

**Part 1 General**

**1.1 REFERENCES**

- .1 American Society for Testing and Materials International, (ASTM).
  - .1 ASTM A53/A53M-02, Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- .2 Canadian General Standards Board (CGSB).
  - .1 CAN/CGSB-1.181-99, Ready-Mixed Organic Zinc-Rich Coating.
- .3 Canadian Standards Association (CSA International).
  - .1 CAN/CSA-A23.1-00/A23.2-F00, Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete.

**1.2 SUBMITTALS**

- .1 Product Data: Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Manufacturer's Instructions: Submit manufacturer's installation instructions.

**Part 2 Products**

**2.1 MATERIALS**

- .1 Wire fence:
  - .1 Galvanized steel.
  - .2 Square mesh 2 mm thick, galvanized metal, 50 mm spacing..
- .2 Gates:
  - .1 Frame: to ASTM A53, galvanized steel pipe, standard weight, 25 mm outside diameter.
  - .2 Size: as indicated.
  - .3 Joints: electrically welded.
- .3 Steel posts:
  - .1 Corner, end, gate and intermediate posts, projection arm with clips, corner and gate post braces, gate posts as indicated.
  - .2 Galvanizing: zinc coating, minimum 92 g/m<sup>2</sup> of surface area.
  - .3 Concrete mixes and materials: to Cast-in-Place Concrete, CAN/CSA-A23.1.
    - .1 Nominal coarse aggregate size: 20-5.
    - .2 Compressive strength: 20 MPa minimum at 28 days.
- .4 Organic zinc-rich coating: to CAN/CGSB-1.181.

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**Part 3 Execution**

**3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

**3.2 GRADING**

- .1 Level ground along fence line in order that bottom wire of fence between posts can be maintained at not more than 150 mm above ground.

**3.3 ERECTION OF FENCE**

- .1 Erect fence along lines as indicated.
- .2 Installation of posts:
  - .1 Space intermediate posts at 3 m.
  - .2 Space corner, end and gate posts 3 m from adjacent post.
  - .3 Locate and erect gate posts as indicated.
  - .4 Install posts true to line and plumb with 1.5 m of post projecting above ground.
- .3 Fencing with steel posts:
  - .1 Install steel posts to depths as indicated.
  - .2 Set following items in concrete:
    - .1 End, corner and gate posts.
    - .2 Intermediate posts adjacent to end, corner and gate posts.
    - .3 Intermediate posts along fence line.
    - .4 Ends of braces for corner, end and gate posts.
  - .3 Brace corner, end and gate posts as indicated.
  - .4 Clamp a studded steel projection arm to each post as indicated.
  - .5 Erect steel mesh as indicated.
  - .6 Stretch mesh to have uniform tension..

**3.4 INSTALLATION OF GATES**

- .1 Install gate in location as indicated.
- .2 Install gates to prevent over-stress on gate posts when gates are open. Install on level ground with ground clearance of 100 mm.
- .3 Locate gate latch and support.. Gate latch to be lockable by padlock..

**3.5 CLEANING**

- .1 Perform cleaning as soon as possible after installation.

- .2 Clean and trim areas disturbed by operations. Dispose of surplus material and replace damaged turf with sod as directed by Contract Administrator.
- .3 Touch Up: Clean damaged galvanized surfaces with wire brush removing loose and cracked coatings. Apply two coats of organic zinc-rich coating.
- .4 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

**END OF SECTION**