

*SPEC NOTE: This Section specifies the FoldSmart, an electronic high speed, vehicular perimeter security gate, suitable for airports, port authorities, military bases, money-transport companies and other locations requiring strict safety measures.*

## **PART 1 GENERAL**

**1.1 THE FOLDSMART IS A POST DRIVEN ELECTRICALLY OPERATED FAST ACTING BI-FOLD GATE.**

**1.2 ALL STRUCTUAL COLUMNS, DRIVE UNIT, CONTROLLER, GATE PANELS BY WALLACE PERIMETER SECURITY.**

### **1.3 RELATED SECTIONS**

- .1 Section 01 33 13 - Submittal Procedures.
- .2 Section 01 74 20 - Construction Waste Management and Disposal.
- .3 Section 01 78 00 - Closeout Submittals.
- .4 Section [\_\_\_\_\_]: Fencing.
- .5 Section 03 30 00 - Cast-in-Place Concrete: Structural foundations.

*SPEC NOTE: Coordinate the following paragraph with electrical sections to ensure electrical supply is provided to suit the gate requirements. Normally the electrical power supply to terminal box in each unit is specified in Division 16. All remaining electrical work is specified in this Section.*

- .6 Section [\_\_\_\_\_]: Electrical service and connections.

### **1.4 SUBMITTALS**

- .1 Shop Drawings:
  - .1 Submit final assembly drawings in accordance with Section 01 33 13 - Submittal Procedures.
  - .2 Indicate electric power requirements, installation details, wiring diagrams.
- .2 Installation instructions:
  - .1 Submit two copies of manufacturer's written installation instructions.
  - .2 Submit reference list of five (5) installations of the specified type within the last 2 years.
- .3 Test reports:
  - .1 Drive unit shall bear a label indicating that the gate controller/operator mechanism has been tested certified to UL 325 and CSA C22.2 No. 247 standards for all electrical components.

### **1.5 CLOSEOUT SUBMITTALS**

- .1 Provide operation and maintenance data for gate for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.
- .2 Conduct comprehensive demonstration for maintenance staff on operation and care of gate.

## 1.6 QUALITY ASSURANCE

- .1 Manufacturer: A company specializing in the manufacture of automated gate systems.
- .2 Installer: A minimum of three years' experience installing similar equipment and approved by manufacturer.

# PART 2 PRODUCTS

## 2.1 HIGH SPEED ELECTRONIC SECURITY GATE

- .1 Manufacturers:
  - .1 Wallace Perimeter Security  
Model FOLDSMART XT  
Contact Wallace Perimeter Security:  
115 Lowson Crescent, Winnipeg, Manitoba Canada, R3P 1A6  
T. 866.300.1110  
www.wallaceperimetersecurity.com

## 2.2 MATERIALS

- .1 Steel sheet: hot dipped galvanized to ASTM A653/A653M, A36 pre galvanized steel.
- .2 Steel sections: to ASTM (Canadian Equivalent - CAN/CSA-G40.21) Grade [G40.21-350W].
- .3 Welding materials: to ASWD1.1 (Canadian Equivalent - CSA W59).
- .4 Electrical components: Complete gate system to be UL325 listed and/or CSA C22.2 No.247 and complying with local requirements.
- .5 Power Supply: 115VAC/230VAC – 20 Amp single phase 60 hertz power supply.

## 2.3 COMPONENTS

- .1 Gate Columns:
  - .1 HSS steel columns, anchored to concrete foundation.
  - .2 Columns to be 8" square with a wall thickness of .250".
- .2 Model FOLDSMART XT:
  - .1 Dimensions: [max 8] ft high x [max 30] ft clear opening.
  - .2 Panels to be capable of fully opening within 8 seconds.
  - .3 Panels infill: Rampart 280 Welded Wire or other.
  - .4 Inter panel hinges - Double stacked R16 ball bearing at each hinge point with 1" hex bolt and lock nut. Column hinges -1" alloy rod end bearing and 1" SAE 941 graphite impregnated bronze bushings.
  - .5 Fully compliant with ASTM F2200 – 05.

*SPEC NOTE: Safety devices are installed to minimize likelihood of vehicle or pedestrian injury/entrapment. Edit the following paragraphs for safety feature options required for project. Pedestrians are NOT permitted to use the automated gate and must be provided with a separate, clearly marked access point.*

*MANUFACTURER'S NOTE: Complete gate system to be UL325 listed and/or CSA C22.2 No.247 and complying with local requirements.*

- .3 Safety/Obstruction Devices:
  - .1 Through beam photoelectric transmitter and receiver: Equip each column with [1] built-in photocell(s) at 20" above the base plate. To be mounted within the columns.
  - .2 Provide obstruction loop relay cards for integration of obstruction loops as required.
  - .3 Provide sensing edges as per UL update.
- .4 Drive Unit:
  - .1 Provide 24VDC drive with printed circuit board - integrated motor control circuitry for controlling electro-mechanical drive system. Drive system to incorporate current sensing resistors and adaptive monitoring software as inherent entrapment protection.
  - .2 All electrical drive components to be enclosed in weather-resistant housing.
  - .3 Dual 0.5HP, 24 VDC motors, 600:1 gear reduction box with synthetic lubricant.
  - .4 Integrated battery back up.
  - .5 Emergency override: Provide point for manual opening and closing in case of power failure/malfunction.
  - .6 RS232 and USB port for laptop or other computer peripheral connection for diagnostics and programming.

## 2.4 FINISHES

- .1 Select from:
  - .1 [Hot dip galvanized finish [0.5] kg/m<sup>2</sup> zinc coating to ASTM A653/A653M (CAN/CSA-G164)].
  - .2 [OPTIONAL: Powder coated to 80 micron thickness - standard RAL colors- check with manufacturer before specifying color.]

## 2.5 PRODUCT OPTIONS

- .1 [Anti climb top guard]
- .2 [Red / Green traffic lights][For Entrance][For Exit].
- .3 [Fence Mounting Devices: Provide mounting brackets for mounting adjoining fence material to columns.]

# PART 3 EXECUTION

## 3.1 INSTALLATION

- .1 Provision of concrete foundations as determined by local engineer according to drawings provided.
- .2 Install high-speed security gate to manufacturer's written instructions, by contractor certified by Wallace Perimeter Security.
- .3 Submit certificate of installation to manufacturer upon completion of installation for warranty validation.

## 3.2 CLEANING AND MAINTENANCE

- .1 Perform cleaning and maintenance procedures in strict accordance with manufacturer's written instructions.
- .2 Maintain logbook of repairs and maintenance.

**END OF SECTION**