

*American National Standard for
Residential Inground Swimming Pools*



**NATIONAL
SPA & POOL
INSTITUTE**

*Approved December 16, 2002
American National Standards Institute*

(Effective October 1, 2003)

ANSI
NSPI-5-2003
Revision of
ANSI/NSPI-5-1995

American National Standard
for Residential Inground Swimming Pools

Sponsor

National Spa and Pool Institute

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American National Standards Institute, Inc.

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It is assumed and intended that pool users will exercise appropriate personal judgment and responsibility and that operators will create and enforce rules of behavior and warning appropriate for their pool.

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Foreword

(This Foreword is not part of the American National Standard ANSI/NSPI-5 2003)

This standard is a revision of ANSI/NSPI-5 1995, *Standard for Residential Inground Swimming Pools*, which was first approved by the American National Standard Institute on April 25, 1995 as an American National Standard. This standard was approved December 16, 2002. The effective date is October 1, 2003. The effective date is established by the National Spa and Pool Institute and not by the American National Standards Institute.

The objective of this standard is to provide recommended minimum guidelines for the design, equipment, installation, and use of residential inground swimming pools. It is also intended to assist local jurisdictions and other regulatory bodies, where necessary, in the development and promulgation of criteria for residential inground swimming pools.

The design requirements and construction practices in this standard are based upon sound engineering principles, research and field experience which, when applied properly, contribute to the delivery and installation of a safe product.

The words “safe” and “safety” are not absolutes. While the goal of this standard is to design and construct a safe, enjoyable product, it is recognized that risk factors cannot, as a practical matter, be reduced to zero in any human activity. This standard does not replace the need for good judgment and personal responsibility. In permitting use of the pool by others, owners must consider the skill, attitude, training and experience of the expected user.

As with any product, the specific recommendations for installation and use provided by the manufacturer should be carefully observed.

This standard was prepared by the NSPI-5 Residential Inground Swimming Pool Standards Writing Committee of the National Spa and Pool Institute (NSPI) in accordance with American National Standards Institute (ANSI) *Procedures for the Development and Coordination of American National Standards* utilizing the ANSI-accredited canvass method. Consensus approval was achieved by ballot of the NSPI-5 canvass list.

The consensus committee that approved this standard was balanced to ensure that individuals from competent and concerned interests have had an opportunity to participate. The proposed standard was made available for public review and comment, which provides an opportunity for additional input from industry, academia, regulatory agencies, and the public at large.

The following organizations, recognized as having an interest in the standardization of residential inground swimming pools, were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposed standard to ANSI.

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In accordance with American National Standards Institute (ANSI) procedures, this document will be reviewed periodically. The National Spa and Pool Institute welcomes your comments and suggestions, and continues to review all NSPI standards, which include:

- ANSI/NSPI-1 2003 Standard For Public Swimming Pools
- ANSI/NSPI-2 1999 Standard For Public Spas
- ANSI/NSPI-3 1999 Standard For Permanently Installed Residential Spas
- ANSI/NSPI-4 1999 Standard For Aboveground/Onground Residential Swimming Pools
- ANSI/NSPI-5 2003 Standard For Residential Inground Swimming Pools
- ANSI/NSPI-6 1999 Standard For Residential Portable Spas
- NSPI-7 Workmanship Standards For Swimming Pools and Spas
- ANSI/NSPI-8 1996 Model Barrier Code for Residential Swimming Pools, Spas and Hot Tubs
- BSR/NSPI/WWA-9 Standard for Aquatic Recreation Facilities (In Progress)
- BSR/NSPI-10 Standard for Public Swimspas (In Progress)
- BSR/NSPI-11 Standard for Residential Swimspas (In Progress)

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ANSI/NSPI-5 2003

Standard for Residential Inground Swimming Pools

1 Scope

1.1 Residential pools. This standard applies to permanently installed residential inground swimming pools intended for noncommercial use as a swimming pool by not more than three owner families and their guests and exceeding 24 inches (61 cm) in water depth and having a volume over 3,250 gallons (12,303 L).

1.2 Construction. This standard covers specifications for new construction and rehabilitation or residential inground swimming pools and includes design, equipment, operation and installation.

1.3 Variation in designs. This standard permits variations in equipment, materials, and design, including special features such as but not limited to ledges beach entries, waterfalls, fountains, bridges, planters, seats, benches, swimouts, in-pool tables and bar stools, walls over 12 inches (30.5 cm), scuba pools, spas, lap pools, swimspas, spillways, slides, coves, beams, etc. to accommodate special needs consideration and advances in technology.

1.3.1 Special purpose pools. Examples of special purpose pools include, but are not limited to, island pools, scuba pool, spas, lap pools and swimspas.

1.4 Important safety consideration. The variations in 1.3 shall consider safety for the intended use and the circulation of the swimming pool water.

1.5 Other standards. This standard does not apply to pools and spas covered by ANSI/NSPI-1 Standard for Public Swimming Pools, ANSI/NSPI-2 Standard for Public Spas, ANSI/NSPI-3 Standard for Permanently Installed Spas, ANSI/NSPI-4 Standard for Aboveground/Onground Residential Swimming Pools, ANSI/NSPI-6 Standard for Residential Portable Spas and Swimspas.

1.6 Workmanship. All work shall be performed in accordance with the 1996 NSPI Workmanship standard or the latest revision.

2 General design criteria

2.1 Materials of components and accessories. The materials of components and accessories used for permanently installed inground residential swimming pools shall be compatible with the user and the environment in which they are installed. The materials shall be capable of fulfilling the design, installation and the intended use requirements in this standard.

2.2 Selection of materials. The selection of materials, manufactured components, accessories and construction processes shall be such that external surfaces and edges that come in contact with the user are arranged, and furnished so they will not constitute a cutting, pinching, puncturing or abrasion hazard.

2.3 Entrapment avoidance. There shall be no protrusions or other obstructions in the swimming area, which may cause the entrapment or entanglement of the user.

3 Plans and permits

3.1 Approval of state or local authority. Prior to construction, rehabilitation, or alteration of a permanently installed residential pool, plans and specifications shall be submitted as required by the state or local authority for review, approval, and issuance of a permit.

4 Structural design

4.1 Structural design. The structural design and materials used shall be in accordance with generally accepted structural engineering practices and methods.

4.2 Freezing. In climates subject to freezing temperatures, the pool shell shall be so designed and constructed to protect it from structural damage due to freezing.

5 Pool dimensions and tolerances

5.1 General requirements. Design dimensions shall comply with specifications in this standard. The pool shall be constructed to these design dimensions within the tolerances listed in 5.1.1.