

Industrial Sliding Door Operator Specification

Part I – General

1.01 Description

This section covers the furnishing and installation of a complete automatic sliding door system. It includes operator, track, activating devices all as required for installation as shown and specified.

1.02 Related Work Covered By Other Applicable Sections of the SPECIFICATION Shall Include:

A. PREPARATION OF OPENING

B. FLOOR PREPARATION

C. ELECTRICAL SUPPLY AND CONNECTIONS

D. GLASS AND GLAZING

1.03 Quality Assurance

A. ANSI A156.10 STANDARD: Automatic entrance doors shall be in compliance with applicable requirements of Power Operated Pedestrian Door Standard where applicable to door type.

B. UL 325: Powered door operators shall be in compliance with UL 325, Electrical Door, Drapery, Gate, Louver and Window Operators and Systems.

C. MANUFACTURER'S QUALIFICATIONS: Door units shall be produced by a firm with not less than (5) five years successful experience in the fabrication of automatic doors of the type required for this project.

D. INSTALLER'S QUALIFICATIONS: Installer must be an authorized representative of the automatic door manufacturer for both the installation and maintenance of the type of units required for the project.

1.04 SUBMITTALS

A. PRODUCT DATA: Manufacturer's product data and standard details shall be provided for automatic entrance doors, including fabrication, finishing hardware, operators, accessories and other components of the work. Rough-in diagrams, wiring diagrams, parts lists, maintenance instructions, as well as certified test data (where required) shall also be provided.

B. TEMPLATES AND DIAGRAMS: Templates, diagrams and other data shall be furnished to fabricators and installers of related work, as needed for coordination of automatic entrance installation.

C. SHOP DRAWINGS: Applicable shop drawings shall be submitted for the fabrication and installation of automatic entrance doors and associated components of the work. Indicate anchors, joint system, expansion provisions, hardware and other components not included in manufacturer's standard data. Include glazing details (where required).

1.05 WARRANTY

ADE Inc. shall warrant to the Buyer that all products they manufacture to be free of any defects in material and workmanship, under normal use and service, for a period of one year from the date product is installed and placed in operation.

Generally, the installing distributor shall provide a one-year warranty covering the labor and transportation

charges for defective parts replacement.

1.06 Compliance

A completed American Association of Door Manufacturer (AAADM) Inspection form shall be submitted as proof of compliance with ANSI A156.10 Standard for power operated pedestrian doors. Door(s) shall be inspected and form shall be signed by an AAADM certified inspector prior to placing door(s) in operation.

Part II - Products

2.01 MANUFACTURER

Automatic sliding door(s) shall be of type(s) and size(s) as indicated on plans, manufactured by Automatic Door Enterprises, Inc.

2.02 Equipment

A. HEADER: The door unit shall include operator, header and track. The header shall be 6" deep by 12-3/4" high; track shall be G.A.L. Steel track heavy duty for doors weighing 500-1000 lbs. Continuous welded steel header section shall conceal the ball bearing wheels on support track and house operator. Guides shall stabilize bottom of door. Anti derailing shall be provided full length of door travel.

All exposed surfaces shall be:

- a. Standard finish: 204-R1 clears anodized
- b. Stock finish: 313-R1 dark bronze anodized
- c. Special anodized finish as indicated
- d. Special paint finish as indicated
- e. Clad with stainless steel or muntz metal (brass color)

B. OPERATOR: Shall be electromechanical, utilizing a 1/8 Hp, DC permanent magnet motor with gear transmission and belt drive (1/4 Hp motor required on biparting doors weighing more than 160 lbs. each). Operator shall be header mounted and concealed with a securely attached, hinged cover. The belt shall be steel stranded polyurethane and nylon, 1" (25 mm) wide.

The opening speed, closing speed, back check and latch check shall be fully and independently adjustable. This shall be accomplished by utilizing the operator's microprocessor C2150 master control that will include programming for aforementioned functions, as well as time-delay. Control shall include a digital readout for diagnostics. A revolution counter shall be used to memorize and continuously recheck the door's position and to issue instruction for the functions of partial opening (optional) and check the door's speed.

Closing speed shall not exceed 12" (305 mm) per second. Opening speed shall be capable of opening a biparting door at a rate of 60" (1524 mm) per second if total door weight is less than 300 lbs. (181 kg.). Doors heavier than 300 lbs. shall be operated at a slower rate.

The operator shall reverse when maximum force of 28 lbs. (13 kg.) is exerted to prevent the door from closing. The reverser shall be field adjustable to meet job conditions.

For protection in case of electrical power failure, operator shall revert to free manual operation of the door. A power ON/OFF switch shall be located on the inside of the header and shall serve a second function as "hold open" for door when in OFF position.

C: Doors by others

2.03 CONTROL SWITCH

A. Push Button, Keyswitch, Sensor or Pull Cord

B. HOLD-OPEN BEAMS: Two C1185 photoelectric beams shall be mounted in the vertical rails of the sidelite or in the jambs at heights of 24" (610 mm) and 48" (1219 mm). Each shall parallel door opening and serve as a door hold-open device when interrupted.

Each switch shall be 24 VAC, class II circuit.

The C2150 master control shall have four modes of operation: day 1-way, day 2-way, night 2-way, and night 1-way. In day 1-way mode, all detectors shall remain enabled throughout then hold-open and closing modes for maximum safety, per ANSI standard A156.10, section 5.2.3.

2.04 Requirements for Work Specified in Other Sections

A. ELECTRICAL: The general contractor or electrical contractor shall furnish and install all wiring to operator. 120 VAC, 60 cycle, 1 phase, 15-amp service shall be provided to each operator on a separate circuit breaker routed into header.

B. GLASS AND GLAZING: Shall be provided under glass and glazing section of specifications. Glazing shall be in strict accordance with manufacturer's instructions (ANSI Standard Z97.1).

Part III - Execution

3.01 Inspection

Installer must examine the areas and conditions under which automatic doors are to be installed and notify the Contractor in writing of conditions detrimental to the proper and timely completion of work. Do not proceed with the work until all unsatisfactory conditions have been corrected in a manner acceptable to the installer and in accordance with approved shop drawings.

3.02 Installation

Complete door package and operator system including drive mechanism, controls and control switches shall be installed in accordance with manufacturer's instructions, specifications and recommendations. An authorized Horton Automatics Distributor/Technician shall do installation.

3.03 ADJUSTMENT and Cleaning

Installer shall clean surfaces promptly after installation and shall lubricate operating equipment for optimum condition and safety. Contractor shall be advised of protective treatment and other precautions required through the remainder of the construction period, to ensure that doors will be without damage or deterioration (other than normal weathering) at the time of acceptance.

Installer shall adjust operator and controls for optimum condition and safety.

End of Section