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

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| 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/F2453M | 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 280 Welded Wire

Wallace Perimeter Security

Product: Rampart 280 Welded Wire

115 Lowson Crescent, Winnipeg, Manitoba Canada, R3P 1A6

T. 866.300.1110 <https://www.wallaceperimetersecurity.com/>

2.02 FABRICATION

1. Panel heights should be approximately: 4 ft. (1.2m), 6ft. (1.8m), 8 ft. (2.4m), or a multiple of stacked panels. Specific panel heights: 48.4” (1230mm), 72.0” (1830mm) and 95.7” (2430mm) respectively as per standard drawings.
2. Wire mesh panels shall be precut to specified lengths of approximately 8’2”; actual, 8’-23/4” or 98.75” (2508 mm) wide.
3. Steel Wire mesh fence panels shall be welded by resistance welding per ASTM F2453 using pre-galvanized steel wire; using one Vertical 4 GA (6mm) pre-galvanized steel wire(s) and two Horizontal 0 GA (8mm) pre-galvanized steel wires to form a mesh opening of 2” x 8” (50mm x 200mm).
4. One end of the vertical wires of the panel shall exceed 1” (25mm) from the first horizontal wire creating a spiked top.
5. The cold rolled wire shall have a tensile strength of at least 74,000 psi (510 MPa) and 68,000 psi (469 MPa) shear strength. Wire strand shall be galvanized before welded (GBW), 0.50 ounces per square foot zinc coating conforming to the ASTM A641.

2.02.1 FENCE AND ACCESSORIES

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| \*\* NOTE TO SPECIFIER \*\*Select nominal panel size. Customized dimensions available upon request. Delete options not required. |

1. Available Rampart 280 - DOUBLE WIRE - Welded Wire Panel Sizes:

| **WPS Part Number** | **Pre-Galvanized Steel Wire Gauge** | | **Mesh Size** | **Standard Panel Length** | **Approximate Standard Panel Height - ft [m]** | **Standard Panel Height - in. [mm]** |
| --- | --- | --- | --- | --- | --- | --- |
| **Horizontal** | **Vertical** |
| 100482 (Black)  100481 (Galv.) | 2 x 0 GA [8mm] | 1 x 4 GA [6mm] | 2" x 8"  [50mm x 200mm] | ≈8'2" (8'-23/4") [2508mm] | 4' [1.2m] | 48.4" [1230mm] |
| 100484 (Black)  100483 (Galv.) | 2 x 0 GA [8mm] | 1 x 4 GA [6mm] | 2" x 8"  [50mm x 200mm] | ≈8'2" (8'-23/4") [2508mm] | 6' [1.8m] | 72.0" [1830mm] |
| 100486 (Black)  100485 (Galv.) | 2 x 0 GA [8mm] | 1 x 4 GA [6mm] | 2" x 8"  [50mm x 200mm] | ≈8'2" (8'-23/4") [2508mm] | 8' [2.4m] | 95.7" [2430mm] |
| Finish: Hot Dipped Galvanized  Optional Powder Coat Finish Available | | | | | | |

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| \*\* NOTE TO SPECIFIER \*\*Select Post Size based on the panel height. Delete options not required. |

B. Post and Bracket Options for Rampart 280 - DOUBLE WIRE - Welded Wire Fence

| **WPS Part Number** | **Post Size/Type** | | **Panel Height** | | **Bracket Qty/Panel** | | **Bracket Type** | **Finish** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7' Dig and Set Option Available (Black or Galv.) | 2-3/8" [60mm] Round Post | | 4' [1.2m] | | 3 | | 13 GA U-Clamp(1) | Standard: Galvanized  Optional: Powder Coat, Black |
| 100772 (Black, 10' Long, SS20, Dig and Set) -OR-  100771 (Galv., 10' Long, SS20, Dig and Set) | 2-3/8" [60mm] Round Post | | 6' [1.8m] | | 4 | | 13 GA U-Clamp(1) | Standard: Galvanized  Optional: Powder Coat, Black |
| 100774 (Black, 12' Long, SS20, Dig and Set) -OR-  100773 (Galv., 12' Long, SS20, Dig and Set) | 2-3/8" [60mm] Round Post | | 8' [2.4m] | | 5 | | 13 GA U-Clamp(1) | Standard: Galvanized  Optional: Powder Coat, Black |
| **(1)**NOTES: 1.5" carriage bolt with washer and 5/16-18" nut. Corner has to be a 90-degree angle. If not, use two end/universal brackets. | | | | | | | | |
| 7' Long Dig and Set Option Available (Black or Galv.) -OR-  Option Available (Black or Galv., 4' Long with flange plate) | 2" x 2" [51mm x 51mm] Square Post | | 4' [1.2m] | | 3 | | 12-14 GA U-Clamp(2) | Standard: Galvanized  Optional: Powder Coat, Black |
| 100770 (16 GA, Black, 8'9" Long, Dig and Set) -OR-  100631 (16 GA, Black, 10' Long, Dig and Set) -OR-  100118 (11 GA, Black, 6' Long, with 4”x6” flange plate) -OR-  100738 (11 GA, Galv., 6' Long, with 4”x6” flange plate) | 2" x 2" [51mm x 51mm] Square Post | | 6' [1.8m] | | 4 | | 12-14 GA U-Clamp(2) | Standard: Galvanized  Optional: Powder Coat, Black |
| **(2)**NOTES: 1.5" carriage bolt with washer and 5/16-18" nut. Use two end brackets for corner installation. 2" posts available in 4' & 6' only. | | | | | | | | |
| 7' Dig and Set Option Available (Black) -OR-  Option Available (Black, 4' Long with flange plate) | 3" x 3" [76mm x 76mm] Square Post | 4' [1.2m] | | 3 | | 12-14 GA U-Clamp(3) | | Standard: Galvanized  Optional: Powder Coat, Black |
| 100126 (12 GA, Black, 9' Long, Dig and Set) –OR-  100769 (12 GA, Black, 10' Long, Dig and Set) -OR-  100122 (11 GA, Black, 6' Long, with 6”x6” flange plate) -OR-  100737 (11 GA, Galv., 6' Long, with 6”x6” flange plate) | 3" x 3" [76mm x 76mm] Square Post | 6' [1.8m] | | 4 | | 12-14 GA U-Clamp(3) | | Standard: Galvanized  Optional: Powder Coat, Black |
| 100121 (12 GA, Black, 12' Long, Dig and Set) -OR-  100125 (11 GA, Black, 8' Long with 6”x6” flange plate) -OR-  100739 (11 GA, Galv., 8' Long with 6”x6” flange plate) | 3" x 3" [76mm x 76mm] Square Post | 8' [2.4m] | | 5 | | 12-14 GA U-Clamp(3) | | Standard: Galvanized  Optional: Powder Coat, Black |
| **(3)**NOTES: 1.5" carriage bolt with washer and 5/16-18" nut. Use two end brackets for corner installation. | | | | | | | | |

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| \*\* NOTE TO SPECIFIER \*\* Delete options not required. When privacy slats are included, a wind load force analysis is recommended for post selection and post spacing. |

C. Privacy Inserts for Rampart 280 - DOUBLE WIRE - Welded Wire Fence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Insert Width** | **Insert Length** | **Panel Height** | **Insert Qty** | **Available Colors** |
| 7.5" [190mm] | 100.4" [2550mm] | 4' [1.2m] | 7 | Black (RAL# 9005)  Anthracite (RAL# 7016)  Transparent |
| 7.5" [190mm] | 100.4" [2550mm] | 6' [1.8m] | 9 | Black (RAL# 9005)  Anthracite (RAL# 7016)  Transparent |
| 7.5" [190mm] | 100.4" [2550mm] | 8' [2.4m] | 12 | Black (RAL# 9005)  Anthracite (RAL# 7016)  Transparent |
| * Insert Material: Polyethylene * One package of inserts contains 10, 7.5" [190mm] x 100.4" [2550mm] inserts. * Different insert weave styles can be achieved using standard length inserts. * Cut to length of fence panel to ease installation. | | | | |

2.03 COATING

1. Hot-dip galvanized: The wire mesh is coated with 0.5 oz./sq. ft. (150 g/m2) zinc in conformity with ASTM A641 (1989) Class 1.
2. 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 (0.102mm) with an average thickness of 100µm (4 mils approx.) applied by an electrostatic method. Coating shall cover all surfaces of the wire sections.
3. 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.

PART 3 - EXECUTION

All new installation shall be laid out by the contractor in accordance with the construction plans. The manufacturers’ gate drawings shall identify the necessary gate hardware and installation recommendations required for the application.