

**SECTION 32 31 19**  
**DECORATIVE METAL FENCING AND GATES**

**PART 1 GENERAL**

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 specification sections, apply to work in this section.

1.2 SECTION INCLUDES

- A. Provide complete aluminum ornamental fencing as shown on the drawings and specified herein.

1.3 REFERENCES

- A. ASTM B221 – Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- B. ASCE 7 - Minimum Design Loads for Buildings and Other Structures

1.4 SUBMITTALS

- A. Shop Drawings: Indicate details of fabrication and installation, size and layout, post and foundation details, hardware anchorage, and schedule of components
  - a. Indicate compliance with specified code references.
- B. Provide manufacturer's descriptive data on fabric, posts, accessories, fittings, and hardware.
- C. Provide manufacturer installation instructions indicate installation requirements, post foundation anchor bolt templates.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with the manufacturer's instructions.
- B. Manufacturer: Company specializing in manufacturing the products specified in this section with a minimum of 5-years of experience.

**PART 2 PRODUCTS**

2.1 MATERIALS

- A. Aluminum Extrusions: All components shall be made of 6063-T5 in accordance with ASTM B221.
- B. Stringers: 2" x 2", 0.70", aluminum extrusion, pre-punched to allow the pickets to pass thru the top of the rail. Stringer spacing shall be as shown on the drawings.
- C. Line and Gate Posts: 4" x 4", 0.125", aluminum tube, pre-punched to allow stringers to slide in and be attached using stainless steel TEK screws.
  - 1. Provide blunt post caps.
- D. Pickets: ¾" square, 0.60", aluminum extrusion, mechanically fastened to top and bottom stringers using stainless steel TEK screws on one side of the stringer only.
  - 1. If required by design, provide blunt picket caps or tops.
- E. Gates: Construct gates using the specified materials and shall be fabricated using fully welded construction.
  - 1. Gates shall have a 0.25" aluminum plate welded to the face as shown for mounting of door panic device, with self-closing hinge.
- F. Expanded Aluminum Facing: Provide ¾" 9-ga, expanded metal security fencing welded to each gate as shown.
- G. Accessories, manufacturer listed or approved equal:
  - 1. Hinges: self-closing, 4½" wide x 4½" high, FBB1191.
  - 2. Closer: LCN 4040

The School District of Palm Beach County

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3. Panic Device: Von Duprin or Monarch, Stainless Steel, standard rim cylinder.
- H. Finish: Coat the fence system using polyester powder coating in a color selected by the Architect from the manufacturer's standard color palette.

### **PART 3 EXECUTION**

#### **3.1 EXAMINATION**

- A. Verify that preparations in fence locations are complete, without irregularities that would interfere with fence installation.
- B. Do not commence work until conditions are satisfactory.

#### **3.2 INSTALLATION**

- A. Measure and lay out complete fence line, parallel to surface of ground.
  1. Locate line posts at maximum 10' o.c. spacing. Locate corner posts at positions where fence changes directions more than 10°.
- B. Provide minimum posthole diameter 3 times outside post diameter, set posts plumb to ¼" in 10', fill hole with concrete to 2" above grade, crown concrete surface to slope away from posts.
- C. Gates:
  1. Install gates plumb and level, ¼" in 10'.
  2. Install panic devices on all leaves required for emergency egress.
  3. Do not install cane bolts on leaves requiring panic devices.
  4. Where both leaves of a gate are required for emergency egress, provide center mullion post or alternate approved egress hardware.
  5. Do not attach the hinged side of gate from building wall; provide gateposts.
  6. Install three hinges per gate leaf.
- D. Provide concrete center drop to footing depth and drop rod retainers at center of double gate openings, unless both leaves are required for emergency egress.

#### **3.3 ADJUST AND CLEAN**

- A. Tighten hardware, fasteners, and accessories.
  1. Remove excess and waste materials from project site.
- B. Adjust operating hardware to operate freely and properly as intended.
  2. Adjust gates to proper clearances.

END OF SECTION