

SP-017104
(New)



Iowa Department of Transportation

SPECIAL PROVISIONS
for
ORNAMENTAL ALUMINUM FENCE SYSTEM

Hardin County

STP-ES-E-CO42(047)—8T-42

Effective Date
February 17, 2009

THE STANDARD SPECIFICATIONS, SERIES OF 2001, ARE AMENDED BY THE FOLLOWING ADDITIONS AND MODIFICATIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

PART 1 – GENERAL

1.01 WORK INCLUDED

- A. The contractor shall provide all labor, materials and appurtenances necessary for installation of ornamental aluminum fence system as shown on the drawings.

1.02 SYSTEM DESCRIPTION

- A. The manufacturer shall supply a total ornamental aluminum fence system which shall include all components (i.e., pickets, rails, posts, gates and hardware) required.

1.03 QUALITY ASSURANCE

- A. The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.04 SPECIAL WARRANTY

- A. Provide manufacturer's standard lifetime limited warranty for electrostatically applied baked on enamel coated fence for a lifetime from date of purchase. Manufacturer shall guarantee the finish will not crack, check, or peel (lose adhesion).

1.06 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data for all manufactured fence components as required.
- B. Shop Drawings: Submit cutting and setting drawings indicating sizes, dimensions, sections and profiles of stones; arrangement and provisions for jointing, supporting, anchoring, and bonding stonework; and details showing relationship with, attachment to, and reception of, related work.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Obtain fencing and gates (if required), including accessories, fittings, and fastenings, from a single source.
- B. Manufacturer shall have a minimum of five years experience manufacturing aluminum ornamental picket fencing with the following specifications for design, size, gauge of metal parts and fabrication.

- C. The ornamental aluminum fence system shall be 3-rail style with solid top and bottom rails and 3/4" pickets as shown in the details. Standard Panel Width shall provide approximately 6' post spacing. Installed height of fence shall be 42" above finished grade.
- D. Approved Suppliers:
 - 1. Storrs Style 3-rail style fence as supplied by SPECRAIL: 1-800-243-6256.
 - 2. Regency Windsor Style 3-rail style fence as supplied by JERITH: 1-800-344-2242.
 - 3. Stratford Industrial Style 3-rail style fence as supplied by DELGARD: 1-800-235-0185.

2.02 MATERIAL

- A. Aluminum material for fence framework (i.e., tubular pickets, rails and posts) shall conform to the requirements of ASTM B221. The aluminum extrusions for posts, pickets, and rails Alloy and Temper Designation 35,000-psi strength aluminum alloy 6063-T5 and 6105-T5.
- B. COATING: The fence system (all exposed surfaces) shall have an electrostatically applied premium Thermoset Modified Polyester coated finish that exceeds AAMA 603.8. Factory applied and baked at a temperature of 350°F to 375°F.
FINISH COLOR: Black
- C. PICKETS - 3/4" square x 0.050" thick extruded tubing and fastened to rail by stainless steel screws.
- D. RAIL – U channel 1-1/2" x 1" x 1-1/2" (.065 top wall and .090 side wall)
- E. POSTS - Pre-punched aluminum 2-1/2" square with a perimeter wall thickness of 0.075".
- F. Aluminum castings shall be used for all rings, post caps, finials, and miscellaneous adornments.

2.03 FABRICATION

- A. Pickets, rails and posts pre-cut to specified lengths. Rails pre-punched to accept pickets.

PART 3– EXECUTION

3.01 PREPARATION

- A. All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 INSTALLATION

- A. Fence posts shall be set at nominal on-center spacing of 71" as specified.
- B. Posts shall be set at 18" minimum depth below finished grade in poured concrete footing. Concrete footing shall extend below frost depth. Coordinate post locations with retaining wall units for additional support if possible.
- C. Slide the fence-section rails into the pre-punched post and fill post-hole with concrete.
- D. Attach railing panels to pre-punched posts using mechanically fastened stainless steel screws supplied by the manufacturer.
- E. Plumb and level the posts and pickets while the concrete is setting. Brace the post as necessary while concrete sets.

3.03 CLEANING

- A. The contractor shall clean the jobsite of excess materials.
- B. Provide cleaned finish surfaces of all fence materials as well as adjacent concrete areas.

PART 4- MEASUREMENT AND PAYMENT

- 4.01 Measurement: The Landscape Architect shall measure the linear foot (LF) of ornamental fence that is satisfactorily installed in accordance with the plans and this Special Provision, as required by the contract documents.
- 4.02 Payment: For ornamental fence installed and measured for payment, the Contractor shall be paid the contract unit price. This payment shall be full compensation for the fence installed.