

American Water Works Association

ANSI/AWWA C513-97

(First Edition)



AWWA STANDARD
FOR
**OPEN-CHANNEL,
FABRICATED-METAL
SLIDE GATES**



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AMERICAN WATER WORKS ASSOCIATION

6666 West Quincy Avenue, Denver, Colorado 80235

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Committee Personnel

The AWWA Standards Committee on Sluice Gates, which developed this standard, had the following personnel at the time:

Henry H. Benjes Jr., *Chair*

Consumer Members

R.J. Alberts, City of Pasco, Pasco, Wash.	(AWWA)
Ronald Arrington, US Bureau of Reclamation, Denver, Colo.	(USBR)
K.D. Jones, City of Midland, Midland, Texas	(AWWA)
H.C. Suan, Edmonton Public Works, Edmonton, Alta.	(AWWA)

General Interest Members

C.S. Barger, Bloomington, Minn.	(AWWA)
H.H. Benjes Jr., HDR Inc., Dallas, Texas	(AWWA)
Aivars Bergs, R.V. Anderson Associates Ltd., Willowdale, Ont.	(AWWA)
J.H. Cook, Fort Worth, Texas	(AWWA)
C.R. Dugan,* Council Liaison, Lansing Board of Water and Light, Lansing, Mich.	(AWWA)
E.S. Ralph,* Standards Engineer Liaison, AWWA, Denver, Colo.	(AWWA)

Producer Members

P.E. Brunelle, Rodney Hunt Company, Orange, Mass.	(AWWA)
Carl Ingimundson, Armtec Water Control Products, Guelph, Ont.	(AWWA)
M.J. McCaig, Hydro Gate Corporation, Commerce City, Colo.	(AWWA)
G.M. Tuttle, Waterman Industries Inc., Exeter, Calif.	(AWWA)

* Liaison, nonvoting

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Foreword

This foreword is for information only and is not a part of AWWA C513.

I. Introduction.

I.A. *Background.* Open-channel, fabricated-metal slide gates are mechanically actuated plates positioned in open-channel conduits. Fabricated slide gates do not include stop plates that are manually placed in grooves in an open channel. The common use of open-channel, fabricated-metal slide gates in water facilities led to the preparation of this standard. The open-channel, fabricated-metal slide gate described in this standard is intended to be used to shut off water in water conveyance channels.

I.B. *History.* The first edition of ANSI/AWWA C513 was developed in 1996 by the AWWA Standards Committee on Sluice Gates as a result of infrastructure needs for placement and replacement of slide gates. This standard was approved by the AWWA Board of Directors on Feb. 2, 1997.

I.C. *Acceptance.* In May 1985, the US Environmental Protection Agency (USEPA) entered into a cooperative agreement with a consortium led by NSF International (NSF) to develop voluntary third-party consensus standards and a certification program for all direct and indirect drinking water additives. Other members of the original consortium included the American Water Works Association Research Foundation (AWWARF) and the Conference of State Health and Environmental Managers (COSHEM). The American Water Works Association (AWWA) and the Association of State Drinking Water Administrators (ASDWA) joined later.

In the United States, authority to regulate products for use in, or in contact with, drinking water rests with individual states.* Local agencies may choose to impose requirements more stringent than those required by the state. To evaluate the health effects of products and drinking water additives from such products, state and local agencies may use various references, including

1. An advisory program formerly administered by USEPA, Office of Drinking Water, discontinued on Apr. 7, 1990.
2. Specific policies of the state or local agency.
3. Two standards developed under the direction of NSF, ANSI[†]/NSF[‡] 60, Drinking Water Treatment Chemicals—Health Effects, and ANSI/NSF 61, Drinking Water System Components—Health Effects.
4. Other references, including AWWA standards, *Food Chemicals Codex*, *Water Chemicals Codex*,[§] and other standards considered appropriate by the state or local agency.

Various certification organizations may be involved in certifying products in accordance with ANSI/NSF 61. Individual states or local agencies have authority to

* Persons in Canada, Mexico, and non-North American countries should contact the appropriate authority having jurisdiction.

[†] American National Standards Institute, 11 W. 42nd St., New York, NY 10036.

[‡] NSF International, 3475 Plymouth Rd., Ann Arbor, MI 48106.

[§] Both publications available from National Academy of Sciences, 2102 Constitution Ave. N.W., Washington, DC 20418.

accept or accredit certification organizations within their jurisdiction. Accreditation of certification organizations may vary from jurisdiction to jurisdiction.

Appendix A, "Toxicology Review and Evaluation Procedures," to ANSI/NSF 61 does not stipulate a maximum allowable level (MAL) of a contaminant for substances not regulated by a USEPA final maximum contaminant level (MCL). The MALs of an unspecified list of "unregulated contaminants" are based on toxicity testing guidelines (noncarcinogens) and risk characterization methodology (carcinogens). Use of Appendix A procedures may not always be identical, depending on the certifier.

AWWA C513-97 does not address additives requirements. Thus, users of this standard should consult the appropriate state or local agency having jurisdiction in order to

1. Determine additives requirements, including applicable standards.
2. Determine the status of certifications by all parties offering to certify products for contact with, or treatment of, drinking water.
3. Determine current information on product certification.

II. Special Issues. This standard has no applicable information for this section.

III. Use of This Standard. AWWA has no responsibility for the suitability or compatibility of the provisions of this standard to any intended application by any user. Accordingly, each user of this standard is responsible for determining that the standard's provisions are suitable for and compatible with that user's intended application.

III.A. Purchaser Options and Alternatives. The following items should be covered in the purchaser's specifications:

1. Standard used—that is, ANSI/AWWA C513, Standard for Open-Channel, Fabricated-Metal Slide Gates, of latest revision.
2. Number of units required.
3. Size and type of gate.
4. Type of lift mechanism structural support (Sec. 4.3.8.2).
5. Driver media and pressure (refer to ANSI/AWWA C540, Standard for Power-Actuating Devices for Valves and Sluice Gates).
6. Any drawings and material specifications required of the manufacturer (Sec. 4.1).
7. If test records must be viewed (Sec. 4.2.2).
8. Acceptable materials (Sec. 4.2).
9. Standard or self-contained gate frame (Sec. 4.3.1.2 and 4.3.1.3).
10. Rising stem or nonrising stem (Sec. 4.3.2.3).
11. Type of lift mechanism: manual, electric-motor-driven, or hydraulic-cylinder. The purchaser should refer to ANSI/AWWA C540 if the lift mechanism is electric-motor-driven or hydraulic-cylinder.
12. Omission of stem covers (Sec. 4.3.8.6) if not required.
13. Leakage tests in the shop (Sec. 5.2.2) and in the field (Sec. 4.5.5) if required.
14. Definition of any special design and construction required for conditions beyond the scope of this standard, such as throttling service or downward acting gates, including intended operation frequency and duration.
15. Frequency of operation and special operating conditions, such as ice formation.
16. An installation-requirement drawing showing clearances, wall thickness, details of wall pipe and thimble installation, and operator location.
17. Affidavit of compliance and certification of design (Sec. 6.3).

III.B. *Modification to Standard.* Any modification to the provisions, definitions, or terminology in this standard must be provided in the purchaser's specifications.

IV. **Major Revisions.** This standard has no applicable information for this section.

V. **Comments.** If you have any comments or questions about this standard, please call the AWWA Standards and Materials Development Department, (303) 794-7711 ext. 6283, FAX (303) 795-1440, or write to the department at 6666 W. Quincy Ave., Denver, CO 80235.