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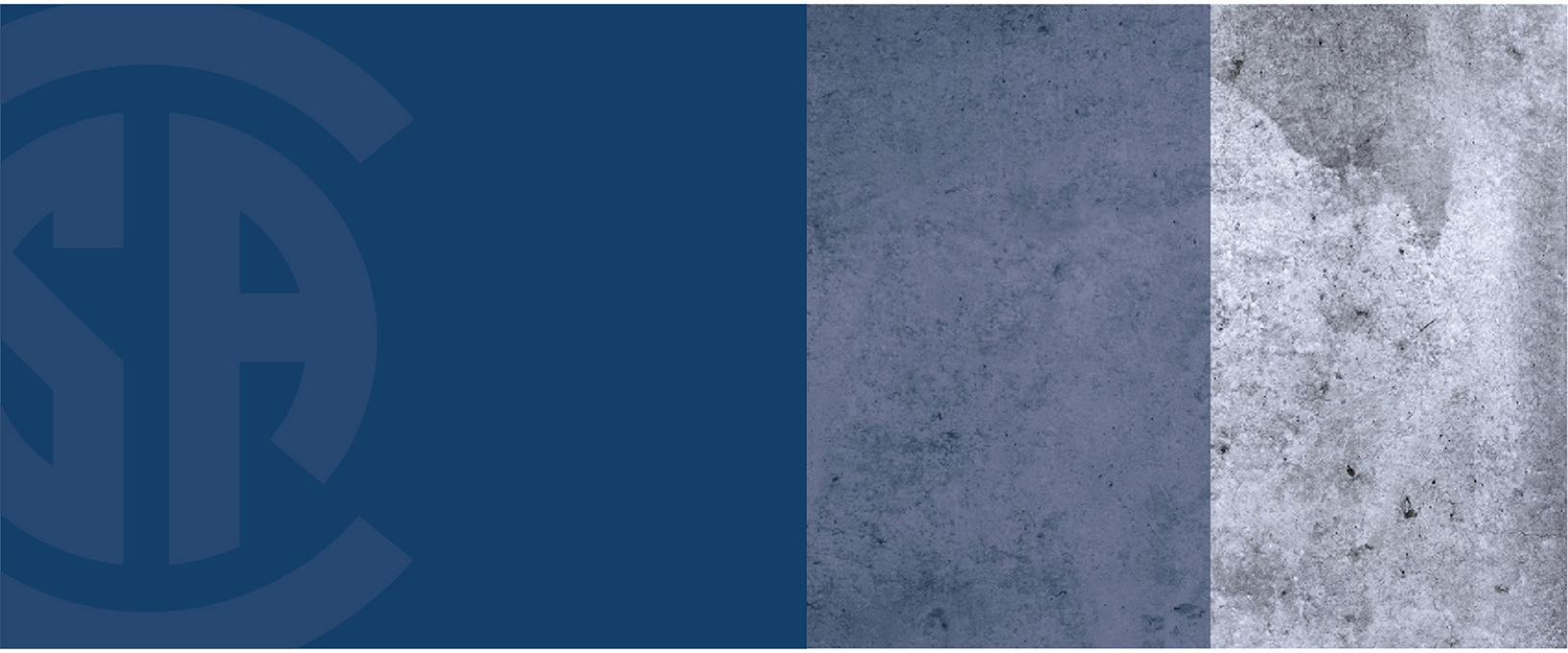
CSA A257 Series:19
National Standard of Canada

Standards for concrete pipe and manhole sections



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Preface

This is the seventh edition of CSA A257 Series, *Standards for concrete pipe and manhole sections*. It supersedes the previous editions published in 2014, 2009, 2003, 1992, 1982, and 1974.

This is a performance Standard. As with the previous editions, the Standards contained in this edition include requirements for

a) the determination of physical properties;
b) non-reinforced circular concrete pipe;
c) steel-reinforced circular concrete pipe; and
d) joints for concrete pipe.

The major changes in this new edition are

a) clarification of the maximum intervals for the three-edge-bearing test;
b) clarification of the requirements for tack welding of reinforcing bars; and
c) revision to the crushing strength and D-load strength test frequencies.

These Standards were prepared by the Technical Committee on Concrete Pipe, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and have been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at* ***standardsactivities.csa.ca****.*
5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to* ***inquiries@csagroup.org*** *and include "Proposal for change" in the subject line:*
   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

National Standard of Canada

CSA A257.0:19

Methods for determining physical properties of circular precast concrete pipe, manhole sections, catch basins, and fittings

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CSA A257.0:19
Methods for determining physical properties of circular precast concrete pipe, manhole sections, catch basins, and fittings

1 Scope

1.1
This performance Standard applies to circular precast concrete pipe, manhole (maintenance hole) sections, and accessories intended for

a) use as sewer pipe for the conveyance of sewage, industrial wastes, and storm water; and
b) the construction of culverts.

1.2
This Standard describes the following procedures for testing circular precast concrete pipe, manhole sections, and joints:

a) three-edge-bearing test (see Clause 4);
b) concrete compression tests (see Clause 5);
c) absorption test (see Clause 6);
d) hydrostatic test (see Clause 7);
e) flat slab top test (see Clause 8); and
f) manhole step tests (see Clause 9).

1.3
This Standard does not apply to cast-in-place elements or to non-circular precast concrete pipe, manhole, or catch basin sections.

1.4
In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.