

## Aluminum Ornamental Fence System Construction Specification - SECTION 32 31 00

### PART 1 - GENERAL

#### 1.01 WORK INCLUDED

The contractor shall provide all labor, materials and all necessary items for the installation of the Echelon® ornamental aluminum fence system defined herein at (specify project site).

#### 1.02 RELATED WORK

Section 022 - Earthwork  
Section 030 - Concrete

#### 1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total ornamental aluminum fencing system of the style and dimensions defined herein. The system shall include all components (i.e., pickets, posts, rails, gates and hardware) as required.

#### 1.04 QUALITY ASSURANCE

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

#### 1.05 REFERENCES

AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels. ASTM B221-Specification for aluminum alloy extruded bars, shapes and tubes.

#### 1.06 SUBMITTAL

The manufacturer's literature shall be submitted prior to installation to confirm compliance with all requirements for materials specified in this section.

#### 1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damages occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage and to protect against damage, weather, vandalism and theft.

### PART 2 - MATERIALS

#### 2.01 MANUFACTURER

The ornamental metal fencing system shall conform to Echelon aluminum ornamental fencing, (specify style from options in Manufacturer's current literature).

#### 2.02 MATERIAL

A. Aluminum Extrusions: All pickets shall be made of 6063-T6 and all rails and posts shall be made of 6005-T5 per ASTM B221.

B. Accessories: Aluminum castings shall be used for all post caps, wall brackets, scrolls finials and other miscellaneous hardware. Hinges and latches shall be fabricated from aluminum, stainless steel or composite materials.

#### 2.03 FABRICATION

A. Horizontal rails shall be 1.125" x 1" channel with .055" thick top wall and .072" thick side walls and shall be punched to allow picket to pass through the top of the rail. The number of rails shall vary with the style and height as determined by manufacturer.

B. Pickets shall be .590" square x .050" thick and shall be retained by 1/8" rod passing through the raceway in the Forerunner™ rail.

C. Posts shall be 2" square x .060" thick, pre-punched for applicable panel configuration. Cast aluminum post caps shall be affixed to all posts.

D. Gates shall be fabricated by welding components similar to those for the complete fencing system.

E. Finish: All fence components shall be subject to a six-stage pretreatment/wash followed by an electrostatic spray application of a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2-4 mils. The color shall be black. Testing of coated finish shall be per AAMA 2603.

### PART 3 - EXECUTION

#### 3.01 PREPARATION

All new installation shall be laid out by the contractor in accordance with the construction plan.

#### 3.02 INSTALLATION

Fence posts shall be set at 6'-0" on center. Gate posts shall be spaced according to the gate openings specified in the construction plans. The "Earthwork" and "Concrete" sections of this specification shall govern post base placement and material requirements. Echelon aluminum panels shall be installed by inserting the notched ends of the rails into the pre-punched holes in the posts and affixing with self-drilling screws provided. Gates shall be installed using the hardware supplied by the manufacturer.

#### 3.03 CLEANING

The contractor shall clean the jobsite of excess materials. Post hole excavations shall be scattered uniformly away from posts.