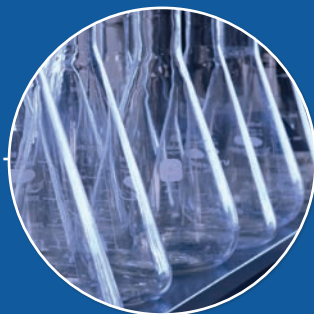




*NSF International Standard /
American National Standard*

NSF/ANSI 350-1 - 2011

**Onsite Residential and Commercial
Graywater Treatment Systems for
Subsurface Discharge**



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NSF/ANSI 350-1 – 2011

NSF International Standard/
American National Standard
for Wastewater Technology —

**Onsite residential and commercial
graywater treatment systems
for subsurface discharge**

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Foreword²

This American National Standard, NSF/ANSI 350-1 Onsite residential and commercial graywater treatment systems for subsurface discharge Standard, has been developed as part of the ongoing efforts of interested parties to establish minimum requirements for onsite residential and commercial graywater treatment systems. The standard is intended to address public health and environmental issues only. Actual performance for any site or system may vary, depending on variations in raw water supply (such as in alkalinity and hardness), graywater constituents, and patterns of use. The end use of the effluent is the responsibility of the owner, design professionals, and regulatory officials.

Management methods and end uses appropriate for the treated effluent discharged from graywater residential and commercial treatment systems meeting this Standard are limited to subsurface discharge to the environment only.

Systems include:

- Graywater reuse treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d): This applies to onsite residential and commercial reuse treatment systems that treat combined graywater, those that treat laundry water only from residential laundry facilities, and those that treat bathing water only.
- Commercial graywater reuse treatment systems: This applies to onsite commercial reuse treatment systems that treat combined commercial facility graywater with capacities exceeding 5,678 L/d (1,500 gal/d) and commercial facility laundry water only of any capacity. These systems shall be performance tested and evaluated at the location of the reuse system installation, using the graywater generated onsite from the facility serving the treatment system.

This Standard was developed by the NSF Joint Committee on Wastewater Technology using the consensus process described in the American National Standards Institute.

Suggestions for improvements of this Standard are welcome. Comments should be sent to Chair, Joint Committee on Wastewater Technology, c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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NSF/ANSI Standard
for Wastewater Treatment Systems —

Onsite residential and commercial graywater treatment systems for subsurface discharge

1 General

1.1 Scope

This Standard contains minimum requirements for onsite residential and commercial graywater treatment systems. Systems may include:

- Graywater reuse treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d): This applies to onsite residential and commercial reuse treatment systems that treat combined graywater, those that treat laundry water only from residential laundry facilities, and those that treat bathing water only. See 8.1 for performance testing and evaluation.
- Commercial graywater reuse treatment systems: This applies to onsite commercial reuse treatment systems that treat combined commercial facility graywater with capacities exceeding 5,678 L/d (1,500 gal/d) and commercial facility laundry water only of any capacity. These systems shall be performance tested and evaluated at the location of the reuse system installation, using the graywater generated onsite from the facility serving the treatment system. See 8.2 for performance testing and evaluation. The key elements of a field evaluation of a commercial onsite reuse treatment system are described in Annex A.

The standard is intended to address public health and environmental issues only. Actual performance for any site or system may vary, depending on variations in raw water supply (such as in alkalinity and hardness), graywater constituents, and patterns of use. The end use of the effluent is the responsibility of the owner, design professionals, and regulatory officials.

Management methods and end uses appropriate for the treated effluent discharged from graywater residential and commercial treatment systems meeting this Standard are limited to subsurface discharge to the environment only. Effluent quality criteria consistent with these uses are described in 8.5 – Criteria.

System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

1.2 Alternate materials, design, and construction

While specific materials, designs, and constructions may be stipulated in this Standard, systems that incorporate alternate materials, designs, or constructions may be acceptable when it is verified that such systems meet the applicable requirements of this Standard.