

SECTION 08300
HIGH SPEED ROLLING DOORS (IMPACT RESISTANT)

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. High-speed insulated roll-up doors. 16' wide x 12' high, Impact Rated Door Numbered 130.
- B. Wiring from electric circuit disconnect to operator to control station.

1.02 RELATED SECTIONS

- A. 05500 Metal Fabrications. Door opening jamb and head members.
- B. 06100 Rough Carpentry. Door opening jamb and head members.
- C. 08700 Hardware. Padlocks. Master Keyed cylinder.
- D. 09900 Painting. Field painting.
- E. Division 16. Electrical wiring and conduit, fuses, disconnect switches, connection of operator to power supply, and installation of control station and wiring.

1.03 REFERENCES

- A. NEMA - National Electrical Manufacturers Association.
- B. LED - Light Emitting Diode.

1.04 SYSTEM DESCRIPTION

- A. Motor type: AC drive, and variable speed with soft acceleration and braking. Mechanical release lever on side column allows door to be easily opened in the event of a power failure.

1.05 SUBMITTALS

- A. Submit the following:
 - 1. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
 - 2. Product Data: Provide general construction, component connections and details, and electrical equipment, operation instructions, and information.
 - 3. Warranty: Submit sample warranty.
 - 4. Manufacturer's Installation: Indicate installation sequence and procedures, adjustment, and alignment procedures.

1.06 MAINTENANCE DATA

- A. Maintenance Data: Scheduled maintenance program available to include lubrication requirements and frequency, periodic adjustments required, scheduled maintenance suggested, manufacturer's data sheets, and equipment inter-connection diagrams.

1.07 REGULATORY REQUIREMENTS

- A. Electrical components UL listed.
- B. Electrical control panel NEMA approved.

1.08 QUALITY ASSURANCE

- A. Furnish high-speed roll doors and all components and accessories by one manufacturer.
- B. Specific door model used must have a proven track record of successful installations in similar applications of no less than 3 years. References to be provided upon request.

1.09 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings.

1.10 COORDINATION

- A. Coordinate the work with installation of electric power and locations and sizes of conduit.

1.11 WARRANTY

- A. One-year parts, one-year labor.

PART 2 - PRODUCTS

2.01 PRODUCTS

- A. Rytec Corporation Spiral Door.
- B. Substitutions per Section 01600.
- C. Impact Rated.

2.02 MATERIALS

- A. Door Panel: double-walled, aluminum slats are 6 inches high by 1 9/16 inches thick. Width is variable. Integral rubber weatherseal between each of the panels.
- B. Side Frames: Galvanized steel side frames with full height weatherseal on both sides to seal against door panel. Dual thru-beam photo-eye standard. No exterior mounted coil cord.

- C. Bottom Bar: Extruded aluminum bottom bar with electric, reversing edge that reverses the door upon contacting an object.
- D. Counterbalance: Up to six extension springs in each side column, depending on the size of the door. Springs assist the motor in opening the door. Mechanical release lever on side column allows door to be easily opened in the event of a power failure.
- E. Drive system: 2 HP 208, 230/460 Volt, three-phase motor with variable speed AC drive which allows for soft acceleration and braking.
- F. Travel Speed: Opens at up to 60 inches per second and closes at 30 inches per second.
- G. Electrical Controls: AC-drive system with self-diagnostic capability and pre-programmed menu options. Housed in a NEMA 4 electrical enclosure with vision window. Includes cycle counter and 2 digit display. Incorporates self-adjusting limit switches. Control panel to be fully assembled, wired and tested at factory.
- H. Motion Sensor: Provide Falcon Motion Sensor
Falcon Motion Sensor: The Falcon Motion detector utilizes microwave technology that operates at 24.125 GHz (K-band frequency).
 - a. The sensor shall utilize a planar (flat antenna), and shall be capable to discriminate between vehicular traffic and pedestrians.
 - b. The sensor shall be concealed within a NEMA-4 rated plastic housing and shall have a crimp style connector to prevent water intrusion through the feed cable.
 - c. The sensor shall be fully adjustable by remote control and shall have a unidirectional sensing capability to acknowledge approaching or departing traffic only.
 - d. The sensor shall be capable to ignore traffic moving parallel to the sensor.
 - e. Sensor Dimensions: 4 inches (102 mm) wide by 3-3/4 inches (96 mm) high by 5 inches (127 mm) deep.
 - f. Mounting Height: 11.5 feet (3.5 m) and 23 feet (7.0 m) above finished floor.
 - g. Mounting heights between 6.5 feet (1.98 m) and 11.5 feet (3.5 m), use Model "Falcon-XL".
 - h. Finish: ABS & Polycarbonate with black anodized metal mount bracket.
- H. All components factory finished. Color as selected by Architect from manufacturer's standard RAL selection.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that opening sizes, tolerances, and conditions are acceptable.

3.02 INSTALLATION

- A. Install door unit assembly in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Fit and align assembly including hardware; level to plumb to provide smooth operation.

- D. Coordinate installation of electrical service. Complete wiring from disconnect to unit components.

3.03 ADJUSTING

- A. Adjust door and operating assemblies.
- B. Test and adjust door(s), if necessary, for proper operation.

3.04 CLEANING

- A. Clean door and components.

END OF SECTION 08300
