



*NSF International Standard /
American National Standard*

NSF/ANSI 50 - 2011

Equipment for Swimming Pools, Spas,
Hot Tubs and Other Recreational
Water Facilities



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Chair, Joint Committee on Recreational Water Facilities
c/o NSF International
789 Dixboro Road, P.O. Box 130140
Ann Arbor, Michigan 48113-0140 USA
Phone: (734) 769-8010 Telex: 753215 NSF INTL
FAX: (734) 769-0109
E-mail: info@nsf.org
Web: <http://www.nsf.org>

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American National Standard

Equipment for Swimming Pools,
Spas, Hot Tubs and other
Recreational Water Facilities—

Evaluation criteria for materials, components,
products, equipment and systems for use at
recreational water facilities

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Foreword²

The purpose of this Standard is to establish minimum materials, design and construction, and performance requirements for components, products, equipment and systems, related to public and residential recreational water facility operation.

If a value for measurement is followed by a value in other units in parenthesis, the second value may be only approximate. The first stated value is the requirement.

In this edition of NSF/ANSI 50 the following revisions were incorporated:

Issue 57 – CEC pump, energy and sound testing

This revision included an optional evaluation criteria and testing method for the evaluation of pumps for energy efficiency.

Issue 66 – Chemical feeders

This revision updated 5 – Filters to clarify the marking requirements for vacuum service filters to specify the collapse negative pressure in psi or inches of mercury. Sections 5 – Filters, 9 – Mechanical chemical feeding equipment and 10 – Flow-through chemical feeding equipment updated the product data plate to reference a web address and phone number by which users can obtain the installation, operation, and maintenance instructions.

Issue 66 – Equalizer line

This revision resolved the issue of public pool skimmer equalizer lines required as mandatory or optional. It provides the mechanism for continued production, testing, and certification, and the installation of skimmers equipped with equalizers where permitted or required by code and allows skimmers to be installed without equalizer lines to address jurisdictions and codes that prohibit equalizer lines and the additional submerged suction fittings.

Issue 70 – Normative Reference and mechanical chemical feeders

The revision added section within 4 to address special use suction fittings (i.e. the vacuum port fittings); updated the normative references; and 9 was revised to allow for mechanical chemical feeding equipment that operates at a fixed rate if it is controlled by a chemical controller that meets the requirements of 17 and the mechanical chemical feeder has a method of mechanically restricting the maximum output per day.

Issue 73 – Media labeling

This revision added requirements for filtration media labeling.

Issue 76 – Filtration media reorganization

NSF/ANSI 50 – 2011 was editorially reformatted to make the Standard more user friendly. A new section for filtration media was created (Section 11). The requirements in 11 - General requirements for process equipment were added to 12 – Ozone process equipment, 13 – Ultraviolet light process equipment, 14 – In-line electrolytic chlorinator or brominator process equipment, 15 – Brine (batch) type electrolytic chlorine or bromine generators, and 16 – Copper/silver and copper ion generators.

Suggestions for improvement of this Standard are welcome. Comments should be sent to Chair, Joint Committee on Recreational Water Facilities c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, MI 48113-0140, USA.

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NSF/ANSI Standard

Equipment for Swimming Pools, Spas, Hot Tubs and other Recreational Water Facilities

Evaluation criteria for materials, components, products, equipment and systems for use at recreational water facilities

1 General

1.1 Scope

This Standard covers materials, components, products, equipment and systems, related to public and residential recreational water facility operation.

1.2 Variations in design and operation

A component varying in design and/or operation may qualify under this Standard. Appropriate tests and investigations shall indicate that the component performs as well as components conforming to this Standard. Such components shall meet the requirements for materials, finishes, and construction in this Standard.

1.3 Alternate materials

If specific materials are mentioned, other materials equally satisfactory from the standpoint of public health may be permitted.

1.4 Standard review

A complete review of this Standard shall be conducted at least every five years. These reviews shall be conducted by representatives from the industry, public health, and user groups, or agencies of the NSF Joint Committee on Recreational Water Facilities.

1.5 Normative references

The following documents contain provisions that, through reference in this text, constitute provisions of this Standard. At the time of publication, the indicated editions were valid. All standards are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the standards indicated below.

21 CFR Chapter 1. *Code of Federal Regulations*³

³ USFDA, 5600 Fishers Lane, Rockville, MD 20857 <www.fda.gov>