

SECTION 02828 - ARCHITECTURAL METAL FENCE AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Provide Architectural fences and gates as complete units obtained from a single source including necessary erection accessories, fittings and fasteners.

1.2 RELATED SECTIONS

A. Section 03300 - Concrete

1.3 QUALITY ASSURANCE

A. The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified. Prior to construction or excavation the contractor shall locate all underground utilities (public and private) that may exist and cross through the area of construction. Contractor is responsible for repairing at his expense any existing utilities damaged during construction. Contractor shall coordinate post locations with underground utility lines prior to ordering fencing. Fence post locations may need to be adjusted to avoid underground utility conflicts.

1.4 SUBMITTALS

A. Product Data:

1. Submit in accordance with Section 01300, complete shop drawings and product data for all materials and equipment furnished under this Section, including layout and details of construction and erection offence and accessories required.
2. Shop drawings showing finish, material gauge, footings dimensions, locking mechanism and keepers for gates, heights, dimension of metal to finish grade.

B. Samples:

1. Submit three samples approximately 6-in long, or 6-in square of metal material.
2. Provide sample of post cap style and material.

1.5 WARRANTY

A. Warranty fencing systems to be free from defects in material and workmanship. The polyester-coated galvanized metal is guaranteed not to crack, peel or blister for a minimum period of 20 years from Date of Substantial Completion. Accidental damage, defects resulting from improper installation and damage from vandalism or abuse are not included. Warranty is limited to prorated value of the coating, not to exceed the original value of the coating.

1.6 PRODUCT HANDLING AND STORAGE

A. Upon receipt at the job site, all materials shall be checked to ensure that no damages occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage and to protect against damage, weather, vandalism and theft.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Subject to compliance with requirements, the following manufacturers are acceptable for use:
Best Metal Fence Co. Contact: Gary Wiley (469-644-5091) www.bestmetalfence.com

B. Substitutions: Under provisions of Section 01600 and shall fully comply with specified requirements.

2.2 FENCE SYSTEMS

A. KastleGard Titan (6'hx6'w or 8'hx6'w)

B. KastleGard XP (6'h or 8'h)

C. RanchGard (1, 2, 3, 4, or 5 Rail Design)

2.3 MATERIALS AND FABRICATION

A. Galvanized Steel Sheet: Fabricated from high strength Galvalume structural steel sheet, ASTM A 792/A 792M .0179-.0217 inches thick (29-26 gauge), .0236 inches thick (24 gauge).

2.4 FACTORY FINISH

A. Factory applied, baked-on coatings for application by the coil coat method.

1. 24gauge material: Fluoropolymer 2-Coat System: Manufacturer's standard system with topcoat containing not less than 70 percent PVDF resin by weight; complying with AAMA 621-96. Color to be determined and match manufacturer standard colors, including metallic finishes.
2. 26-29gauge material: Factory coil applied, baked-on 30% silicone polyester paint system or Vinyl Plastisol coating. Color to be determined and match manufacturer standard colors, including metallic finishes.

2.5 POSTS, PANELS AND CHANNELS

A. Fabricate sheet metal components to comply with recommendations of SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of the item indicated.

B. Items Required:

1. Posts. (24gauge)
2. Top & Bottom Channel. (24gauge)
3. Side Channel. (Min. 26gauge)
4. Fence Panels and Rail Panels. (Min. 29gauge)

2.6 ACCESSORIES

A. Self-drilling sheet metal fasteners, prefinished to match Channels and Panels.

B. Post Caps: (Square or Ball Newel)

1. 4x4 inch cast iron, cast aluminum, pressed steel or pressed aluminum as by King Architectural Metals.
2. All posts shall be provided with post caps which will fit over the outside of posts to exclude moisture. Paint to match posts.

C. Concrete: Provide concrete consisting of Portland Cement, ASTM C 150, aggregates ASTM C 33 and clean water. Mix materials to obtain concrete with a minimum 28-day compressive strength of 2500psi using at least four (4) sacks of cement per cubic yard, 1 inch maximum size aggregate and maximum 3 inch slump.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Do not begin installation and erection before final grading is completed.

B. Work shall be performed in a safe and orderly fashion in accordance with Occupational Safety and Health Administration (OSHA) regulations

C. Comply with Manufacturer's Installation Guides to provide secure, aligned installation.

If not indicated on drawings, excavate postholes to minimum depth and diameter as recommended by fence manufacturer. Fill holes with concrete and set posts plumb, in line, and at proper spacing. Specify that no concrete shall be exposed above finished grade at fence posts.

D. Contractor shall clean the site of excess materials. Post hole excavations shall be scattered uniformly away from posts.

END OF SECTION 02828 - ARCHITECTURAL METAL FENCE AND GATES