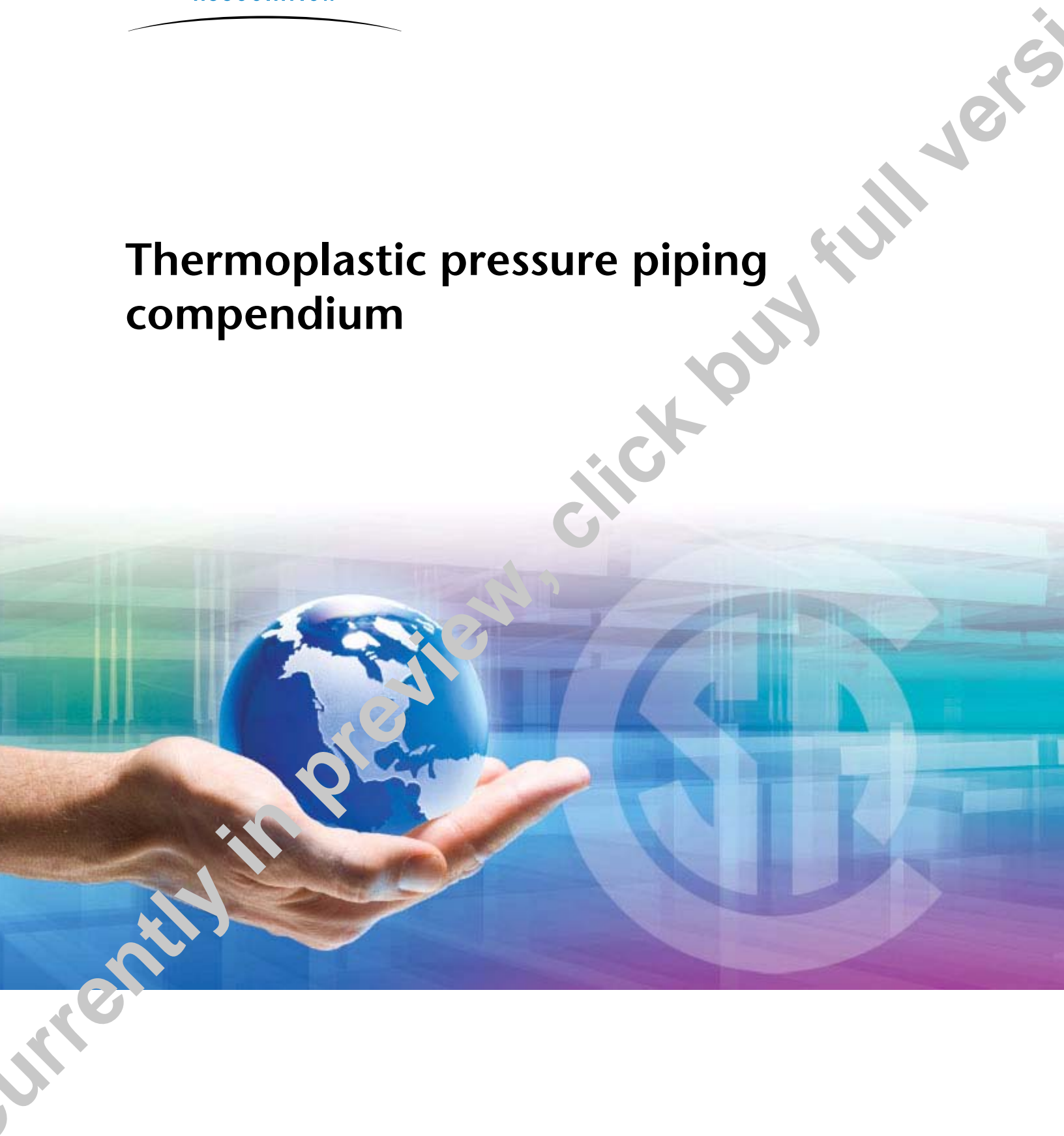


Thermoplastic pressure piping compendium



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Preface

This is the fourth edition of the CSA B137 Series of Standards, *Thermoplastic pressure piping compendium*. It supersedes the previous editions published in 2005, 2002, and 1999. It consists of the following Standards:

- (a) the eighth edition of CSA B137.0, *Definitions, general requirements, and methods of testing for thermoplastic pressure piping*, which supersedes editions published in 2005, 2002, 1999, 1993, 1986, 1981, and 1973;
- (b) the eighth edition of CSA B137.1, *Polyethylene (PE) pipe, tubing, and fittings for cold-water pressure services*, which supersedes editions published in 2005, 2002, 1999, 1995, 1989, 1983, and 1970;
- (c) the sixth edition of CSA B137.2, *Polyvinylchloride (PVC) injection-moulded gasketed fittings for pressure applications*, which supersedes editions published in 2005, 2002, 1999, 1993, and 1989;
- (d) the tenth edition of CSA B137.3, *Rigid polyvinylchloride (PVC) pipe and fittings for pressure applications*, which supersedes editions published in 2005, 2002, 1999, 1993, 1990, 1986, 1981, 1972, and 1970;
- (e) the first edition of CSA B137.3.1, *Molecularly oriented polyvinylchloride (PVCO) pipe for pressure applications*;
- (f) the eighth edition of CSA B137.4, *Polyethylene (PE) piping systems for gas services*, which supersedes editions published in 2005, 2002, 1999, 1992, 1986, 1977, and 1971;
- (g) the fifth edition of CSA B137.4.1, *Electrofusion-type polyethylene (PE) fittings for gas services*, which supersedes editions published in 2005, 2002, 1999, and 1989;
- (h) the seventh edition of CSA B137.5, *Crosslinked polyethylene (PEX) tubing systems for pressure applications*, which supersedes editions published in 2005, 2002, 1999, 1997, 1996, and 1989;
- (i) the seventh edition of CSA B137.6, *Chlorinated polyvinylchloride (CPVC) pipe, tubing, and fittings for hot- and cold-water distribution systems*, which supersedes editions published in 2005, 2002, 1999, 1996, 1983, and 1971;
- (j) the seventh edition of CSA B137.8, *Polybutylene (PB) piping systems for pressure applications*, which supersedes editions published in 2005, 2002, 1999, 1992, 1986, and 1977;
- (k) the sixth edition of CSA B137.9, *Polyethylene/aluminum/polyethylene (PE-AL-PE) composite pressure-pipe systems*, which supersedes editions published in 2005, 2002, 1999, 1997, and 1991;
- (l) the sixth edition of CSA B137.10, *Crosslinked polyethylene/aluminum/crosslinked polyethylene (PEX-AL-PEX) composite pressure-pipe systems*, which supersedes editions published in 2005, 2002, 1999, 1997, and 1991;
- (m) the fifth edition of CSA B137.11, *Polypropylene (PP-R) pipe and fittings for pressure applications*, which supersedes editions published in 2005, 2002, 1999, and 1993; and
- (n) the fifth edition of CSA B137.12, *Polyamide-11 (PA-11) piping systems for gas services*, which supersedes editions published in 2005, 2002, 1999, and 1996 under the title *Polyamide (PA) piping systems for gas services*.

CSA B137.0 provides requirements and test methods that are common to some or all of the Standards of the CSA B137 Series. Wherever possible, individual Standards make reference to the relevant clauses in CSA B137.0.

These Standards were prepared by the Technical Committee on Plastic Pressure Piping, under the jurisdiction of the Strategic Steering Committee on Water Management Products, Materials, and Systems, and have been formally approved by the Technical Committee. These Standards will be submitted to the Standards Council of Canada for approval as National Standards of Canada.

October 2009

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 publication 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 publication.*
- (4) *CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.*
- (5) *All enquiries regarding this Standard, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.*
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- (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) be phrased where possible to permit a specific “yes” or “no” answer.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA’s periodical Info Update, which is available on the CSA Web site at www.csa.ca.

CSA Standard

B137.0-09

***Definitions, general requirements, and
methods of testing for thermoplastic
pressure piping***



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B137.0-09

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

1 Scope

1.1

This Standard specifies requirements for thermoplastic pressure piping. It includes reference publications, definitions, abbreviations, general requirements for materials and manufactured pipe and fittings, relevant test methods, and marking requirements.

Note: The terms “pipe” and “piping”, as well as “tube” and “tubing”, are used interchangeably in the CSA B137 Series.

1.2

This Standard is intended to be used in conjunction with one of the other Standards in the CSA B137 Series to form a complete Standard for a particular product.

1.3

In CSA Standards, “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; “may” is used to express an option or that which is permissible within the limits of the standard; and “can” is used to express possibility or capability. 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.

2 Reference publications

The CSA B137 Series refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA (Canadian Standards Association)

CAN/CSA-B125.3-05

Plumbing fittings

CAN/CSA-C448 Series-02 (R2007)

Design and installation of earth energy systems

C22.1-09

Canadian Electrical Code, Part I

CAN/CSA-C22.2 No. 0-M91 (R2006)

General requirements — Canadian Electrical Code, Part II