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 hyrdostatic

COMPLETE SYSTEM

- Material safety – chemical extraction
- Structural integrity – cyclic and hyrdostatic
- 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:

- Your company submits an application.
- You provide product formulation, toxicology and product use information.
- Our technical team reviews formulations and/or parts lists.
- We perform an on-site audit of the production facility and collect/request samples.
- Our laboratory conducts testing.
- We complete a final technical evaluation.
- NSF certification is granted (and maintained annually).

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
- **Optional**
  - Cyst reduction
  - Hexavalent and trivalent chromium reduction
  - Arsenic reduction
  - Nitrate/nitrite reduction
  - Cadmium reduction
  - Lead reduction
  - Barium reduction
  - Turbidity reduction
  - Fluoride 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.