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**CAN/CGSB-138.4-2019**  
**Reaffirmed May 2024**

Supersedes CAN/CGSB-138.4-96



# Gates for chain link fence

Canadian General Standards Board **CGSB**

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## **Gates for chain link fence**

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## Preface

This National Standard of Canada CAN/CGSB-138.4-2019 has been reaffirmed by the Committee on Wire Fencing in May 2024.

The following definitions apply in understanding how to implement this National Standard of Canada:

- "shall" indicates a **requirement**;
- "should" indicates a **recommendation**;
- "may" is used to indicate that something is **permitted**;
- "can" is used to indicate that something is **possible**, for example, that an organization is able to do something.

Notes accompanying clauses do not include requirements or alternative requirements. The purpose of a note accompanying a clause is to separate explanatory or informative material from the text. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

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# Gates for chain link fence

## 1 Scope

This standard applies to gates used in conjunction with chain link fence used in commercial and industrial applications.

Some quantities and dimensions used in this standard are given in SI units with imperial equivalents shown in brackets where appropriate.

All imperial measurements are industry standard nominal measurements. All metric references are closest conversions to industry standard. The imperial units are regarded as being official in the event of dispute.

The testing and evaluation of a product against this standard may require the use of materials and/or equipment that could be hazardous. This document does not purport to address all the safety aspects associated with its use. Anyone using this standard has the responsibility to consult the appropriate authorities and to establish appropriate health and safety practices in conjunction with any existing applicable regulatory requirements prior to its use.

## 2 Normative references

The following normative documents contain provisions that, through reference in this text, constitute provisions of this National Standard of Canada. The referenced documents may be obtained from the sources noted below.

Note: The contact information provided below was valid at the date of publication of this standard.

An undated reference is to the latest edition or revision of the reference or document in question, unless otherwise specified by the authority applying this standard. A dated reference is to the specified revision or edition of the reference or document in question.

### 2.1 Canadian General Standards Board (CGSB)

CAN/CGSB-138.1 — *Fabric for chain link fence*

CAN/CGSB-138.2 — *Steel framework for chain link fence*

CAN/CGSB-138.3 — *Installation of chain link fence*

#### 2.1.1 Contact information

The above may be obtained from the Canadian General Standards Board, Sales Centre.

Telephone: 1-800-665-2472. E-mail: [ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca](mailto:ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca). Web site:

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Web site: <https://publications.gc.ca/site/eng/home.html>.

## 3 Terms and definitions

For the purposes of this National Standard of Canada, the following terms and definitions apply.

### **3.1 fittings**

mechanical connections and devices of various designs, shapes and metals used in joining components into an integral structure.

### **3.2 gates**

tubular steel rectangular shaped frame faced with chain link fence fabric, hinged on a gate post.

#### **3.2.1 double swing gate**

gate consisting of two sections or leaves of equal width.

#### **3.2.2 single swing gate**

gate consisting of one section or leaf.

#### **3.2.3 special sliding gate/cantilever sliding gate**

gate as specified and/or in accordance with applicable drawings.

#### **3.2.4 special swing gate**

gate as specified and/or in accordance with applicable drawings.

### **3.3 gate opening**

gate opening with size measured from inside to inside dimension between gate posts.

### **3.4 gate posts**

two fence posts forming a gate opening.

### **3.5 wire ties**

wire used to tie the chain link fence fabric to the gate frame.

## **4 Classification**

**4.1** Chain link fence gates shall be supplied in the following types and styles, as specified (see clause 9):

### **4.1.1 Types (of framework<sup>1</sup> manufactured)**

Type E — Electric resistance welded (ERW)

Type F — Continuous welded (CW)

Type S — Seamless

### **4.1.2 Styles**

Style 1 — Single swing

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<sup>1</sup> Galvanized steel fence pipe — Hot or cold rolled in any of those types.



Style 2 — Double swing

Style 3 — Special swing

Style 4 — Special sliding.

## 5 General requirements

### 5.1 Materials and workmanship

Materials used for the construction of chain link fence gates shall be produced by methods recognized as good commercial practice. The base material of the gate frame shall be tubular members, fully welded at all connections to ensure rigidity of the gate frame. The gates shall be uniform in quality and condition and shall be free from any defects or imperfections that might adversely affect their serviceability and appearance (see 8.1).

## 6 Detailed requirements

### 6.1 Framework

The gate frame members shall meet the requirements of Table 1 unless otherwise specified (see clause 9). Styles 3 and 4 shall be as specified (see clause 9).

**Table 1 — Specifications for fence gate frame members (Styles 1 and 2)**

Gate style and opening width	Height of fence	Frame member outside diameter	Frame member wall thickness (both types of framework)	Gate posts <sup>a</sup> outside diameter
Maximum m (ft)	Maximum m (ft)	Minimum mm (in.)	Minimum mm (in.)	Minimum mm (in.)
Single swing 3.05 (10 )	2.44 (8)	42.2 (1-11/16")	3.56 (.140)	88.9 (3-1/2")
Double swing 6.10 (20 )	2.44 (8)	42.2 (1-11/16")	3.56 (.140)	88.9(3-1/2")
Single swing 4.57 (15)	3.66 (12)	42.2 (1-11/16")	3.56 (.140)	114.3 (4-1/2")
Double swing 9.14 (30)	3.66 (12)	42.2 (1-11/16")	3.56 (.140)	114.3 (4-1/2")
Single swing 7.62 (25)	3.66 (12)	48.3 (1-7/8")	3.68 (.145)	168.3 (6-5/8")
Double swing 15.24 (50)	3.66 (12)	48.3 (1-7/8")	3.68 (.145)	168.3 (6-5/8")

<sup>a</sup> Requirements for gate posts are not part of this standard and may exceed those given in CAN/CGSB-138.2 for wide gates. The minimum sizes indicated have general acceptance within the fence industry.

**6.1.1** For Styles 1, 2 and 3, the gate frame shall be designed for the width built so that the outer member shall not sag in excess of 1% of the gate leaf width. For Style 4, the horizontal sliding/cantilever gate (unloaded) shall not deflect downward more than 12.7 mm (1/2") for openings up to 6.4 m (21 ft) and 25.4 mm (1 in.) for openings more than 6.4 m (21 ft).

**6.1.2** The height of the gate shall match the height of the fence and conform to the requirements of CAN/CGSB-138.2 when applicable.

**6.1.3** Vertical and horizontal interior bracing members shall be spaced so that no dimension between members shall be greater than 2.44 m (8 ft). Bracing members shall not be less than 33.4 mm (1-5/16") outside diameter and 3.38 mm (0.133 in.) thickness. A diagonal brace shall be installed on gate leaves 1.9 m (6 ft) and greater in width.

Interior bracing members shall be of tubular material and finish the same as the gate frame members. The framework shall be in accordance with CAN/CGSB-138.2 when applicable.

## **6.2 Fabric**

The fabric shall be installed on the outside of the gate unless a requirement for installation on the inside of the gate is specified (see clause 9). The fabric shall be fastened to gate frame members and interior bracing members by wire ties, metal tension bands and steel tension bars that are attached at intervals, or by other approved methods, in accordance with CAN/CGSB-138.3. The fabric shall be in accordance with CAN/CGSB-138.1.

## **6.3 Barbed wire**

When specified (see clause 9), a barbed wire top shall be installed on the gate. When barbed wire is specified, the upright end members of the gate frame shall be extended in height to accommodate those strands of barbed wire uniformly spaced 300 mm (12 in.) above the top horizontal member of the gate frame. Barbed wire shall be in accordance with CAN/CGSB-138.2.

## **6.4 Fittings**

Gates shall be provided with all the necessary fittings to allow an opening of at least 90°. The material used shall be zinc-coated pressed steel, zinc-coated malleable iron, galvanized steel or aluminum alloy, as may be specified (see clause 9). Fittings shall be in accordance with CAN/CGSB-138.2.

### **6.4.1 Single gate latch**

A latch for a single swing gate shall be capable of retaining the gate in a closed position and shall allow the use of a padlock. Both latch and padlock shall be accessible from either side of the gate.

### **6.4.2 Double gate locking device**

A locking device for a double swing gate shall be constructed to retain the gate in a closed position. The locking device shall allow the use of a padlock. Both locking device and padlock shall be accessible from either side of the gate.

### **6.4.3 Cane bolt**

A double swing gate shall have a cane bolt attached to one of the two sections. The cane bolt, when inserted in the centre stop, shall allow the gate section to remain in the closed position.

### **6.4.4 Gate stop**

A gate stop shall be provided for all double swing type gates.

#### 6.4.5 Gate keeper

A gate keeper shall be provided for each leaf more than 1.5 m (5 ft) wide. A gate keeper shall consist of a length of chain or mechanical device to secure the free end of the gate in a fully open position.

#### 6.4.6 Gate hinges

Gate hinges shall be of adequate strength for the gate and shall have sufficient bearing surfaces for clamping or bolting in position. Gates 3 m (10 ft) or more in width shall have three hinges per section.

### 7 Preparation for delivery

7.1 Unless otherwise specified (see clause 9), normal commercial practice of packaging, labelling, packing and marking shall be acceptable.

### 8 Inspection

#### 8.1 Examination for defects

Examine fence gates and fence gate components for defects or imperfections affecting serviceability of the finished gate (see 5.1).

#### 8.2 Testing

Testing of mass per unit area of coating shall be in accordance with CAN/CGSB-138.1 and CAN/CGSB-138.2.

### 9 Options

The following options shall be specified in the application of this standard:

- a) Type and style of framework manufactured (see 4.1)
- b) Size of gate frame members, if other than as specified in Table 1 (see 6.1)
- c) Size of gate frame members for styles 3 and 4 (see 6.1)
- d) Requirement for installation of chain link fabric on the inside of the gate (see 6.2)
- e) Requirement for barbed wire top (see 6.3)
- f) Material used for fittings (see 6.4)
- g) Preparation for delivery, if other than as specified (see 7.1).