

## Section 08 42 29

### AUTOMATIC FOLDING DOOR SYSTEMS

#### SERIES 4500 SLIDE/FOLD DOORS

#### PART 1: GENERAL

##### 1.01 SCOPE

This specification details the requirements for the fabrication and installation of automatic Slide/folding doors. Door packages shall be complete including folding door panels, side jambs, header, operator, control, and bottom door pivots. *(Optional activation devices, and transom would also be included with this package. Guide rails as required by code.)*

##### 1.02 RELATED WORK

The following exclusions are covered in Section(s) \_\_\_\_\_:

1. Preparation of the plumb and square masonry opening
2. Floor preparation
3. Electrical supply and connection (dedicated 120 VAC, 15 amp circuit for each single operator; 20 amp circuit for each pair): Section \_\_\_\_\_
4. Electrical wiring, conduit and supplies for remote switching (if required): Section \_\_\_\_\_
5. Glass and glazing: Section \_\_\_\_\_

##### 1.03 QUALITY ASSURANCE

Slide/folding door packages to be provided by an authorized distributor of record-usa. Provide automatic slide/folding door package(s) that meet the requirements of the following standards:

ANSI/BHMA A156.10: American National Standard for Power Operated Doors

UL Standard 325: Standard 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

Slide/Folding door packages 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 4500 Slide folding door packages as detailed shall be supplied by record-usa, Monroe, N.C.

##### 2.02 DESIGN

**A. Slide/FOLDING DOOR PACKAGE:** Slide/Folding door packages shall be complete including operator mechanism, folding door panels, side jambs, header, control, and bottom door pivots. *(Optional activation devices, and transom would also be included with this package.)*

**B. DOORS AND FRAME:** All structural aluminum sections shall be 6063-T5 alloy with exposed surfaces anodized *(painted)* to matching architectural finish. Side jambs *(and transom framing)* shall be 1¾" x 4½" *(optional 4½" x 4½" side jambs are also available)*. Wool double weatherpile shall run full height of the lock stile of the FX panel and the catch stile of the FX. Wool weatherpile shall run full height of the pivot stile of the FS panel.

**C. DOOR OPERATOR(S) AND CONTROL:** Slide/Folding door operator mechanism shall be electro-mechanical, completely self-contained, and comply with ANSI/BHMA A156.10 and UL325. Operator mechanism and control shall be completely concealed above the doors in an extruded aluminum header (alloy 6063-T6) with removable access cover with an overall size of 9" deep x 7" high. Door movement shall be driven by a sealed DC gearmotor and steel reinforced drive belt. The multifunction microprocessor control shall provide fully adjustable open, close, and check speeds. An adjustable hold open time delay (1-30 seconds) shall be provided. The microprocessor shall provide a safety-first recycle/stop feature if closing/opening is obstructed. The control shall provide a self-monitor system that compensates each cycle for changes in temperature, wind load, pressure and mechanical drag and checks for proper internal operation. The control shall automatically adjust motor speeds, checking action, and other operating characteristics. A backlit LCD display panel shall be provided as standard and shall have the following

modes: Automatic, Off, Exit Only, Full Open, and Partial Open, and shall allow authorized service personnel to make door performance adjustments to the control. The reduced opening distance shall be field adjustable and can be constant or a function of traffic frequency. Selectable ratchet mode shall keep the door in the open position until a second activation signal. The operator shall allow the door to be opened manually in power off conditions. Optional battery pack shall automatically either open or close the door(s) after power is lost.

- D. SECURITY:** The folding door packages shall be fitted with an Adams Rite Maximum Security hookbolt deadlock with threshold bolt for two-point locking.
- E. FINISH:** All exposed surfaces shall be integral color anodized (*painted*) to one of the following finishes:
  - 1. 204-R1 Clear
  - 2. Class 1 two-step, hardcoat dark bronze
  - 3. Other anodized or painted finish as specified.
- F. ACTIVATION AND SAFETY DEVICES:** Opening cycle shall be activated by a floor mat, motion sensor or press wall switch installed in a location in compliance with ANSI A156.10 and all local codes. Safety device(s) shall be installed and protect the fold area of the door in compliance with ANSI A156.10.

### **2.03 REQUIREMENTS FOR WORK SPECIFIED IN OTHER SECTIONS**

**ELECTRICAL:** The General Contractor or Electrical Contractor shall furnish and install all wiring to header. Provide 120VAC, 60 Hz, 1 phase, 15 amp service to each single operator (20 amp service to each pair) on a separate, dedicated circuit routed into the header.

## **PART 3: EXECUTION**

### **3.01 INSPECTION**

Inspect frame openings for correct size, plumb and square, suitable structural support for installation of the folding door package, 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 the door package plumb, square, and level in properly prepared and supported opening as required by record-usa instructions and as detailed on the shop drawings.

### **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 folding 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.

