Addendum to
AWWA Manual M23
PVC Pipe—Design and Installation
(July 30, 2010)

It is standard practice to review and update the requirements of AWWA standards on a regular basis. Since the last edition of this manual, major changes were made to the C900, C905, and C909 standards (in the 2007, 2010, and 2009 revisions, respectively). PVC pressure pipe users are advised to review the latest editions of AWWA C900, C905, and C909 as part of their engineering design.

These changes include the following:

For C900
1. The factor of safety for internal pressure classification was revised from 2.5 to 2.0, and the terminology was revised to use the design factor (the inverse of the safety factor) equal to 0.5.
2. The previous built-in surge allowance has been replaced with a more technical treatment of surge pressure. Treatment of surge pressures was expanded to separately include both occasional (emergency or transient) surge pressure and recurring (cyclic) surge pressure.
3. The new pressure classes are 165, 235, and 305 psi and replace the previous pressure classes 100, 150, and 200 psi, respectively.

For C905
1. Terminology was revised to use design factor equal to 0.5 (instead of safety factor of 2.0).
2. Treatment of surge pressures was expanded to separately include occasional (emergency) surge and recurring (cyclic) surge.
3. Pressure capacities remain unchanged from 14 in. to 48 in. (350 mm through 1,200 mm) pipe, but the terminology changes from “pressure rating” to “pressure class” to harmonize with C900.

For C909
1. The factor of safety for internal pressure classification was revised from 2.5 to 2.0, and the terminology was revised to use the design factor (the inverse of the safety factor) equal to 0.5.
2. The previous built-in surge allowance has been replaced with a more technical treatment of surge pressure. Treatment of surge pressures was expanded to include occasional (emergency or transient) surge pressure.
3. The new pressure classes are 165, 235, and 305 psi and replace the previous pressure classes 100, 150, and 200 psi, respectively.