

## **PART 1 - GENERAL**

### **1.01 Summary of Work**

- .A Decorative aluminum metal fences (up to 12ft high), pedestrian swing gates, double drive swing gates, rolling gates, custom gates.

**Specifiers Note:** Custom gates (large swing gates, rolling, cantilever, custom sizes) are available if needed, please contact [support@sleekfence.com](mailto:support@sleekfence.com) for project specific assistance and shop drawings.

- .B Related Work:

- .1 Section 03 30 00: Cast-in-Place Concrete.
- .2 Section 31 23 16: Excavation.

### **1.02 References**

- .A AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix).
- .B AAMA 2604 - Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix).
- .C ANSI/BHMA A156.3 – Exit Devices.
- .D ASTM A276/A276M – Standard Specification for Stainless Steel Bars and Shapes.
- .E ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- .F ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
- .G ISO 9227 – Corrosion Tests in Artificial Atmospheres.
- .H ISO 16474-2 – Methods of Exposure to Laboratory Light Sources.

### **1.03 Administrative Requirements**

- .A Site Meetings: Arrange a pre-installation meeting on site one week prior to start of work to be attended by consultant, installer, project manager, manufacturer's representative, and any other parties directly affecting work of this section to:
  - .1 Review methods and procedures related to installation.

- .2 Review all typical and special details as required to complete the work of this section.

#### **1.04 Submittals**

- .A Submit action submittals in accordance with Section 01 33 00.
- .B Product Data: Submit 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:
  - .1 Submit Shop Drawings.
  - .2 Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, gates, and schedule of components.
  - .3 Foundation details, concrete design mix.
- .D Samples: Submit samples of fence panels, slat infill, illustrating construction and colored finish.
- .E Manufacturer's Installation Instructions: Indicate installation requirements, post foundation anchor bolt templates, and gate installation.
- .F Project Record Documents: Accurately record actual locations of property perimeter posts relative to property lines.
- .G Closeout and Maintenance Submittals:
  - .1 Submit closeout and maintenance submittals including manufacturers maintenance and cleaning data and product warranty documentation.
  - .2 Submit maintenance materials consisting of one panel.

#### **1.05 Quality Assurance**

- .A Manufacturers: Manufacturers specializing in manufacturing products specified in this section with a minimum of five (5) years documented experience.
- .B Installers: Perform Work of this Section by a company that has a minimum of five (5) years proven experience in the installation of decorative metal fencing and gates of a similar size and nature.

#### **1.06 Delivery, Storage and Handling**

- .A Store materials in a manner to ensure proper ventilation and drainage.
- .B Protect against damage, weather, vandalism, and theft.

#### 1.07 **Warranty**

- .A Provide extended warranty for decorative metal fences and gates in accordance with the General Conditions, warranty shall be extended from date of Substantial Completion for the period of time listed below:
  - .1 Provide five (5) year extended warranty against defects in installation.
  - .2 Provide ten (10) year extended warranty against defects in powder coated finish including cracking, peeling, chipping, blistering or corroding.
  - .3 Provide twenty (20) year extended warranty against defects in fencing materials.
- .B Provide manufacturers limited lifetime warranty for all structural fence components including rails, pickets, and posts from date of original purchase.

### **PART 2 - PRODUCTS**

#### 2.01 **System and Manufacturer**

- .A Decorative fence and gate components for a [semi] [solid] privacy fence as manufactured by:
  - .1 ***Sleek Fence Inc.***  
2 Vliet Farm Road  
Asbury, NJ, USA, 08802  
Contact: Samuel Mitchell  
Email: sam@sleekfence.com  
Tel: 1-855-875-0855
  - .2 ***Sleek Fence Inc.***  
19272 96 Avenue, Unit 3  
Surrey, BC, Canada, V4N 4C1  
Contact: Samuel Mitchell  
Email: sam@sleekfence.com  
Tel: 1-855-875-0855

#### 2.02 **Performance Requirements**

- .A Provide complete factory-fabricated system of posts and panels, accessories, fittings, and fasteners; finished with electrodeposition coating.
- .B Design gate to suit the type and application.

- .1 Provide quantity of gate hinges based on weight, height, and number of expected gate cycles.
- .2 Identify necessary hardware required for application on manufacturer's gate drawings.
- .C Fire resistance: Fencing materials to conform to ASTM E84, Class A rating.
- .D Salt spray rating: Fencing materials to conform to ISO 9227 corrosion test.

**Specifiers Note:** Refer to Wind Speed Charts on SleekFence Website to ensure fence post mounting method is appropriate for location of the work and desired fence height.

- .E Wind force loading: Design fence post installation to suit design wind speed for Place of Work. Refer to Structural calculations and manufacturers recommendations to establish appropriate fence mounting method. Provide steel insert as required.

### 2.03 Materials

- .A Aluminum:
  - .1 Tubular Pickets, Rails and Posts: ASTM B221, 6063-T6 alloy.
  - .2 Extrusions for Posts and Rails (Outer Channel): ASTM B221, 6063-T6 alloy.
  - .3 Extrusions for Pickets and Rail (Inner Slide Channels): ASTM B221, 6063-T6 alloy.
- .B Fasteners: ASTM A276/A276M, Type 410 stainless steel; self-drilling screws.

### 2.04 Components

- .A Fence Panels:
  - .1 Fence Panels: 6 feet long extruded aluminum preassembled panels.

**Specifiers Note:** Select the style of fence noted below and insert fence panel height. Fence heights are available for up to 12 feet high.

- .a Panel Style 1: Semi-privacy screen fence, fully assembled panel [...] high by 72" long consisting of 4-inch x 5/8-inch boards installed with 3/4 inch gaps. Aluminum boards to be fabricated with 18-gauge wall thickness and 2 internal ribs.
- .b Panel Style 2: Solid privacy fence, fully assembled panel [...] high by 72" long consisting of 5.7-inch x 5/8-inch boards with interlocking tongue and groove. Aluminum boards to be fabricated with 18-gauge wall thickness and 2 internal ribs.
- .c Panel Style 3: Slat-top fence, fully assembled panel [...] high by 72" long consisting of 5.7-inch x 5/8-inch boards with interlocking tongue and

groove, with 3 slats at the top, 3-inch x 5/8-inch boards installed with 3/4-inch gaps. Aluminum boards to be fabricated with 18-gauge wall thickness and 2 internal ribs.

.2 Posts: 4-inch square aluminum extrusions with 0.138" wall thickness.

.B Manual Pedestrian Swing Gates:

.1 Gate Panels: Manufacturer's standard decorative aluminum gates.

Specifiers Note: Custom gates (large swing gates, rolling, cantilever, custom sizes) are available if needed, please contact [support@sleekfence.com](mailto:support@sleekfence.com) for project specific assistance and shop drawings.

.2 Posts: 4-inch square aluminum extrusions as standard (custom gates may require larger posts)

.3 Rails and Frame: Manufacturer's standard interlocking frame design of aluminum extrusions.

.4 Hardware:

.a Heavy Duty Hinge: Manufacturer's standard mechanism; factory finished stainless steel.

.b Latch: Manufacturer's standard mechanism; factory finished stainless steel.

Specifiers Note: Select the style of panic hardware to suit Project requirements.

.c Panic hardware: ANSI/BHMA A156.3, Grade 1 hardware. [Heavy-duty Detex Advantex 10xW Series Weatherized Rim Exit Device compatible with Detex 08DS Lever] [Medium-duty Detex Value Series V40xW Rim Exit Device compatible with Detex 08BN Lever] [Codelocks CL.ED Series Rim Exit Device compatible with CL600 mechanical keypad trim]. **All Detex devices are compatible with DAC6450 mechanical keypad trim, and Alarm Lock Exterior Grade (ETDL27-S1G-26D-M99) Trilogy T2 Electronic Keypad Exit Device Trim.**

.d Hydraulic gate closer: Manufacturer's standard mechanism; factory finished stainless steel.

.5 Operation: Manual.

## 2.05 Finishes

Specifiers Note: AAMA 2603 and Qualicoat Class 1 are standard. The finish can be upgraded to AAMA 2604 and Qualicoat Class 2 if required.

- .A Finish: Powder coating with weathering performance meeting [AAMA 2603] [AAMA 2604] and GSB Standard requirements. Coating to be certified according to Qualicoat Class [1] [2] including the following stages:
  - .1 Surface preparation: Provide aluminum etching stage.
  - .2 Pretreatment: Full multi-stage chromate conversion coating, or chrome-free pre-treatment, or pre-anodising pre-treatment. Fully dry aluminum prior to application of powder coating.

**Specifiers Note:** Black and white are carried in stock. Wood grain look colors are available with a 18 to 22 week lead time. Custom colors are available, however contact manufacturer for lead times.

- .3 Powder coating color: [Black RAL 9005] [White RAL 9010] [Wood grain look, Deep Forest/Organic/Warm Cedar/Charcoal/New Light] [Custom color RAL[...]].

**Specifiers Note:** Select one of the following two Clauses to suit required Qualicoat Class.

- .B Coating performance: Powder coat finish shall meet Qualicoat Class 1 as follows:
  - .1 Dry film thickness: Minimum 60 µm.
  - .2 Bend test (minimum 5 mm mandrel): no crack.
  - .3 Impact Resistance (minimum 2.5 N-m): no crack.
  - .4 Corrosion resistance to ISO 9227: 1000 hours.
  - .5 Accelerated weathering to ISO 16474-2 (Method A): 50% Gloss retention and color change to limit per App A12.
- .C Coating performance: Powder coat finish shall meet Qualicoat Class 2 as follows:
  - .1 Dry film thickness: Minimum 60 µm.
  - .2 Bend test (minimum 5 mm mandrel): crack allowed, no film detachment after tape adhesion test.
  - .3 Impact Resistance (minimum 2.5 N-m): crack allowed, no film detachment after tape adhesion test.
  - .4 Corrosion resistance to ISO 9227: 1000 hours.
  - .5 Accelerated weathering to ISO 16474-2 (Method A): 90% Gloss retention and color change to 50% of limit per App A12 Class 2.

### **PART 3 - EXECUTION**

### **3.01 Examination**

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

### **3.02 Surface Preparation**

- .A Clean surfaces thoroughly prior to installation.

### **3.03 Installation**

- .A Install in accordance with manufacturer's written instructions.
- .B Excavate post holes in accordance with Section 31 23 16.
- .C Set fence posts to manufacturer recommended spacing.
- .D Space gate posts according to the manufacturers' drawings, dependent on standard out-to-out gate leaf dimensions and gate hardware selected.
- .E Attach panels to posts with manufacturer's standard panel brackets and recommended fasteners. Confirm screw spacing with manufacturer to suit wind speeds for Place of Work.
- .F Provide gate hardware by the manufacturer of the gate and install in compliance with manufacturer's recommendations.

### **3.04 Installation Tolerances**

- .A Maximum Variation from Plumb: 1/8 inch.
- .B Maximum Offset from Indicated Position: 1 inch.
- .C Minimum Distance from Property Line: 6 inches.

### **3.05 Field Quality Control**

- .A Refer to Section 01 40 00 - Quality Requirements, for additional requirements.
- .B Layout: Verify that fence installation markings are accurate to design, paying attention to gate locations, underground utilities, and property lines.
- .C Post Settings: Randomly inspect three locations against design for:
  - .1 Hole diameter.
  - .2 Hole depth.
  - .3 Hole spacing.

- .D Fence Height: Randomly measure fence height at three locations or at areas that appear out of compliance with design.
- .E Gates: Inspect for level, plumb, and alignment.
- .F Workmanship: Verify neat installation free of defects.

### **3.06 Cleaning**

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

### **3.07 Protection**

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

### **3.08 Maintenance**

- .A Regular cleaning of fencing in accordance with manufacturers written instructions is required to qualify for extended warranty. Cleaning shall be documented.
  - .1 <https://sleekfence.com/wp-content/uploads/2023/10/SLEEKFENCE%E2%84%A2-Cleaning-Instructions.pdf>
- .B Clean fencing at minimum 6-month intervals unless otherwise required for more aggressive environment.
- .C Clean with the use of mild and non-abrasive household neutral detergent (pH 5 to 8) diluted with water. Do not use dish soap.
- .D Cleaning of powder coated finish shall be conducted out of direct sunlight and ensure surface temperature of substrates does not exceed 86°F/30°C.

END OF SECTION