

# NSF/ANSI 58 TECHNICAL REQUIREMENTS



## REVERSE OSMOSIS SYSTEMS

NSF/ANSI 58 is the American National Standard for point-of-use (POU) reverse osmosis (RO) systems. It was developed by a joint committee with equal representation from regulators, manufacturers and end users. This standard includes requirements addressing various aspects of these systems, including:

- > Safety of materials in contact with drinking water
- > Structural integrity
- > TDS (total dissolved solids) reduction performance
- > Efficiency rating
- > Recovery rating
- > Contaminant reduction performance
- > Information for the end user

## TESTING UNDER NSF/ANSI 58

This standard requires different testing based on your specific RO unit or component. Testing is conducted as follows:



### NON-PRESSURE BEARING COMPONENT

- ✓ **Material safety** – chemical extraction



### PRESSURE BEARING COMPONENT

- ✓ **Material safety** – chemical extraction
- ✓ **Structural integrity** – cyclic and hydrostatic



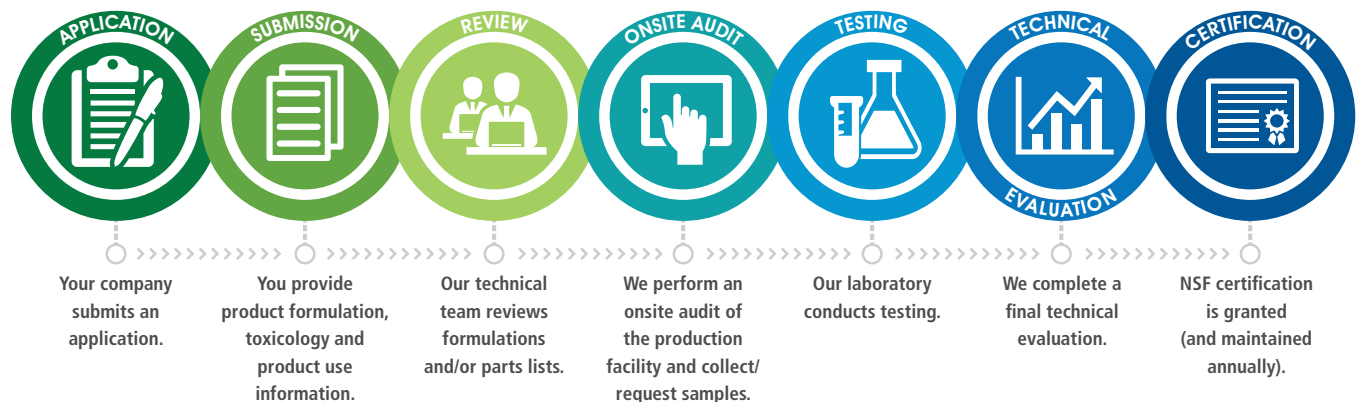
### COMPLETE SYSTEM

- ✓ **Material safety** – chemical extraction
- ✓ **Structural integrity** – cyclic and hydrostatic
- ✓ **Contaminant reduction** – Total dissolved solids, VOC, cyst, etc.



# WHAT YOU CAN EXPECT WHEN GETTING CERTIFIED TO NSF/ANSI 58

Testing is one element of becoming certified to NSF/ANSI 58. When you accept your quote and scope of work from NSF, you can expect the following steps:



## CLAIMS AVAILABLE UNDER NSF/ANSI 58

Standard NSF/ANSI 58 includes test procedures to verify various claims that can be made for your RO system, including:

- > **Required**
  - TDS (total dissolved solids) reduction
  - Turbidity reduction
  - Fluoride reduction
- > **Optional**
  - Cyst reduction
  - Hexavalent and trivalent chromium reduction
  - Arsenic reduction
  - Nitrate/nitrite reduction
  - Cadmium reduction
  - Lead reduction
  - Barium reduction
  - Copper reduction
  - VOC reduction
  - Asbestos reduction
  - Perchlorate reduction
  - Radium 226/228 reduction
  - Selenium reduction
  - Pentavalent arsenic reduction

**Did you know?** Only complete systems are eligible to make containment reduction claims.

**NSF INTERNATIONAL**  
E water@nsf.org | [www.nsf.org](http://www.nsf.org)