

IDEAL ALUMINUM PRODUCTS DECORATIVE FENCE AND GATES

ARCHITECTURAL SPECIFICATION

Section 323119

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. The aluminum fence and gate systems covered by this specification shall be the products of iDeal Aluminum Products, 3200 Parker Drive, Saint Augustine, FL 32084. Phone: 877-323-6496, Fax: 877-226-4469, www.ideal-ap.com
- B. The General Conditions and the requirements of Division 1 of the specifications shall apply to all work hereunder.
- C. All work shall be completed in accordance with the manufacturer's instructions, and in a manner satisfactory to the owner's representative.

1.2 SCOPE

- A. iDeal Aluminum Products shall furnish panels, posts, mounts, hinges and latches. Designated accessories necessary to complete the installation furnished by the contractor – in compliance with plans and specifications.

1.3 RELATED SECTION INCLUDES

- A. Section 02300 - Earthwork.
- B. Section 03300 - Cast-In-Place Concrete.

1.4 REFERENCES

- A. ASTM - American Society for Testing and Materials:
- B. ASTM B 221/B 221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- C. American Architectural Manufacturers Association (AAMA): AAMA 2604 - Voluntary Specification, Performance Requirements, and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
- D. American Welding Society (AWS):
- E. AWS D1.1 - Structural Welding Code - Steel (copyrighted by AWS, ANSI

approved).

- F. AWS D1.2 - Structural Welding Code - Aluminum (copyrighted by AWS, ANSI approved).

1.5 SUBMITTALS

- A. Product Data: iDeal Aluminum Products shall provide standard product specifications and technical for all fence products.
- B. Shop Drawings: iDeal Aluminum Products standard shop drawing showing product components and installation details. Include information not fully detailed in manufacturer's standard product data.
- C. Samples: A 1' x 1' fence panel sample shall be submitted for approval. The sample shall be the correct style selected, with the selected finish applied.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Installer shall be a firm that shall have a minimum of two years of successful installation experience with projects utilizing ornamental metal fences and gates similar in type and scope to that required for this Project.
- B. Single Source Responsibility: Obtain ornamental metal fences and gates from a single source with resources to produce products of consistent quality in appearance and physical properties without delaying the work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in supplier's or manufacturer's original wrappings and containers, labeled with supplier's or manufacturer's name, material or product brand name, if any.
- B. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and be protected against damage, weather, vandalism, and theft.

1.8 WARRANTY

- A. The powder coated surface on all components (pickets, rails, and posts) is warranted for 5 years. Refer to manufacturer for complete details regarding warranty.
- B. The entire fence and gate system shall have a limited lifetime warranty against

defects in workmanship and material. Refer to manufacturer for complete details regarding warranty.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum Extrusions: 6063-T5 alloy in accordance with ASTM B 221/B 221M.
- B. Fasteners: Type 302 stainless steel, self-drilling head screws. Screws shall be painted to match the finish of the fence.
- C. Accessories: Aluminum castings shall be used for post caps, wall brackets, scrolls, finials, and other miscellaneous hardware. Hinges and latches shall be fabricated from aluminum extrusions with stainless steel springs.

2.2 ORNAMENTAL ALUMINUM FENCING

- A. (ENTER GRADE) Fence System:
 - 1. Style: (STYLE NUMBER), as manufactured by iDeal Aluminum Products.
 - 2. Section Width: Sections are supplied in 6 foot or 8 foot widths.
 - 3. Height: (x) inches.
 - 4. Pickets: (x) inch by (x) inch by (x) inch.
 - 5. Rails: (x) inch by (x) inch by (x) inch.
 - 6. Posts: (x) inch by (x) inch by (x) inch wall x (x) inch long with standard post caps
 - 7. Picket Spacing: (x) inches on center.
 - a. Spacing between pickets (x) inch
 - 8. Color: iDeal Aluminum Products standard (ENTER COLOR)
 - a. Meets AAMA 2604

2.3 ORNAMENTAL ALUMINUM GATES

A. (ENTER GRADE) (ENTER TYPE OF GATE):

1. Style: (STYLE NUMBER), as manufactured by iDeal Aluminum Products
2. Gate Opening Width: (x) Feet
3. Gate Height: (x) Feet
4. Pickets: To Match Fence
5. Post: (x) inch by (x) inch by (x) inch wall by (x) inch long with standard post caps
6. Color: iDeal Aluminum Products standard Black
 - a. Meets AAMA 2604
7. Accessories:
 - a. Hinges: iDeal Aluminum Self Closing Hinges
 - i. (3) sets required
 - b. Latch: iDeal Gravity Latch
 - c. Drop Rod: D&D Q-Bolt 24" (Black only)

2.4 FABRICATION

- A. Horizontal Rails: Rails shall be "U" channels. Pickets shall pass through holes punched in the top rail. The number of rails shall vary with the style, height, and strength of the fence system according to manufacturer's specifications.
- B. Pickets: Pickets shall be fastened to the rails using stainless steel tek screws painted to match the color of the fence. Screws shall be used on only one side of the rail leaving the other side with a clean appearance.
- C. Posts: Posts shall be pre-punched to allow the Horizontal rails to slide in and be attached with stainless steel tek screws. Cast aluminum post caps shall be affixed to all posts. Post size and wall thickness shall be based on manufacturers' recommendations. A gate requires a gate post on both sides.

- D. Finish: The fence and gate systems shall have an electrostatically applied TGIC polyester powder coated finish that meets or exceeds industry standard AAMA 2604 tests.

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. Clean surfaces thoroughly prior to installation
- B. Prepare the grade and remove surface irregularities, if any, which may cause interference with the installation of fencing.
- C. If preparation and condition is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Use of non-Ideal Aluminum Products parts/components will negate manufacturer's warranty.
- C. Fence posts shall be set in accordance with the manufacturer recommended spacing.
- D. Insert fence horizontal rail end into pre-punched posts and fasten with Tek screws
- E. Center and align posts, place concrete around posts and vibrate or tamp for consolidation. Recheck vertical and top alignment of posts, and make necessary corrections.
- F. Install gates plumb, level, and secure for full opening without interference. For double gates, install drop rod. Adjust hardware for smooth operation.

- G. Division 2 and Division 3 Sections shall govern post base material requirements.
- H. Gate posts shall be spaced according to the manufacturers' gate drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected.
- I. Type and quantity of gate hinges shall be based on the application; weight, height, and number of gate cycles.
- J. The manufacturer's gate drawings shall identify the necessary gate hardware required for the application.
- K. Gate hardware shall be provided by the manufacture of the gate and shall be installed per manufacturer's recommendation

3.4 CLEANING

- A. Clean surfaces thoroughly prior to installation
- B. Leave immediate work area neat at end of each work day.
- C. Clean jobsite of excess materials; scatter excess material from post hole excavations uniformly away from posts. Remove excess material if required.
- D. Clean fence with mild household detergent and clean water rinse well. Mortar should be removed from exposed posts and other fencing material using a 10% solution of muriatic acid followed immediately by several rinses with clean water.
- E. Touch up scratched surfaces using materials recommended by manufacturer. Match touchup paint color to fence finish.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION