

PART I – GENERAL

WORK SPECIFIED HEREIN

- All labor, materials, equipment and services necessary to furnish and install new automatic sliding entrance packages and controls as indicated or specified including final electrical connections and tune in.

SUBSTITUTIONS

- No substitutions.

SUBMITTALS

- Unless otherwise noted, the contractor shall prepare all shop drawings, product literature, etc. only as required to properly coordinate and construct the project.
- Review of submittals by the Professional of Record is limited to specific shop drawings as called for in the Project Manual.

QUALITY ASSURANCE

- Manufacturer: ASSA ABLOY Entrance Systems, Besam SL500 Fixed Sidelite, Bi-Parting Automatic Sliding Door Entrance. Refer to Required Vendor List in Specification and Material and Product Schedule on Drawings for Additional Information.
- Manufacturer must have a minimum of ten (10) years experience in the fabrication of aluminum-and-glass door assembly similar to those specified.
- Compliance with both ANSI/BHMA A156.10 American National Standard for Power Operated Pedestrian Doors. (current version) and UL 325 Standard for Safety for Door, Drapery, Gate, Louver and Window Operators and Systems.
- Installation shall be approved by an AAADM certified inspector.

COORDINATION AND TESTS

- Coordinate accurately and fully with other trades affected by this work.
- Thoroughly test and check all items and equipment. Make corrections and adjustments to produce a completely satisfactory and operative automatic door installation.

WARRANTY

- The manufacturer shall warrant all equipment, including operators, controls, etc.; and the installation of the equipment for a period of three (3) full years from date of acceptance. The manufacturer and/or the manufacturer's distributor shall replace all defective equipment at no cost to the Owner or Tenant during this three (3) year warranty period. The manufacturer shall have available on a local area level any parts and services required throughout the life of this equipment.

PART II – PRODUCTS

MANUFACTURER

ASSA ABLOY Entrance Systems Inc
4020B Sladeview Crescent, Units 3&4
Mississauga, Ontario, L5L 6B1
(905) 569-5221

SLIDING AUTOMATIC ENTRANCES

- **Sliding Door Package:** Sliding door packages shall be complete including operator, sliding door(s), sidelite(s), header(s), jambs, threshold(s), bottom door guide(s) and activation/safety sensors.
- **Sliding Panels and Sidelites:** Structural aluminum sections, 0.125 inch (3.2 mm) wall thickness, shall be 6063-T5 alloy with exposed surfaces anodized (painted) to matching architectural finish.

Stile and rail sliding panels and sidelites shall have 1-3/4" (44 mm) x 2-1/8" (54 mm) narrow stiles, 10" (254 mm) bottom rail, 1-3/4 inch (45 mm) intermediate muntin.

Slide-in type, replaceable pile mohair seals retained by the aluminum extrusions. The following types of weather-stripping are required: complementing weather-stripping on the joining vertical stiles of the sidelite and sliding door panels, complementing weather-stripping on the lead edge of the lock stiles of bi-parting doors, single pile weather-stripping on the lead edge stile of single slide door panels, dual pile weather-stripping on the pivot stile of breakout sidelite panels, and single pile weather-stripping between the carrier and the header. Bottom rails shall be provided with an adjustable nylon sweep.

Each active door leaf shall have dual door carrier assemblies with tandem 1-7/16" diameter, sealed ball bearing roller assemblies and two heavy duty self-aligning anti-risers. Concealed bottom door guides shall provide stable movement of sliding panels.

- **Frames:** All structural aluminum sections shall be 6063-T5 alloy with exposed surfaces anodized (painted) to matching architectural finish.

4-1/2" wide extruded aluminum header with hinged access panel shall conceal replaceable roller track, door operators, and carrier assemblies.

Vertical jambs and transom framing shall be 1-3/4" (44 mm) x 4-1/2" (114 mm).

- **Glass and Glazing:** Glazing in compliance with ANSI Z97.1.
Glazing Sliding Panels, Sidelite Panels and Transom: 1/4" (6 mm) clear tempered glass.
- **Hardware:** Provide manufacturer's standard hardware as required for operation indicated.

Breakaway arms and bottom pivot assemblies shall be supplied, adjustable to comply with applicable codes.

Magnetic catch(s) to retain breakout door and sidelite panels in the closed position.

Door Security Alarm Contact Switch: Manufacturer's standard alarm contact switches.

Cart Protection Bars: Flat bar, 2-inch high by 1/2-inch thick, 6063-T5 aluminum. Two (2) cart protection bars on the exterior side of each sliding panel and two (2) cart protection bars on the interior side of each sidelite panel.

Two point locking system with throw rod into carrier arm and mortise hookbolt. Locking required at both interior and exterior entrances.

Interior Side of Entrance: Thumbturn with lock indicators.

Exterior Side of Entrance: Keyed cylinder, replaceable core.

Guide Track/Threshold:

Exterior Entrance Threshold: 1/2 inch (12.7 mm) high, surface mounted aluminum threshold with integral track shall span the width of the sliding door header and fit between the vertical framing members. Threshold shall include extruded aluminum ramps that securely interlock to the flat section to meet ADA requirements.

Interior Entrance Guide Track: Surface mounted aluminum guide track(s) adjacent to the sidelite portion of the sliding automatic door assembly.

- **Operator:** Door movement shall be driven by an energy efficient, DC motor and nylon reinforced drive belt. The supplied system shall have the capability to operate at full performance well beyond a brown out and high line voltage conditions (85V – 265V) sensing changes and adjusting automatically. The operator shall allow an adjustable hold open time delay of 0 to 60 seconds and have internal software to incorporate a self-diagnostic system.
- **Microprocessor Control:** Control unit shall be a factory-adjusted configuration with opening and closing speeds set to comply with ANSI/BHMA A156.10 requirements. Electronic dampening shall be included to reduce wear on drive train. Should the drive train operations deviate from design criteria ranges, Watchdog Control Circuit Monitoring will assume command of the system and shut down the automatic function allowing a secondary supervisory circuit to perform as a backup. Control unit shall allow diagnostics with the ability to produce application data.

Mode Selector Control: Multi-position rotary knob mode selector control, jamb mounted, shall allow selection of the indicated functions to be engaged when switch is turned to the appropriate setting. Mode selector control to allow the following functions: "Off", "Exit Only" for one way traffic with automatic operation from

the interior, "Two Way Traffic" allowing automatic operation from exterior and interior, "Partial Opening" energy saving door position allows door to automatically adjust opening width based on amount of usage, that is, full open during high use and partial open during low use (the control for this setting is programmable allowing adjustment to both the usage setting and the opening width), "Hold Open" doors held in the full open position.

- **Emergency Egress:** Fixed sidelite entrances with sliding door(s) 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 ANSI/BHMA A156.10.
- **Finish:** Aluminum entrances shall be clear anodized complying with AAMA 611, Clear, AA- M12C22A41, Class I, 0.018 mm.
- **Activation and Safety Control Devices:** Combination activation motion sensor/safety presence sensor unit shall utilize K-band microwave technology to detect motion and focused active infrared technology to detect presence, combined in a single housing. Sensor housing shall be mounted on each side of the header.

Presence sensor shall remain active at all times.

The sensor shall communicate with the automatic door operator through a self-monitoring connection that allows the door to go into a fail-safe mode preventing the door from closing in the event of a sensor failure.

OPERATING CONDITIONS

- **Climatic Conditions:** All automatic sliding door system components shall operate between -31 degrees F and +130 degrees F (-35° C to 54.44° C) in all climatic conditions.

ELECTRICAL

- **Power Requirements:** Self-detecting line voltage capable control. 120 VAC through 240 VAC, 50/60 Hz, 3amp minimum incoming power with solid earth ground connection for each door system.

REQUIREMENTS FOR WORK SPECIFIED IN OTHER SECTIONS

- **Electrical:** The Electrical Contractor shall furnish and install all wiring to the operator. Provide 120VAC, 60 HZ, 1 phase, 15amp service to each operator header on a separate dedicated circuit routed into the header.

PART III – EXECUTION

INSTALLATION

- Comply with manufacturer's specifications and recommendations for the installation of doors and frames and operators, using only factory trained personnel.
- The automatic door installer must examine the areas and conditions under which the automatic entrances are to be installed and notify the General Contractor in writing of conditions detrimental to the proper functioning of the entrance and the timely completion of the work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to the installer.
- Set units plumb, level and true in line, without warp or rack of frames or doors. Anchor securely in place. Separate aluminum and other corrodible metal surfaces from sources of corrosion or electrolytic action at points of contact with other materials with a bituminous coating of approximately 30-mil dry film thickness or other suitable permanent separator.
- The installer shall work with the General Contractor to coordinate all details pertinent to the installation. Complete manufacturer's drawings and details shall be furnished for the installation of the equipment. Final connections and tune in shall be made by the installer and the automatic entrances shall be left in a satisfactory operating condition.
- Set sill members and other members in a bed of sealant, with joint fillers or gaskets to provide weathertight construction. Comply with requirements specified in division 7 Section "Joint Sealants" to provide a weather tight installation.
- Apply signage on both sides of each door and sidelite as required by ANSI/BHMA A156.10 and manufacturers installation instructions.

ADJUSTING

- Adjust door operators, controls and hardware for smooth and safe operation and for weather tight closure. Adjust doors in compliance with ANSI/BHMA A156.10.

FIELD QUALITY CONTROL

- Before placing doors into operation, AAADM certified technician shall inspect and approve doors for compliance with ANSI/BHMA A156.10. Certified technician shall be approved by the manufacturer.

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.

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

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