

IAPMO/ANSI Z1001-2007

Prefabricated Gravity Grease Interceptors



ANSI Accredited Program
PRODUCT CERTIFICATION

AN AMERICAN NATIONAL STANDARD



**IAPMO / ANSI
Z1001 - 2007**

**American National Standard
for Prefabricated Gravity Grease Interceptors**



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

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

American National Standard

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| Contents | Page |
|------------------------------------------------------|-------------|
| Foreword | iii |
| 1 Scope..... | 1 |
| 1.3 Units of Measure | 1 |
| 1.4 Reference Standards | 1 |
| 1.5 Definitions | 1 |
| 2 General Requirements | 1 |
| 3 Design Requirements..... | 1 |
| 4 Material Requirements | 2 |
| 4.1 Concrete..... | 2 |
| 4.1.2 Sealants | 2 |
| 4.1.3 Lifting..... | 2 |
| 4.1.4 Synthetic Fiber-Reinforced Concrete Tanks..... | 2 |
| 4.1.5 Steel Fiber-Reinforced Concrete Tanks..... | 2 |
| 4.1.6 Fiberglass-Reinforced Polyester | 2 |
| 4.1.7 Gaskets | 2 |
| 4.2 Polyethylene | 2 |
| 4.3 Coated Steel..... | 2 |
| 5 Testing Requirements | 3 |
| 5.1 Leakage Testing | 3 |
| 5.1.1 Water Test | 3 |
| 5.1.2 Vacuum Test | 3 |
| 5.1.3 Air Test | 3 |
| 6 Marking and Identification | 3 |

Foreword (This Foreword is not a part of American National Standard for Prefabricated Gravity Grease Interceptors)

The IAPMO Main Standards Committee organized Subcommittee Z1001 to develop an American National Standard for the evaluation of products covered under the scope of IAPMO PS 80, Grease Interceptors and Clarifiers

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
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AMERICAN NATIONAL STANDARD FOR PREFABRICATED GRAVITY GREASE INTERCEPTORS

1. Scope

1.1 This standard is to establish specifications regarding the construction of prefabricated gravity grease interceptors. This standard is to serve as a guide for producers, distributors, architects, engineers, contractors, installers, inspectors and users; to promote understanding regarding design, materials, and the installation; and to also provide marking/labeling for identifying prefabricated gravity grease interceptors that conform to this standard.

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

ASME B16.5, *Pipe Flanges and Flanged Fittings: NPS 1/2 through 24*

ASME B1.20.1, *Pipe Threads, General Purpose, Inch*

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

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 1613, *Precast Concrete Grease Interceptors*

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

IAPMO / ANSI Z1000, *Prefabricated Septic Tanks*

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*

1.5 Definitions.

gravity interceptors: A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oils, and greases (FOG) from a wastewater discharge using the application of gravity over time for separation.

2. General requirements

2.1 Prefabricated gravity grease interceptors shall be designed to remove grease from effluent and retain grease until accumulations are removed by pumping the interceptor.

3. Design requirements

3.1 Drawings shall be complete and shall show all dimensions, capacities, reinforcing and structural design calculations. Engineering calculations certifying the prefabricated gravity grease interceptor's liquid capacity and structural design shall be provided and certified by a registered professional engineer.

3.2 Prefabricated gravity grease interceptors shall have a minimum of two (2) compartments and shall have a minimum of 300 gallons (1136 liters) total liquid volume.

3.3 All prefabricated gravity grease interceptors shall have a minimum of 1 sq. ft. (0.09 m²) of free surface area of liquid for every 45 gal (170 liters) of liquid capacity.

3.4 Each prefabricated gravity grease interceptor shall have a minimum of two maintenance holes with a minimum 20 in. (50 cm) inside dimension. One access maintenance hole shall be located over the inlet, and one access maintenance hole shall be located over the outlet. There shall also be access from maintenance holes openings to interior partitions or baffles.

3.5 The inlet and outlet shall have a sanitary tee or similar device with a minimum cross sectional area equal to the