ANSI<sup>®</sup>
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Revision of
ANSI Z124.6 - 1990

American National Standard for Plastic Sinks



Secretariat
International Association of
Plumbing and Mechanical Officials

Approved May 9, 1997

American National Standards Institute, Inc.

# American National Standard

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## **Foreword** (This Foreword is not a part of American National Standard for Plastic Sinks)

Production of gel-coated glass-fiber reinforced Plastic Plumbing Fixtures began in 1956. The immediate need for standard specifications was answered by the issuance, in 1959, of Commercial Standards CS 221-59 for bathtubs and CS 222-59 for shower receptors. These standards served as the basis of product acceptance by the Federal Housing Administration (FHA) and code writing agencies.

In 1962 the development of a needed industry standard was undertaken by the NAHB Research Institute and a Reinforced Plastics Industry Advisory Board with the cooperation and assistance of the Society of the Plastics Industry. In July 1963, the NAHB Research Institute issued a new standard for tub-shower units which constituted an extensive revision of CS 221-59 and was the first performance-type standard for such products.

In December 1965, the NAHB Research Foundation, Inc., continuing the work of the NAHB Research Institute, issued a revised standard for bathtub units and a standard for shower receptors and stalls. These standards were considered by those most interested to be worthy of approval as an American National Standard, and the need for their application nationally was self-evident. Accordingly, they were submitted to the Standards Institute in 1965 and approved on April 5, 1967 as American National Standard for Gel-Coated Glass-Fiber Reinforced Polyester Resin Bathtub Units, Z124.1-1967 and Gel-Coated Fiberglass Reinforced Polyester Resin Shower Receptors and Shower Stalls, Z124.2-1967.

The sponsor also asked for the establishment of an American National Standards Committee, which was approved as American National Standards Committee Z124.

Use of American National Standards Z124.1 and Z124.2 has resulted, over the years, in constructive suggestions which have been incorporated in these standards. Many of the requirements given in these standards evolved out of field experience with new materials and manufacturing techniques. Therefore, these standards have been expanded, listing separate areas of pertinent tests and performance requirements for such materials and techniques. They also cover the revision and addition of test methods and performance requirements.

In October 1978, the International Association of Plumbing and Mechanical Officials (IAPMO) assumed the secretariat's position to continue the work already in progress.

The continuation of work resulted in the revision and updating of Z124.1 for Plastic Bathtubs and Z124.2 for Plastic Shower Receptors and Shower Stalls. These standards were forwarded to American National Standards Institute and adopted on May 1, 1980.

A Standard for Plastic Lavatories, which had been started by a Task Group in early 1975, was also completed and forwarded to American National Standards Institute in September 1979. The formal adoption date was May 21, 1980, and resulted in American National Standard Z124.3 for Plastic Lavatories.

At the request of HUD a Task Committee developed a standard for Plastic Water Closet Bowls and Tanks. It was completed and forwarded to ANSI and formally adopted May 30, 1983, as American National Standard Z124.4.

The Standard for Plastic Toilet (Water Closets) Seats which was started in November 8, 1983 was completed and forwarded to the American National Standards Institute on February 15, 1989. The formal adoption date was August 24, 1989 and resulted in American National Standards Institute, Standard Z124.5 for Plastic Toilet (Water Closets) Seats.

This Standard for Plastic Sinks which was started in April 1986 was completed and forwarded to American National Standards Institute on July 1989. The formal adoption date was December 13, 1990 and resulted in American National Standard Z124.6 for Plastic Sinks.

The standard for Plastic Bathtub Liners which was started in 1985 was completed and forwarded to the American National Standards Institute in June 1990. The formal adoption date was October 1990 and resulted in American National Standards Institute, Standard Z124.8 for Plastic Bathtub Liners.

Other standards which are appropriate for the scope of the Z124 Standards are also under development.

The Z124 Committee had grown from the original 1962 Committee of eleven industry members to a full consensus balanced Committee of twenty producer members and twenty general interest, consumer, and distributor membership.

Suggestions for improvement of these Z124 standards are always welcome. They should be sent to the American National Standards Institute, 11 West 42nd Street, New York, NY 10036.

This standard was processed and approved for submittal to ANSI by American National Standards Committee on Synthetic Organic Materials in Plumbing Fixtures, Z124. Committee approval of the standard does not necessarily imply that all Committee members voted for its approval. At the time it approved this standard, the Z124 Committee had the following members:

Shabbir Rawalpindiwala, Chairman Patrick J. Higgins, Vice Chairman Lloyd Klusendorf, Secretary

Organization Represented	Name of Representative
American Institute of Architects	W. W. Aird
American Society of Plumbing Engineers	G. Markow
, , ,	W. Y. W. Chan (Alt)
American Society of Sanitary Engineers	J. Boats
American Standard Inc.	P. DeMarco
Aqua Bath Company, Inc	G. McAlister
Aristech Chemical Corporation	
Atohaas, Rohm and Haas Co.	E. Grimes
	R. Banyay (Alt)
Blau Plumbing & Heating, Inc.	F. J. Blau, Jr.
Consultant	T. Hicks
Consultant	E. Maybeck
Consultant	E. A. Povalski
Fiat/Crane Plumbing	
	J. Murray (Alt)
General Electric	G. Diehl
George Kauffman Plumbing	G. Kauffman
Gruber Systems	
Higgins & Associates	
Housing and Urban Development	
Independent	R. Deuel
J.M. Huber/Solem Div.	B Dallum
ICI Acrylics - Lucite ® Sheet Division	R. Gano
Industrial Testing Laboratory	
International Association of Plumbing and Mechanical Officials	
International Cast Polymer Association	
Kohler Co.	3
	L. W. Klusendorf (Alt)
Masco Corporation	· /
	B. Gentsch (Alt)
Metropolitan Water District of Southern California	R. Brown

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Organization Represented	Name of Representative
National Association of Home Builders	C. Arnold
	T. Kenney (Alt)
National Association of Plumbing, Heating, and	
Cooling Contractors	R. E. White
National Association of Thermoformers for	
Manufactured Housing Industry	S. Richardson
	B. Mitchell (Alt.)
National Fiberglass Products, Inc.	
National Sanitation Foundation	JR. Coiner
Naval Construction Bn	
Novi American	
PTL Inspectorate Inc.	R. Garland
	P. Medwig (Alt)
Spartech	D. Meinzinger
Taylor Industries	B. W. Taylor
	R. Taylor (Alt)
United Association	
U. S. Testing Co., Inc.	
Waterless Company	K. Reichardt

Subcommittee Z124.6 on Plastic Sinks, which developed this standard had the following members:

S. Rawalpindiwala, Chairman C. Arnold L. Klusendorf B. Murphy S. McNally T. Brignole S. Moinian

T. Brignole
P. DeMarco
R.E. Pamplona
L. Garasi
J. Sargent
B. Gentsch
J. Schwalbe
P. Higgins
B. W. Taylor
D. Holloway
I. Kathawalla
P. Zelasko

M. Klimboff

#### AMERICAN NATIONAL STANDARD Z124.6-1997

## AMERICAN NATIONAL STANDARD FOR PLASTIC SINKS

## 1. Scope and purpose

**1.1 Scope.** This standard covers physical requirements and test methods for minimum performance requirements of materials and workmanship and finish of plastic sinks. Where the term "sink" is used in this standard, it shall mean a kitchen sink, bar sink, service sink, or laundry tray with or without integral tops.

The materials and equipment which are listed as having been used to conduct the testing procedures are provided solely for informational reference.

**1.2 Purpose.** The purpose of this standard is to establish minimum performance requirements for plastic sinks.

Conformance to this standard and test procedures herein shall indicate the acceptability of a plastic sink as a plumbing fixture.

### 1.3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standard are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying most recent editions of the standards indicated below.

ASTM D 883-93, Terminology Relating to Plastics

ASTM D 2244-89<sup>e1</sup>, Test method for calculation of color differences from instrumentally measured color coordinates

ASTM D 2565-92a, Practice for operating xenon arc-type light exposure apparatus with and without water for exposure of plastics

ASTM E 84-91a<sup>e1</sup>, Test method for surface burning characteristics of building materials

ASTM E 162-90, Test method for surface flammability of materials using a radiant energy heat source

ASTM E 662-93, Test method for specific optical density of smoke generated by solid materials

NFPA 255-90, (See ASTM E 84)

NFPA 258-89, Research test methods for determining smoke generation of solid materials

### 1.4 Definitions

**drain fitting:** The outlet fitting for a fixture including any strainer and the tailpiece necessary for connection to drain piping.

**integral top:** A product consisting of a horizontal surface and a fixture, made from a single mold, and which may include a drain board area and back splash.

## 2. General requirements

### 2.1 Materials

- **2.1.1 Composition.** The units shall be made of suitable grades of plastic resins and such other filling, coloring, reinforcing, and coating materials as will meet the performance requirements of this standard.
- **2.1.2 Supporting structure.** The material of supporting structure integral with the unit and its attachment shall be adequate to meet the performance requirements of this standard.
- **2.2 Dimensions and tolerances.** Holes for faucets and drain outlets, when provided, shall be as described in Figure 1. The finished trim dimensional tolerances shall be the manufacturer's stated dimensional tolerances, except as otherwise specified herein.
- **2.3 Units for testing.** Units to be inspected and tested shall be taken from finished goods inventory. For test, the unit shall be installed according to the manufacturer's installation instructions so as to simulate conditions of permanent installation, excluding fittings and piping, except that a drain fitting shall be installed. Certain tests shall not be applicable to all classes of sinks, as shown in Table 1.
- **2.4 Installation, care, and maintenance instructions.** Each unit shall be supplied with a copy of the manufacturer's written Installation, Care, and Maintenance Instructions.
- **2.5 Identification.** Manufacturer's name or trademark, or both, shall be permanently and legibly marked on the unit so as to be visible after installation.