

## SECTION 323129

### WOOD FENCE AND GATES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

A. This Section includes the following:

1. Construction of wood fences and gates along boundaries, property lines in accordance with St. Tammany Parish Zoning Ordinances.

##### 1.2 REFERENCES

A. Reference Standards.

1. Reference standards cited in this specification refer to the current reference standard published at the time of the latest revision date logged at the end of this specification, unless a date is specifically cited.
2. American Society for Testing and Materials (ASTM):
  - a. A 123, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
  - b. A 500, Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
  - c. F 1043, Standard Specification for Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework.
  - d. F 1083, Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures

##### 1.3 ACTION SUBMITTALS

- A. Shop drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.
- C. Building Permit: All fences over 6 feet.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

#### A. General

1. Gate hinges and post caps shall be of steel, malleable iron, ductile iron or equal.
2. Post tops may be of aluminum.

B. Slats: Redwood or cedar free from all major decay or defects which would weaken or otherwise cause them to be unsuitable for fence slats.

C. Bottom and Top Rail: Minimum 2-inch x 4-inch cedar stud.

#### D. Corner, Gate, End, or Line Posts

##### 1. Steel Posts

##### a. Steel pipe - Type I

- 1) ASTM F 1083
- 2) Standard weight schedule 40
- 3) Minimum yield strength: 30,000 psi
- 4) Sizes as indicated on Drawings
- 5) Hot-dipped galvanized with minimum average 1.8 oz/ft<sup>2</sup> of coated surface area.

##### b. Steel pipe - Type II

- 1) ASTM F 1043, Group IC
- 2) Minimum yield strength: 50,000 psi
- 3) Sizes as indicated on Drawings
- 4) Protective coating per ASTM F 1043
- 5) External coating Type B
  - a) Zinc with organic overcoat
  - b) 0.9 oz/ft<sup>2</sup> minimum zinc coating with chromate conversion coating and verifiable polymer film
- 6) Internal coating Type B
  - a) Minimum 0.9 oz/ft<sup>2</sup> zinc or Type D, zinc pigmented, 81 percent nominal coating, minimum 3 mils

##### c. Steel square sections

- 1) ASTM A 500, Grade B
- 2) Minimum yield strength: 40,000 psi
- 3) Sizes as indicated
- 4) Hot-dipped galvanized with minimum 1.8 oz/ft<sup>2</sup> of coated surface area.

##### 3. Accessories

##### a. Post caps

- 1) Formed steel or cast malleable iron weather tight closure cap for tubular posts.
- 2) Provide one cap for each post.
- 3) Cap to have provision for barbed wire when necessary.

- 4) "C" shaped line post without top rail or barbed wire supporting arms do not require post caps.
  - 5) Where top rail is used, provide tops to permit passage of top rail.
4. Setting Materials
- a. Concrete
    - 1) Minimum 28 day compressive strength of 3,000 psi
    - 2) Bagged concrete allowed.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verification of Conditions
1. Verify areas to receive fencing are completed to final grades and elevations.
  2. Ensure property lines and legal boundaries of work are clearly established.

### 3.2 INSTALLATION

- A. Wood Fence Framing
1. Steel Posts are required for all required screening fences.
  2. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30 degrees or more.
  3. Space line posts uniformly at 6 feet on center.
  4. Set all posts in concrete.
    - a. Drill holes in firm, undisturbed or compacted soil.
    - b. Drill hole diameter 4 times greater than outside dimension of post (minimum 12 inches).
    - c. Set post bottom 24 inches below surface when in firm, undisturbed soil.
    - d. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads.
    - e. Place concrete around posts in a continuous pour.
    - f. Trowel finish around post. Slope to direct water away from posts.
  5. Check each post for vertical and top alignment and maintain in position during placement and finishing operations.
- B. Slats
1. Place slats approximately 1 inch above the ground, and on a straight grade between posts by excavating high points of the ground.
  2. Fasten slats to top and bottom railings with 2 galvanized screws designed for wood fence construction at both the top and bottom rail.

END OF SECTION 323129