

ANSI/APSP/ICC/NPC-12 2016

# American National Standard for the Plastering of Swimming Pools and Spas



Approved November 3, 2015



*The Association of  
Pool & Spa Professionals®*



**NATIONAL PLASTERERS COUNCIL**

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**American National Standard for the  
Plastering of Swimming Pools and Spas**

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Approved November 3, 2015  
American National Standards Institute (ANSI)

## American National Standard

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## Foreword

This Foreword is not part of the American National Standard ANSI/APSP/ICC/NPC-12 2016. It is included for information only.

The ANSI/APSP/ICC/NPC-12 2016, *American National Standard for the Plastering of Swimming Pools and Spas*, was approved by ANSI as a new standard on November 3, 2015.

Federal, state, local, and international authorities, as well as industry members and consumers, recognize the need for modern, up-to-date standards governing the design, construction, alteration, repair and maintenance of swimming pools, spas, hot tubs and aquatic facilities and other water-containment vessels.

This standard was designed to accomplish this need by addressing the cementitious interior finish of swimming pools, spas, and other aquatic facilities, public and residential. It is also intended to assist state local jurisdictions, and well as national and international regulatory bodies, where necessary, in the development and promulgation of criteria for this purpose. It is also intended for adoption into the International Swimming Pool and Spa Code™ (ISPSC) published in jointly with the International Code Council (ICC) and the Association of Pool and Spa Professionals (APSP).

The design recommendations 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 reliable and safe product. The recommendations in this Standard are not designed or intended to reference or preclude all potential or alternative materials, methodologies. The primary focus of this document is to substantiate sound common practices currently utilized throughout the U.S. Plastering Trade, and which have shown a satisfactory history of performance. Specifications in this Standard should not limit the Trade from using materials, methods, or practices that have been shown historically to achieve an equivalent performance. Preferred nuances, regional variations, and increased levels of quality or performance can be specified or stipulated by contract that meet or exceed the minimum provisions herein.

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 APSP-12 Plastering of Swimming Pool Standards Writing Committee of the Association of Pool & Spa Professionals (APSP) and the National Plasters Council (NPC) in accordance with American National Standards Institute (ANSI) Essential Requirements: Due process requirements for American National Standards. Consensus approval was achieved by ballot of the ANSI Standards Consensus Committee (SCC).

The SCC 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.

Consensus approval was achieved by a ballot of the American National Standards Institute (ANSI) Consensus Voting Body, the APSP Standards Consensus Committee (SCC), and through an ANSI Public Review process. The ANSI Public Review provided an opportunity for additional input from industry, academia, regulatory agencies, safety experts, state code and health officials, and the public at large.

Suggestions for improvement of this standard should be sent to the Association of Pool and Spa Professionals, 2111 Eisenhower Avenue, Alexandria, VA 22314.

## Development

This first edition of the ANSI/APSP/ICC/NPC-12 2016 *Standard for the Plastering of Swimming Pools and Spas* is the culmination of an initial drafting effort of the National Plasterers Council's Technical Manual by Jonathan E. Dongell, which was reviewed and adopted by the National Plasterers Council in 2005, first edition, as well an initial drafting effort by Jonathan E. Dongell of the National Plasterers Council's Commercial Specification for Swimming Pool Plastering that was reviewed and adopted by the National Plasterers Council in 2014, first edition, as well as relevant sections of current codes,

specification, standards, and manuals from the International Code Council (ICC), ASTM International, and American Concrete Institute (ACI) combined in an initial draft effort by Jonathan E. Dongell of this code specification. The initial draft was submitted to the National Plasterers Council for their review and acceptance in 2014.

Subsequently, a formal draft of this code specification, as adopted by the National Plasterers Council, was submitted to APSP to undergo ANSI Standards Consensus Committee (SCC) Ballot and Public Review through APSP's ANSI Accredited Procedures seeking ANSI approval.

## Adoption

The ANSI/APSP/ICC/NPC-12 2016 *Standard for the Plastering of Swimming Pools and Spas* is available for adoption and use by the authority having jurisdiction. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings established in the jurisdiction's laws. At the time of adoption, jurisdictions should insert the appropriate information in provisions requiring specific local information, such as the name of the adopting jurisdiction.

## Development

The ANSI/APSP/ICC/NPC-12 2016 *Standard for the Plastering of Swimming Pools and Spas* will be kept up to date according to the ANSI Accredited Procedures of the APSP.

This standard is published in partnership with the International Code Council (ICC). ICC develops and publishes the **International Building Code (IBC)** and **International Residential Code (IRC)**, which are adopted as the basis for the building codes used in most states and jurisdictions within the United States. Additionally, APSP and ICC have collaborated to develop the first comprehensive model swimming pool and spa code, known as the **International Swimming Pool and Spa Code**. This landmark document incorporates and references material from ANSI/APSP standards and ICC's model codes, to create a stand-alone code that is consistent with codes and standards from both organizations.

These codes and standards are the result of a joint effort between ICC and APSP as a service to both the swimming pool and spa community, and building code professionals. It is the hope of both organizations that they will lead to enhanced safety for pool and spa users around the world.

## Organizations Represented

Consensus approval in accordance with ANSI procedures was achieved by ballot of the following APSP Standards Consensus Committee (SCC). Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposed standard to ANSI.

### Producers

All American Custom Pools & Spas, Inc. . . . John Romano  
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Hayward Industries . . . . . John O'Hare  
HornerXpress South Florida . . . . . Bill Kent  
Master Spas, Inc. . . . . Nathan Coelho  
Paragon Pools . . . . . Joe Vassallo  
Rosebrook Carefree Pools, Inc. . . . . John Bently  
S.R. Smith, LLC . . . . . Bill Svendsen  
Trilogy Pools . . . . . Ted Baudendistel  
Van Kirk & Sons, Inc. . . . . Don Cesarone

### General Interest

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American Red Cross . . . . . Connie Harvey  
Chesapeake Aquatic Consultants, LLC . . . Frank Goldstein  
Conroe Independent School District, TX . . . Louis Sam Fruia  
Higgins Environmental Solutions  
(National Environmental Health Assoc.) . . . Florence Higgins  
Walt Disney Parks and Resorts . . . . . Michael Beatty  
Don Witte, Consultant . . . . . Don Witte  
World Waterpark Association . . . . . Rick Root  
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\*non-voting

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

- ANSI/APSP/ICC-1 2014** Standard for Public Swimming Pools
- ANSI/APSP-2 1999** Standard for Public Spas
- ANSI/APSP/ICC-3 2014** Standard for Permanently Installed Residential Spas and Swim Spas
- ANSI/APSP/ICC-4 2012** Standard for Aboveground/Onground Residential Swimming Pools Includes Addenda A Approved April 4, 2013
- ANSI/APSP/ICC-5 2011** Standard for Residential Inground Swimming Pools Includes Addenda A Approved June 28, 2012
- ANSI/APSP/ICC-6 2013** Standard for Residential Portable Spas and Swim Spas
- ANSI/APSP/ICC-7 2013** Standard for Suction Entrapment Avoidance In Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins
- ANSI/APSP/ICC-8 2005 (R2013)** Standard Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs
- ANSI/SPSP-9 2005** Standard for Aquatic Recreation Facilities
- ANSI/APSP-11 2009 (PA)** Standard for Water Quality in Public Pools and Spas Includes Provisional Amendment Approved May 4, 2015
- ANSI/APSP/ICC-14 2014** Standard for Portable Electric Spa Energy Efficiency
- ANSI/APSP/ICC-15 2011** Standard for Residential Swimming Pool and Spa Energy Efficiency Includes Addenda A Approved January 9, 2013
- ANSI/APSP-16 2011** Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs

### APSP-12 Writing Committee

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Anderson Poolworks . . . . . Dana Anderson  
Applied Materials Technologies . . . . . Greg Garrett  
BND Plastering, Inc. . . . . Jay Stone  
G & B Tile & Plaster, Ltd. . . . . Greg Musgrove  
Gardner Pool Plastering . . . . . Scott McKenna  
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# Standard for the Plastering of Swimming Pools and Spas

## PART 1 – GENERAL

### 1.1 SCOPE

1.1.1 This standard covers the material and application for the plastering of cementitious finish coatings for in-ground swimming pools or other cementitious water-containment vessels (see Appendix).

1.1.2 Except to the extent specified in the Standard, the terms specified by contractual agreement shall govern.

1.1.3 Except where indicated, this Standard shall apply to the public and residential plastering of swimming pools.

1.1.4 Where designated "For Public Swimming Pools Only" this portion of Standard shall apply to Class A, B, D, E and F public swimming pools as defined in ANSI<sup>1</sup>/APSP<sup>2</sup>-1 *Standard for Public Swimming Pools*, and shall not apply to residential or Class C public swimming pools.

### 1.2 SUMMARY

1.2.1 'Work' shall include all labor, materials, services, scaffolding, and equipment required to complete the plastering of the interior of a swimming pool, spa, water feature, or other water-containment vessel, as per the project stipulations, in accordance with drawings, plans, and provisions of the contract.

1.2.2 'Swimming pool,' 'water feature,' and 'water-containment vessel' are used within this standard interchangeably, and shall include any permanent vessel having a cementitious substrate designed to hold water, and that will have a cementitious interior finish coating applied (plastered) that will remain submersed in water during service life (see Appendix).

1.2.3 For the purposes of this standard, 'plastering' shall designate the methodology and/or action of applying a cementitious interior finish coating material in a swimming pool or other water-containment vessel.

### 1.3 APPLICABLE GOVERNING DOCUMENTS

1.3.1 All drawings, plans, and general provisions of the contract shall govern.

1.3.2 All codes, specifications, standards, manuals, guides, and related documents from Section 1.4 that

are applicable to the trade practice of plastering of cementitious interior finish coatings for cementitious water containment vessels, and related work, when stipulated within the drawings, plans, or provisions of the contract, shall govern (see Appendix).

### 1.4 APPLICABLE MOST RECENT EDITION CODES, SPECIFICATIONS, STANDARDS, MANUALS, AND GUIDES RELATED TO PLASTERING, CONCRETE, AND SWIMMING POOLS

#### 1.4.1 Related Sections in IBC Code<sup>3</sup>:

Chapter 19 – Concrete  
Section 1910 – Shotcrete  
Section 2511 – Interior Plaster  
Section 2512 – Exterior Plaster  
Section 2512 – Exposed Aggregate Plaster

#### 1.4.2 Related Sections in APSP International Swimming Pool and Spa Code<sup>4</sup>:

Section 307.3 – Materials  
Section 307.4 – Structural Design  
Section 307.6 – Surface Condition  
Section 307.7 – Colors and Finish  
Section 411.5 (Item #4) – Underwater Seats, Benches, and Swimouts  
Table 502.1 – Reservoirs and Shells  
Section 610.5 – Pool Steps  
Section 610.6 – Swimouts  
Section 610.7 – Underwater Seats and Benches  
Section 802.1 – Materials of Components and Accessories  
Section 802.3 – Structural Design

#### 1.4.3 Related ASTM<sup>5</sup> Specifications:

C 109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars  
C 150 Standard Specification for Portland Cement

1 American National Standards Institute (ANSI), 25 West 43rd Street, New York NY 10036 USA, 1-212-642-4900, www.ANSI.org

2 The Association of Pool and Spa Professionals (APSP), 2111 Eisenhower Avenue, Alexandria, VA 22314-4679 USA, 1-703-838-0083, www.APSP.org

3 The International Code Council (ICC), 4051 West Flossmoor Road, County Club Hills, IL 60478 USA, 1-888-ICC-SAFE (422-7233), www.iccsafe.org

4 The International Code Council (ICC), 4051 West Flossmoor Road, County Club Hills, IL 60478 USA, 1-888-ICC-SAFE (422-7233), www.iccsafe.org

5 ASTM International (formerly American Society of Testing & Materials), 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959 USA, 1-877-909-2786, www.ASTM.org