

# ***SPECRAIL ASTM/IBC Specifications***

## **PART 1 – GENERAL**

### **1.01 Work Included**

- ✘ The contractor shall provide labor, materials and all necessary accessory items for the installation of the ornamental aluminum fence herein at (specified project location).

### **1.02 Related Work**

- ✘ Section 0.22 – Earthwork
- ✘ Section 0.33 – Concrete

### **1.03 System Description**

- ✘ The manufacturer shall supply a total ornamental aluminum fencing system of the style, strength and color defined herein. The system shall be a total package including all components; pickets, posts, stringers, 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 603.8 – Performance requirements and testing procedures for pigmented organic coatings.
- ✘ AAMA 2604 - Performance requirements and testing procedures for organic coatings.
- ✘ 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 Delivery, Storage and Handling**

- ✘ **A.** Fence panels gates, posts and accessories shall be delivered to the construction site in packaged cartons.
- ✘ **B.** Each package shall be identified and shall bear the name of the manufacturer.
- ✘ **C.** Store all materials in a secure and dry area.

## PART 2 – PRODUCTS

### 2.01 Manufacturer

✘ The aluminum fencing system shall be as manufactured by SPECRAIL, 333 Welton St, Hamden, CT 06517. The fence shall be [(specify style from applicable options on page 3 through 5 on style), (specify height from table on page 7), and (specify color from table on page 8 on color)].

### 2.02 Materials

✘ **A. Aluminum Extrusions:** All components shall be made of 6063-T52 and 6105-T5 in accordance with ASTM B221.

✘ **B. Fasteners:** All screws shall be 302 stainless self-drilling head. All screws shall be painted to match the finish on the fence.

✘ **C. 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 extrusions with stainless steel springs.

### 2.03 Finish

✘ The fence shall be coated with Powdura™, an environmentally approved, premium polyester powder coating which exceeds AAMA 2604. Application of Powdura™ shall be electrostatic spray. Curing shall be at a temperature of 375°F to 400°F.

### 2.04 Fabrication

✘ **A. Stringers\***, (Horizontal rails) shall be punched to allow pickets to pass through the top of the rail. The number of stringers shall vary with the style, height and grade as determined by the manufacturer.

✘ **B. Pickets\***, (Vertical members) shall be fastened to stringers mechanically using stainless steel TEK screws on one side of the stringers only.

✘ **C. Posts\***, shall be pre-punched to allow the stringers to slide in and be fastened with stainless steel TEK screws. Cast aluminum post caps shall be affixed to all posts.

✘ **D. Gates\***, shall be fabricated using the same components as for the complete fencing system. Walk gates shall have adjustable self-closing hinges and will be self-latching.

\* (Specify style and dimensions from tables on pages 3 through 5).

## PART 3 – EXECUTION

### 3.01 Preparation

- ✘ Prepare the grade and remove surface irregularities, if any, which may cause interference with the installation of the ornamental aluminum fence.

### 3.02 Installation

- ✘ **A.** Set fence posts at on-center (O.C.) distance set forth on post spacing guide included with the Tech Manual. Set gateposts for gate openings specified in the construction drawings.
- ✘ **B.** Insert stringers into the pre-punched posts and fasten with stainless steel TEK screws.
- ✘ **C.** Center and align posts. Pour concrete around posts and vibrate or tamp for consolidation. Recheck vertical and top alignment of posts and make necessary adjustments prior to concrete setting.
- ✘ **D.** Install gates plumb, level and secure for full opening without interference. For double gates, install drop rod kit. Adjust all hardware for smooth operation.

### 3.03 Cleaning

- ✘ Contractor shall clean jobsite of excess materials; posthole excavations shall be scattered uniformly and away from posts. Clean ornamental aluminum fence with a mild solution of household detergent and clean water. Rinse well. Mortar should be removed from exposed posts using a 10% solution of muriatic acid followed by immediate and thorough rinsing with clean water.