

The Ross XS-2000-PW Portable Wedge Barrier has the look and feel of a permanent wedge barrier, providing a strong visual deterrent. Crash test certified to Department of Defense K4/L2 standards, it supplies greater stopping power than similar competitive products. The portable barrier is designed to serve in the most challenging locations and is built to last. The barrier can be positioned nearly anywhere a threat is expected. No excavation or foundation is needed. It's even suitable for use directly on soil. Integral lifting eyes provide for rapid deployment, while a unique towing option can transform it into a true mobile barrier. For more information, please call our toll-free number above or visit our website.

SECTION 347515

PORTABLE WEDGE BARRIERS

(ROSS XS-2000-PW)

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. Portable wedge barrier.

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 equipment, materials, and manufacturer's descriptive and technical literature.
 - 2. Complete wiring and schematic diagrams, and details required to demonstrate that the system has been coordinated and will properly function as a unit.
 - 3. Proposed layout and anchorage of equipment and relationship to other parts of the work, including foundation and clearances for maintenance and operation.
- C. Reports and Certifications: Submit the following:
 - 1. Crash Test Report: Provide a copy of the crash test report summary showing that the barrier meets the penetration requirements for condition designation K4/L2 per Department of State SD-STD-02.01.
 - 2. Crash Test Certification: Provide copy of letter from the Department of the Army, Protective Design Center stating that the barrier has been given a DOD K4/L2 certification as an active vehicle barrier.
- D. Operations and Maintenance Manuals: Submit at least two copies of operating and maintenance instructions at least two weeks prior to installation.
 - 1. Operating Instructions: Include step by step procedures required for system startup, operation, and shut down. Also include the manufacturer's name, manufacturer's contact information, model number, parts lists, and brief description of all equipment and their basic operating features.

2. Maintenance Instructions: Include maintenance schedule, routine maintenance procedures, troubleshooting and repair procedures, and spare parts list.

E. Welder's Certificates: Copy of current certificate for AWS D1.1.

F. Warranty: Submit executed copy of manufacturer's warranty.

1.3 QUALITY ASSURANCE

A. Installer: Minimum 2 year documented history of installing similar equipment, authorized and certified by the manufacturer. Installer shall accept responsibility for all field verifications, underground utility locations, and coordination of all controls and interfaces to the units. Installer shall be capable of bonding projects to relevant project amounts, and acceptable liability and vehicle insurance.

B. Manufacturer's Services: If requested by the Owner, provide services of a manufacturer's representative who is experienced in the installation, adjustment, and operation of the equipment. The representative shall inspect the final installation and supervise final hookup, adjustment, and final testing of the equipment.

1.4 DELIVERY, STORAGE AND HANDLING

A. Store equipment in a location protected from the weather, humidity, temperature variation, dirt and dust, or other contaminants. 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 Corporation, 104 North Maple Avenue, Leola, PA 17540. Toll-free 800-345-8170. www.rosstechnology.com. No substitutions.

2.2 PORTABLE WEDGE BARRIERS

A. Portable Wedge Barriers: Ross XS-2000-PW by Ross Technology Corporation complying with the following:

1. Performance: Crash test rated to DoS SD-STD-02.01 K4/L2 (15,000 lb. truck at 30 mph with between 1 m and 6 m penetration). Jersey barriers must be placed behind barrier to achieve K4/L2 rating. Certified for use by DOD and listed on DOD Anti-Ram Vehicle Barrier List.
2. Operation: Hydraulic.
3. Deployed Height: 36 inches (914 mm).
4. Clear Opening: 145 inches (3683 mm).
5. Overall Footprint: 228.5 inches x 77 inches (5804 mm x 1956 mm).
6. Deployment Time (approx.): 3 seconds.
7. Weight (approx.): 14,000 lbs (6800 kg).
8. Power Unit: Hydraulic power unit (HPU) with 24 VDC direct drive motor with manual back-up.

9. UPS: Integrated battery-powered uninterruptible power supply (UPS) to provide 150+ cycles without local power.
10. Oil: Low toxicity hydraulic oil.
11. Hoses: Quick-connect HPU hoses.
12. Pendant: Hand-held, tethered 2-button pendant.
13. Controls: Controls integrated into barrier enclosure.
14. Lugs: Integral lifting lugs.
15. Striping: Directional striping.
16. [Optional] Accessories:
 - a. Slip-resistant Algrip™ surfaces.
 - b. Wireless control pendant.
 - c. Solar panels.
 - d. Single- or dual-directional two-color traffic lights.
 - e. Safety loops.
 - f. Wrong-way detection.
 - g. Overspeed detection.
 - h. Heat trace.
 - i. Spare parts kit.
 - j. Extended warranty.

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 units level, 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.

3.3 FIELD TESTING AND TRAINING

- A. Notify Owner's representative at least 7 days prior to beginning of the field test.
- B. Upon completion of construction, perform a field test for each vehicle barrier. The test shall include raising and lowering the barrier, both electrically and manually, through its complete range of operation.
- C. Continuously cycle each vehicle barrier for not less than 30 minutes to test for heat build-up in the hydraulic system.

- D. Installer shall furnish equipment and make necessary corrections and adjustments prior to test witnessed by the Owner's representative. Changes to site conditions and adjustments and repairs to barrier system shall be performed at no additional cost to the Owner or manufacturer. If adjustments are made to ensure correct functioning of components, complete field tests and cycle tests shall be performed after adjustments are made.
- E. Provide a field-training course for designated operating staff members by the installer. Field training shall cover all of the items contained in the operating and maintenance instructions..

3.4 ADJUSTING AND CLEANING

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

END OF SECTION

REV 0914 SK