

IAPMO/ANSI Z1000-2007

Prefabricated Septic Tanks



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PRODUCT CERTIFICATION

AN AMERICAN NATIONAL STANDARD



**IAPMO / ANSI
Z1000 - 2007**

**American National Standard
for Prefabricated Septic Tanks**



Secretariat
**International Association of
Plumbing and Mechanical Officials**

Approved February 7, 2007
American National Standards Institute, Inc.

American National Standard

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This is a preview of "IAPMO/ANSI Z1000 - 2...". [Click here to purchase the full version from the ANSI store.](#)

Foreword (This Foreword is not a part of American National Standard for Prefabricated Septic Tanks)

The IAPMO Main Standards Committee organized Subcommittee Z1000 to develop an American National Standard for the evaluation of products covered under the scope of IAPMO PS 1, Prefabricated Septic Tanks

This Standard is the culmination of efforts by the Subcommittee and Main Committee Members which began its work on this project back in May 2005. This Standard has been developed to allow for freedom to the manufacturer in design to produce products with good engineering practices for the protection of public health.

Other standards which are appropriate for the scope of the Z Series can also be proposed for development, and suggestion for improvement of these Z Series 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 the IAPMO Main Standards Committee. 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 IAPMO Main Standards Committee had the following members:

Susan Galayda, Chairman
Shabbir Rawalpindiwala, Vice Chairman
Maribel Campos, Secretary

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AMERICAN NATIONAL STANDARD FOR PREFABRICATED SEPTIC TANKS

1. Scope

1.1 This standard establishes an acceptable quality standard for prefabricated septic tanks of concrete, fiberglass-reinforced plastic, or polyethylene. These prefabricated septic tanks are intended for use in domestic or commercial sewage disposal systems. Included are requirements for design, materials, performance testing, and markings.

1.2 The provisions of this standard are not intended to prevent the use of any alternate material, provided any such alternate material meets or exceeds the requirements of this standard.

1.3 Units of measure. Liquid values are stated in U.S. Gallons and/or Liters

1.4 Reference standards. The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. The latest issue shall apply.

AASHTO, *Standard Specifications for Highway Bridges*

ASTM A 820, *Steel Fibers for Fiber Reinforced Concrete*

ASTM C 581, *Chemical Resistance of Thermosetting Resins Used in Glass Fiber Reinforced Structures*

ASTM C 890, *Minimum Structural Design Loading for Monolithic or Sectional Precast Concrete Water and Wastewater Structures*

ASTM C 990, *Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants*

ASTM C 1116, *Fiber-Reinforced Concrete and Shotcrete*

ASTM C 1227, *Precast Concrete Septic Tanks*

ASTM C 1644, *Resilient Connectors Between Reinforced Concrete On-Site Wastewater Tanks and Pipes*

ASTM D 618, *Conditioning Plastics and Electrical Insulating Materials for Testing*

ASTM D 638, *Tensile Properties of Plastics*

ASTM D 790, *Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials*

ASTM D 883, *Terms Related to Plastics*

ASTM D 1248, *Polyethylene Plastics Molding and Extrusion Materials*

ASTM D 1693, *Environmental Stress-Cracking of Ethylene Plastics*

ASTM D 2563, *Classifying Visual Defects in Glass-Reinforced Plastic Laminate Parts*

ASTM D 2583, *Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor*

ASTM D 2584, *Ignition Loss of Cured Reinforced Resins*

PEI RP 100, *Recommended Practices for Installation of Underground Liquid Storage Systems*

STI F921, *Aboveground Tanks with Integral Secondary Containment*

UL 58, *Steel Underground Tanks for Flammable and Combustible Liquids*

UL 1746, *External Corrosion Protection Systems for Steel Underground Storage Tanks*

2. General requirements

2.1 Prefabricated Septic tank shall be designed to produce a watertight, structurally sound vessel that will provide adequate space for sludge and scum accumulations.

3. Design requirements

3.1 Drawings shall be complete and shall show all dimensions, capacities, reinforcing, structural calculations and other such pertinent data. Engineering submittals certifying the prefabricated septic tanks capacity and structural design shall be provided and signed by a registered professional engineer.

3.2 Septic tanks shall be watertight, when tested in accordance with Section 5.1 of this standard.

3.3 Septic tanks shall have a minimum of two (2) compartments and have a minimum of 750 gallons (2839 liters) total liquid volume.

3.3.1 Each septic tank shall have a minimum of two