



*NSF International Standard /
American National Standard*

NSF/ANSI 50 - 2016a

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



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NSF/ANSI 50-2016a

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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 editorial revisions and the following issues were incorporated:

Issue 108

Changes were made to the skimmer performance test procedure.

Issue 110

This issue changed the turbidity tolerance from 45 +/- 10 NTU to 45 +/- 5 NTU.

Issue 118

The upper limit of challenge organisms in H.1.6.2 was removed.

Issue 119

Language was added to specify that the Hydrostatic pressure test in 11.3 be performed on the same sample as the test in 11.2.

Issue 120

Requirements for pump voltage in 6.6 and C.1 were updated.

Issue 121

A discrepancy in units in B.4.3.1 was corrected.

Issue 122

Section N.2.3.3.1 was updated to require 4 ORP sensors, consistent with other language in Annex N.

Issue 123

Column titles in Tables O.1 through O.9 were updated for consistency.

Issue 125

This revision modified the test procedure for automated controllers.

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The figure titles in this edition have also been changed to maintain consistency:

Previous edition of NSF/ANSI 50	Current edition of NSF/ANSI 50
Figure B.1	Figure 1
Figure C.1	Figure 2
Figure D.1	Figure 3
Figure D.2	Figure 4
Figure D.3	Figure 5
Figure D.4	Figure 6
Figure D.5	Figure 7
Figure D.6	Figure 8
Figure D.7	Figure 9
Figure H.1	Figure 11
Figure A.1	Figure 12
Figure H.2	Figure 13
Figure P.1	Figure 15

This Standard was developed by the NSF Joint Committee on Recreational Water Facilities using the consensus process described by the American National Standards Institute.

Suggestions for improvement of this Standard are welcome. This Standard is maintained on a Continuous Maintenance schedule and can be opened for comment at any time. Comments should be sent to Chair, Joint Committee on Recreational Water Facilities at standards@nsf.org, or 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

21 CFR Part 58, Subchapter A. *Code of Federal Regulations*³

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