# CLINCHFENCE<sup>TM</sup> ORNAMENTAL FENCE & GATE SPECIFICATIONS

#### I.

1.02

General 1.01 Included Work:

These specifications include ornamental iron fence, gates, posts and hardware. Contractor is to provide labor and concrete. Related Work:

Section	Earthwork
Section	Concrete

System Description:

- 1.03 System Description
  - Manufacturer shall supply a complete fencing system including posts, caps, blocks, sleeves, gates and hardware.

1.04 Quality Assurance:

- Contractor shall supply laborers and supervisors who are familiar with ornamental iron fence installation and construction. 1.05 References:
  - References: ASTM A036 Structural Steel ASTM A500 Cold Formed Steel ASTM A513 Low Carbon Steel Salt Spray Resistance ASTM B117-90 ASTM D3363 Gouge Pencil Hardness MEK Test - 50 Double Rubs **ASTM D4752 ASTM D3359** Adhesion Elongation ASTM D522-93A ASTM D2794 Impact Resistance Min. 140 inch lbs ASTMG007 South Florida Exposure
- 1.06 Submittal

Manufacturers shop drawings, literature and installation procedures shall be submitted to insure compliance with requirements for materials specified.

#### 1.07 Product:

Delivery, handling and storage all materials shall be inspected to ensure that no damages were incurred during shipping. Materials are to be stored in a clean, dry, dust and chemical free environment and in an area where materials will be secure from vandalism and theft.

### II. Products

2.01 Manufacturer

The ornamental iron fence system shall be manufactured by:

Ironworks Manufacturing & Supply

- 300 W. South Street
- Jackson MS 39203
- 877-379-8305

### 2.02 Materials:

- (a) All components (pickets horizontal runners posts and sleeves will be made from tubing with requirements of ASTM A500 grade B or ASTM A513.
- (b) All solids, angles, channels will be made from steel with requirements of ASTM A36.
- (c) Gate and pickets shall be the same size and specifications as fence. Gate frames will meet requirements of ASTM A500 grade B or ASTM 513.
- 2.03 Fabrication:
  - (a) All steel used in manufacturing of fencing will be of new clean steel conforming to ASTM requirements.
  - (b) Fence panels will be of all weld construction having no fasteners to hold pickets to rails. All welds will be uniformly machine made by gas metal arch welding (mig). All flush welds will be ground smooth.
  - (c) After fabrications, fence will be washed in a phosphoric acid solution, rinsed and dried. Fence will then be electro-coated and powder coated.
- 2.04 Coatings:
  - (a) <u>Electro coating</u>: The electro-coating process should begin with each panel receiving an alkaline cleanser (2 cycles) followed by 2 cycles of water rinse. Then a conditioning prep for Zinc Phosphate followed by Zinc Phosphate is applied. A two cycle rinse phase is then applied, followed by a sealer coat. The sealer coat should be followed by two cycles of reverse osmosis rinse. Following the reverse osmosis 2 cycle rinse, the panels are then electro-coated and pass through a permeation process. The panels then pass through a curing oven to cure. This completes the electro-coating process only.
  - (b) <u>Polyester Powder Coating</u>: The panels then go through a complete rinse again and enter a preheat oven where a highly durable, highly weatherable TGIC no-mar, polyester powder coat is applied and cured in a finish oven. The coating should then pass ASTM B117 salt spray test up to 3,500 hours.

#### III. Execution

3.02

- 3.01 Preparation:
  - (a) Contractor shall layout new fence according to fence construction plans, shop drawings and codes or applicable requirements.
  - (b) Contractor shall check for grade changes.
  - (c) All discrepancies between plans, shop drawings and site conditions must be approved by architect or engineer before proceeding further. Installation:
    - (a) Posts will be set at a maximum of 8'-0" on center having footings of 8" in diameter and 24" deep below finish grade.
    - (b) Install blocks on posts.
    - (c) Slide sleeves onto horizontal runners and hang fence panels on blocks.
    - (d) Slide sleeves toward post and clinch shut.
    - (e) Cut posts tops to desired height and install post caps.
    - (f) Install gates plumb and level. Install gate hardware (locks, drop pins etc)
    - (g) All abrasions to factory coatings shall be free of oil, dirt rust and wax and shall be primed with cold galvanize spray and touched up with
      - paint that matches quality, color and sheen of gloss as that of manufacturers paint.

## 3.03 Cleaning:

Contractor shall remove debris caused by excavation of post footings. Excess mortar concrete, strings, stakes etc. All posts shall have concrete splatter removed.