

## SECTION 08 42 29 - AUTOMATIC ENTRANCES

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section includes:

1. **KROGER DIRECT BUY PROGRAM:** Owner supplied/Owner installed.

a. The Kroger Company will supply and install the biparting-sliding, automatic entrance door assemblies.

1) The automatic entrance door assembly packages shall consist of the following:

- a) Sliding aluminum doors.
- b) Sidelites.
- c) Header.
- d) Operator.
- e) Microprocessor control.
- f) Nylon sweeps and weather-stripping.
- g) Sensors for activation.
- h) Standard safety sensor and hold beam for each opening.
- i) Locks.
- j) Access controls (Grocery Pickup entry doors only).

b. Comply with requirements in Division 00 Section "General Conditions."

2. Contractor supplied items:

a. Glass for doors, sidelights, and transoms.

3. Contractor installed items:

a. Glass for doors and sidelights.

B. Refer to Division 08 Section "Glazing" for glazing for automatic entrances.

#### 1.2 COORDINATION

A. Templates: Obtain templates for doors, frames, and other work specified to be factory prepared for installing automatic entrance doors.

B. Coordinate size and location of recesses in concrete floors for recessed sliding tracks when recessed tracks are specified.

### 1.3 SUBMITTALS

- A. The Owner will post the following information on the Owner's Project Management Website (PMW) for the Contractor's use in preparing the substrate.
  - 1. Product Data: For sliding, automatic entrance door assemblies.
  - 2. Shop Drawings: Plans, elevations, sections, details, hardware mounting heights, and attachments to other work including wiring diagrams.

### 1.4 WARRANTY

- A. Warranty information for exterior and interior, sliding, power-operated automatic entrances is specified in Division 01 Section "Product Warranties."

## PART 2 - PRODUCTS

### 2.1 MANUFACTURER

- A. Basis-of-Design Product: Stanley Access Technologies, LLC; Model Dura-Glide 3000.
  - 1. Kroger Account Representative; Refer to Section 01 64 00 "Vendor Contact List." Specify store number and address when calling with questions.

### 2.2 AUTOMATIC ENTRANCE ASSEMBLIES

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Power-Operated Door Standard: BHMA A156.10.

### 2.3 PERFORMANCE REQUIREMENTS

- A. Wind Loads: As indicated on Drawings.
- B. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
  - 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- C. Operating Range: Minus 30 deg F (34 deg C) to 130 deg F (54 deg C).
- D. Opening-Force Requirements for Egress Doors: Not more than 50 lbf (222 N) required to manually set door in motion if power fails, and not more than 15 lbf (67 N) required to open door to minimum required width.

- E. Closing-Force Requirements: Not more than 30 lbf (133 N) required to prevent door from closing.

## 2.4 SLIDING AUTOMATIC ENTRANCE DOORS.

- A. General: Automatic entrance door assemblies will have door panels attached to a door carrier hanger assembly by means of an adjustable support rod pivot assembly and corrosion resistant adjustable breakaway release latch holding panel in the closed position under normal automatic operation. The support rod pivot assembly allows the door panel to be broken outward at any point in the door's opening or closing cycle allowing for safe emergency egress in compliance with NFPA 101. The door panel in the breakout mode disconnects the power to the control circuit inhibiting automatic door operation. The control circuit shall be resettable by re-engaging the door panel with the door carrier hanger assembly. Breakaway pressure shall be field adjustable, 5-50 lbs. (2.3- 22.7 kg) to meet local building code requirements but will be factory set at 50 lbs. (22.7 kg) maximum.

## 2.5 COMPONENTS

- A. Framing Members: Extruded aluminum, minimum 0.125 inch (3.2 mm) thick and reinforced as required to support imposed loads.
  - 1. Nominal Size: As indicated on Drawings.
  - 2. Extruded Glazing Stops and Applied Trim: Minimum 0.062-inch (1.6-mm) wall thickness.
- B. Stile and Rail Doors: Glazed doors with minimum 0.125-inch- (3.2-mm-) thick, extruded-aluminum tubular stile and rail members. Mechanically fasten corners with reinforcing brackets that are welded, or incorporate concealed tie-rods that span full length of top and bottom rails.
  - 1. Glazing Stops and Gaskets: Snap-on, extruded-aluminum stops and preformed gaskets.
  - 2. Stile Design: As indicated on Drawings.
  - 3. Rail Design: As indicated on Drawings.
- C. Sidelites: 1-3/4-inch- (45-mm-) deep sidelites with minimum 0.125-inch- (3.2-mm-) thick, extruded-aluminum tubular stile and rail members matching door design.
  - 1. Glazing Stops and Gaskets: Same materials and design as for stile and rail door.
  - 2. Glazing Stops and Gaskets: Snap-on, extruded-aluminum stops and preformed gaskets.
- D. Headers: Fabricated from minimum 0.125-inch- (3.2-mm-) thick extruded aluminum and extending full width of automatic entrance units to conceal door operators and controls. Provide hinged or removable access panels for service and adjustment of door operators and controls. Secure panels to prevent unauthorized access.
- E. Signage: As required by cited BHMA standard.
  - 1. Application Process: Door manufacturer's standard process.
- F. Operator Features:

1. Power opening and closing.
  2. Drive System: belt.
  3. Adjustable opening and closing speeds.
  4. Adjustable hold-open time between zero and 30 seconds.
  5. Obstruction recycle.
  6. On-off/hold-open switch to control electric power to operator.
- G. Sliding-Door Carrier Assemblies and Overhead Roller Tracks: Carrier assembly that allows vertical adjustment; consisting of nylon- or delrin-covered, ball-bearing-center steel wheels operating on a continuous roller track, or ball-bearing-center steel wheels operating on a nylon- or delrin-covered, continuous roller track. Support doors from carrier assembly by cantilever and pivot assembly.
1. Rollers: Minimum of two ball-bearing roller wheels and two antirise rollers for each active leaf.
- H. Sliding-Door Threshold (Do not use on Grocery Pickup doors): Threshold members and bottom-guide-track system with stainless-steel, ball-bearing-center roller wheels.
1. Configuration: Saddle-type threshold across door opening and surface-mounted guide-track system at sidelites.
- I. Locks:
1. Exterior Doors: Master security hook lock, inside lever lock with indicator, and construction core.
  2. Interior Vestibule Doors: No locks.
  3. Grocery Pickup Single Slider Door: Internal dead bolt lock which automatically locks each time door cycles to closed position.
- J. Weather Stripping: Replaceable components.
1. Sliding Type: AAMA 701, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.
  2. Door Bottom Sweeps: Manufacturer's standard. Provide extra-long sweeps for doors without threshold (Grocery Pickup).
- K. Controls: Activation and safety devices according to BHMA standards.
- a. Activation Device: Motion sensor mounted on each side of door header to detect pedestrians in activating zone to activate door operator.
  - b. Safety Device: Presence sensor mounted to underside of door header and two photoelectric beams mounted in sidelite jambs on one side of the door to detect pedestrians in presence zone and to prevent door from closing.
- L. Access Controls (Grocery Pickup Entry Doors Only):
1. Furnished and installed by Grocery Pickup entry door supplier.
  2. Exterior Entry Controller: Provide local entry-control functions with keypad access-control devices.

- a. Capacity: 500 users, dual code/card or code + card each
  - b. Keypad: 2x6 keys for local programming and 4- to 8-digit PIN code entry
  - c. User Levels: Normal, Secure, Master
  - d. Security Modes: Normal, Bypass, Secure
  - e. Audio/Visual: Interface for bell, chime and siren enunciator. Two tri-color LED indicators, built-in sounder.
  - f. Design: Epoxy potted, fully-sealed in polycarbonate enclosure. Illuminated keys. Suitable for harsh environments.
3. Interior Access Controller: Wireless wall switch and hand-held transmitter.
  - a. Nominal 4-3/4 inch square push plate package with text and logo plate, box, transmitter, and receiver.

## 2.6 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
  1. Headers, stiles, rails, and frames: 6063-T6.
  2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221.
- B. Sheet and Plate: ASTM B 209.
- C. Glazing: Glazing installer to provide glass Type C as specified in Division 08 Section "Glazing."
- D. Sealants and Joint Fillers: As specified in Section 079200 "Joint Sealants."
- E. Anodized Finish: AAMA 611, AA-M12C22A41 or AA-M12C22A42/A44, Class I, 0.018 mm or thicker.
  1. Color: Match adjacent storefront.

## PART 3 - EXECUTION

### 3.1 INSTALLATION (CONTRACTOR RESPONSIBILITIES)

- A. Preparation Prepare openings ready for installation of automatic entrances by Owner's Installer.
- B. Install glazing in doors, sidelites, and transoms as recommended by sliding automatic entrance doors and as specified in Division 08 Section "Glazing."

### 3.2 INSTALLATION (OWNER'S INSTALLER RESPONSIBILITIES)

- A. Automatic entrance door assemblies will be installed by the Owner. Contractor to coordinate installation with Owner's Installer.

- B. General: Install automatic entrances according to manufacturer's written instructions and cited BHMA standard for direction of pedestrian travel, including signage, controls, wiring, and connection to the building's power supply.
  - 1. Do not install damaged components. Fit frame joints to produce hairline joints free of burrs and distortion. Rigidly secure nonmovement joints. Seal joints watertight.
  - 2. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape recommended by manufacturer for this purpose.
  - 3. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous coating.
- C. Entrances: Install automatic entrances plumb and true in alignment with established lines and grades without warp or rack of framing members and doors. Anchor securely in place.
  - 1. Set headers, carrier assemblies, tracks, operating brackets, and guides level and true to location with anchorage for permanent support.
  - 2. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within system to exterior.
  - 3. Level recesses for recessed thresholds using nonshrink grout.
- D. Door Operators: Connect door operators to electrical power distribution system.
- E. Controls: Install and adjust activation and safety devices according to manufacturer's written instructions and cited BHMA standard for direction of pedestrian travel. Connect control wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
- F. Access Controls (Grocery Pickup Area Doors Only): Install and adjust access controls according to manufacturer's written instructions. Connect control wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."
- G. Sealants: Comply with requirements specified in Section 079200 "Joint Sealants" to provide weathertight installation.
  - 1. Set thresholds, framing members and flashings in full sealant bed.
  - 2. Seal perimeter of framing members with sealant.
- H. Signage: Apply signage on both sides of each door and breakaway sidelite as required by cited BHMA standard for direction of pedestrian travel.
- I. Wiring within Automatic Entrance Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's written limitations on bending radii. Provide and use lacing bars and distribution spools.
- J. Field Quality Control: Perform the following tests and inspections utilizing an approved representative of the supplier:
  - 1. Test and inspect each automatic entrance to certify proper and safe operation and to determine compliance of installed systems with applicable BHMA standards, using AAADM inspection forms.

2. Automatic entrances will be considered defective if they do not pass tests and inspections.
- K. Adjusting: Adjust hardware, moving parts, door operators, and controls to function smoothly, and lubricate as recommended by manufacturer; comply with requirements of applicable BHMA standards.
1. Readjust door operators and controls after repeated operation of completed installation equivalent to three days' use by normal traffic (100 to 300 cycles).
- L. Demonstration: Engage a manufacturer-approved representative to train Owner's personnel to operate automatic entrances.
- M. Maintenance Service: Automatic entrance installer shall provide on-call maintenance service for the first day of heavy automatic entrance use (grand opening, soft opening, department opening, etc.) provided by skilled employees of automatic entrance Installer working a minimum of four hours, commencing two hours before store opening. Include repair or replacement of defective components, lubrication, cleaning, and adjusting as required for proper automatic entrance operation. Parts and supplies shall be manufacturer's authorized replacement parts and supplies.

END OF SECTION 08 42 29

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