



Ornamental Picket Swing Gates Section 32 31 19

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Ornamental picket swing gates.

1.02 SUBMITTALS

- A. Changes in specification may not be made after the published date of bid. All submittals of substitutions must be approved before bid date.
- B. Shop Drawings of fences and gates with all dimensions, details, and finishes. Drawings must include post foundations.
- C. Product Data: Manufacturer's catalog indicating materials and a letter certifying that all conditions of the specifications have been met.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Products from other qualified manufacturers who have five years or more experience manufacturing picket swing gates will be considered by the architect as equal if they meet all specifications for design, size gauge of metal parts and fabrication.
- B. Picket fences and gates must be obtained from a single source.
- C. Approved Manufacturers: Iron World, Howard County, MD
Telephone 301-776-7448
Fax 301-776-7449

2.02 ORNAMENTAL PICKET FENCE

- A. Gate Frame: Ornamental picket swing gate frames to be fabricated of galvanized steel tubing, ASTM A-653, of structural steel having a 45,000 psi (310 Map) tensile strength and a G90 [0.9 oz/ft² zinc coating. Members welded with stainless steel rods, forming a rigid one piece unit. Vertical upright member's 2"sq. 13ga. metal thickness.
- B. Horizontal rails and pickets.
1. For gate leaves up to 8'0" the horizontal rails to be "U" channels, formed of hot rolled, structural steel 1" wide by 1½" high, 11 gauge [0.120"] metal thicknesses. Rails must be punched to receive pickets and rivets. Rails stainless steel welded inside vertical members. Pickets are galvanized steel [choose one: ¾" or 1" to match fence sections.] Pickets attached to "U" channels using 1/4" industrial drive rivets.
 2. For gate leaves 8'1" up to 12'0" provide an additional 1½" sq. stiffener welded to one top and one bottom "U" channel. Use stainless steel rods for welds.
 3. For gate leaves 12'1" to 18'0" supply 2 additional 2" sq. horizontal members welded to the 2" sq. vertical members forming a 2" sq. rectangular frame. Welds to be stainless steel.
 4. For gate leaves 18'1" to 24'0" 2 additional horizontal stiffeners 2' sq. to be welded behind 2" horizontal members. Welds to be stainless steel.
 5. Bracing: Provide diagonal adjustable length truss rods to prevent sagging. One truss rod per 8' maximum of length of gate panel.
 6. Double gates consist of 2 each of the above gate leaves.
- C. Hardware: Galvanized steel and or malleable steel to suit application. Latch shall have provision for padlocking. Hinges shall grip post and frame firmly to prevent slippage. Hinges shall have a load capacity of 1,000 lbs. Hinges shall allow gate leaf to swing 180°.
- D. Gate keepers shall be provided for any leaf wider than 5'0' to hold gate in open position.
- E. Double leaf gates to have center drop rod to enable one leaf to be made stationary while that latch shall lock both leaves together.
- F. Gate Posts: Square gate posts (ASTM A-653) 45,000 psi (MPa) tensile strength with G90 galvanized coating in sizes shown below.
- 3"sq. for gate leaf sizes 3'0" to 4'0"
 - 4"sq. for gate leaf sizes 4'1" to 8'0"
 - 6"sq. for gate leaf sized 8'0" to 12'0"
 - 8"sq. for gate leaf sized 12'1" to 18'0"
 - 10"sq. for gate leaf sizes 18'0" to 24'0"

G. Finish: All steel parts to be galvanized to prevent corrosion. Next, pre-treat and clean surfaces to accept finish coat. Apply 3 mils of TGIC polyester powder coating applied by electrostatic spray process baked at 450° F until finished is cured onto metal. Gates to be coated after all welding is completed.

2.03 POST SETTING

A. Concrete: Minimum 28 day compressive strength of 3,000 psi (20 mpa).

PART 3 EXECUTIONS

3.01 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Property lines and legal boundaries of work and all gate locations to be clearly established by the general contractor or property owner.

3.02 GATE INSTALLATION

- A. Install gate posts a minimum of 36" into firm soil. The diameter of the footing to be 4 times the diameter of the post. Footing should be 6" deeper than the bottom of the posts, 42". Finish concrete with a slop for all water to drain away from post.
- B. Attach all hardware to gate in such a way that it cannot be removed by unauthorized persons.

3.03 CLEANING

- A. Clean up debris and remove from the site