

Section 08 42 29

ALL GLASS AUTOMATIC SLIDING ENTRANCES 5200 Series *SOPHISTICATE*™ SLIDING ENTRANCES

PART 1: GENERAL

1.01 SCOPE

This specification details the requirements for the fabrication and installation of All Glass automatic sliding entrances. Entrance packages shall be complete including sliding door(s), fixed sidelite(s) [*filler tube(s) on surface mounted units*], side jambs, header with roller track, operator, bottom door guides, and activation devices. (Optional transom would also be included with this package).

1.02 RELATED WORK

The following exclusions are covered in Section(s) _____:

1. Preparation of the plumb and square masonry opening with adequate structural support
2. Floor preparation
3. Electrical supply and connection (dedicated 120 VAC, 15 amp circuit to each operator/header)

1.03 QUALITY ASSURANCE

Door packages to be provided by authorized distributor of record-usa. Provide All Glass automatic sliding entrance package(s) that meet the requirements of ANSI/BHMA A156.10: American National Standard for Power Operated Doors.

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 entrance.

1.05 WARRANTY

Door packages warranted against defect in material and workmanship for a period of two years from the date of installation.

PART 2: PRODUCT

2.01 MANUFACTURER

5200 Series Sophisticate All Glass sliding entrance packages as detailed shall be supplied by record-usa., Monroe, N.C.

2.02 DESIGN

- A. SLIDING ENTRANCE PACKAGE:** Sliding door packages shall be complete including operator, glass sliding door(s), sidelite(s) [*filler tube(s) on surface mounted units*], side jambs, headers with roller track, bottom door guides, and activation devices.
- B. DOORS AND FRAMES:** Entrance package header shall be extruded aluminum alloy 6063-T6 with exposed surfaces anodized (painted) to matching architectural finish. Extruded aluminum header and removable access cover shall have overall dimensions of 7 ¾" high and 4½" deep with concealed, replaceable lifetime warranty roller track and integrated anti-derail extrusion. Door carrier assemblies shall incorporate four 1¾" diameter roller assemblies with sealed ball bearings and Grade 8 alloy steel hanger bolts. Concealed bottom door guides shall provide stable movement of sliding panels. Door(s) and fixed sidelite(s) shall consist of top and bottom rails with ½" tempered glass. Rails shall be extruded aluminum alloy 6063-T6, anodized or painted to desired finish. Top rail of sliding door(s) shall house a heavy duty steel breakout mechanism which allows the door(s) to swing out at any point of door travel when pushed in the direction of egress. Sidelite(s) shall be non-breakout (fixed) type. Header shall be capable of being surface mounted to existing walls or storefronts using 1¾" x 2" filler tube(s) in place of the fixed sidelite(s). Wool weatherpile shall run full height at front of sliding door(s) and a PVC weather seal shall run full height between the door(s) and fixed sidelite(s) [*filler tube(s) on surface mounted units*]. Units shall be one of the following configurations:

O-SX, SX-O, O-SX-SX-O, SO-SX, SX-SO
P-SX, SX-P, P-SX-SX-P, SO-SX-SX-SO

- C. OPERATOR:** Door movement shall be driven by a sealed DC gear motor and nylon reinforced drive belt. The multifunction microprocessor control shall provide fully adjustable open, close, and check speeds. An adjustable hold open time delay (1-60 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 jamb mounted 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. EMERGENCY EGRESS:** Sliding door(s) shall be capable of being swung out to 90° from any position of slide movement and require no more than 50 lbf. (222 N) of force applied at the lock stile to open. Units with this emergency egress feature comply with Chapter 5, Means of Egress, of Code for Safety from Fire in Buildings & Structures, NFPA 101.
- E. SECURITY:** The sliding doors shall be fitted with a high security deadbolt lock mounted in the bottom rail of each door leaf. (Option: Unit can be provided with either a fail-safe or fail-secure electric lock concealed in the header and coordinated with the operator to electrically lock against slide).
- F. FINISH:** All exposed surfaces shall be 204-R1 clear anodized or 313-R1 two-step, hard coat dark bronze anodized for Class 1 architectural finish. Other painted or anodized colors as specified.
- G. SAFETY AND ACTIVATING DEVICES:** Unit shall have two infrared safety beams installed in the side jambs at 24" and 48" from the finished floor. The beams will not be active when the doors are fully closed. Motion/presence sensors shall be installed on both sides of the unit to detect traffic approaching the door from either direction. For units intended for one-way traffic only, the detection sensor on the side not intended for use shall not be active when the doors are fully closed.

2.03 REQUIREMENTS FOR WORK SPECIFIED IN OTHER SECTIONS

- A. ELECTRICAL:** The General Contractor or Electrical Contractor shall furnish and install all wiring to the operator. Provide 120VAC, 60 Hz, 1 phase, 15 amp service to each operator header on a separate, dedicated circuit routed into the header.
- B. GLASS AND GLAZING:** Glazing bead and setting blocks shall be in compliance with ANSI Z97.1.

PART 3: EXECUTION

3.01 INSPECTION

Inspect frame opening for correct size, plumb and square and level floor for safe and reliable performance. Provide written notification to the appropriate personnel of conditions not acceptable to the installer and/or manufacturer. Proceed with installation only after necessary corrections are made by the general contractor to insure a suitable opening.

3.02 INSTALLATION

Install sliding door unit plumb, square, and level in properly prepared and supported opening, using specified fasteners, as required by installation instructions and as detailed on the shop drawings.

3.03 INSTRUCTION

Following the installation and final adjustments, the installer shall fully instruct the facility manager as to correct operating procedure and safety requirements of the sliding 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.