SECTION 08 4229
AUTOMATIC ENTRANCES

PART 1  GENERAL

1.01 SECTION INCLUDES
A. Packaged power-operated door assemblies.
B. Operators for doors provided in other sections.
C. Controllers, actuators and safety devices.
D. Maintenance.

1.02 REFERENCE STANDARDS
B. UL (DIR) - Online Certifications Directory; current listings at database.ul.com.

1.03 SUBMITTALS
A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
B. Shop Drawings:
   1. Indicate layout and dimensions; head, jamb, and sill conditions; elevations; components, anchorage, recesses, materials, and finishes, electrical characteristics and connection requirements.
   2. Identify installation tolerances required, assembly conditions, routing of service lines and conduit, and locations of operating components and boxes.
C. Product Data: Provide data on system components, sizes, features, and finishes.
D. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention, and manufacturer's hardware and component templates.
E. Project Record Documents: Record actual locations of concealed equipment, services, and conduit.
F. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. Wrenches and other tools required for maintenance of equipment.

1.04 WARRANTY
A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
B. Provide two year manufacturer warranty.

PART 2  PRODUCTS

2.01 MANUFACTURERS
A. Sliding Automatic Entrance Door Assemblies:
B. Door Operators for Swing Doors Specified in Other Sections:

2.02 POWER OPERATED DOORS
A. Power Operated Doors: Provide products that comply with the requirements of the authorities having jurisdiction; unless otherwise indicated, provide equipment selected for the actual weight of the doors and for light pedestrian traffic.
   1. Swinging Fire Door Operators: In addition to other requirements, provide equipment UL (DIR) listed as a fire door operator with automatic closer.
2. Swinging Door Operators: Fully adjustable for opening and closing speeds, checking speeds, and hold-open time; in the event of power failure, disengage operator allowing door to function as a door with a spring closer.

3. Sliding and Folding Door Operators: In the event of power failure, provide for manual open, close, and break-away operation of door leaves.

4. Packaged Door Assemblies: Provide all components by single manufacturer, factory-assembled, including doors, frames, operators, actuators, and safeties.
   a. Finish exposed equipment components to match door and frame finish.

B. Sliding and Folding Doors with Full Power Operators: Comply with BHMA A156.10; safeties required; provide break-away operation unless otherwise indicated; in the event of break-away operation, interrupt power operation.

C. Swinging Doors with Full Power Operators: Comply with BHMA A156.10; safeties required.

2.03 PACKAGED AUTOMATIC ENTRANCE DOOR ASSEMBLIES
   A. Sliding Automatic Door: Bi-parting double leaf track-mounted, electric operation, extruded aluminum glazed door, with frame, and operator concealed overhead.
      1. Operation: Power open, spring close operation.

2.04 OPERATORS FOR SWINGING DOORS PROVIDED BY OTHERS
   A. Door Operator: Electric, surface mounted overhead.
      1. Operation: Full-power open, spring close operation.
      2. Variable speed control for opening and closing cycles.
      3. Actuators and Safeties: As indicated on drawings.

PART 3 EXECUTION

3.01 EXAMINATION
   A. Verify that electric power is available and is of the correct characteristics.

3.02 INSTALLATION
   A. Install equipment in accordance with manufacturer's instructions.
   B. Coordinate installation of components with related and adjacent work; level and plumb.

3.03 ADJUSTING
   A. Adjust door equipment for correct function and smooth operation.

3.04 CLEANING
   A. Remove temporary protection, clean exposed surfaces.

3.05 CLOSEOUT ACTIVITIES
   A. Demonstrate operation, operating components, adjustment features, and lubrication requirements.

3.06 MAINTENANCE
   A. Provide service and maintenance of operating equipment for one year from Date of Substantial Completion, at no extra charge to Owner.

END OF SECTION 08 4229