



record-usa

4324 PHIL HARGETT CT.
MONROE, NC 28110
(704) 289 - 9212

AUTOMATIC SWING DOORS AND OPERATORS

ARCHITECTURAL SPECIFICATIONS

SERIES 8500/8600 ELECTROMECHANICAL SWING DOOR

03/10

SECTION 08460 AUTOMATIC DOOR AND OPERATOR

PART 1: GENERAL

1.01 Scope

This specification details the requirements for the fabrication and installation of overhead concealed automatic swing doors and door operators. Door operator system shall be complete including operator, control, door arm and operator enclosure (header and cover). (Optional aluminum door and frame are also addressed in this specification).

1.02 Related Work

The following exclusions are covered in the sections indicated:

1. Doors, frames, storefront and structural support for door operator: Section 08120, 08410
2. Floor preparation: Section _____
3. Electrical supply and connection (dedicated 120 VAC, 15 amp circuit for each single operator; 20 amp circuit for each pair): Division 1600
4. Electrical wiring, conduit and supplies for remote switching (if required): Section _____
5. Glass and glazing: Section 08810
6. Hardware: Section 08710
7. Caulking and sealants: Section 07920

1.03 Quality Assurance

Automatic swing door operators to be provided by authorized distributor of record-usa. Provide automatic swing door operators that meet the requirements of the following standards:
ANSI/BHMA A156.10 American National Standard for Power Operated Doors
UL Standard 325 for Electric Door, Drapery, Gate, Louver, and Window Operators and Systems

1.04 Submittals

Installing record-usa distributor shall provide the following submittal information:

1. Product Data: Submit record-usa product data and standard details.
2. Shop Drawings: Submit five prints and one reproducible shop drawing for fabrication and installation approval.
3. Templates and diagrams: Submit templates, wiring diagrams, fabrication details, and other information to providers of related work to coordinate the proper installation of the automatic doors.

1.05 Warranty

Door operators and components shall be warranted against defect in material and workmanship for a period of two years from the date of installation.

PART 2: PRODUCT

2.01 Manufacturer

Series 8500 Electromechanical automatic swing door operator as detailed shall be supplied by record-usa, Monroe, N.C.

2.02 Design

- A. Automatic Door Operator: Automatic door operator system shall be record-usa Series 8500. The microprocessor control shall be easily field adjustable to comply with ANSI A156.10-2010 Standard for Full energy Automatic Door Systems with field adjustments for door opening speed, door opening force, door closing speed, door closing force, and time delay shall be standard within the unit and adjust independently from all other external requirements.



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The same unit will be able to be converted easily in the field from full energy to low energy without the necessitation of a new unit being provided.

- a. Door will safely stop and hold for 5 seconds if an object is encountered in the opening cycle. At the end of the 5 seconds, if the actuating signal and time delay have expired, the unit will close. If the actuate signal or time delay is still present, the unit shall resume opening at a reduced speed.
 - b. Field selectable delayed activation to provide an adjustable delay between receipt of the activation signal and actual opening of the door.
 - c. Built-in dry contacts to control automatic locking and electrified exit hardware
 - d. Logic terminal for interface with accessories and sensors.
 - e. Microprocessor control shall retain history of last 10 alarm/error events.
- B. Display Board. Unit will provide the ability to determine diagnostic evaluation of problematic issues through a digitized display panel. When provided, the display will provide confirmation that the door is performing properly and also provide error codes when it is not. This same panel shall also provide systematic information such as counters for usage determination, and provide the installing contractor's telephone number in the event of service requirements.
- C. Door Operators - Construction: The door operating equipment must use the electromechanical 8000 series drive system.
1. Unit must be non-handed, and able to operate as an in-swing or out-swing unit by field selection in the microprocessor control.
 2. The unit must be factory assembled, adjusted and tested.
 3. Gear box operator: Self-contained cast aluminum housing, with precision-machined gears and bearing seals and all-weather lubricant, and not require vibration isolators. No exposed gears. The gear box shall use an adjustable compression spring engineered for maximum life. No electro hydraulic equipment shall be allowed.
 4. Motor: DC permanent magnet motor with shielded ball bearings. Motor will stop when the door stops or is fully open and when breakaway is operated.
 5. Door operating arm: Forged and machined steel, and shall be either direct drive or isolated pivot with slide track in top of door.
- D. Enclosure: Operator shall be completely self-contained within an extruded aluminum header (alloy 6063-T6) with removable access cover with an overall size of 5 1/2" deep x 4 1/2" high. Header and cover shall be integral color anodized/painted to match adjacent storefront/frame finish:
- 204-R1 Clear
 - Class 1 two-step, hard coat dark bronze
 - Other anodized or painted finish as specified.
- E. Activation and Safety Devices: Opening cycle shall be activated by a floor mat, detection sensor or press wall switch installed in a location in compliance with ANSI A156.10 and all local codes. Swing side safety devices shall be installed and protect the swing area of the door in compliance with ANSI A156.10.
- F. Optional Door And Frame: Door and frame shall be Series 8600 Heavy Duty Aluminum Swing Door Package as manufactured by record-usa, Monroe, NC. All structural aluminum sections shall be 6063-T5 alloy not less than 1/8" thickness with exposed surfaces anodized (painted) to matching architectural finish. Frame members shall be 1 3/4" x 4 1/2". Mohair weather pile shall run full height of the lock and pivot stiles. The following hardware and accessories shall be provided: Maximum Security Lock, pivots, threshold, push bars, and finger guard.



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All exposed surfaces shall be integral color anodized/painted to one of the following finishes:
204-R1 Clear
Class 1 two-step, hard coat dark bronze
Other anodized or painted finish as specified.

PART 3: EXECUTION

3.01 Inspection

Inspect frame openings for correct size, suitable structural support for door operator, plumb and square and level floor for safe and reliable performance. Proceed with installation only after necessary corrections are made by the general contractor to insure a suitable opening.

3.02 Installation

Install unit plumb, square, and level in properly prepared and supported opening as required by record-usa instructions and as detailed on the shop drawings. Header back member must be rigidly secured to frame and structural support behind the frame.

3.03 Instruction

Following the installation and final adjustments, the installer/record-usa distributor shall fully instruct the facility manager/supervisor as to correct operating procedure and safety requirements of the automatic swing door package.

3.04 Final Cleanup

After installation and adjustment for smooth, reliable operation, clean the door package and remove all surplus material, equipment, and debris incidental to this work.

- End of Section -