

3100 PEDESTRIAN SLIDING GATE OPERATOR SYSTEM

1. DESCRIPTION

- 1.1. The Scope of Work is furnishing and erecting sliding gate operator system(s) to allow motorized operation of the gate(s) by pressing the appropriate pushbutton on the control console as shown at the location(s) on the drawings.
- 1.2. The sliding gate operator system shall be a 3100 Pedestrian Sliding Gate as manufactured by: The Tymetal Corp., Inc.; 2566 State Route 40; Greenwich, New York 12834 (800/328-4283).

2. SUBMITTAL:

2.1. Product Data:

- 2.1.1. Provide manufacturer's catalog cuts with printed specifications and installation instructions.
- 2.1.2. Furnish detailed sequence of operation (description of system).
- 2.1.3. Deliver two copies of operation and maintenance data covering the installed products, to the Director's Representative. Include name, address and telephone number of the nearest fully equipped service organization.

2.2. Shop Drawings:

- 2.2.1. Supply Shop Drawings showing the relationship of operating system with other work. Include details of all major components. Include parts list showing

manufacturer's names and part numbers for the complete installation.

2.2.2. Include complete details of gate construction, gate height; post spacing dimensions and unit weights of track, supporting frame and concrete footing details.

3. SYSTEM DIMENSIONS:

3.1. Each gate shall have a clear gate opening height shall be 7 feet 0 inches and the clear gate opening width shall be 3 feet 10 inches.

4. SYSTEM FUNCTION:

4.1. General Description:

4.1.1. System is designed to operate chain link fence sliding gate panel.

4.1.2. When device is in the closed position, it shall be impossible to move the gate to the open position except by electrical or mechanical operations provided.

4.1.3. The sliding gate shall positively lock at two (2) separate locations in the closed and open position:

4.2. Function:

4.2.1. Gate opening is initiated by pressing the OPEN push-button.

4.2.2. Pressing the CLOSE push-button closes the gate.

4.2.3. A STOP push-button allows the gate to be stopped in any position.

4.2.4. A green indication light illuminates when the gate is completely closed and locked. A red indication light illuminates under all other conditions.

4.2.5. Gate movement may be resumed in either direction by pushing the appropriate push-button.

4.2.6. All wiring shall be concealed.

4.2.7. Provide emergency manual control mechanism to permit the unlocking and manual operation of the sliding gates in the event of power failure by means of crank as specified in section 2.04-E.

4.2.8. Coordinate all control wiring and conduit needed with the Electrical Contractor.

5. PEDESTRIAN SLIDING GATE OPERATOR SYSTEM:

5.1. Motors:

5.1.1. Motors shall be 1/4 HP, 208/220 Volt, 3 Phase as produced by a nationally recognized manufacturer.

5.2. Overload Protection:

5.2.1. Motors shall be protected against overload by either a thermal or a current sensing overload device.

5.3. Motor Gear Box:

5.3.1. The gearbox shall have a right angle worm-gear reduction

5.4. Operating Force:

5.4.1. The normal force exerted by the sliding gate during electric operations shall be a minimum of forty (40) pounds. An obstruction placed in the path of the gate, having a resistance greater than the factory pre-set limit, shall cause the gate to stop. When

the obstruction is removed the gate shall resume travel in the selected direction.

5.5. Manual Operation:

5.5.1. A manual release, located in the emergency release column, shall be provided for manual operation.

5.6. Controller:

5.6.1. Houses the entire required gate logic components including, relays, limit switches and motor starters with overloads.

5.7. Control Circuit:

5.7.1. Shall be 110 VAC and operating controller shall be fabricated using UL listed parts.

6. OPERATOR HOUSING:

6.1. Weather Resistant Motor Housing:

6.1.1. Shall be constructed of a minimum 1/4" inch steel plate, framed and stiffened as required.

6.2. Removable Front Cover:

6.2.1. The removable front cover panel shall be constructed of 10 gauge galvanized steel.

7. SYSTEM COMPONENTS:

7.1. General:

7.1.1. All moving parts shall be concealed within the horizontal housing and the locking pilaster. The door jamb and vertical members shall be free of hooks or lugs used for locking or any other purpose.

7.2. Gate Guide Angle:

7.2.1. Bottom Guide angle shall be hot dip galvanized steel and provided as part of the system.

8. GATE PANEL:

8.1. Chain Link Fence Gate Panel:

8.1.1. Gate panel shall be manufactured using 2 inch square hot dip galvanized steel framing member. Gate frame shall be welded to form a ridged panel.

8.2. Security Mesh:

8.2.1. Chain Link Fence Fabric: Shall be a minimum of 2-inch mesh x 9 gauge aluminum-coated steel in accordance with ASTM A491.

8.3. Fence Fittings:

8.3.1. Tension Bars: Galvanized steel in accordance with ASTM F 626.

8.3.2. Tie Wires: 9 gauge aluminum-coated or galvanized steel.

9. CONTROLS:

9.1. Controls for electrically interlocked overhead sliding gates and/or swing gates:

9.1.1. Electrically interlock gates in each Sallyport to prevent unlocking of gate if any companion gate is in the unlocked position. Only one gate can be in the Open position at any time. Exception: a key operated interlock bypass switch allows gate(s) to be opened for maintenance without preventing operation of the companion gate(s).

The key is non-removable when the interlock circuit is bypassed.

10. FINISH:

10.1. Coating:

10.1.1. All exposed system parts shall be primed or galvanized.

11. INSPECTION:

11.1. Final Grades and Installation Conditions:

11.1.1. Examine final grades and installation conditions. Do not begin work until all unsatisfactory conditions are corrected.

12. INSTALLATION:

12.1. Equipment:

12.1.1. Install equipment of this section in strict accordance with the company's printed instructions unless otherwise shown on the contract drawings.

13. PRELIMINARY SYSTEM TEST:

13.1. Preparation:

13.1.1. Adjust the complete system and then operate it long enough assure that it is performing properly.

13.2. Preliminary Test:

13.2.1. Run system long enough to determine whether the system is in suitable condition to conduct the acceptance test.

14. SYSTEM ACCEPTANCE TEST:

14.1. Preparation:

14.1.1. Notify the director's representative at least three working days prior to the test so arrangements can be made to have a Facility Representative witness the test.

14.2. Acceptance Test:

14.2.1. 1. Test each system function step by step as summarized in section 2.09.

14.2.2. 2. Supply all equipment necessary for system adjustment and testing.

Note: The Tymetal Corporation reserves the right to modify and/or make changes as deemed necessary without previous notice.