



*NSF International Standard /
American National Standard*

NSF/ANSI 50 - 2012

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



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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

Standard Developer

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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 67 – Annex H

When Annex H of NSF 50 was modified in 2005 the procedure eliminated the specific test method for ion generators. This revision reinstates a specific test method for ion generators as well as requires statements in the listing and use instructions that communicate disinfection capabilities of the certified systems.

Issue 71 – Batch chlorination systems

This revision updated the operating condition specifications in 15.2 for batch chlorination system components.

Issue 72 – Permeability

This revision added a test method for determination of the permeability and cake density of pre-coat filter media.

Issue 79 – Life testing

This revision updated the life testing requirements for process equipment

Issue 81 – Fence barriers, chemical feed stock, multi-port valve

This revision included modification or updates to: fences and barriers, valve handle clarification, spa temperature requirements, hardware interlock, and sensor output signal requirements.

Issue 82 – Copper tests

This revision deleted the requirements for copper test kits for copper/silver ion generators in 16.1 and 16.16.

Issue 83 – Electrical requirements

This revision rewrote and moved the electrical requirements to Annex J.

Issue 84 – Vacuum ports, data plates, AISI, SPS 4

This revision included modification or updates to: vacuum ports, data plates, and normative references.

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Issue 85 – Feeder output control, electrolytic ClBr, strainers, Annex G

This revision included modification or updates to: Annex G, electrolytic ClBr, non-integral strainers and feeder output control.

Issue 86 - APSP

This revision replaced withdrawn Standard *ANSI/ASME A112.19.8a* with *ANSI/APSP – 16*.

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.

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. The most recent published edition of the document shall be used for undated references.

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

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