

Profile steel reinforced polyethylene (SRPE) storm sewer pipe and fittings/Profile steel reinforced polyethylene (SRPE) sewer pipe and fittings



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***Profile steel reinforced polyethylene
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and fittings***



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Preface

This is the first edition of CSA B182.14, *Profile steel reinforced polyethylene (SRPE) storm sewer pipe and fittings*, and the CSA B182.15, *Profile steel reinforced polyethylene (SRPE) sewer pipe and fittings*, which will form part of the B1800 series of Standards.

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 Water Management Products, Materials, and Systems, and have been formally approved by the Technical Committee.

February 2012

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.
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CSA Standard

B182.14-12

***Profile steel reinforced polyethylene (SRPE)
storm sewer pipe and fittings***



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B182.14-12

Profile steel reinforced polyethylene (SRPE) storm sewer pipe and fittings

1 Scope

This Standard specifies requirements for profile steel reinforced polyethylene (SRPE) sewer pipe and fittings for storm sewer, and other gravity-flow applications.

Profile wall pipe in this Standard includes open profile pipe of helical construction, with a smooth interior and sizes based on controlled inside diameter. The pipe can be perforated, for specific applications, as required.

Notes:

- (1) *Pipe and fittings manufactured in accordance with this Standard should be installed in accordance with CSA B182.11.*
- (2) *The structural design of this product should be in accordance with the manufacturer's recommendations.*
- (3) *Refer to Annex A for recommended quality control test frequencies.*
- (4) *Refer to Annex B for base inside diameters used to determine installation deflection limits.*
- (5) *Refer to Annex C for fitting patterns covered by this Standard.*
- (6) *Refer to Annex D for examples of Type 3 non-gasketed coupling joints.*
- (7) *The ordering recommendations in Annex E should be followed to ensure that the requested products are described adequately.*

2 Reference publications

The publications referenced in this Standard are listed in [Clause 2](#) of CSA B182.15.

3 Definitions and abbreviations

The definitions and abbreviations listed in [Clause 3](#) of CSA B182.15 shall apply in this Standard.

4 General requirements

4.1 PE compounds

4.1.1 Pipe and fittings

4.1.1.1

Virgin PE compounds used for pipe and fittings shall comply with

- (a) cell classification 335420C or 335420E, as specified in ASTM D3350; and
- (b) the applicable requirements of Clause 4 of CSA B181.0.

4.1.1.2

Resins with a slow crack-growth resistance cell classification of less than 5, as specified in ASTM D3350, shall be evaluated using the single point notched tensile load (SP-NCTL) test specified in [Clause 8.4](#). The minimum failure time of the five test specimens shall exceed 24 h.

Note: *Resins with a slow crack growth classification of 5 or greater per ASTM D3350 are not required to perform the NCTL test because they already greatly exceed the minimum crack resistance requirements of 24 h.*