



**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS**

**MATERIAL AND PROPERTY STANDARD
FOR
METALLIC AND PLASTIC UTILITY BOXES**

IAPMO PS 54-2011a

1. SCOPE AND PURPOSE

- 1.1** This Standard covers metallic, plastic, and combination utility boxes intended for plumbing applications such as washing machines, ice makers, tubs, gas supply, and air admittance valves.
- 1.2** This Standard specifies requirements for physical characteristics, performance tests and markings and identification for metallic or plastic utility boxes.
- 1.3** The purpose of this Standard is to enhance health and safety by:
 - (a) specifying acceptable criteria for metallic, plastic, and combination utility boxes;
 - (b) serving as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors, and users; and
 - (c) promoting understanding regarding materials, manufacturing, and installation of metallic and plastic utility boxes.
- 1.4** The requirements of this Standard are not intended to prevent the use of alternate materials or methods of construction provided such alternates meet the intent of this Standard.
- 1.5** Amendments to this Standard will be made after processing according to the standards writing procedures of IAPMO.

2. REFERENCE PUBLICATIONS

This Standard refers to the following publications, and where such reference is made, it shall be the current edition of those publications, including all amendments published thereto.

ASME A112.18.1/CSA B125.1	Plumbing supply fittings
ASSE 1010	Performance Requirements for Water Hammer Arresters
ASSE 1050	Performance Requirements for Stack Air Admittance Valves for Sanitary Drainage Systems

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ASSE 1051	Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems
ASTM D4549	Standard Classification System and Basis for Specification for Polystyrene and Rubber-Modified Polystyrene Molding and Extrusion Materials (PS)
ASTM D4673	Standard Classification System for Acrylonitrile-Butadiene-Styrene (ABS) Plastics and Alloys Molding and Extrusion Materials
ASTM E814	Standard Test Method for Fire Tests of Penetration Firestop Systems
IAPMO IGC 157	Ball Valves
NSF 61	Drinking Water System Components - Health Effects

3. GENERAL DESCRIPTION OF UTILITY BOXES

3.1 Washing Machine Utility Boxes

Washing machine metallic or plastic utility boxes:

- (a) provide a space or flush mount for a valve (or valves) to be connected to water supply lines and the washing machine;
- (b) have a discharge outlet for connection to the waste line
- (c) have a snap lock or screw-in faceplate; and
- (d) may have various configurations depending on the expected location of the valves and the discharge outlet.

Note: *Washing machine utility boxes are intended to be installed within a single or double stud bay at the laundry locations in single or multiple-family dwellings.*

3.2 Ice Maker Utility Boxes

Ice maker metallic, plastic, or combination utility boxes:

- (a) provide a space or flush mount for connecting one valve to the water supply line and the ice maker; and
- (b) have a snap lock or screw-in face plate.

Note: *Ice maker utility boxes are intended to be installed within a single or double stud bay at the refrigerator locations in single or multiple-family dwellings.*

3.3 Tub Boxes

Tub plastic utility boxes are comprised of matching top and bottom halves, for insertion of trap arms.

Note: *Tub utility boxes function is to keep the trap cavity clear in slab or upper floor installation.*

3.4 Gas Supply Boxes

Gas supply metallic, plastic, or combination utility boxes:

- (a) provide a space or flush mount for a gas valve to be connected to a gas appliance;
- (b) have a snap lock or screw-in face plate.

Note: *Gas supply utility boxes are intended to be installed within a single or double stud bay at the appliance locations in single or multiple-family dwellings.*

3.5 Air Admittance Valve Utility Boxes

Air admittance valve metallic, plastic or combination utility boxes shall

- (a) have a snap lock or screw-in slotted face frame or register with a minimum open area of 1,290 mm² (2 in²) to provide a space for an air admittance valve;