



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.

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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.

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

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