

## **TECHNICAL SPECIFICATIONS for Model: BG-2300 Sloan Electric Bi-Folding Speed Gate (Trackless)**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Sloan Electric Bi-Folding Speed Gate (Trackless)
  - 2. [\_\_\_\_\_]

#### **1.2 RELATED SECTIONS**

- A. Section 01 33 13 - Submittal Procedures
- B. Section 01 74 20 - Construction Waste Management and Disposal
- C. Section 01 78 00 – Submittals
- D. Section [\_\_\_\_\_] – Fencing
- E. Section 03 30 00 – Cast-in-Place Concrete
- F. See section [\_\_\_\_\_] - Electrical service and connections

#### **1.3 REFERENCES**

- A. ASTM International (ASTM):
  - 1. ASTM A653/A653M, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
  - 2. ASTM A36 - Standard Specification for Carbon Structural Steel
  - 3. ASTM (CAN/CSA-G40.21) Grade [300W] [350W] - Steel sections
- B. American Welding Society (AWS)
  - 1. ASWD 1.1 (CSA W59) - Welding Materials
- C. Underwriters Laboratories (UL)
  - 1. UL325 – Standard for Safety Door, Drapes, Gate, Louver and Window Operators and Systems

#### **1.4 SUBMITTALS**

- A. Product Data:
  - 1. Comply with Section [01 33 00 – Submittal Procedures.] [\_\_\_\_\_].
  - 2. Shop drawing: Submit drawings showing connections to adjacent construction, range of travel, and all electrical and mechanical connections to the barrier. All underground runs of electrical lines and inductive vehicle obstruction loop locations shall be indicated on drawings. Drawings shall also show the size and location of the concrete footings.

3. Installation instructions: Submit two copies of manufacturer's installation instructions for this specific project. Submit reference list of five (5) installation of the specific type within the last 2 years.

B. Test reports:

1. Drive unit shall bear a label indicating that the gate controller/operator mechanism has been tested certified to UL325 and CSA C22.2 No. 247 standards for all electrical components.

C. Closeout Submittals

1. Maintenance Data: Submit manufacturer's field touch-up, cleaning, and maintenance instructions.
2. Warranty Documentation: Submit sample of manufacturer's warranty.

**1.5 QUALITY ASSURANCE**

- A. COMPLY WITH SECTION [01 43 00 – QUALITY ASSURANCE.] [\_\_\_\_\_].

- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.

C. Installer Qualifications:

1. Engage an experienced installer who has a minimum of five years experience installing similar equipment
2. Installer is an authorized representative of the gate manufacturer for both installation and maintenance of the type of units required for this Project.

- D. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

**1.6 DELIVERY, STORAGE AND HANDLING**

- A. Comply with Section [01 66 00 – Product Storage and Handling Requirements.] [\_\_\_\_\_].

- B. The Sloan Hydraulic Wedge Barrier M50/P1 shall be packaged to protect the materials from damage during shipment.

- C. While Sloan Security Group does not assume responsibility for injury to persons or property during loading, unloading, transporting or installation, verbal guidance and additional written instructions are available upon request.

- D. Sloan Security Group does not assume responsibility for insuring that the rigging and lifting gear is properly sized and attached when lifting heavy components. Equipment used shall be capable of handling product in an overhang position.

- E. Upon receipt at the job site, all materials shall be checked to ensure that no damage 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.

## 1.7 WARRANTY

- A. Provide a warranty against all defects in materials or workmanship for 3 years after delivery date. Defective materials shall be replaced at manufacturer's discretion with new or reconditioned materials furnished by the manufacturer, at no cost to the owner when installed by a Sloan authorized installer. Buyer shall prepay the cost of shipping the product and bear the risk of loss while the product is in transit. Sloan shall pay the shipping charges to return the product to the Buyer and bear the risk of loss during transit, unless it is determined that the defect is not covered by this warranty.

## PART 2 – PRODUCTS

### 2.1 MANUFACTURERES

- A. Acceptable Manufacturer: Sloan Security Group, Phone: (888) 382-8370, Website: [www.sloansg.com](http://www.sloansg.com), Email: [info@sloansg.com](mailto:info@sloansg.com)
- B. Substitutions: Not Permitted.

### 2.2 ELECTRIC SPEED BI-FOLDING GATE

- A. Basis of Design: Sloan Electric Bi-Folding Speed Gate (Trackless) System, Model: BG-2300, as manufactured by Sloan Security Group
- B. Components
1. Formed steel columns, anchored to concrete foundation
  2. Columns to be 12" square with a thickness of .250"
- C. Model BG-2300
1. Dimensions: [max 8] ft high x [max 24] ft clear opening OR [max 10] ft high [max 18] ft clear opening
  2. Panels to be capable of fully opening within 7 seconds
  3. Panels: [1.5" vertical bar infill] [6-gauge welded wire infill] [6-gauge woven wire infill]
  4. Manufacturer's standard corrosion resistant hinges. Hinges are to be serviceable heavy duty corrosion resistant base material with a minimum 1" stainless steel shaft.
- D. Safety/Obstruction Devices:
1. Provide reduced speed sensor – Absolute encoder mounted directly to drive motor to act as primary entrapment detection device.
  2. Photoelectric transmitter and receiver: Equip each column with [2] built-in photocells at 20" [and] [60] inches above the base plate. To be mounted within the columns.
  3. Provide 2 channel obstruction loop relay card for integration of dual obstruction loops. Provide in-ground obstruction detection loops.
  4. The gate system shall comply with Sloan's System Drawings.
- E. Drive Unit:
1. Provide variable frequency drive with programmable logic controller for controlling electromechanical drive system. Drive system to incorporate encoders with reduced speed sensing software as primary entrapment detection device.
  2. All drive electrical components to be enclosed in weather-resistant housing.
  3. Dual .75HP 3 phase gear motors with integrated brake and 360:1 gear reduction box with synthetic lubricant.
  4. Emergency override: Provide secured access panel for manual opening and closing in case of power failure/malfunction.

- F. Power:
  - 1. Power supply: 208/240 V – 20 Amp single phase 60 hertz power supply.
- G. Options:
  - 1. Anti-climb top guard
  - 2. Red/Green traffic lights
  - 3. Fence Mounting Devices: Provide mounting brackets for mounting adjoining fence material to columns.
  - 4. UPS Backup: Provide uninterruptible power supply to variable speed gate controller for emergency operation in the event of power outages

## **2.3 FABRICATION**

- A. Fabrication of the members shall be in accordance with manufacturer's instructions, the plan details, and this specification.
- B. Shop drawings can be provided for site specific locations of each gate upon request.

## **PART 3 – EXECUTION**

### **3.1 SITE EXAMINATION**

- A. The purchaser shall indicate the location of all products with suitable means.
- B. The purchaser shall indicate all underground utility locations, USC&G benchmarks, property monuments, and other underground structures that interfere with installation.
- C. Locate concrete footings forms in accordance with approved shop drawings and in compliance with local building codes.
- D. Before installing the Sloan Electric Bi-Folding Speed Gate (Trackless), all necessary site clearing and grading shall be performed by the purchaser. An adequate clearance on both sides of the gate is required.

### **3.2 PREPARATION**

- A. Examine and verify foundation suitability for product installation.
- B. Clean surfaces thoroughly prior to installation
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best results for substrate under the project conditions.

### **3.3 INSTALLATION**

- A. Provision of concrete foundations as determined by local engineer according to drawings provided
- B. Install bi-folding speed gate to manufacturer's written instructions, by authorized contractor certified by Sloan Security Group
- C. Engage an experienced installer who has minimum five years documented experience with projects of similar scope and complexity.

- D. Suggested Installer: Sloan Security Group Phone: (888) 382-8370, Website: [www.sloangsg.com](http://www.sloangsg.com), Email: [info@sloangsg.com](mailto:info@sloangsg.com)
- E. Submit certificate of installation to manufacturer upon completion of installation for warranty validation.

### 3.4 CONTINUED SERVICE AND DOCUMENTATION

- A. Perform cleaning and maintenance procedures in strict accordance with manufacturer's written instructions.
- B. Maintain logbook of repairs and maintenance.
- C. Suggested Maintenance Contractor: Sloan Security Group, Phone: (888) 382-8370, Website: [www.sloangsg.com](http://www.sloangsg.com), email: [info@sloangsg.com](mailto:info@sloangsg.com)

**NOTE:** Sloan Security Group reserves the right to change these specifications at any time, without notice and without prejudice. Call (800) 321-9947 if you are not sure that you have the latest edition.

**CAUTION:** Barriers manufactured by Sloan Security Group are intended for use in controlling vehicular traffic and are not intended to be used by pedestrians or to control pedestrian traffic. **Always install a separate pedestrian entry.**