PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and accessories necessary for installation of the commercial welded wire fence system defined herein at (specify project site).

1.02 REFERENCES

- ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
- ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process
- ASTM B117 - Practice for Operating Salt-Spray (Fog) Apparatus
- ASTM D523 - Test Method for Specular Gloss
- ASTM D714 - Test Method for Evaluating Degree of Blistering in Paint
- ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus
- ASTM D1654 - Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- ASTM D2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates
- ASTM D2794 - Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- ASTM D3359 - Test Method for Measuring Adhesion by Tape Test
- ASTM F2453/F 2453M – Standard Specification for Welded Wire Mesh Fence Fabric

1.03 SUBMITTAL

The manufacturer's submittal package shall be provided prior to installation.

1.04 QUALITY ASSURANCE

Installer Qualifications: The installer shall have completed similar installations in material, design.

PART 2 - MATERIALS

2.01 MANUFACTURER

Rampart 286 Welded Wire

Manufacturers:

1 Wallace Perimeter Security
Rampart 286 Welded Wire:
90 Lowson Crescent, Winnipeg, Manitoba Canada, R3P 2H8
T. 866.300.1110 F. 204.284.1868
wallaceperimetersecurity.com

2.02 FABRICATION

A. Panel heights should be: 4 ft. (1230mm), 6ft. (1730mm), 8 ft. (2430mm), or a multiple of stacked panels.

B. Wire mesh panels shall be precut to specified lengths of 8’2 (2508 mm) wide.

C. Steel Wire mesh fence panels shall be welded by resistance welding per ASTM F2453 using pre-galvanized steel wire using Vertical 6 GA (4.88mm) pre-galvanized steel wires and Horizontal 6 GA (4.88mm) pre-galvanized steel wires to form a mesh opening of 2” x 8” (50mm x 200mm).

D. One end of the vertical wires of the panel shall exceed 1" (25mm) from the first horizontal wire creating a spiked top.

E. Panel will have structural V-bends at top and bottom of panel (and center depending on height).

F. The cold rolled wire shall have a tensile strength of at least 74,000 psi and 68,000 psi shear strength. Wire strand shall be galvanized before welded (GBW), .50 ounces per square foot zinc coating conforming to the ASTM A641.

2.03 COATING

A. Hot-dip galvanized: The wire mesh is coated with 0.5 oz./sq. ft. (150 g/m^2) zinc in conformity with ASTM A641 (1989) Class 1.

B. Pre-galvanized and polyester powder coated: The polyester surface coating color shall be standard black or [optional color as per RAL chart]. Polyester coating to be minimum 4 mils with an average thickness of 100µm applied by an electrostatic method. Coating shall cover all surfaces of the wire sections.

C. Corrosion: The wires are galvanized according to ASTM A641/A641M with a minimum of 40 gr/m2. After the welding process the panels will be pre-treated and provided with a conversion layer for a better anti-corrosion effect and better adhesion of the polyester powder coating.