Gouvernement du Canada

Canadian General Office des normes Standards Board générales du Canada

Series 138 Série des 138

# WITHDRAWAL

#### October 2017

# Standards in series Fencing products

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#### CAN/CGSB-138.1-96

Fabric for Chain Link Fence (ICS 91.090)

#### CAN/CGSB-138.2-96

Steel Framework for Chain Link Fence (ICS 91.090)

## CAN/CGSB-138.3-96

Installation of Chain Link Fence (ICS 91.090)

## CAN/CGSB-138.4-96

Gates for Chain Link Fence (ICS 91.090)

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#### CAN/CGSB-138.1-96

Grillage métallique pour clôture (ICS 91.090)

## CAN/CGSB-138.2-96

Monture en acier pour clôture grillagée (ICS 91.090)

## CAN/CGSB-138.3-96

Installation des clôtures grillagées (ICS 91.090)

## CAN/CGSB-138.4-96

Barrière pour clôture grillagée (ICS 91.090)



CAN/CGSB-138.4-96

Supersedes CAN/CGSB-138.4-M82

Canadian General Standards Board

Gates for Chain Link Fence



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# GATES FOR CHAIN LINK FENCE

Prepared by the

Canadian General Standards Board

CG\$8

Approved by the

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#### CANADIAN GENERAL STANDARDS BOARD

# GATES FOR CHAIN LINK FENCE

#### 1. SCOPE

- 1.1 This standard applies to gates used in conjunction with chain link fence used in commercial and industrial applications.
- 1.2 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. REFERENCED PUBLICATIONS

- 2.1 The following publications are referenced in this standard:
- 2.1.1 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.

A reference to a regulation is always to the latest issue. A dated reference is to the issue specified. An undated reference is to the latest issue, unless otherwise specified by the authority applying this standard. The sources are given in the Notes section.

## 3. TERMINOLOGY

3.1 The following definitions apply in this standard:

Fittings (Dispositifs de fixation)

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

Gates (Barrière)

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

Double Swing Gate (Barrière à deux battants)

A gate consisting of two sections or leaves of equal width.

Single Swing Gate (Barrière à un battant)

A gate consisting of one section or leaf.

Special Sliding Gate (Barrière coulissante de type particulier)

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

Special Swing Gate (Barrière à battants de type particulier)

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

# Gate Opening (Entrée)

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

Gate Posts (Poteaux de barrière)

The two fence posts forming a gate opening.

Wire Ties (Attaches métalliques)

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 (par. 9.1):
- 4.1.1 Types (of Framework Manufacture)
  - Type I Hot rolled, butt or electric resistance welded
  - Type II Cold rolled, electric resistance welded.
- 4.1.2 *Styles* 
  - Style 1 Single swing
  - Style 2 Double swing
  - Style 3 Special swing
  - Style 4 Special sliding.

# 5. GENERAL REQUIREMENTS

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 (par. 8.2).

# 6. DETAILED REQUIREMENTS

6.1 Framework — The gate frame members for Styles 1 and 2 shall meet the requirements of Table 1 unless otherwise specified (par. 9.1). Styles 3 and 4 shall be as specified (par. 9.1).

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* Outside Diameter
Max. (m)	Max. (m)	Min. (mm)	Min. (mm)	Min. (mm)
Single swing 3.0	2.4	42.9	2.5	88.9
Double swing 6.0	2.4	42.9	2.5	88.9
Single swing 4.5	3.6 `	48.3	2.5	114.3
Double swing 9.0	3.6	48,3	2.5	114.3
Single swing 7.5	>3.6	48.3	2.5	168.3
Double swing 15.0	>3.6	48.3	2.5	168.3

<sup>\*</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 gate (unloaded) shall not deflect downward more than 12.7 mm for openings up to 6.4 m and 25.4 mm for openings in excess of 6.4 m.
- 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 2.4 m. Bracing members shall not be less than 31.8 mm outside diameter and 2.1 mm thickness. A diagonal brace shall be installed on gate leaves 3.6 m 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 (par. 9.1). The fabric shall be fastened to gate frame members and interior bracing members by wire ties, metal bands or clips 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 (par. 9.1), 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 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 (par. 9.1). 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.

CAN/CGSB-138.4-96 3

- 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 Foot Bolt A double swing gate shall have a foot bolt attached to one of the two sections. The foot 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. The gate stop shall be suitable for setting in concrete.
- 6.4.5 Gate Keeper A gate keeper shall be provided for each leaf more than 1.5 m 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 or more in width shall have three hinges per section.

# 7. PREPARATION FOR DELIVERY

7.1 Unless otherwise specified (par. 9.1), normal commercial practice of packaging, labelling, packing and marking shall be acceptable.

# 8. INSPECTION

- 8.1 **Sampling** Completed fence gate and fence gate components shall be subject to inspection and testing according to requirements as specified. Sampling for this purpose shall be as specified (par. 9.1).
- 8.2 **Examination for Defects** Examine fence gates and fence gate components for defects or imperfections affecting serviceability of the finished gate (par. 5.1.3).
- 8.3 **Testing** Testing of mass per unit area of coating shall be in accordance with CAN/CGSB-138.1 and CAN/CGSB-138.2.

# 9. NOTES

- 9.1 **Options** The following options must be specified in the application of this standard:
  - a. Type of framework manufacture (par. 4.1.1)
  - b. Style of gate (par. 4.1.2)
  - c. Size of gate frame members, if other than as specified in Table 1 (par. 6.1.1)
  - d. Size of gate frame members for styles 3 and 4 (par. 6.1.1)
  - e. Requirement for installation of chain link fabric on inside of gate (par. 6.2)
  - f. Requirement for barbed wire top (par. 6.3)
  - g. Material used for fittings (par. 6.4.2)
  - h. Packaging, labelling, packing and marking details, if other than normal commercial practice (par. 7.1)
  - i. Sampling requirements (par. 8.1).
- 7.2 Source of Referenced Publications The publications referred to in par. 2.1.1 may be obtained from the Canadian General Standards Board, Sales Centre, Ottawa, Ontario K1A 1G6. Telephone (613) 941-8703 or 1-800-665-CGSB (Canada only). Fax (613) 941-8705.