



ORNAMENTAL ALUMIUMN FENCE & GATES SPECIFICATIONS

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Part I General

1.1 SECTION INCLUDES

- A. Ornamental aluminum railing
- B. Ornamental aluminum fences
- C. Ornamental aluminum gates.

1.2 RELATED SECTIONS

- A. Section 05500 - Metal Fabrication:
- B. Section 05510- Metal Stairs: Railings associated with metal stairs Upon request

1.3 REFERENCES

- A. Desination- Title ; date.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Shop Drawings: Show layout and details of construction, including plans, elevations,

sections, and attachments to other work.

- D. Selection Samples: Two complete sets of color chips representing manufacturer's full range of available colors for finishes.
- E. Verification Samples: Two samples, minimum size 6 inches square, representing actual finish color.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products out of the weather, in original delivered condition, and protected from damage and soiling until ready for installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Swedge Lock 211 Riverside Court Greer, SC. 29651
Tel: 888-754-2301 Fax: 800-997-8132 E-Mail Ron@swedgelock.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- D. Obtain all fence and gate components of each type from a single manufacturer.

2.2 APPLICATIONS

- A. Exterior Applications: Design to accommodate without damage thermal movement resulting from change in temperature of at least 120 degrees F (67 degrees C) ambient and 180 degrees F (100 degrees C) at material surface.
- B. Fences:
 - 1. Height: To 72 inches
 - 2. Width: 72 inches
 - 3. Layout: As indicated on drawings.
- C. Gates: Mount gate Frame sections on extruded welded aluminum.
 - 1. Provide structural design by licensed professional engineer.
 - 2. Pedestrian Gate Type: Swinging.
 - 3. Vehicular gate Type: Swinging

4. Vehicular gate Type: Swinging, bi-parting
5. Vehicular gate Type: Slide, Rolling Style with Counter balance
6. Materials: Extruded Aluminum per gate design
7. Height: _____
8. Width: _____
9. Pedestrian Gate Hinges: Spring loaded self-closing.
10. Vehicular Gate Hinges: Aluminum barrel Hinges
11. Locking: Cane bolt on each leaf
12. Locking: Aluminum Magnetic key lock or Stainless Steel Powder latch

2.3 MATERIALS

A. Fence & Railing Sections: Extruded aluminum, factory-assembled; post, rail and picket style with pickets permanently "Wedge locked" to horizontal rails without fasteners or welding

1. Posts: Self-mating with equal legs to prevent separation.
2 by 2 inches square, .093 inch wall thickness
2 1/2" by 2 1/2" inches square, .062 inch wall thickness
2. Rails: 1 by 1-5/8 inches by 1 inch with 0.059-inch wall thickness.
3. Picket Design: 3/4 inch x 3/4 inch with .047 wall thickness
4. Gates Frame 2 by 2 inches with 0.125 inch wall thickness
5. Design to drain water from hollow sections
6. Close ends of hollow members with prefabricated fittings.
7. Connections: Tight fitting hairline joints; for exterior use, design with watertight connections.
8. Finish: Factory-applied ESP Powder Coated finish
9. Color: As selected by Architect from manufacturer's standard colors.

B. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), alloy 6063-T5/T52; & ASTM B 429, alloy 6063-T6. ASTM B 209 (ASTM B 209M), alloy 6061-T6.

C. Aluminum Anchorage Fittings: ASTM B 247 (ASTM B 247M), alloy 6061-T6 forgings; or ASTM B 26/B 26M, alloy A356-T6 castings; provide any suitable type unless specifically indicated on drawings.

D. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy 6061-T6.

E. Powder Coated /Acrylic Finish: Thermosetting siliconized polyester acrylic enamel primer and topcoat, complying with AAMA 603.8 except with minimum 8 mils dry film thickness; applied immediately after extrusion of parts to minimize aluminum oxidation prior to coating.

F. Gate Hinges and Other Hardware: Suitable for gate size, weight, and operation.

- G. Fasteners for Connecting Rail/Fence Members: Concealed, type 304 stainless /ASI
Ceramic Fasteners on gates may be exposed.
- H. Fasteners for Anchoring to Other Construction: Type, grade, and class required to produce suitable connections and capable of withstanding specified design loadings.
- I. Anchorage Items to be embedded in Other Work: Provide items required and deliver to appropriate installer.

2.4 FABRICATION

- A. Field Measurements: Where units are indicated to fit other construction, check actual dimensions of other construction prior to fabrication; record dimensions on shop drawings.
- B. Factory assemblies. Disassemble if necessary for shipping and handling but minimize need for field splicing or assembly. Clearly mark units for reassembly. Design field connections to maintain the required structural capacity.
- C. Prepare for field connections by reinforcing, cutting, drilling, and tapping to suit hardware and fasteners to be used.
- D. Prevent galvanic action and other forms of corrosion by separating dissimilar metals and by coating surfaces to be in contact with cementitious materials.
- E. Provide finished assemblies that are free from surface blemishes on surfaces exposed to view when installed.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Coordinate location of anchorage items to be embedded in other work.
- B. Clean surfaces thoroughly prior to installation.

- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install in manner adequate to achieve required structural capacity.
- C. Do not weld or cut prefinished members.
- D. Set assemblies accurately in location, alignment, and elevation, measured from established lines and levels and free from rack.
- E. Set posts plumb within a tolerance of 1/4 inch in 12 feet (2 mm in 1 m).
- F. Adjust gates for smooth free operation without binding or scraping.

3.4 PROTECTION AND CLEANING

- A. Protect installed products until completion of project using temporary protective covering approved by manufacturer. Remove coverings at time of Substantial Completion.
- B. Touch-up, repair or replace damaged products after Substantial Completion so that no evidence remains of correction work.
- C. Clean by washing thoroughly with clean water and soap, followed by rinsing with clean water.

END OF SECTION