

ONSITE WASTEWATER TREATMENT AND REUSE SYSTEMS



Governments, NGOs, residential and commercial builders, and architects are turning to onsite wastewater reuse systems as a solution to water scarcity and energy costs associated with the treatment and distribution of municipal water and wastewater.

With over 40 years of experience in onsite wastewater treatment systems (OWTS) and reuse systems, NSF has facilitated the development of many standards and protocols to ensure that these systems are safe for public health.

ONSITE WATER REUSE AND WASTEWATER TREATMENT STANDARDS AND PROTOCOLS

Onsite wastewater treatment systems can be certified to the following standards and protocols:

- > NSF/ANSI 40: *Residential Wastewater Treatment Systems*
- > NSF/ANSI 41: *Non-Liquid Saturated Treatment Systems*
- > NSF/ANSI 46: *Components and Devices*
- > NSF 240: *Drainfield Product Trench Sizing*
- > NSF/ANSI 245: *Nitrogen Reduction*
- > NSF/ANSI 350: *Onsite Water Reuse*
- > NSF/ANSI 360: *Field Performance Verification*
- > NSF P157: *Incinerating Toilets*

The NSF P157 protocol is similar in many ways to an NSF/ANSI standard, but does not undergo review and approval by an NSF joint committee. Instead, it is reviewed and approved by a smaller technical panel that includes experts in onsite wastewater and stakeholder representation from industry, public health and user communities.

We can also certify your system to CAN/BNQ 3680-600: *Onsite Residential Wastewater Treatment Technologies* if you intend to sell into the Canadian market. This standard has been developed based on NSF/ANSI 40 and establishes performance requirements for onsite residential wastewater treatment technologies applied to isolated dwellings.



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NSF/ANSI 40: RESIDENTIAL ONSITE SYSTEMS

NSF/ANSI 40 is the most recognized and required standard for the residential wastewater treatment industry with more than 30 years of market use and acceptance.

NSF/ANSI 40 is required in several states for systems treating 400 to 1,500 gallons per day.



REQUIREMENT AND ACCEPTANCE

The 2015 International Residential Code (IRC), International Plumbing Code (IPC), Uniform Plumbing Code (UPC) and International Green Construction Code (IgCC) all require water reuse systems used for residential toilet and urinal flushing to comply with NSF/ANSI 350.

Also, the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) green building rating system includes criteria that recognize NSF/ANSI 350-certified products.

Why choose NSF to certify your onsite wastewater treatment and reuse systems?

- > With a key focus on public health and appropriate water quality criteria for reuse applications, NSF/ANSI standards are the first of their kind and are for comprehensive evaluation of water reuse technologies.
- > The scope and requirements of NSF/ANSI residential wastewater standards help you demonstrate performance to public health officials.
- > Widely recognized for our scientific and technical expertise, we collaborate with the World Health Organization, the U.S. Environmental Protection Agency, the National Environmental Health Association (NEHA) and the National Onsite Wastewater Recycling Association (NOWRA).
- > Certification allows you to use the NSF mark. The NSF mark is the most known and recognized mark in all regions of the world. Some of your customers may require the NSF mark, which other certifiers cannot use even if they certify products to NSF standards. The mark helps you to sell to your customers.



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