1.980	2.376	2.772	3.168	3.564	3.96
80	2.112	2.640	3.168	3.696	4.224	4.752	5.280
100	2.640	3.300	3.960	4.620	5.280	5.940	6.600

TABLE 1 (METRIC) THERMAL EXPANSION TABLE							
Chart Shows Length Changes in Millimeters vs. Degrees Temperature Change Coefficient of Linear Expansion: $e = 9.821 \times 10^{-5} \frac{\text{mm}}{\text{mm } ^\circ\text{C}}$							
LENGTH (mm)	22°C	28°C	33°C	39°C	44°C	50°C	56°C
6096	13.2	16.8	19.8	23.4	26.3	29.9	33.5
12 192	26.3	33.5	39.5	46.7	52.7	59.9	67.1
18 288	39.5	50.3	59.3	70.0	79.0	89.8	100.6
24 384	52.7	67.1	79.0	93.4	105.4	119.7	134.1
30 480	65.9	83.8	98.8	116.7	131.7	149.7	167.6

Example:

Highest Temperature expected	100°F (38°C)
Lowest Temperature expected	- 50°F (10°C)
	50°F (28°C)

Length of run – 60 feet (18 288 mm) from chart, read 1.980 inches (50.3 mm) linear expansion that must be provided for.

Appendix L

Section L 603.5.1(1) – Revise the temperature conversion in the second paragraph, from “less then 90°F (32°C) above ambient” to “less than 90°F (50°C) above ambient”.

L 603.5.1 Space Heating and Water Heating. The use of a gas-fired or oil-fired space-heating boiler system, otherwise in accordance with Section L 603.0, to provide the total space heating and water heating for a building is allowed where one of the following conditions is met:

- (1) The single space-heating boiler, or the component of a modular or multiple boiler system that is heating the service water, has a standby loss in Btu/h (kW) not exceeding $(13.3 \times pmd + 400)/n$, where (*pmd*) is the probable maximum demand in gallons per hour, determined in accordance with the procedures described in generally accepted engineering standards and handbooks, and (*n*) is the fraction of the year where the outdoor daily mean temperature exceeds 64.9°F (18.28°C).

The standby loss is to be determined for a test period of 24 hours duration while maintaining a boiler water temperature of not less than 90°F (50°C) above ambient, with an ambient temperature between 60°F (16°C) and 90°F (32°C). For a boiler with a modulating burner, this test shall be conducted at the lowest input.

(portions of the text not shown remain unchanged)

10/19/2020