

AMERISTAR® PERIMETER SECURITY USA INC.
PassPort Commercial® Gate - Steel Roll Gate System
Construction Specification – SECTION 32 31 00

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials, and appurtenances necessary for installation of the steel roll gate system defined herein at (specify project site).

1.02 RELATED WORK

Section 022__ - Earthwork

Section 030__ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total roll gate system of Ameristar® PassPort® Commercial Ornamental design series and (specify the style as Classic, Majestic, Genesis, or Invincible) style. The system shall include all components (i.e., pickets, rails, gate uprights, wheels, and hardware) required.

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of construction involved and materials and techniques specified.

1.05 REFERENCES

- 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.

1.06 SUBMITTAL

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

1.07 PRODUCT HANDLING AND STORAGE

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 - MATERIALS

2.01 MANUFACTURER

The steel roll gate system shall conform to Ameristar PassPort Commercial Ornamental design series, (specify Classic, Majestic, Genesis, or Invincible style and (specify 2-rail or 3-rail) frame configuration manufactured by Ameristar Fence Products, Inc. in Tulsa, Oklahoma.

2.02 MATERIAL

A. Steel material for roll gate components (i.e. pickets, rails, diagonals and uprights), shall be commercial steel with a minimum yield strength of 45,000 psi (344 MPa).

B. Ornamental picket material shall be 3/4" square x 14 Ga. Tubing. Picket spacing shall be 4-5/8". Material for top rails, uprights and diagonals rails shall be 2" square x 12 Ga. Material for the bottom rail shall be 2" x 4" x 11 Ga. Posts shall be a minimum of 4" square x 11 Ga.

2.03 FABRICATION

A. Pickets, rails, uprights and posts shall be pre-cut to specified lengths. Diagonals shall be pre-cut to specified lengths and angles. Frame materials shall be joined by welding. Pickets shall be face welded to roll gate frame, except for Invincible gates over 18' long. Invincible style gates over 18' long shall have pickets face-welded to 2" x 2" angle iron to form panels equal in length to the gate frame bay width.

B. The manufactured roll gates and bolt-on panels (if applicable) shall be subjected to the PermaCoat® thermal stratification coating process (high-temperature, in-line, multi-stage, multi-layer) including, as a minimum, a six-stage pre-treatment/wash (with zinc phosphate), an electrostatic spray application of an epoxy base, and a separate electrostatic spray application of a polyester finish. The base coat shall be a thermosetting epoxy powder coating (gray in color) with a minimum thickness of 2 mils (0.0508mm). The topcoat shall be a "no-mar" TGIC polyester powder coat finish with a minimum thickness of 2 mils (0.0508mm). The color shall be (specify Black, Bronze, White, or Desert Sand). The stratification-coated framework shall be capable of meeting the performance requirements for each quality characteristic shown in Table 1.

C. Completed gates shall be capable of supporting a 200 lb. load applied at midspan without permanent deformation.

PART 3 - EXECUTION

3.01 PREPARATION

All new installation shall be laid out by the contractor in accordance with the construction plans.

3.02 INSTALLATION

Gateposts shall be set in accordance with the spacing's shown in the construction plans. The "Earthwork" and "Concrete" sections of this specification shall govern post base material requirements. 6" wheels shall be bolted to the gate (between the wheel plates welded near the ends of the gate bottom rail). The gate shall be set upright with the V-grooved wheels positioned over the pre-installed steel V-track that traverses the gate opening. V-track is to be installed level to prevent gravity from causing the gate to roll freely. Roller guides shall be affixed to the gateposts at a height even with the gate top rail to hold the gate in a vertical position. Gate stop options shall either be welded to the top end of the gate and guideposts, track, or separate post set at each end of the gate in the full open or closed position, so gate cannot pass rollers in either direction.

3.03 CLEANING

The contractor shall clean the jobsite of excess materials; post hole excavations shall be scattered uniformly away from posts.

Table 1 – Coating Performance Requirements

Quality Characteristics	ASTM Test Method	Performance Requirements
Adhesion	D3359 – Method B	Adhesion (Retention of Coating) over 90% of test area (Tape and knife test).
Corrosion Resistance	B117, D714 & D1654	Corrosion Resistance over 1,000 hours (Scribed per D1654; failure mode is accumulation of 1/8" coating loss from scribe or medium #8 blisters).
Impact Resistance	D2794	Impact Resistance over 60 inch lb. (Forward impact using 0.625" ball).
Weathering Resistance	D822 D2244, D523 (60° Method)	Weathering Resistance over 1,000 hours (Failure mode is 60% loss of gloss or color variance of more than 3 delta-E color units).

