

# **Fence Standards for Residential Lots**

### Part A - Ornamental Fencing

Fences are permitted in accordance with the City of Winnipeg Zoning By-Law standards. Fencing shall not exceed 1980 mm. in height. Where a purchaser elects to construct a fence, it shall be in accordance with the materials and specifications outlined below.

Acceptable manufacturers of ornamental fencing include residential types manufactured by Ameristar, Nuvo Iron, or as approved by the *Project Manager* for the development.

# 1. Materials

- a. Steel material for fence framework (i.e. posts, channel rails, panel brackets and solid pickets), shall be galvanized prior to forming in accordance with the requirements of ASTM A653/A653M, with minimum yield strength of 50,000 psi (344 MPa). The steel shall be hot-dip galvanized to meet the requirements of ASTM A653/A653M with a minimum zinc coating weight of 0.90 oz/ft<sup>2</sup> (276 g/m<sup>2</sup>), Coating Designation G-90.
- b. The manufactured galvanized framework shall be subjected to the PermaCoat® thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pretreatment/wash (with zinc phosphate), an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a zinc-rich thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be Black.
- c. Material for fence pickets shall be 16 mm. (minimum dimension) square, galvanized solid steel. Pickets shall be fastened or welded onto support rails, as specified by manufacturer/supplier. Posts shall be 75.mm. (minimum dimension) square, galv. tubular steel. The post height shall be 1,220 mm. (four feet) above grade and must be driven to a minimum depth of 1,220 mm. below finished grade. Where required, corner posts shall be 125 mm. (minimum dimension) square, galvanized tubular steel and shall be set at the same height and depth from grade as all other 75mm. posts. The cross-sectional shape of the support rails shall conform to outside cross-section dimensions of 50mm x 25mm square galv. steel channels. Picket holes in the support rail shall be spaced 100 mm. on center. Provide galvanized steel panel brackets, to be fastened or welded onto posts, as specified by the manufacturer/supplier. Nuts and bolts are to be used to fasten panels onto rails and posts.
- d. Pickets, rails and posts shall be pre-cut to specified lengths. Support rails shall be pre-punched to accept pickets.
- e. Completed sections (i.e., panels) shall be capable of supporting a 600 lb. load applied at mid-span without permanent deformation.

#### SCHEDULE 'F'

Waterford Green – Architectural Guidelines and Site Standards

# 2. Installation

- a. Fence posts shall be set in accordance with the spacing of 2,440 mm. on center, plus or minus 12.7mm.
- b. Ensure all posts are set straight, are plumb, set 1,220 mm. above grade and are driven below grade to a depth of 1,220 mm. to ensure post stability.
- c. Attach brackets to posts, followed by supporting rails and pickets which comprise the panel.
- d. Ensure that the all support rails, pickets and picket gaps above grade are equally spaced in accordance with the specification.
- e. Where cutting of rails is required, the exposed, cut surfaces shall be sealed immediately by:
  - i. Removing all metal shavings from cut area;
  - ii. Applying a zinc-rich primer to thoroughly cover the cut edge and drilled hole; and once these surfaces are dry;
  - iii. Applying two (2) coats of custom-finish spray paint which matches the fence colour.

#### SCHEDULE 'F'

Waterford Green – Architectural Guidelines and Site Standards

# Part B - Wood Fencing

Fences are permitted in accordance with the City of Winnipeg Zoning By-Law standards. Fencing shall not exceed 1980 mm. in height. Where a purchaser elects to construct a fence, it shall be in accordance with the materials and specifications outlined below, and the details provided below.

# 1. Description

This Specification shall cover the supply and installation of a wood fence. The work to be completed by the Contractor under this Specification shall include the supply of all materials, and the furnishing of all superintendence, overhead, labour, equipment, tools and all other things necessary for and incidental to the satisfactory completion of all of the work as hereinafter specified.

### 2. Materials

All wooden posts (140mm x 140mm x 2900mm and 203mm x 203mm x 3100mm), structural rails (38mm x 140mm and 51mm x 152mm), top caps (38mm x 198mm and 51mm x 203mm), tongue and groove boards (38mm x 140mm x 1600mm and 51mm x 152mm x 1740mm) and bevelled post caps (190mm x 190mm x 200mm) shall be Grade 1 Pressure Treated, Unpainted Cedar Tone Brown. Galvanized fence hanger brackets (where required), screws, lag screws and nails required to fasten timber rails and top caps to posts, and 19mm aggregate.

# 3. Execution

Where diameter and depths of holes are specified for post installation, they shall be of the lengths and dimensions shown in the Fencing Details (shown following the specification). Posts shall be set in the centre of hole. Posts shall be plumbed and set to give correct alignment. Bending of posts to give correct alignment is not acceptable. Maximum spacing between centerline of posts shall not exceed 2520mm. 19 mm. down aggregate shall be compacted in 150 mm. lifts upon the setting of all posts' surfaces.

Top structural rails shall be installed at a height no greater than 1160mm for 1.2m high fences and 1960mm for 2.0m high fences above the finished grade in accordance with the Fencing Details (which are shown following the specification). Clearance of all bottom rails shall be installed no greater than 160mm above grade. All structural rails and caps shall be installed using galvanized nails. Tongue and groove methods shall be applied to the installation of  $38 \, \text{mm} \times 140 \, \text{mm} \times 1600 \, \text{mm}$  and  $51 \, \text{mm} \times 152 \, \text{mm} \times 1740 \, \text{mm}$  board panels.

# **Wood Fencing Details**

