The Ross XL-501-TF (RSS-F501D) Post & Beam Perimeter Fence system is the ideal solution for protecting boundaries of high-security facilities. Its proven vehicle-stopping strength is achieved through our patent-pending design, which incorporates "Smart Steel" technology for reduced material and installation costs. This unique system utilizes a single, tubular beam with energy-absorbing technology, enabling the vertical posts to be set on 30-foot centers without the need for multiple intermediate posts and cable runs used in traditional fence designs. The system has been crash-tested to stop a 15,000-lb. truck traveling 50 mph per ASTM F2656-07, achieving the M50 P1 rating. The result is a perimeter security system that offers superior security and aesthetic appeal. For more information, please call our toll-free number above or visit our website.

### **SECTION 323101**

#### ANTI-RAM FENCING

(ROSS XL-501-TF / RSS-F501D)

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
  - 1. Post and beam anti-ram perimeter fencing.

### 1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data for each type of product.
- B. Shop Drawings: Submit shop drawings including the following:
  - 1. Complete list of materials and manufacturer's descriptive and technical literature.
  - 2. Proposed layout and anchorage and relationship to other parts of the work.
- C. Reports and Certifications: Submit the following:
  - Crash Test Report: Provide a copy of the crash test report summary, from an independent, ISO 17025 accredited test facility, showing assignment of the ASTM F2656-07 M50-P1 rating.
- D. Warranty: Submit executed copy of manufacturer's warranty.

### 1.3 QUALITY ASSURANCE

A. Installer: Minimum 2 year documented history of installing similar fencing and acceptable to the manufacturer. Installer shall accept responsibility for all field verifications, underground utility locations, and verification of soil conditions. Installer shall be capable of bonding projects to relevant project amounts, and acceptable liability and vehicle insurance.

# 1.4 DELIVERY, STORAGE AND HANDLING

A. Store materials on sleepers or pallets and protect from rust and objectionable materials such as dirt, grease or oil.

# 1.5 WARRANTY

A. Warranty: Provide manufacturer's standard limited warranty.

### PART 2 - PRODUCTS.

### 2.1 MANUFACTURER

A. Basis-of-Design Manufacturer: Ross Technology Company, 104 North Maple Avenue, Leola, PA 17540. Toll-free 800-345-8170. www.rosstechnology.com. No substitutions.

### 2.2 ANTI-RAM FENCING

- A. Anti-Ram Fencing: Ross XL-501-TF (RSS-F501D) Post and Beam Perimeter Fence by Ross Technology Company complying with the following:
  - 1. Performance: Crash tested in accordance with ASTM F2656-07 and assigned a rating of M50-P1. Vehicle weight 15,000 pounds, impact speed 50 mph.
  - 2. Standard Features: Constructed from heavy-duty structural steel sections with patent-pending "Smart Steel" technology. Top caps to secure beam elements and protect system from the elements; secured with single nut and bolt. Rebar installed directly into posts; separate rebar cages not required.
  - 3. Post Spacing: 30 feet (9.14 m).
  - 4. Post Height: 42.63 inches (1083 mm).
  - 5. Beam Height: 38.5 inches (978 mm).
  - 6. Steel Shapes: ASTM A36.
  - 7. Steel Tubing: ASTM A500.
  - 8. Steel Reinforcing Bars: ASTM A615.
  - 9. Carbon Steel Bolts: ASTM A307.
  - 10. Carbon Steel Nuts: ASTM A563.
  - 11. [Optional] Accessories:
    - a. Post filler plates for end-of-run conditions.
    - b. Custom beam lengths.
    - c. Custom end conditions.

#### B. Finish:

- 1. Hot-dip galvanized per ASTM A123.
- 2. [Option] Wash primer after hot-dip galvanizing per ASTM A123.
- 3. [Option] Factory wash primer and finish after hot-dip galvanizing per ASTM A123; polyurethane top coat. Select colors from manufacturer's color range.

### PART 3 - EXECUTION

### 3.1 EXAMINATION

A. Examine substrates and site conditions for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 INSTALLATION

- A. Install products in strict accordance with manufacturer's instructions and approved submittals. Locate fence posts plumb and in proper alignment with adjacent work.
  - 1. Protect adjacent areas against damage; repair or patch damaged areas. Restore damaged finishes so no evidence remains of corrective work.
- B. Foundation: Excavate to required depth and place concrete in accordance with ACI standards; concrete strength 3000 psi in 28 days.

# 3.3 ADJUSTING AND CLEANING

A. Clean exposed surfaces using methods acceptable to the manufacturer which will not damage finish.

**END OF SECTION** 

**REV 0719 SK**