



B1800-18
National Standard of Canada



Thermoplastic nonpressure piping compendium



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Revision History

B1800-18, Thermoplastic nonpressure piping compendium

Update No. 1 — September 2019	Revision symbol (in margin)
<p><u>B181.0-18</u> Clauses 1.1, 2, and 3 Table 6</p> <p><u>B181.1-18</u> Clauses 1.1, 5.4.1, and 6.2.1</p> <p><u>B181.2-18</u> Clauses 1.1 and 6.2.1</p> <p><u>B181.3-18</u> Clause 6.1.1</p> <p><u>B182.1-18</u> Clause 6.2</p> <p><u>B182.2-18</u> Clauses 5.2.1A and 5.4.1A</p> <p><u>B182.6-18</u> Clauses 5.4.1, 5.5.4, 7.3, 7.5, 8.1A, 8.2.1, 8.3, and 8.7 Tables 4, A.1, and B.1</p> <p><u>B182.8-18</u> Clauses 1.1, 4.1.1.3, 4.4, 5.1, 5.4.1, 5.5.4, 7.3, 7.4, 7.5, 7.6, 8.1A, 8.2.1, 8.3, 8.5.2, 8.5.4, 8.7, 8.8, 8.9, 8.10, and 9.1 Annex G Tables 1, 2, 5, A.1, and B.1</p> <p><u>B182.13-18</u> Clauses 4.1.1, 5.4.1, 5.5.4, 7.4, 8.1A, 8.2.1, 8.5, and 8.8 Tables 3, A.1, B.1, and B.2</p> <p><u>B182.14-18</u> Clauses 5.6.4, 7.3, 7.4, and 8.3 Tables 3 and A.1</p> <p><u>B182.15-18</u> Clauses 5.6.4, 7.3, 7.4, and 8.3 Tables 3 and A.1</p>	<p>①</p>

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B1800-18

March 2018

Title: *Thermoplastic nonpressure piping compendium*

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*Published in March 2018 by CSA Group
A not-for-profit private sector organization
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*ICS 23.040.45
ISBN 978-1-4883-0937-3*

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Preface

This is the sixth edition in the form of a compendium of the CSA B181 and CSA B182 series of Standards, published as CSA B1800, *Thermoplastic nonpressure piping compendium*. It supersedes the previous editions of the compendium, published in 2015, 2011, 2006, 2002, and 1999. It consists of the following Standards:

- the fourth edition of CSA B181.0, *Definitions, general requirements, and methods of testing for thermoplastic nonpressure piping*, which supersedes the previous editions published in 2015, 2011, and 2006;
- the eleventh edition of CSA B181.1, *Acrylonitrile-butadiene-styrene (ABS) drain, waste, and vent pipe and pipe fittings*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1996, 1990, 1985, 1973, and 1967;
- the twelfth edition of CSA B181.2, *Polyvinylchloride (PVC) and chlorinated polyvinylchloride (CPVC) drain, waste, and vent pipe and pipe fittings*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1996, 1990, 1987, 1985, 1973, and 1967;
- the eighth edition of CSA B181.3, *Polyolefin and polyvinylidene fluoride (PVDF) laboratory drainage systems*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1986, and 1971;
- the eighth edition of CSA B181.5, *Coextruded acrylonitrile-butadiene-styrene/polyvinylchloride (ABS/PVC) drain, waste, and vent pipe*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1995, and 1994;
- the twelfth edition of CSA B182.1, *Plastic drain and sewer pipe and pipe fittings*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1996, 1992, 1987, 1983, 1977, and 1967;
- the ninth edition of CSA B182.2, *PSM type polyvinylchloride (PVC) sewer pipe and fittings*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1995, 1990, and 1983;
- the tenth edition of CSA B182.4, *Profile polyvinylchloride (PVC) sewer pipe and fittings*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1997, 1992, 1990, and 1983;
- the seventh edition of CSA B182.6, *Profile polyethylene (PE) sewer pipe and fittings for leak-proof sewer applications*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, and 1992;
- the fifth edition of CSA B182.8, *Profile polyethylene (PE) storm sewer and drainage pipe and fittings*, which supersedes the previous editions published in 2015, 2011, 2006, and 2002;
- the eighth edition of CSA B182.11, *Standard practice for the installation of thermoplastic drain, storm, and sewer pipe and fittings*, which supersedes the previous editions published in 2015, 2011, 2006, 2002, 1999, 1995, and 1967;
- the third edition of CSA B182.13, *Profile polypropylene (PP) sewer pipe and fittings for leak-proof sewer applications*, which supersedes the previous editions published in 2015 and 2011;
- the second edition of CSA B182.14, *Profile steel reinforced polyethylene (SRPE) storm sewer pipe and fittings*, which supersedes the previous edition published in 2015; and
- the second edition of CSA B182.15, *Profile steel reinforced polyethylene (SRPE) sewer pipe and fittings*, which supersedes the previous edition published in 2015.

These Standards are considered suitable for use for conformity assessment within the stated scopes of the Standards.

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

These Standards have been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. They have been published as National Standards 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.*

B181.0-18

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*®A trademark of the Canadian Standards Association,
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*Published in March 2018 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

*To purchase standards and related publications, visit our Online Store at store.csagroup.org
or call toll-free 1-800-463-6727 or 416-747-4044.*

*ICS 23.040.45
ISBN 978-1-4883-0937-3*

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B181.0-18

Definitions, general requirements, and methods of testing for thermoplastic nonpressure piping

1 Scope

① 1.1

This Standard covers thermoplastic nonpressure piping, including

- a) drain, waste, and vent pipe and pipe fittings;
- b) sewer and storm pipe and pipe fittings; and
- c) accessories such as factory-assembled expansion joints, closet flanges, backwater valves, and cleanouts.

Note: *This Standard does not specify requirements for venting of combustion gases. In Canada, ULC S636 specifies testing and marking requirements for pipe, fittings, and accessories intended for venting of combustion gases. In the United States, UL 1738 specifies testing and marking requirements for pipe, fittings, and accessories intended for venting of combustion gases.*

1.2

This Standard specifies general requirements for compounds and for manufactured pipe and pipe fittings, the relevant test methods, and marking requirements.

1.3

This Standard is intended to be used in conjunction with one of the other Standards in the CSA B181 or CSA B182 series to form a complete Standard for a particular product.

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.