

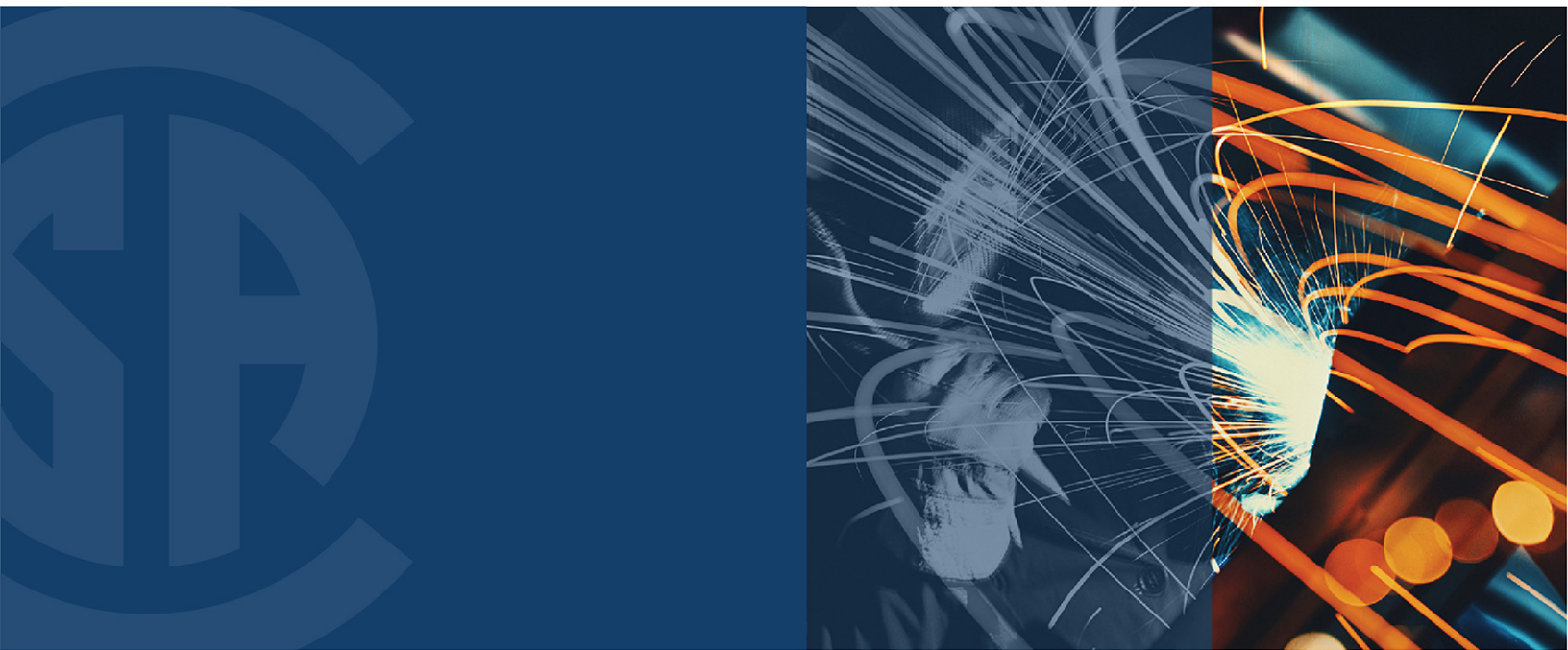


# CAN/CSA-G401-14

National Standard of Canada  
*(reaffirmed 2019)*



## Corrugated steel pipe products



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# *Revision History*

## **G401-14, Corrugated steel pipe products**

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# Preface

This is the fifth edition of CSA G401, *Corrugated steel pipe products*. It supersedes the previous editions, published in 2007, 2001, 1993, and 1981.

Changes have been made to this Standard to permit materials, manufacturing methods, and inspection procedures that meet appropriate current and projected industry practices. These changes include the following:

- a) adding requirements for structural plate Type II, deep corrugated structural plate Type III, and tunnel liner plate corrugated steel pipe (CSP) products, including product specifications, sheet layout, and installation requirements;
- b) adding requirements for polymer coating for structural plate products;
- c) adding requirements for flange connections for structural plate and deep corrugated structural plate Types I and III;
- d) changing requirements for chemical limits of structural plate;
- e) adding requirements for alternative fasteners for applications in more aggressive environments;
- f) removal of the requirements for asphalt and mastic coatings; and
- g) updating the list of reference standards in Clause 2.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

The development of this Standard was made possible thanks to the leadership and financial support of the Corrugated Steel Pipe Institute (CSPI). Such support does not indicate endorsement of the contents of this Standard.

This Standard was prepared by the Technical Committee on Corrugated Steel Pipe Products, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and has been formally approved by the Technical Committee.

This Standard has been approved as a National Standard of Canada by the Standards Council of Canada.

## Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
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- 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.*
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  - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

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  - b) *relevant clause, table, and/or figure number;*
  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# CAN/CSA-G401-14

## Corrugated steel pipe products

### 1 Scope

#### 1.1

This Standard specifies material and fabrication requirements for corrugated steel pipe, spiral rib pipe, structural plate corrugated steel pipe products, and two-flange tunnel liner plate.

#### 1.2

This Standard applies to the use of corrugated steel pipe, spiral rib pipe, and structural plate corrugated steel pipe for applications such as culverts, storm sewers, sanitary sewers, subdrains, ground recharge systems, well casings, underpasses, stream enclosures, shelters, and tunnels.

#### 1.3

This Standard does not include requirements for hydraulic design, service life, structural design, construction, or installation.

#### 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.

### 2 Reference publications

This Standard 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 Group

G40.20-13/G40.21-13

*General requirements for rolled or welded structural quality steel/Structural quality steel*

CAN/CSA-G164-M92 (withdrawn)

*Hot dip galvanizing of irregularly shaped articles*