



**Summary of Substantive Changes
between the 2004 and 2012 editions of
ASME A112.1.2 “Air Gaps in Plumbing Systems (For Plumbing Fixtures and
Water-Connected Receptors)”**

Presented to the IAPMO Standards Review Committee on July 9, 2012

General: Changes to this standard should not affect currently listed products. The changes are as follows:

- The suggested method of providing an air gap for tanks or vats with water inlets below the flood-level rim was removed (Section 1.3 and Appendix A)
- The definition of *free area* was revised and a column was added to Table 1 to include the minimum air gaps for fixtures when affected by two adjacent walls. (Section 1.5 and Table 1)

Section 1.3, Air Gap for Tanks or Vats With Water Inlets: The suggested method of providing an air gap for tanks or vats with water inlets below the flood-level rim was removed as follows;

~~*Below the Flood-Level Rim For those cases where it is not practicable to provide a minimum required air gap above the flood-level rim (top edge) of a tank or vat, a suggested substitute procedure is given in Nonmandatory Appendix A.*~~

Section 1.5, Definitions: Revised the definitions for: air gap-minimum required, critical level mark, effective opening, flood-level rim, and free area, and removed the definition for spill level. The revision of the definition of free area is as follows;

free area: the area created between a near wall and the faucet or fitting when the distance between the wall and the outlet of the faucet or device is ~~four~~ three times the diameter of the effective opening of the faucet for a single wall or device: a distance four times the diameter of effective opening for two intersecting walls.

Section 2.1, Minimum Required Air Gap for General Use: Corrected the referenced sections of the standard as follows;

(a) The minimum required air gap shall be twice the diameter of the effective opening, but in no case less than the minimum air gaps values specified in Table 1 or in conformance with the performance requirements of paras. 2.4.1 and 2.4.2.

(b) These minimum requirements may not apply to certain unusual conditions. When a receptor receives water from two or more outlets of different sizes, air gaps for all water supply openings shall be at least equal to that required for the largest opening.

~~*(c) As an alternative to (a), the minimum required air gap shall be in conformance with the performance requirements of paras. 2.4 and 2.5.*~~

~~*(d) For additional standards relating to backflow and backflow prevention, which are not specifically mentioned in this Standard, see Nonmandatory Appendix B.*~~



Section 2.4, Determination of Minimum Air Gaps for Plumbing ~~Systems~~ Fixture Supply Fittings Not Meeting the Minimum Air Gap Requirements of Table 1: The section title was changed as shown to clarify its purpose.

Section 2.4.1, Determination of Critical Air Gap: The section number and title were added and the body of the section was changed as follows:

(i) The larger of the two distances measured and recorded shall be considered the critical air gap of the faucet or fitting ~~device. Faucets or devices that are marked with a critical level mark shall be marked at or below the lowest water level, from para. 2.4(h), where back siphonage stopped.~~

(k) For faucets and devices with a critical level mark, confirm that the mark is at a level that is at or ~~below~~ above the highest water level recorded in determining the critical air gap.

Table 1, Minimum Air Gaps for Generally Used Plumbing Fixtures: A new column was added to the table to clarify the minimum air gaps for fixtures when affected by two adjacent walls.

Nonmandatory Appendix A, Method of Providing an Air Gap for Tanks or Vats with Water Inlets Below the Flood-Level Rim: This Appendix was deleted.

Nonmandatory Appendix B, Other Standards Applicable to Backflow Prevention: This Appendix was deleted.